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UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

FORM 20-F

(Mark One)

REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) or (g) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

ANNUAL REPORT PURSUANT TO SECTION 13 or 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2016

OR

TRANSITION REPORT PURSUANT TO SECTION 13 or 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

OR

SHELL COMPANY REPORT PURSUANT TO SECTION 13 or 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of event requiring this shell company report \_\_\_\_\_

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission file number 1-12874

TEEKAY CORPORATION  
(Exact name of Registrant as specified in its charter)

Republic of The Marshall Islands  
(Jurisdiction of incorporation or organization)

Not Applicable  
(Translation of Registrant's name into English)

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Securities registered, or to be registered, pursuant to Section 12(b) of the Act.

Title of each class  
Common Stock, par value of \$0.001 per share

Name of each exchange on which registered  
New York Stock Exchange

**Securities registered, or to be registered, pursuant to Section 12(g) of the Act.**

None

**Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act.**

None

Indicate the number of outstanding shares of each issuer's classes of capital or common stock as of the close of the period covered by the annual report.

86,149,975 shares of Common Stock, par value of \$0.001 per share.

Indicate by check mark whether the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes  No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes  No

Indicate by check mark if the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

Indicate by check mark if the registrant (1) has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act. (Check one):

Large Accelerated Filer

Accelerated Filer

Non-Accelerated Filer

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP

International Financial Reporting Standards as issued  
by the International Accounting Standards Board

Other

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow: Item 17  Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes  No

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## PART I

This annual report of Teekay Corporation on Form 20-F for the year ended December 31, 2016 (or Annual Report) should be read in conjunction with the consolidated financial statements and accompanying notes included in this report.

Unless otherwise indicated, references in this Annual Report to “Teekay,” “the Company,” “we,” “us” and “our” and similar terms refer to Teekay Corporation and its subsidiaries. References in this Annual Report to “Teekay Offshore” refer to Teekay Offshore Partners L.P. (NYSE: TOO), references in this Annual Report to Teekay LNG refer to Teekay LNG Partners L.P. (NYSE: TGP) and references in this Annual Report to Teekay Tankers refer to Teekay Tankers Ltd. (NYSE: TNK).

In addition to historical information, this Annual Report contains forward-looking statements that involve risks and uncertainties. Such forward-looking statements relate to future events and our operations, objectives, expectations, performance, financial condition and intentions. When used in this Annual Report, the words “expect,” “intend,” “plan,” “believe,” “anticipate,” “estimate” and variations of such words and similar expressions are intended to identify forward-looking statements. Forward-looking statements in this Annual Report include, in particular, statements regarding:

- our future financial condition or results of operations and future revenues and expenses;
- our dividend policy and our ability to pay cash dividends on our shares of common stock or any increases in quarterly distributions, and the distribution and dividend policies of our publicly-listed subsidiaries, Teekay Offshore, Teekay LNG and Teekay Tankers (or the *Daughter Companies*), including the ability to increase the distribution levels of Teekay Offshore and Teekay LNG in the future;
- our future financial condition and results of operations and our future revenues, expenses and capital expenditures, and our expected financial flexibility to pursue capital expenditures, acquisitions and other expansion opportunities;
- meeting our going concern requirements and our liquidity needs, and the liquidity needs of our Daughter Companies, including our working capital deficit, anticipated funds and sources of financing for liquidity needs and the sufficiency of cash flows, and our estimation that we will have sufficient liquidity for at least the next 12 months;
- our ability to refinance existing debt obligations, raise additional debt and equity capital to fund capital expenditures, negotiate extensions or redeployments of existing assets and sell partial interests in certain assets;
- our plans for Teekay Parent, which excludes our controlling interests in Daughter Companies and includes Teekay and its remaining subsidiaries, not to have a direct ownership in any conventional tankers and floating production, storage and offloading (or *FPSO*) units, and to increase its free cash flow per share;
- conditions and fundamentals of the markets in which we operate, including the balance of supply and demand in these markets and spot tanker charter rates and oil production;
- the relative size of the newbuilding order book and the pace of future newbuilding orders generally;
- offshore, liquefied natural gas (or *LNG*) and liquefied petroleum gas (or *LPG*) market conditions and fundamentals, including the balance of supply and demand in these markets and charter rates;
- the expected lifespan of our vessels, including our expectations as to any impairment of our vessels;
- our future growth prospects;
- the impact of future changes in the demand for and price of oil, and the related effects on the demand for and price of natural gas;
- expected costs, capabilities, delivery dates of and financing for newbuildings, acquisitions and conversions;
- expected employment and trading of older shuttle tankers;
- our ability to maximize the use of our vessels, including the re-deployment or disposition of vessels no longer under long-term time charter or on a short-term charter contract, including, among others, Teekay LNG’s 52% owned vessels, the *Magellan Spirit* and the *Methane Spirit*, Teekay LNG’s wholly-owned LNG carrier, the *Torben Spirit*, and Teekay’s in-chartered *Arctic Spirit* and *Polar Spirit* LNG carriers;
- the ability of Tanker Investments Ltd. (or *TIL*) to benefit from the cyclical tanker market;
- expected financing for Teekay LNG’s joint venture (or the *Yamal LNG Joint Venture*) with China LNG Shipping (Holdings) Limited (or *China LNG*);
- expected funding of Teekay LNG’s proportionate share of the remaining shipyard installment payments for Teekay LNG’s joint venture with China LNG, CETS Investment Management (HK) Co. Ltd. and BW LNG Investments Pte. Ltd. (or the *BG Joint Venture*);
- the cost of supervision and crew training in relation to the BG Joint Venture, and our expected recovery of a portion of those costs;
- the exercise of any counterparty’s rights to terminate a lease, or to obligate us to purchase a leased vessel, or failure to exercise such rights, including the rights under the leases and charters for two of Teekay LNG’s Suezmax tankers;
- our expectations regarding the ability of I.M. Skaugen SE (or *Skaugen*) and our other customers to make charter payments to us, and the ability of our customers to fulfill purchase obligations at the end of charter contracts, including obligations relating to two of Teekay LNG’s LNG carriers completing charters in 2017 and 2018;

- the future resumption of a LNG plant in Yemen operated by Yemen LNG Company Limited (or *YLNG*), the expected repayment of deferred hire amounts on Teekay LNG's two 52% owned vessels, the *Marib Spirit* and *Arwa Spirit*, on charter to *YLNG*, and the expected reduction to Teekay LNG's equity income in 2017 as a result of the charter payment deferral;
- our expectations regarding the financing, schedule and performance of the receiving and regasification terminal in Bahrain, which will be owned and operated by a new joint venture, Bahrain LNG W.L.L., owned by Teekay LNG (30%), National Oil & Gas Authority (or *Nogaholding*) (30%), Gulf Investment Corporation (or *GIC*) (24%), and Samsung C&T (or *Samsung*) (16%) (or the *Bahrain LNG Joint Venture*), and our expectations regarding the supply, modification and charter of the floating storage unit (or *FSU*) vessel for the project;
- our expectations regarding the completion by Teekay LNG of the acquisition of the joint venture between Skaugen (35%), Nogaholding (35%) and Suffun Bahrain W.L.L. (or *Suffun*) (30%) (or the *Skaugen LPG Joint Venture*);
- the future valuation or impairment of goodwill;
- our expectations and estimates regarding future charter business, with respect to minimum charter hire payments, revenues and our vessels' ability to perform to specifications and maintain their hire rates in the future;
- future debt refinancings, including pre-arranged financings, and our ability to fulfill our debt obligations;
- compliance with financing agreements and the expected effect of restrictive covenants in such agreements;
- the ability of OOG-TK Libra GmbH & Co KG (or the *Libra joint venture*) to drawdown on its \$804 million long-term facility for the new FPSO unit conversion for the Libra field and to obtain further cross default waivers from its lenders;
- operating expenses, availability of crew and crewing costs, number of off-hire days, dry-docking requirements and durations and the adequacy and cost of insurance;
- the effectiveness of our risk management policies and procedures and the ability of the counterparties to our derivative contracts to fulfill their contractual obligations;
- the impact of recent and future regulatory changes or environmental liabilities;
- the impact of, and our ability to comply with, new and existing governmental regulations and maritime self-regulatory organization standards applicable to our business, including the expected cost to install ballast water treatment systems on our vessels in compliance with the International Marine Organization (or *IMO*) proposals;
- the outcome and cost of claims and potential claims against us, including claims and potential claims by Sevan Marine ASA (or *Sevan*), CeFront Technology AS (or *CeFront*) and COSCO (Nantong) Shipyard (or *COSCO*) relating to Logitel Offshore Holding AS (or *Logitel*) and cancellation of Units for Maintenance and Safety (or *UMS*) newbuildings, by Petroleo Brasileiro S.A. (or *Petrobras*) associated with the *Piranema Spirit* FPSO and by Royal Dutch Shell Plc (or *Shell*) associated with the *Petrojarl Knarr* FPSO and by Transocean Offshore International Ventures Limited (or *Transocean*) associated with the ALP Forward;
- the outcome of the investigation into allegations of improper payments by one of our subsidiaries to Brazilian agents;
- the outcome of discussions with Petrobras, the charterer on the *Arendal Spirit* UMS, including the timing and certainty of the unit returning to operation, and expected revenues from the unit;
- certainty of completion, estimated delivery and completion dates, commencement of charter, intended financing and estimated costs for newbuildings, acquisitions, conversions and upgrades, including the towing and offshore installation vessel newbuildings, conversion of the *Randgrid* to a floating storage and off-take (or *FSO*) unit to serve the Gina Krog oil and gas field, conversion of the *Libra* FPSO unit to serve the Libra field, the upgrade of the *Petrojarl I* FPSO unit and shuttle tanker newbuildings;
- the timing of the new shuttle tanker contract of affreightment (or *CoA*) contracts and the number of shuttle tankers to serve these new CoAs;
- the ability of Teekay Offshore to grow its long-distance ocean towage and offshore installation services business;
- expected uses of proceeds from vessel or securities transactions;
- the expectations as to the chartering of unchartered vessels, including towage newbuildings and the *HiLoad DP* unit;
- the impact of our cost saving initiatives;
- our entering into joint ventures or partnerships with companies;
- our expectations regarding whether the UK taxing authority can successfully challenge the tax benefits available under certain of our former and current leasing arrangements, and the potential financial exposure to us if such a challenge is successful;
- our hedging activities relating to foreign exchange, interest rate and spot market risks, and the effects of fluctuations in foreign exchange, interest rate and spot market rates on our business and results of operations;
- the potential impact of new accounting guidance; and
- our business strategy and other plans and objectives for future operations.

Forward-looking statements involve known and unknown risks and are based upon a number of assumptions and estimates that are inherently subject to significant uncertainties and contingencies, many of which are beyond our control. Actual results may differ materially from those expressed or implied by such forward-looking statements. Important factors that could cause actual results to differ materially include, but are not limited to, those factors discussed below in “Item 3. Key Information—Risk Factors” and other factors detailed from time to time in other reports we file with the U.S. Securities and Exchange Commission (or *SEC*).

We do not intend to revise any forward-looking statements in order to reflect any change in our expectations or events or circumstances that may subsequently arise. You should carefully review and consider the various disclosures included in this Annual Report and in our other filings made with the SEC that attempt to advise interested parties of the risks and factors that may affect our business, prospects and results of operations.

**Item 1. Identity of Directors, Senior Management and Advisors**

Not applicable.

**Item 2. Offer Statistics and Expected Timetable**

Not applicable.

**Item 3. Key Information**



## Selected Financial Data

Set forth below is selected consolidated financial and other data of Teekay for fiscal years 2012 through 2016, which have been derived from our consolidated financial statements. The data below should be read in conjunction with the consolidated financial statements and the notes thereto and the Reports of the Independent Registered Public Accounting Firm thereon with respect to fiscal years in the three-year period ended December 31, 2016 (which are included herein) and "Item 5. Operating and Financial Review and Prospects."

Our consolidated financial statements are prepared in accordance with United States generally accepted accounting principles (or GAAP).

	Years Ended December 31,				
	2016	2015	2014	2013	2012
	(in thousands of U.S. Dollars, except share, per share, and fleet data)				
<b>Income Statement Data:</b>					
Revenues	\$ 2,328,569	\$ 2,450,382	\$ 1,993,920	\$ 1,830,085	\$ 1,980,771
Income (loss) from vessel operations <sup>(1)</sup>	384,290	625,132	427,159	62,746	(150,393)
Interest expense	(282,966)	(242,469)	(208,529)	(181,396)	(167,615)
Interest income	4,821	5,988	6,827	9,708	6,159
Realized and unrealized (loss) gain on non-designated derivative instruments	(35,091)	(102,200)	(231,675)	18,414	(80,352)
Equity income	85,639	102,871	128,114	136,538	79,211
Foreign exchange (loss) gain	(6,548)	(2,195)	13,431	(13,304)	(12,898)
Other (loss) income	(39,013)	1,566	(1,152)	5,646	366
Income tax (expense) recovery	(24,468)	16,767	(10,173)	(2,872)	14,406
Net income (loss)	86,664	405,460	124,002	35,480	(311,116)
Less: Net (income) loss attributable to non- controlling interests	(209,846)	(323,309)	(178,759)	(150,218)	150,936
Net (loss) income attributable to shareholders of Teekay Corporation	(123,182)	82,151	(54,757)	(114,738)	(160,180)
<b>Per Common Share Data:</b>					
Basic (loss) income attributable to shareholders of Teekay Corporation	(1.62)	1.13	(0.76)	(1.63)	(2.31)
Diluted (loss) income attributable to shareholders of Teekay Corporation	(1.62)	1.12	(0.76)	(1.63)	(2.31)
Cash dividends declared	0.2200	1.7325	1.2650	1.2650	1.2650
<b>Balance Sheet Data (at end of year):</b>					
Cash and cash equivalents	\$ 567,994	\$ 678,392	\$ 806,904	\$ 614,660	\$ 639,491
Restricted cash	237,248	176,437	119,351	502,732	533,819
Vessels and equipment	9,138,886	9,366,593	8,106,247	7,351,144	7,321,058
Net investments in direct financing leases	660,594	684,129	704,953	727,262	436,601
Total assets	12,814,752	13,061,248	11,779,690	11,506,393	10,959,125
Total debt (including capital lease obligations)	7,032,385	7,443,213	6,715,526	6,658,491	6,154,388
Capital stock and additional paid-in capital	887,075	775,018	770,759	713,760	681,933
Non-controlling interest	3,189,928	2,782,049	2,290,305	2,071,262	1,876,085
Total equity	4,089,293	3,701,074	3,388,633	3,203,050	3,191,474
Number of outstanding shares of common stock	86,149,975	72,711,371	72,500,502	70,729,399	69,704,188
<b>Other Financial Data:</b>					
Net revenues <sup>(2)</sup>	\$ 2,190,230	\$ 2,334,595	\$ 1,866,073	\$ 1,717,867	\$ 1,842,488
EBITDA <sup>(3)</sup>	961,102	1,134,674	758,781	641,126	291,832
Adjusted EBITDA <sup>(3)</sup>	1,268,668	1,393,696	1,037,284	817,382	830,676
Total debt to total capitalization <sup>(4)</sup>	63.2%	66.8%	66.5%	67.5%	65.9%
Net debt to total net capitalization <sup>(5)</sup>	60.4%	64.0%	63.1%	63.4%	60.9%
<b>Capital expenditures:</b>					
Expenditures for vessels and equipment	\$ 648,326	\$ 1,795,901	\$ 994,931	\$ 753,755	\$ 523,597

- (1) Income (loss) from vessel operations includes, among other things, the following:

	Years Ended December 31,				
	2016	2015	2014	2013	2012
	(in thousands of U.S. Dollars)				
Asset impairments and net (loss) gain on sale of vessels, equipment and other operating assets	\$ (112,246)	\$ (70,175)	\$ 11,271	\$ (166,358)	\$ (441,057)
Unrealized losses on derivative instruments	—	—	—	(130)	(660)
Restructuring charges	(26,811)	(14,017)	(9,826)	(6,921)	(7,565)
	<u>\$ (139,057)</u>	<u>\$ (84,192)</u>	<u>\$ 1,445</u>	<u>\$ (173,409)</u>	<u>\$ (449,282)</u>

- (2) Net revenues is a non-GAAP financial measure. Consistent with general practice in the shipping industry, we use net revenues (defined as revenues less voyage expenses) as a measure of equating revenues generated from voyage charters to revenues generated from time charters, which assists us in making operating decisions about the deployment of our vessels and their performance. Under time charters, the charterer pays the voyage expenses, which are all expenses unique to a particular voyage, including any bunker fuel expenses, port fees, cargo loading and unloading expenses, canal tolls, agency fees and commissions, whereas under voyage-charter contracts the ship-owner pays these expenses. Some voyage expenses are fixed, and the remainder can be estimated. If we, as the ship-owner, pay the voyage expenses, we typically pass the approximate amount of these expenses on to our customers by charging higher rates under the contract or billing the expenses to them. As a result, although revenues from different types of contracts may vary, the net revenues after subtracting voyage expenses, which we call “net revenues,” are comparable across the different types of contracts. We principally use net revenues because it provides more meaningful information to us than revenues, the most directly comparable GAAP financial measure. Net revenues are also widely used by investors and analysts in the shipping industry for comparing financial performance between companies and to industry averages. Net revenue should not be considered as an alternative to revenue or any other measure of financial performance in accordance with GAAP. Net revenue is adjusted for expenses that we classify as voyage expenses and, therefore, may not be comparable to similarly titled measures of other companies. The following table reconciles net revenues with revenues.

	Years Ended December 31,				
	2016	2015	2014	2013	2012
	(in thousands of U.S. Dollars)				
Revenues	\$ 2,328,569	\$ 2,450,382	\$ 1,993,920	\$ 1,830,085	\$ 1,980,771
Voyage expenses	(138,339)	(115,787)	(127,847)	(112,218)	(138,283)
Net revenues	<u>\$ 2,190,230</u>	<u>\$ 2,334,595</u>	<u>\$ 1,866,073</u>	<u>\$ 1,717,867</u>	<u>\$ 1,842,488</u>

- (3) EBITDA and Adjusted EBITDA are non-GAAP financial measures. EBITDA represents earnings before interest, taxes, depreciation and amortization. Adjusted EBITDA represents EBITDA before restructuring charges, unrealized foreign exchange (gain) loss, items included in other loss (income), asset impairments, loan loss provisions, net loss (gain) on sale of vessels and equipment, amortization of in-process revenue contracts, unrealized losses (gains) on derivative instruments, realized losses on interest rate swaps, realized losses on interest rate swap amendments and terminations, write-down of equity accounted investments, and our share of the above items in non-consolidated joint ventures which are accounted for using the equity method of accounting. EBITDA and Adjusted EBITDA are used as supplemental financial measures by management and by external users of our financial statements, such as investors, as discussed below.

- Financial and operating performance. EBITDA and Adjusted EBITDA assist our management and security holders by increasing the comparability of our fundamental performance from period to period and against the fundamental performance of other companies in our industry that provide EBITDA or Adjusted EBITDA-based information. This increased comparability is achieved by excluding the potentially disparate effects between periods or companies of interest expense, taxes, depreciation or amortization (or other items in determining Adjusted EBITDA), which items are affected by various and possibly changing financing methods, capital structure and historical cost basis and which items may significantly affect net income between periods. We believe that including EBITDA and Adjusted EBITDA as financial and operating measures benefits security holders in (a) selecting between investing in us and other investment alternatives and (b) monitoring our ongoing financial and operational strength and health in order to assess whether to continue to hold our equity, or debt securities, as applicable.
- Liquidity. EBITDA and Adjusted EBITDA allow us to assess the ability of assets to generate cash sufficient to service debt, pay dividends and undertake capital expenditures. By eliminating the cash flow effect resulting from our existing capitalization and other items such as dry-docking expenditures, working capital changes and foreign currency exchange gains and losses (which may vary significantly from period to period), EBITDA and Adjusted EBITDA provide consistent measures of our ability to generate cash over the long term. Management uses this information as a significant factor in determining (a) our proper capitalization structure (including assessing how much debt to incur and whether changes to our capitalization should be made) and (b) whether to undertake material capital expenditures and how to finance them, all in light of our dividend policy. Use of EBITDA and Adjusted EBITDA as liquidity measures also permits security holders to assess the fundamental ability of our business to generate cash sufficient to meet our financial and operational needs, including dividends on shares of our common stock and repayments under debt instruments.

Neither EBITDA nor Adjusted EBITDA should be considered as an alternative to net income, operating income, cash flow from operating activities or any other measure of financial performance or liquidity presented in accordance with GAAP. EBITDA and Adjusted EBITDA exclude some, but not all, items that affect net income and operating income, and these measures may vary among other companies. Therefore, EBITDA and Adjusted EBITDA as presented below may not be comparable to similarly titled measures of other companies.

The following table reconciles our historical consolidated EBITDA and Adjusted EBITDA to net income (loss), and our historical consolidated Adjusted EBITDA to net operating cash flow.

	Year Ended December 31,				
	2016	2015	2014	2013	2012
	(in thousands of U.S. Dollars)				
<b>Income Statement Data:</b>					
<b>Reconciliation of EBITDA and Adjusted EBITDA to Net Income (Loss)</b>					
Net income (loss)	\$ 86,664	\$ 405,460	\$ 124,002	\$ 35,480	\$ (311,116)
Income tax expense (recovery)	24,468	(16,767)	10,173	2,872	(14,406)
Depreciation and amortization	571,825	509,500	422,904	431,086	455,898
Interest expense, net of interest income	278,145	236,481	201,702	171,688	161,456
<b>EBITDA</b>	<b>961,102</b>	<b>1,134,674</b>	<b>758,781</b>	<b>641,126</b>	<b>291,832</b>
Restructuring charges	26,811	14,017	9,826	6,921	7,565
Foreign exchange loss (gain) <sup>(a)</sup>	6,548	2,195	(13,431)	13,304	12,898
Items included in other loss (income) <sup>(b) (c)</sup>	42,401	—	7,699	—	—
Asset impairments and net loss (gain) on sale of vessels, equipment and other operating assets	112,246	70,175	(11,271)	166,358	441,057
Amortization of in-process revenue contracts	(28,109)	(30,085)	(40,939)	(61,700)	(72,933)
Unrealized (gains) losses on derivative instruments	(69,401)	(38,319)	100,496	(178,731)	(29,658)
Realized losses on interest rate swaps	87,320	108,036	125,424	122,439	123,277
Realized losses on interest rate swap amendments and terminations	8,140	10,876	1,319	35,985	—
Write-downs related to equity-accounted investments	2,357	—	—	—	1,767
Adjustments relating to equity income <sup>(d)</sup>	119,253	122,127	99,380	71,680	54,871
<b>Adjusted EBITDA</b>	<b>1,268,668</b>	<b>1,393,696</b>	<b>1,037,284</b>	<b>817,382</b>	<b>830,676</b>
<b>Reconciliation of Adjusted EBITDA to net operating cash flow</b>					
Net operating cash flow	620,120	770,309	446,317	292,584	288,936
Expenditures for dry docking	45,964	68,380	74,379	72,205	35,023
Interest expense, net of interest income	278,145	236,481	201,702	171,688	161,456
Change in non-cash working capital items related to operating activities	(38,333)	12,291	(60,631)	(64,184)	115,209
Equity income (loss), net of dividends received	47,563	(3,203)	94,726	121,144	65,639
Other items <sup>(b) (c)</sup>	73,685	54,382	44,842	(13,080)	(21,300)
Restructuring charges	26,811	14,017	9,826	6,921	7,565
Realized losses on interest rate swaps	87,320	108,036	125,424	122,439	123,277
Realized losses on interest rate swap resets and terminations	8,140	10,876	1,319	35,985	—
Adjustments relating to equity income <sup>(d)</sup>	119,253	122,127	99,380	71,680	54,871
<b>Adjusted EBITDA</b>	<b>1,268,668</b>	<b>1,393,696</b>	<b>1,037,284</b>	<b>817,382</b>	<b>830,676</b>

(a) Foreign exchange loss (gain) excludes the unrealized gain of \$75.0 million in 2016 (2015 - loss of \$89.2 million, 2014 - loss of \$167.3 million, 2013 - loss of \$65.4 million and 2012 - gain of \$10.7 million) on cross currency swaps, which is incorporated in unrealized (gains) losses on derivative instruments in the table above.

(b) In June 2016, as part of its financing initiatives, Teekay Offshore canceled the construction contracts for its two UMS newbuildings. As a result, Teekay Offshore accrued for potential damages resulting from the cancellations and reversed contingent liabilities previously recorded that were relating to the delivery of the UMS newbuildings. This net loss provision of \$23.4 million for the year ended December 31, 2016 is reported in Other (loss) income in our consolidated statements of income. The newbuilding contracts are held in Teekay Offshore's separate subsidiaries and obligations of these subsidiaries are non-recourse to Teekay Offshore. For additional information, please read Item 18 - Financial Statements: Note 15d Commitments and Contingencies.

(c) The Company holds investments at cost. During the year ended December 31, 2016, the Company recorded a write-down of these investments of \$19.0 million.

- (d) Adjustments relating to equity income, which is a non-GAAP measure, should not be considered as an alternative to equity income or any other measure of financial performance or liquidity presented in accordance with GAAP. Adjustments relating to equity income exclude some, but not all, items that affect equity income and these measures may vary among other companies. Therefore, adjustments relating to equity income as presented in this Annual Report may not be comparable to similarly titled measures of other companies. When using Adjusted EBITDA as a measure of liquidity it should be noted that this measure includes the Adjusted EBITDA from our equity accounted for investments. We do not have control over the operations, nor do we have any legal claim to the revenue and expenses of our equity accounted for investments. Consequently, the cash flow generated by our equity accounted for investments may not be available for use by us in the period generated. Equity income from equity accounted investments is adjusted for income tax expense (recovery), depreciation and amortization, interest expense net of interest income, foreign exchange loss (gain), amortization of in-process revenue contracts, and unrealized and realized (gains) losses on derivative instruments. Adjustments relating to equity income from our equity accounted investments are as follows:

	Year Ended December 31,				
	2016	2015	2014	2013	2012
	(in thousands of U.S. Dollars)				
Depreciation and amortization	69,781	69,103	61,367	56,188	25,589
Interest expense, net of interest income	45,584	47,799	42,713	37,863	26,622
Income tax expense (recovery)	724	476	(188)	(21)	87
Amortization of in-process revenue contracts	(5,482)	(7,153)	(8,295)	(14,173)	(11,083)
Foreign currency exchange loss (gain)	132	(527)	(441)	709	(18)
Asset impairments and net loss (gain) on sale of vessels, equipment and other operating assets	4,763	(7,472)	(16,923)	—	—
Realized and unrealized loss (gain) on derivative instruments	3,075	15,027	21,147	(8,886)	13,674
Other	676	4,874	—	—	—
Adjustments relating to equity income	<u>119,253</u>	<u>122,127</u>	<u>99,380</u>	<u>71,680</u>	<u>54,871</u>

- (4) Total capitalization represents total debt and total equity.
- (5) Net debt is a non-GAAP financial measure. Net debt represents total debt less cash, cash equivalents and restricted cash. Total net capitalization represents net debt and total equity.

## Risk Factors

*Some of the following risks relate principally to the industry in which we operate and to our business in general. Other risks relate principally to the securities market and to ownership of our common stock. The occurrence of any of the events described in this section could materially and adversely affect our business, financial condition, operating results and ability to pay interest or principal or dividends on, and the trading price of our public debt and common stock.*

### **Changes in the oil and natural gas markets could result in decreased demand for our vessels and services.**

Demand for our vessels and services in transporting, production and storage of oil, petroleum products, LNG and LPG depend upon world and regional oil, petroleum and natural gas markets. Any decrease in shipments of oil, petroleum products, LNG or LPG in those markets could have a material adverse effect on our business, financial condition and results of operations. Historically, those markets have been volatile as a result of the many conditions and events that affect the price, production and transport of oil, petroleum products, LNG or LPG, and competition from alternative energy sources. A slowdown of the U.S. and world economies may result in reduced consumption of oil, petroleum products and natural gas and decreased demand for our vessels and services, which would reduce vessel earnings.

### **A continuation of the recent significant declines in oil prices may adversely affect our growth prospects and results of operations.**

Global crude oil prices have significantly declined since mid-2014. The significant decline in oil prices has also contributed to depressed natural gas prices. A continuation of lower oil prices or a further decline in oil prices may adversely affect our business, results of operations and financial condition and our ability to make cash distributions, as a result of, among other things:

- a reduction in exploration for or development of new offshore oil fields, or the delay or cancelation of existing offshore projects as energy companies lower their capital expenditures budgets, which may reduce our growth opportunities;
- a reduction in or termination of production of oil at certain fields we service, which may reduce our revenues under volume-based contracts of affreightment, production-based components of our FPSO unit contracts or life-of-field contracts;
- a reduction in both the competitiveness of natural gas as a fuel for power generation and the market price of natural gas, to the extent that natural gas prices are benchmarked to the price of crude oil;
- lower demand for vessels of the types we own and operate, which may reduce available charter rates and revenue to us upon redeployment of our vessels, in particular FPSO units, following expiration or termination of existing contracts or upon the initial chartering of vessels, or which may result in extended periods of our vessels being idle between contracts;

- customers potentially seeking to renegotiate or terminate existing vessel contracts, failing to extend or renew contracts upon expiration, or seeking to negotiate cancelable contracts;
- the inability or refusal of customers to make charter payments to us, including purchase obligations at the end of certain charter contracts, due to financial constraints or otherwise; or
- declines in vessel values, which may result in losses to us upon vessel sales or impairment charges against our earnings.

***Current market conditions limit our access to capital and our growth.***

We have relied primarily upon bank financing and debt and equity offerings, primarily by our Daughter Companies, to fund our growth. Current market conditions generally in the energy sector and for master limited partnerships have significantly reduced our and our Daughter Companies' access to capital, particularly equity capital, compared to periods prior to mid-2014. Debt financing and refinancing are more challenging to obtain and terms are less attractive to us. Issuing additional common equity given current market conditions is more dilutive and costly than it has been in the past. Lack of access to debt or equity capital at reasonable rates would adversely affect our growth prospects and our ability to refinance debt and make distributions to our equityholders.

***The ability of us and our Daughter Companies to repay or refinance debt obligations and to fund capital expenditures will depend on certain financial, business and other factors, many of which are beyond our control. We and our Daughter Companies will need to obtain additional financing, which financing may limit our and their ability to make cash dividends and distributions, increase our or their financial leverage and result in dilution to our or their equityholders.***

To fund existing and future debt obligations and capital expenditures of us and our Daughter Companies and to meet the minimum liquidity requirements under the financial covenants in our or their credit facilities, we and they will be required to obtain additional sources of financing, in addition to amounts generated from operations. These anticipated sources of financing include: raising additional capital through equity issuances; refinancing and increasing amounts available under various loan facilities of Teekay Tankers, Teekay LNG and Teekay Offshore; negotiating new secured debt financings related to vessels under construction or other unencumbered operating vessels for Teekay Tankers, Teekay LNG and Teekay Offshore; and, for Teekay Offshore, negotiating extensions or redeployments of existing assets and the sale of partial interests in certain assets.

The ability of us and our Daughter Companies to obtain external financing may be limited by our and their financial condition at the time of any such financing as well as by adverse market conditions in general. Even if we or our Daughter Companies are successful in obtaining necessary funds, the terms of such financings could limit our or their ability to pay cash dividends or distributions to security holders or operate our or their businesses as currently conducted. In addition, incurring additional debt may significantly increase interest expense and financial leverage, and issuing additional equity securities may result in significant equityholder dilution and would increase the aggregate amount of cash required to maintain quarterly dividends and distributions. The sale of certain assets will reduce cash from operations and the cash available for distribution to equityholders. For more information on our and our Daughter Companies' liquidity requirements, please read "Item 18 - Financial Statements: Note 15 (c) - Commitments and Contingencies - Liquidity."

***We have guaranteed significant debt and derivatives of certain of our Daughter Companies, and will be directly obligated to make related payments if the Daughter Companies default in their payment obligations.***

We have guaranteed obligations pursuant to certain credit facilities of Teekay Tankers and Teekay Offshore. As at December 31, 2016, the aggregate outstanding balance on such credit facilities was \$150.0 million and \$364.0 million, respectively. We have also guaranteed obligations, up to a maximum of \$387.0 million, pursuant to certain interest rate swaps and cross currency swaps of Teekay Offshore. As at December 31, 2016, the estimated fair value of these interest rate swaps and cross currency swaps, capped at the maximum guarantee obligation, was a liability of \$241.3 million. If Teekay Tankers or Teekay Offshore default in paying these obligations, we will be obligated to make the required payments.

***Our cash flow depends substantially on the ability of our subsidiaries, primarily our Daughter Companies, to make distributions to us. Our Daughter Companies, Teekay Offshore and Teekay LNG, have significantly reduced their distribution levels.***

The source of our cash flow includes cash distributions from our subsidiaries, primarily Teekay Offshore and Teekay LNG. The amount of cash our subsidiaries can distribute to us principally depends upon the amount of distributions declared by each of their board of directors and the amount of cash they generate from their operations.

Effective for the quarterly distribution of the fourth quarter of 2015, we reduced our quarterly cash dividend per share to \$0.055 from \$0.55, Teekay Offshore reduced its quarterly cash distribution per common unit to \$0.11 from \$0.56 and Teekay LNG reduced its quarterly cash distribution per common unit to \$0.14 from \$0.70. At the time these changes were made, there was a dislocation in the capital markets relative to the stability of our businesses. More specifically, the future equity capital requirements for our committed growth projects, coupled with the relative weakness in energy and capital markets, resulted in our conclusion that it would be in the best interests of our shareholders to conserve more of our internally generated cash flows to fund committed existing growth projects and to reduce debt levels. We, Teekay Offshore and Teekay LNG each maintained these reduced dividend and distribution levels throughout 2016. These distribution reductions by Teekay Offshore and Teekay LNG substantially reduced our cash flows from them, including by currently eliminating any distributions on our incentive distribution rights in such Daughter Companies.

The amount of cash our subsidiaries generate from their operations may fluctuate from quarter to quarter based on, among other things:

- the rates they obtain from their charters, voyages and contracts;
- the price and level of production of, and demand for, crude oil, LNG and LPG, including the level of production at the offshore oil fields our subsidiaries service under contracts of affreightment;
- the operating performance of our FPSO units, whereby receipt of incentive-based revenue from our FPSO units is dependent upon the fulfillment of the applicable performance criteria;
- the level of their operating costs, such as the cost of crews and repairs and maintenance;
- the number of off-hire days for their vessels and the timing of, and number of days required for, dry docking of vessels;
- the rates, if any, at which our subsidiaries may be able to redeploy shuttle tankers in the spot market as conventional oil tankers during any periods of reduced or terminated oil production at fields serviced by contracts of affreightment;
- the rates, if any, at which our subsidiaries may be able to redeploy vessels, particularly FPSO units, after they complete their charters or contracts and are redelivered to us;
- the rates, if any, and ability, at which our subsidiaries may be able to contract our newbuilding vessels, including our newbuilding towage vessels;
- delays in the delivery of any newbuildings or vessels undergoing conversion or upgrades and the beginning of payments under charters relating to those vessels;
- prevailing global and regional economic and political conditions;
- currency exchange rate fluctuations; and
- the effect of governmental regulations and maritime self-regulatory organization standards on the conduct of business.

The actual amount of cash our subsidiaries have available for distribution also depends on other factors such as:

- the level of their capital expenditures, including for maintaining vessels or converting existing vessels for other uses and complying with regulations;
- their debt service requirements and restrictions on distributions contained in their debt agreements, including financial ratio covenants which may indirectly restrict loans, distributions or dividends;
- fluctuations in their working capital needs;
- their ability to make working capital borrowings; and
- the amount of any cash reserves, including reserves for future maintenance capital expenditures, working capital and other matters, established by the boards of directors of our Daughter Companies at their discretion.

The amount of cash our subsidiaries generate from operations may differ materially from their profit or loss for the period, which will be affected by non-cash items and the timing of debt service payments. As a result of this and the other factors mentioned above, our subsidiaries may make cash distributions during periods when they record losses and may not make cash distributions during periods when they record net income.

***The prices of our common stock and other securities have been, and are likely to continue to be, volatile. Periods of market volatility may increase the risk of a securities litigation claim, regardless of merit. We have been named as a defendant in a pending securities class action lawsuit relating to our common shares.***

Following our announcement in December 2015 that our Board of Directors had reduced our quarterly dividend to \$0.055 per share for the fourth quarter of 2015 dividend payable in February 2016, down from a dividend of \$0.55 per share in the third quarter of 2015, and the subsequent decline of the price of our common stock, a class action complaint was filed on March 1, 2016 in the U.S. District Court for the District of Connecticut against us and certain of our officers. As a result of our motion to transfer the action, the case was transferred to the U.S. District Court for the Western District of Washington on November 18, 2016. The lead plaintiff in the action filed an Amended Class Action Complaint on January 13, 2017. The Amended Complaint includes claims that we and certain of our officers violated Section 10(b) of the U.S. Securities and Exchange Act of 1934, as amended (or the *Exchange Act*) and Rule 10b-5 promulgated thereunder. The Amended Complaint alleges that we and certain of our officers violated federal securities laws by making materially false and misleading statements regarding our ability and intention to increase our future dividends beyond the initial dividend increase to \$0.55 per share that we announced in September 2014 and first declared in the second quarter of 2015, thereby artificially inflating the price of our common stock. The lead plaintiff is seeking unspecified monetary damages, including reasonable costs and expenses incurred in this action. We are vigorously defending against the claims. We filed our motion to dismiss the Amended Complaint on March 14, 2017. The motion to dismiss will be fully briefed and ready for consideration by the Court on June 14, 2017. Based on the current stage of this action and our evaluation of the facts available at this time, the amount or range of reasonably possible losses to which we are exposed cannot be estimated and the ultimate resolution of this matter and the associated financial impact to us, if any, remains uncertain at this time. We maintain a Directors and Officers insurance policy that provides a fixed amount of coverage for such claims, subject to coverage defenses, and a deductible to be paid by us. Regardless of the outcome of claims of this type, the defense of such claims may cause us to incur substantial costs, divert resources and the attention of management from our business, and adversely affect our business.

***The cyclical nature of the tanker industry may lead to volatile changes in charter rates and significant fluctuations in the utilization of our vessels, which may adversely affect our earnings and profitability.***

Historically, the tanker industry has been cyclical, experiencing volatility in profitability due to changes in the supply of and demand for tanker capacity and changes in the supply of and demand for oil and oil products. The cyclical nature of the tanker industry may cause significant increases or decreases in the revenue we earn from our vessels and may also cause significant increases or decreases in the value of our vessels. If the tanker market is depressed, our earnings may decrease, particularly with respect to the conventional tanker vessels owned by Teekay Tankers, which accounted for approximately 22% and 21% of our net revenues during 2016 and 2015, respectively. These vessels are primarily employed on the spot-charter market, which is highly volatile and fluctuates based upon tanker and oil supply and demand. Declining spot rates in a given period generally will result in corresponding declines in operating results for that period. The successful operation of our vessels in the spot-charter market depends upon, among other things, obtaining profitable spot charters and minimizing, to the extent possible, time spent waiting for charters and time spent traveling unladen to pick up cargo. Future spot rates may not be sufficient to enable our vessels trading in the spot tanker market to operate profitably or to provide sufficient cash flow to service our debt obligations. The factors affecting the supply of and demand for tankers are outside of our control, and the nature, timing and degree of changes in industry conditions are unpredictable.

Factors that influence demand for tanker capacity include:

- demand for oil and oil products;
- supply of oil and oil products;
- regional availability of refining capacity;
- global and regional economic and political conditions;
- the distance oil and oil products are to be moved by sea; and
- changes in seaborne and other transportation patterns.

Factors that influence the supply of tanker capacity include:

- the number of newbuilding deliveries;
- the scrapping rate of older vessels;
- conversion of tankers to other uses;
- the number of vessels that are out of service; and
- environmental concerns and regulations.

Changes in demand for transportation of oil over longer distances and in the supply of tankers to carry that oil may materially affect our revenues, profitability and cash flows.

***Reduction in oil produced from offshore oil fields could harm our shuttle tanker and FPSO businesses.***

As at December 31, 2016, we had 30 vessels operating in our shuttle tanker fleet, nine FPSO units operating in our FPSO fleet (of which one is operating in a joint venture), one FPSO unit undergoing an upgrade and one 50% owned FPSO unit undergoing a conversion. Certain of our shuttle tankers and our FPSO units earn revenue that depends upon the volume of oil we transport or the volume of oil produced from offshore oil fields. Oil production levels are affected by several factors, all of which are beyond our control, including:

- geologic factors, including general declines in production that occur naturally over time;
- the rate of technical developments in extracting oil and related infrastructure and implementation costs; and
- operator decisions based on revenue compared to costs from continued operations.

Factors that may affect an operator's decision to initiate or continue production include: changes in oil prices; capital budget limitations; the availability of necessary drilling and other governmental permits; the availability of qualified personnel and equipment; the quality of drilling prospects in the area; and regulatory changes. In addition, the volume of oil we transport may be adversely affected by extended repairs to oil field installations or suspensions of field operations as a result of oil spills, operational difficulties, strikes, employee lockouts or other labor unrest. The rate of oil production at fields we service may decline from existing or future levels, and may be terminated, all of which could harm our business and operating results. In addition, if such a reduction or termination occurs, the spot tanker market rates, if any, in the conventional oil tanker trades at which we may be able to redeploy the affected shuttle tankers may be lower than the rates previously earned by the vessels under contracts of affreightment, which would also harm our business and operating results.

***The redeployment risk of FPSO units is high given their lack of alternative uses and significant costs.***

FPSO units are specialized vessels that have very limited alternative uses and high fixed costs. In addition, FPSO units typically require substantial capital investments prior to being redeployed to a new field and production service agreement. These factors increase the redeployment risk of FPSO units. Unless extended, seven of our FPSO production service agreements will expire during the next five years. Our clients may also terminate certain of our FPSO production service agreements prior to their expiration under specified circumstances. Any idle time prior to the commencement of a new contract or our inability to redeploy the vessels at acceptable rates may have an adverse effect on our business and operating results.

***The duration of many of our shuttle tanker, FSO and FPSO contracts is the life of the relevant oil field or is subject to extension by the field operator or vessel charterer. If the oil field no longer produces oil or is abandoned or the contract term is not extended, we will no longer generate revenue under the related contract and will need to seek to redeploy affected vessels.***

Many of our shuttle tanker contracts have a "life-of-field" duration, which means that the contract continues until oil production at the field ceases. If production at a field terminates or a field is abandoned for any reason, we no longer will generate revenue under the related contract. Other shuttle tanker, FSO and FPSO contracts under which our vessels operate are subject to extensions beyond their initial term. The likelihood of these contracts being extended may be negatively affected by reductions in oil field reserves, low oil prices generally or other factors. If we are unable to promptly redeploy any affected vessels at rates at least equal to those under the contracts, if at all, our operating results will be harmed. Any potential redeployment may not be under long-term contracts, which may affect the stability of our business and operating results.

***Charter rates for conventional oil and product tankers and towage vessels may fluctuate substantially over time and may be lower when we are attempting to re-charter these vessels, which could adversely affect our operating results. Any changes in charter rates for LNG or LPG carriers, shuttle tankers, FSO or FPSO units, or UMS could also adversely affect redeployment opportunities for those vessels.***

Our ability to re-charter our conventional oil and product tankers following expiration of existing time-charter contracts and the rates payable upon any renewal or replacement charters will depend upon, among other things, the state of the conventional tanker market. Conventional oil and product tanker trades are highly competitive and have experienced significant fluctuations in charter rates based on, among other things, oil, refined petroleum product and vessel demand. For example, an oversupply of conventional oil tankers can significantly reduce their charter rates. Our ability to charter our towage vessels will depend, among other things, on the state of the towage market. Towage contracts are highly competitive and are based on the level of projects undertaken by the customer base. There also exists some volatility in charter rates for LNG and LPG carriers, shuttle tankers, FSO and FPSO units, and UMS, which could also adversely affect redeployment opportunities for those vessels.



***Over time, the value of our vessels may decline, which could adversely affect our operating results.***

Vessel values for oil and product tankers, LNG and LPG carriers, UMS, and FPSO and FSO units can fluctuate substantially over time due to a number of different factors, including:

- prevailing economic conditions in oil and energy markets;
- a substantial or extended decline in demand for oil or natural gas;
- increases in the supply of vessel capacity;
- competition from more technologically advanced vessels;
- the cost of retrofitting or modifying existing vessels, as a result of technological advances in vessel design or equipment, changes in applicable environmental or other regulations or standards, or otherwise; and
- a decrease in oil reserves in the fields and other fields in which our FPSO units or other vessels might otherwise be deployed.

Vessel values may decline from existing levels. If operation of a vessel is not profitable, or if we cannot redeploy a chartered vessel at attractive rates upon charter termination, rather than continue to incur costs to maintain and finance the vessel, we may seek to dispose of it. Our inability to dispose of the vessel at a fair market value or the disposition of the vessel at a fair market value that is lower than its book value could result in a loss on its sale and adversely affect our results of operations and financial condition. Further, if we determine at any time that a vessel's future useful life and earnings require us to impair its value on our financial statements, we may need to recognize a significant charge against our earnings. We recognized asset impairment charges of \$46 million, \$68 million and \$nil in 2016, 2015, 2014, respectively, and net (loss) gain on sale of assets of \$(66) million, \$(2) million and \$9 million in 2016, 2015 and 2014, respectively.

***Declining market values of our vessels could adversely affect our liquidity and result in breaches of our financing agreements.***

Market values of vessels fluctuate depending upon general economic and market conditions affecting relevant markets and industries and competition from other shipping companies and other modes of transportation. In addition, as vessels become older, they generally decline in value. Declining vessel values could adversely affect our liquidity by limiting our ability to raise cash by refinancing vessels. Declining vessel values could also result in a breach of loan covenants and events of default under certain of our credit facilities that require us to maintain certain loan-to-value ratios. If we are unable to pledge additional collateral in the event of a decline in vessel values, the lenders under these facilities could accelerate our debt and foreclose on our vessels pledged as collateral for the loans. As of December 31, 2016, the total outstanding debt under credit facilities with this type of loan-to-value covenant tied to conventional tanker, towage, UMS and shuttle tanker values was \$1,405.9 million, tied to FPSO values was \$640.2 million and tied to LNG carrier values was \$127.8 million. We have eleven financing arrangements that require us to maintain vessel value to outstanding loan principal balance ratios ranging from 105% to 125%. At December 31, 2016, we were in compliance with these required ratios.

***Our growth depends on continued growth in demand for LNG and LPG, and LNG and LPG shipping, as well as offshore oil transportation, production, processing and storage services.***

A significant portion of our growth strategy focuses on continued expansion in the LNG and LPG shipping sectors and on expansion in the FPSO, shuttle tanker, and FSO sectors.

Expansion of the LNG and LPG shipping sectors depends on growth in world and regional demand for LNG and LPG and marine transportation of LNG and LPG, as well as the supply of LNG and LPG. Demand for LNG and LPG and for the marine transportation of LNG and LPG could be negatively affected by a number of factors, such as:

- increases in the cost of natural gas derived from LNG relative to the cost of natural gas generally;
- increases in the cost of LPG relative to the cost of naphtha and other competing petrochemicals;
- increases in the production of natural gas in areas linked by pipelines to consuming areas, the extension of existing, or the development of new, pipeline systems in markets we may serve, or the conversion of existing non-natural gas pipelines to natural gas pipelines in those markets;
- decreases in the consumption of natural gas due to increases in its price relative to other energy sources or other factors making consumption of natural gas less attractive;
- additional sources of natural gas, including shale gas;
- availability of alternative energy sources; and
- negative global or regional economic or political conditions, particularly in LNG and LPG consuming regions, which could reduce energy consumption or its rate of growth.

Reduced demand for LNG or LPG and LNG or LPG shipping could have a material adverse effect on future growth of Teekay LNG, and could harm its results. Growth of the LNG and LPG markets may be limited by infrastructure constraints and community and environmental group resistance to new LNG and LPG infrastructure over concerns about the environment, safety and terrorism. If the LNG or LPG supply chain is disrupted or does not continue to grow, or if a significant LNG or LPG explosion, spill or similar incident occurs, it could have a material adverse effect on demand for LNG or LPG and could harm our business, results of operations and financial condition.

Expansion of the FPSO, shuttle tanker, FSO, and towing sectors depends on continued growth in world and regional demand for these offshore services, which could be negatively affected by a number of factors, such as:

- decreases in the actual or projected price of oil, which could lead to a reduction in or termination of production of oil at certain fields we service, delays or cancellations of projects under development or a reduction in exploration for or development of new offshore oil fields;
- increases in the production of oil in areas linked by pipelines to consuming areas, the extension of existing, or the development of new, pipeline systems in markets we may serve, or the conversion of existing non-oil pipelines to oil pipelines in those markets;
- decreases in the consumption of oil due to increases in its price relative to other energy sources, other factors making consumption of oil less attractive or energy conservation measures;
- availability of new, alternative energy sources; and
- negative global or regional economic or political conditions, particularly in oil consuming regions, which could reduce energy consumption or its growth.

Reduced demand for offshore marine transportation, production, processing, storage services, offshore accommodation or towing and offshore installation would have a material adverse effect on our future growth and could harm our business, results of operations and financial condition.

***The intense competition in our markets may lead to reduced profitability or reduced expansion opportunities.***

Our vessels operate in highly competitive markets. Competition arises primarily from other vessel owners, including major oil companies and independent companies. We also compete with owners of other size vessels. Our market share is insufficient to enforce any degree of pricing discipline in the markets in which we operate and our competitive position may erode in the future. Any new markets that we enter could include participants that have greater financial strength and capital resources than we have. We may not be successful in entering new markets.

One of our objectives is to enter into additional long-term, fixed-rate charters for our LNG and LPG carriers, shuttle tankers, UMS, FPSO and FSO units. The process of obtaining new long-term time charters is highly competitive and generally involves an intensive screening process and competitive bids, and often extends for several months. We expect competition for providing services for potential gas and offshore projects from other experienced companies, including state-sponsored entities. Our competitors may have greater financial resources than us. This increased competition may cause greater price competition for charters. As a result of these factors, we may be unable to expand our relationships with existing customers or to obtain new customers on a profitable basis, if at all, which would have a material adverse effect on our business, results of operations and financial condition.

***The loss of any key customer or its inability to pay for our services could result in a significant loss of revenue in a given period.***

We have derived, and believe that we will continue to derive, a significant portion of our revenues from a limited number of customers. Two customers, international oil companies, accounted for an aggregate of 29%, or \$653.6 million of our consolidated revenues during 2016 (2015 – two customers for 21%, or \$495.2 million, 2014 – two customers for 24%, or \$488.0 million). During these periods, no other customer accounted for over 10% of our revenues for the applicable period. The loss of any significant customer or a substantial decline in the amount of services requested by a significant customer, or the inability of a significant customer to pay for our services, could have a material adverse effect on our business, financial condition and results of operations.

We could lose a customer or the benefits of a contract if:

- the customer fails to make payments because of its financial inability, disagreements with us or otherwise;
- we agree to reduce the payments due to us under a contract because of the customer's inability to continue making the original payments;
- the customer exercises certain rights to terminate the contract; or
- the customer terminates the contract because we fail to deliver the vessel within a fixed period of time, the vessel is lost or damaged beyond repair, there are serious deficiencies in the vessel or prolonged periods of off-hire, or we default under the contract.

In early-November 2016, the *Arendal Spirit* UMS experienced an operational incident relating to its dynamic positioning system. As a result of this operational incident, and a gangway incident that occurred in April 2016, the charterer, Petrobras, initiated an operational review. Until the results of the review are available, Petrobras has suspended its charter hire payments since November 2016. Teekay Offshore completed an investigation to identify the cause of such incidents and have implemented corrective actions. There is a risk that Petrobras may seek to cancel the charter contract resulting from their operational review. If this occurs, the term loan outstanding for the *Arendal Spirit* UMS, which as at December 31, 2016 had a balance of \$127.5 million, could become payable within 180 days of a cancellation. Teekay Offshore is working to address Petrobras' concerns to bring the unit back into operations as soon as possible. Should the contract be cancelled, it could result in a reclassification of \$112.5 million of long-term debt to the current portion of long-term debt unless Teekay Offshore is able to obtain an extension from the lenders. A cancellation of the charter contract or demand for repayment of the loan would adversely affect our result of operations, financial condition and liquidity.

If we lose a key customer, we may be unable to obtain replacement long-term charters or contracts of affreightment and may increase our exposure, with respect to any shuttle tankers redeployed on conventional oil tanker trades, to the volatile spot market, which is highly competitive and subject to significant price fluctuations. If a customer exercises its right under some charters to purchase the vessel, or terminate the charter, we may be unable to acquire an adequate replacement vessel or charter. Any replacement newbuilding would not generate revenues during its construction and we may be unable to charter any replacement vessel on terms as favorable to us as those of the terminated charter.

The loss of any of our significant customers or a reduction in revenues from them could have a material adverse effect on our business, results of operations and financial condition and our ability to pay dividends and service our debt.

***Future adverse economic conditions, including disruptions in the global credit markets, could adversely affect our business, financial condition and results of operations.***

Economic downturns and financial crises in the global markets could produce illiquidity in the capital markets, market volatility, increased exposure to interest rate and credit risks and reduced access to capital markets. If global financial markets and economic conditions significantly deteriorate in the future, we may face restricted access to the capital markets or bank lending, which may make it more difficult and costly to fund future growth. Decreased access to such resources could have a material adverse effect on our business, financial condition and results of operations.

***Future adverse economic conditions or other developments may affect our customers' ability to charter our vessels and pay for our services and may adversely affect our business and results of operations.***

Future adverse economic conditions or other developments relating directly to our customers may lead to a decline in our customers' operations or ability to pay for our services, which could result in decreased demand for our vessels and services. Our customers' inability to pay for any reason could also result in their default on our current contracts and charters. The decline in the amount of services requested by our customers or their default on our contracts with them could have a material adverse effect on our business, financial condition and results of operations.

***Our operations are subject to substantial environmental and other regulations, which may significantly increase our expenses.***

Our operations are affected by extensive and changing international, national and local environmental protection laws, regulations, treaties and conventions in force in international waters, the jurisdictional waters of the countries in which our vessels operate, as well as the countries of our vessels' registration, including those governing oil spills, discharges to air and water, and the handling and disposal of hazardous substances and wastes. Many of these requirements are designed to reduce the risk of oil spills and other pollution. In addition, we believe that the heightened environmental, quality and security concerns of insurance underwriters, regulators and charterers will lead to additional regulatory requirements, including enhanced risk assessment and security requirements and greater inspection and safety requirements on vessels. We expect to incur substantial expenses in complying with these laws and regulations, including expenses for vessel modifications and changes in operating procedures.

These requirements can affect the resale value or useful lives of our vessels, require a reduction in cargo capacity, ship modifications or operational changes or restrictions, lead to decreased availability of insurance coverage for environmental matters or result in the denial of access to certain jurisdictional waters or ports, or detention in, certain ports. Under local, national and foreign laws, as well as international treaties and conventions, we could incur material liabilities, including cleanup obligations, in the event that there is a release of petroleum or other hazardous substances from our vessels or otherwise in connection with our operations. We could also become subject to personal injury or property damage claims relating to the release of or exposure to hazardous materials associated with our operations. In addition, failure to comply with applicable laws and regulations may result in administrative and civil penalties, criminal sanctions or the suspension or termination of our operations, including, in certain instances, seizure or detention of our vessels. For further information about regulations affecting our business and related requirements on us, please read "Item 4. Information on the Company—B. Operations—Regulations."

***We may be unable to make or realize expected benefits from acquisitions, and implementing our long-term strategy of growth through acquisitions may harm our financial condition and performance.***

A principal component of our long-term strategy is to continue to grow by expanding our business both in the geographic areas and markets where we have historically focused as well as into new geographic areas, market segments and services. We may not be successful in expanding our operations and any expansion may not be profitable. Our long-term strategy of growth through acquisitions involves business risks commonly encountered in acquisitions of companies, including:

- interruption of, or loss of momentum in, the activities of one or more of an acquired company's businesses and our businesses;
- additional demands on members of our senior management while integrating acquired businesses, which would decrease the time they have to manage our existing business, service existing customers and attract new customers;
- difficulties integrating the operations, personnel and business culture of acquired companies;
- difficulties coordinating and managing geographically separate organizations;
- adverse effects on relationships with our existing suppliers and customers, and those of the companies acquired;
- difficulties entering geographic markets or new market segments in which we have no or limited experience; and
- loss of key officers and employees of acquired companies.

Acquisitions may not be profitable to us at the time of their completion and may not generate revenues sufficient to justify our investment. In addition, our acquisition growth strategy exposes us to risks that may harm our results of operations and financial condition, including risks that we may: fail to realize anticipated benefits, such as cost-savings, revenue and cash flow enhancements and earnings accretion; decrease our liquidity by using a significant portion of our available cash or borrowing capacity to finance acquisitions; incur additional indebtedness, which may result in significantly increased interest expense or financial leverage, or issue additional equity securities to finance acquisitions, which may result in significant shareholder dilution; incur or assume unanticipated liabilities, losses or costs associated with the business acquired; or incur other significant charges, such as impairment of goodwill or other intangible assets, asset devaluation or restructuring charges.

Unlike newbuildings, existing vessels typically do not carry warranties as to their condition. While we generally inspect existing vessels prior to purchase, such an inspection would normally not provide us with as much knowledge of a vessel's condition as we would possess if it had been built for us and operated by us during its life. Repairs and maintenance costs for existing vessels are difficult to predict and may be substantially higher than for vessels we have operated since they were built. These costs could decrease our cash flow and reduce our liquidity.

***The strain that growth places upon our systems and management resources may harm our business.***

Our growth has placed, and we believe it will continue to place, significant demands on our management, operational and financial resources. As we expand our operations, we must effectively manage and monitor operations, control costs and maintain quality and control in geographically dispersed markets. In addition, our three publicly-traded subsidiaries and TIL have increased the complexity of our operations and placed additional demands on our management. Any future joint venture, partnering or other similar transactions may further increase our complexity and demands on our management. Our future growth and financial performance will also depend on our ability to recruit, train, manage and motivate our employees to support our expanded operations and continue to improve our customer support, financial controls and information systems.

These efforts may not be successful and may not occur in a timely or efficient manner. Failure to effectively manage our growth and transitions in systems and procedures required by expansion in a cost-effective manner could have a material adverse effect on our business.

***Our insurance may not be sufficient to cover losses that may occur to our property or as a result of our operations.***

The operation of oil and product tankers, lightering vessels, LNG and LPG carriers, FPSO and FSO units, UMS, towage vessels, and the HiLoad DP unit is inherently risky. Although we carry hull and machinery (marine and war risk) and protection and indemnity insurance, all risks may not be adequately insured against, and any particular claim may not be paid. In addition, with the exception of the Petrojarl Knarr FPSO unit and *Libra* FPSO unit, we do not generally carry insurance on our vessels covering the loss of revenues resulting from vessel off-hire time, based on its cost compared to our off-hire experience. Any significant off-hire time of our vessels could harm our business, operating results and financial condition. Any claims relating to our operations covered by insurance would be subject to deductibles, and since it is possible that a large number of claims may be brought, the aggregate amount of these deductibles could be material. Certain of our insurance coverage is maintained through mutual protection and indemnity associations and as a member of such associations we may be required to make additional payments over and above budgeted premiums if member claims exceed association reserves.

We may be unable to procure adequate insurance coverage at commercially reasonable rates in the future. For example, more stringent environmental regulations have led in the past to increased costs for, and in the future may result in the lack of availability of, insurance against risks of environmental damage or pollution. A catastrophic oil spill, marine disaster or natural disaster could result in losses that exceed our insurance coverage, which could harm our business, financial condition and operating results. Any uninsured or underinsured loss could harm our business and financial condition. In addition, our insurance may be voidable by the insurers as a result of certain of our actions, such as our ships failing to maintain certification with applicable maritime regulatory organizations.

Changes in the insurance markets attributable to terrorist attacks, environmental catastrophes or political changes may also make certain types of insurance more difficult for us to obtain. In addition, the insurance that may be available may be significantly more expensive than our existing coverage.

***Past port calls by our vessels, or third-party vessels from which we derived pooling revenues, to countries that are subject to sanctions imposed by the United States and the European Union may impact investors' decisions to invest in our securities.***

The United States has imposed sanctions on Syria and Sudan. The United States and the European Union (or *EU*) also had imposed sanctions on trade with Iran. The EU lifted these sanctions in January 2016. At that time, the U.S. lifted its secondary sanctions on Iran which applied to foreign persons, but has retained its primary sanctions which apply to U.S. entities and their foreign subsidiaries. In the past, conventional oil tankers owned or chartered-in by us, or third-party vessels participating in commercial pooling arrangements from which we derive revenue, made limited port calls to those countries for the loading and discharging of oil products. Those port calls did not violate U.S. or EU sanctions at the time and we intend to maintain our compliance with all U.S. and EU sanctions. In addition, we have no future contracted loadings or discharges in any of those countries and intend not to enter into voyage charter contracts for the transport of oil or gas to or from Iran, Syria or Sudan. We believe that our compliance with these sanctions and our lack of any future port calls to those countries does not and will not adversely impact our revenues, because port calls to these countries have never accounted for any material amount of our revenues. However, some investors might decide not to invest in us simply because we have previously called on, or through our participation in pooling arrangements have previously received revenue from calls on, ports in these sanctioned countries. Any such investor reaction could adversely affect the market for our common shares.

***Marine transportation and oil production is inherently risky, and an incident involving significant loss of or environmental contamination by any of our vessels could harm our reputation and business.***

Our vessels and their cargoes are at risk of being damaged or lost because of events such as:

- marine disaster;
- bad weather or natural disasters;
- mechanical failures;
- grounding, fire, explosions and collisions;
- piracy;
- human error; and
- war and terrorism.

An accident involving any of our vessels could result in any of the following:

- death or injury to persons, loss of property or environmental damage or pollution;
- delays in the delivery of cargo;
- loss of revenues from or termination of charter contracts;
- governmental fines, penalties or restrictions on conducting business;
- higher insurance rates; and
- damage to our reputation and customer relationships generally.

Any of these results could have a material adverse effect on our business, financial condition and operating results.

***Our operating results are subject to seasonal fluctuations.***

We operate our conventional tankers in markets that have historically exhibited seasonal variations in demand and, therefore, in charter rates. This seasonality may result in quarter-to-quarter volatility in our results of operations. Tanker markets are typically stronger in the winter months as a result of increased oil consumption in the Northern Hemisphere. In addition, unpredictable weather patterns in these months tend to disrupt vessel scheduling, which historically has increased oil price volatility and oil trading activities in the winter months. As a result, our revenues have historically been weaker during the fiscal quarters ended June 30 and September 30, and stronger in our fiscal quarters ended March 31 and December 31.

Due to harsh winter weather conditions, oil field operators in the North Sea typically schedule oil platform and other infrastructure repairs and maintenance during the summer months. Because the North Sea is our primary existing offshore oil market, this seasonal repair and maintenance activity contributes to quarter-to-quarter volatility in our results of operations, as oil production typically is lower in the fiscal quarters ended June 30 and September 30 in this region compared with production in the fiscal quarters ended March 31 and December 31. Because a number of our North Sea shuttle tankers operate under contracts of affreightment, under which revenue is based on the volume of oil transported, the results of our shuttle tanker operations in the North Sea under these contracts generally reflect this seasonal production pattern. When we redeploy affected shuttle tankers as conventional oil tankers while platform maintenance and repairs are conducted, the overall financial results for our North Sea shuttle tanker operations may be negatively affected if the rates in the conventional oil tanker markets are lower than the contract of affreightment rates. In addition, we seek to coordinate some of the general dry-docking schedule of our fleet with this seasonality, which may result in lower revenues and increased dry-docking expenses during the summer months.

***We expend substantial sums during construction of newbuildings and the conversion of tankers to FPSO or FSO units without earning revenue and without assurance that they will be completed.***

We are typically required to expend substantial sums as progress payments during construction of a newbuilding or vessel conversion, but we do not derive any revenue from the vessel until after its delivery. In addition, under some of our time charters if our delivery of a vessel to a customer is delayed, we may be required to pay liquidated damages in amounts equal to or, under some charters, almost double the hire rate during the delay. For prolonged delays, the customer may terminate the time charter and, in addition to the resulting loss of revenues, we may be responsible for additional substantial liquidated charges.

Our newbuilding financing commitments typically have been pre-arranged. However, if we are unable to obtain financing required to complete payments on any of our newbuilding orders, we could effectively forfeit all or a portion of the progress payments previously made. As of December 31, 2016, we had on order 19 LNG carriers, four LPG carriers, three shuttle tankers, one FSO conversion, one FPSO conversion, one FPSO upgrade and three long-distance towing and offshore installation vessels. These newbuildings and conversion and upgrade projects are scheduled for delivery or completion between 2017 and 2020. As of December 31, 2016, progress payments made towards these newbuildings, excluding payments made by our joint venture partners, totaled \$1.3 billion.

In addition, conversion of tankers to FPSO and FSO units exposes us to a numbers of risks, including lack of shipyard capacity and the difficulty of completing the conversions in a timely and cost effective manner. During conversion of a vessel, we do not earn revenue from it. In addition, conversion projects may not be successful.

***We make substantial capital expenditures to expand the size of our fleet. Depending on whether we finance our expenditures through cash from operations or by incurring debt or issuing equity securities, our financial leverage could increase or our shareholders could be diluted.***

We regularly evaluate and pursue opportunities to provide the marine transportation requirements for various projects, and we have recently submitted bids to provide transportation solutions for LNG and LPG, towage, FPSO and FSO projects. We may submit additional bids from time to time. The award process relating to LNG and LPG transportation, FPSO and FSO opportunities typically involves various stages and takes several months to complete. If we bid on and are awarded contracts relating to any LNG and LPG, FPSO and FSO projects, we will need to incur significant capital expenditures to build the related LNG and LPG carriers, FPSO and FSO units.

To fund the remaining portion of existing or future capital expenditures, we will be required to use existing liquidity, cash from operations or incur borrowings or raise capital through the incurrence of debt or issuance of additional equity, debt or hybrid securities. Our ability to obtain bank financing or to access the capital markets for future offerings may be limited by our financial condition at the time of any such financing or offering as well as by adverse market conditions resulting from, among other things, general economic conditions and contingencies and uncertainties that are beyond our control. Our failure to obtain the funds for necessary future capital expenditures could have a material adverse effect on our business, results of operations and financial condition. Even if we are successful in obtaining necessary funds, incurring additional debt may significantly increase our interest expense and financial leverage, which could limit our financial flexibility and ability to pursue other business opportunities. Issuing additional equity securities may result in significant shareholder dilution and would increase the aggregate amount of cash required to pay quarterly dividends.

***Exposure to currency exchange rate and interest rate fluctuations results in fluctuations in our cash flows and operating results.***

Substantially all of our revenues are earned in U.S. Dollars, although we are paid in Euros, Australian Dollars, Norwegian Kroner and British Pounds under some of our charters. A portion of our operating costs are incurred in currencies other than U.S. Dollars. This partial mismatch in operating revenues and expenses leads to fluctuations in net income due to changes in the value of the U.S. Dollar relative to other currencies, in particular the Norwegian Kroner, the British Pound, the Euro, Singapore Dollar, Australian Dollar, and Canadian Dollar. We also make payments under two Euro-denominated term loans. If the amount of these and other Euro-denominated obligations exceeds our Euro-denominated revenues, we must convert other currencies, primarily the U.S. Dollar, into Euros. An increase in the strength of the Euro relative to the U.S. Dollar would require us to convert more U.S. Dollars to Euros to satisfy those obligations.

Because we report our operating results in U.S. Dollars, changes in the value of the U.S. Dollar relative to other currencies also result in fluctuations of our reported revenues and earnings. Under U.S. accounting guidelines, all foreign currency-denominated monetary assets and liabilities, such as cash and cash equivalents, accounts receivable, restricted cash, accounts payable, accrued liabilities, advances from affiliates and long-term debt are revalued and reported based on the prevailing exchange rate at the end of the applicable period. This revaluation historically has caused us to report significant unrealized foreign currency exchange gains or losses each period. The primary source of these gains and losses is our Euro-denominated term loans and our Norwegian Kroner-denominated bonds. We have entered into foreign currency forward contracts to economically hedge portions of our forecasted expenditures denominated in Norwegian Kroner. We also incur interest expense on our Norwegian Kroner-denominated bonds. We have entered into cross-currency swaps to economically hedge the foreign exchange risk on the principal and interest payments of our Norwegian Kroner-denominated bonds.

***Many of our seafaring employees are covered by collective bargaining agreements and the failure to renew those agreements or any future labor agreements may disrupt operations and adversely affect our cash flows.***

A significant portion of our seafarers are employed under collective bargaining agreements. We may become subject to additional labor agreements in the future. We may suffer labor disruptions if relationships deteriorate with the seafarers or the unions that represent them. Our collective bargaining agreements may not prevent labor disruptions, particularly when the agreements are being renegotiated. Salaries are typically renegotiated annually or bi-annually for seafarers and annually for onshore operational staff and may increase our cost of operation. Any labor disruptions could harm our operations and could have a material adverse effect on our business, results of operations and financial condition.

***We and certain of our joint venture partners may be unable to attract and retain qualified, skilled employees or crew necessary to operate our business.***

Our success depends in large part on our ability to attract and retain highly skilled and qualified personnel. In crewing our vessels, we require technically skilled employees with specialized training who can perform physically demanding work. Any inability we experience in the future to hire, train and retain a sufficient number of qualified employees could impair our ability to manage, maintain and grow our business.

***Terrorist attacks, piracy, increased hostilities, political change or war could lead to further economic instability, increased costs and disruption of business.***

Terrorist attacks, piracy and the current or future conflicts in the Middle East and elsewhere, and political change, may adversely affect our business, operating results, financial condition, and ability to raise capital and future growth. Continuing hostilities in the Middle East and elsewhere may lead to additional armed conflicts or to further acts of terrorism and civil disturbance in the United States or elsewhere, which may contribute to economic instability and disruption of oil production and distribution, which could result in reduced demand for our services and have an adverse impact on our operations and our ability to conduct business.

In addition, oil facilities, shipyards, vessels, pipelines and oil fields could be targets of future terrorist attacks and warlike operations and our vessels could be targets of pirates, hijackers, terrorists or warlike operations. Any such attacks could lead to, among other things, bodily injury or loss of life, vessel or other property damage, increased vessel operational costs, including insurance costs, and the inability to transport oil to or from certain locations. Terrorist attacks, war, piracy, hijacking or other events beyond our control that adversely affect the distribution, production or transportation of oil to be shipped by us could entitle customers to terminate charters, which would harm our cash flow and business.

***Acts of piracy on ocean-going vessels continue to be a risk, which could adversely affect our business.***

Acts of piracy have historically affected ocean-going vessels trading in regions of the world such as the South China Sea, Gulf of Guinea and the Indian Ocean off the coast of Somalia. While there continues to be a significant risk of piracy incidents in the Gulf of Aden and Indian Ocean, recently there have been increases in the frequency and severity of piracy incidents off the coast of West Africa and a resurgent piracy risk in the Straits of Malacca and surrounding waters. If these piracy attacks result in regions in which our vessels are deployed being named on the Joint War Committee Listed Areas, war risk insurance premiums payable for such coverage can increase significantly and such insurance coverage may be more difficult to obtain. In addition, crew costs, including costs which may be incurred to the extent we employ on-board armed security guards and escort vessels, could increase in such circumstances. We may not be adequately insured to cover losses from these incidents, which could have a material adverse effect on us. In addition, hijacking as a result of an act of piracy against our vessels, or an increase in cost or unavailability of insurance for our vessels, could have a material adverse impact on our business, financial condition and results of operations.

***Our and many of our customers' substantial operations outside the United States expose us to political, governmental and economic instability, which could harm our operations.***

Because our operations, and the operations of certain of our customers, are primarily conducted outside of the United States, they may be affected by economic, political and governmental conditions in the countries where we engage in business, including Brazil, or where our vessels are registered. Any disruption caused by these factors could harm our business, including by reducing the levels of oil exploration, development and production activities in these areas. We derive some of our revenues from shipping oil and gas from politically and economically unstable regions. Conflicts in these regions have included attacks on ships and other efforts to disrupt shipping. Hostilities, strikes, or other political or economic instability in regions where we operate or where we may operate could have a material adverse effect on the growth of our business, results of operations and financial condition and ability to make cash distributions. In addition, tariffs, trade embargoes and other economic sanctions by the United States or other countries against countries in which we operate or to which we trade could harm our business and ability to make cash distributions. Finally, a government could requisition one or more of our vessels, which is most likely during war or national emergency. Any such requisition would cause a loss of the vessel and could harm our cash flow and financial results.

Two vessels owned by the Teekay LNG-Marubeni Joint Venture, the *Marib Spirit* and *Arwa Spirit*, are currently under long-term contracts expiring in 2029 with YLNG, a consortium led by Total SA. Due to the political situation in Yemen, YLNG decided to temporarily close operation of its LNG plant in Yemen in 2015. As a result, the Teekay LNG-Marubeni Joint Venture agreed in December 2015 to defer a portion of the charter payments for the two LNG carriers from January 1, 2016 to December 31, 2016 and further deferrals were agreed to and effective in August 2016 and in January 2017, which extended the deferral period to December 31, 2017. Once the LNG plant in Yemen resumes operations, it is intended that YLNG will repay the deferred amounts in full, plus interest over a period of time to be agreed upon. However, there is no assurance if or when the LNG plant will resume operations or if YLNG will repay the deferred amounts, and this deferral period may extend beyond 2017. Teekay LNG's proportionate share of the impact of the charter payment deferral for 2016 was a reduction to equity income of \$21.2 million. Teekay LNG's proportionate share of the estimated impact of the charter payment deferral for 2017 compared to original charter rates earned prior to December 31, 2015 is estimated to be a reduction to equity income ranging from \$20 million to \$30 million depending on any sub-chartering employment opportunities.

***The ARC7 Ice-Class LNG carrier newbuildings for the Yamal LNG Project are customized vessels and Teekay LNG's financial condition, results of operations and ability to make distributions to us could be substantially affected if the Yamal LNG Project is not completed.***

On July 9, 2014, Teekay LNG entered into a 50/50 joint venture with China LNG (or the *Yamal LNG Joint Venture*) and ordered six internationally-flagged icebreaker LNG carriers for a project located on the Yamal Peninsula in Northern Russia (or the *Yamal LNG Project*). The Yamal LNG Project is a joint venture between Russia-based Novatek OAO (50.1%), France-based Total S.A. (20%), China-based China National Petroleum Corporation (20%) and Silk Road Fund (9.9%).

The LNG carrier newbuildings ordered by the Yamal LNG Joint Venture will be specifically built for the Arctic requirements of the Yamal LNG Project and will have limited redeployment opportunities to operate as conventional trading LNG carriers if the project is abandoned or cancelled. If the project is abandoned or cancelled for any reason, either before or after commencement of operations, the Yamal LNG Joint Venture may be unable to reach an agreement with the shipyard allowing for the termination of the shipbuilding contracts (since no such optional termination right exists under these contracts), change the vessel specifications to reflect those applicable to more conventional LNG carriers and which do not incorporate ice-breaking capabilities, or find suitable alternative employment for the newbuilding vessels on a long-term basis with other LNG projects or otherwise.

The Yamal LNG Project may be abandoned or not completed for various reasons, including, among others:

- failure to achieve expected operating results;
- changes in demand for LNG;
- adverse changes in Russian regulations or governmental policy relating to the project or the export of LNG;
- technical challenges of completing and operating the complex project, particularly in extreme Arctic conditions;
- labor disputes; and
- environmental regulations or potential claims.

If the project is not completed or is abandoned, proceeds if any, received from limited Yamal LNG project sponsor guarantees and potential alternative employment, if any, of the vessels and from potential sales of components and scrapping of the vessels likely would fall substantially short of the cost of the vessels to the Yamal LNG Joint Venture. Any such shortfall could have a material adverse effect on Teekay LNG's financial condition, results of operations and ability to make distributions to us.



***Sanctions against key participants in the Yamal LNG Project could impede completion or performance of the Yamal LNG Project, which could have a material adverse effect on us.***

The U.S. Treasury Department's Office of Foreign Assets Control (or OFAC) placed Russia-based Novatek OAO (or *Novatek*), a 50.1% owner of the Yamal LNG Project, on the Sectoral Sanctions Identifications List. OFAC also previously imposed sanctions on an investor in Novatek and these sanctions also remain in effect. The restrictions on Novatek prohibit U.S. persons (and their subsidiaries) from participating in debt financing transactions of greater than 90 days' maturity with Novatek and, by virtue of Novatek's 50.1% ownership interest, the Yamal LNG Project. The EU also imposed certain sanctions on Russia. These sanctions require an EU license or authorization before a party can provide certain technologies or technical assistance, financing, financial assistance, or brokering with regard to these technologies. However, the technologies being currently sanctioned by the EU appear to focus on oil exploration projects, not gas projects. Future sanctions may prohibit the Yamal LNG Joint Venture from performing under its contracts with the Yamal LNG Project, which could have a material adverse effect on our financial condition, results of operations and ability to pay dividends and service our debt. We believe that we are in compliance with all applicable sanctions, laws and regulations and intend to maintain such compliance.

***Failure of the Yamal LNG Project to achieve expected results could lead to a default under the time-charter contracts by the charter party.***

The charter party under the Yamal LNG Joint Venture's time-charter contracts for the Yamal LNG Project is Yamal Trade Pte. Ltd., a wholly-owned subsidiary of Yamal LNG, the project's sponsor. If the Yamal LNG Project does not achieve expected results, the risk of charter party default may increase. If the charter party defaults on the time-charter contracts, Teekay LNG may be unable to redeploy the vessels under other time-charter contracts or may be forced to scrap the vessels. Any such default could adversely affect Teekay LNG's results of operations and ability to make distributions to us.

***Neither the Yamal LNG Joint Venture nor Teekay LNG's joint venture partner may be able to obtain financing for the six LNG ARC7 Ice-Class carrier newbuildings for the Yamal LNG Project.***

The Yamal LNG Joint Venture does not yet have in place financing for the six ARC7 Ice-Class LNG carrier newbuildings that will service the Yamal LNG Project. The estimated total fully built-up cost for the vessels is approximately \$2.1 billion. As of December 31, 2016, \$306.6 million has been funded by Teekay LNG and China LNG based on their proportionate ownership interests in the Yamal LNG Joint Venture. If the Yamal LNG Joint Venture is unable to obtain debt financing for the vessels on acceptable terms, if at all, or if Teekay LNG's joint venture partner fails to fund its portion of the newbuilding financing, Teekay LNG may be unable to purchase the vessels and participate in the Yamal LNG Project.

***Maritime claimants could arrest, or port authorities could detain, our vessels, which could interrupt our cash flow.***

Crew members, suppliers of goods and services to a vessel, shippers of cargo and other parties may be entitled to a maritime lien against that vessel for unsatisfied debts, claims or damages. In many jurisdictions, a maritime lienholder may enforce its lien by arresting a vessel through foreclosure proceedings. The arrest or attachment of one or more of our vessels could interrupt our cash flow and require us to pay large sums of funds to have the arrest or attachment lifted. In addition, in some jurisdictions, such as South Africa, under the "sister ship" theory of liability, a claimant may arrest both the vessel that is subject to the claimant's maritime lien and any "associated" vessel, which is any vessel owned or controlled by the same owner. Claimants could try to assert "sister ship" liability against one vessel in our fleet for claims relating to another of our ships. In addition, port authorities may seek to detain our vessels in port, which could adversely affect our operating results or relationships with customers.

***Climate change and greenhouse gas restrictions may adversely impact our operations and markets.***

Due to concern over the risk of climate change, a number of countries have adopted, or are considering the adoption of, regulatory frameworks to reduce greenhouse gas emissions. These regulatory measures include, among others, adoption of cap and trade regimes, carbon taxes, increased efficiency standards, and incentives or mandates for renewable energy. Compliance with changes in laws, regulations and obligations relating to climate change could increase our costs related to operating and maintaining our vessels and require us to install new emission controls, acquire allowances or pay taxes related to our greenhouse gas emissions, or administer and manage a greenhouse gas emissions program. Revenue generation and strategic growth opportunities may also be adversely affected.

Adverse effects upon the oil and gas industry relating to climate change may also adversely affect demand for our services. Although we do not expect that demand for oil and gas will lessen dramatically over the short-term, in the long-term, climate change may reduce the demand for oil and gas or increased regulation of greenhouse gases may create greater incentives for use of alternative energy sources. Any long-term material adverse effect on the oil and gas industry could have a significant financial and operational adverse impact on our business that we cannot predict with certainty at this time.

***We have substantial debt levels and may incur additional debt.***

As of December 31, 2016, our consolidated debt and capital lease obligations totaled \$7.0 billion and we had the capacity to borrow an additional \$0.5 billion under our revolving credit facilities. These credit facilities may be used by us for general corporate purposes. Our consolidated debt and capital lease obligations could increase substantially. We will continue to have the ability to incur additional debt, subject to limitations in our credit facilities. Our level of debt could have important consequences to us, including:

- our ability to obtain additional financing, if necessary, for working capital, capital expenditures, acquisitions or other purposes, and our ability to refinance our credit facilities may be impaired or such financing may not be available on favorable terms, if at all;
- we will need to use a substantial portion of our cash flow to make principal and interest payments on our debt, reducing the funds that would otherwise be available for operations, future business opportunities and dividends to shareholders;
- our debt level may make us more vulnerable than our competitors with less debt to competitive pressures or a downturn in our industry or the economy generally; and
- our debt level may limit our flexibility in obtaining additional financing, pursuing other business opportunities and responding to changing business and economic conditions.

***Financing agreements containing operating and financial restrictions may restrict our business and financing activities.***

The operating and financial restrictions and covenants in our revolving credit facilities, term loans, indentures and in any of our future financing agreements could adversely affect our ability to finance future operations or capital needs or to pursue and expand our business activities. For example, these financing arrangements restrict our ability to:

- pay dividends;
- incur or guarantee indebtedness;
- change ownership or structure, including mergers, consolidations, liquidations and dissolutions;
- grant liens on our assets;
- sell, transfer, assign or convey assets;
- make certain investments; and
- enter into new lines of business.

Our ability to comply with covenants and restrictions contained in debt instruments may be affected by events beyond our control, including prevailing economic, financial and industry conditions. If market or other economic conditions deteriorate, we may fail to comply with these covenants. If we breach any of the restrictions, covenants, ratios or tests in our financing agreements or indentures, our obligations may become immediately due and payable, and the lenders' commitment under our credit facilities, if any, to make further loans may terminate. This could lead to cross-defaults under other financing agreements and result in obligations becoming due and commitments being terminated under such agreements. A default under financing agreements could also result in foreclosure on any of our vessels and other assets securing related loans.

Furthermore, the termination of any of our charter contracts by our customers could result in the repayment of the debt facilities for which the chartered vessels relate to.

***Certain of Teekay LNG's lease arrangements contain provisions whereby it has provided a tax indemnification to third parties, which may result in increased lease payments or termination of favorable lease arrangements.***

Teekay LNG and certain of its joint ventures are party and were party to lease arrangements whereby the lessor could claim tax depreciation on the capital expenditures it incurred to acquire these vessels. As is typical in these leasing arrangements, tax and change of law risks are assumed by the lessee. The rentals payable under the lease arrangements are predicated on the basis of certain tax and financial assumptions at the commencement of the leases. If an assumption proves to be incorrect or there is a change in the applicable tax legislation or the interpretation thereof by the United Kingdom (U.K.) taxing authority, the lessor is entitled to increase the rentals so as to maintain its agreed after-tax margin. Under the capital lease arrangements, Teekay LNG does not have the ability to pass these increased rentals onto its charter party. However, the terms of the lease arrangements enable Teekay LNG and its joint venture partner to jointly terminate the lease arrangements on a voluntary basis at any time. In the event of an early termination of the lease arrangements, the lessee is obliged to pay termination sums to the lessor sufficient to repay its investment in the vessels and to compensate it for the tax effect of the terminations, including recapture of tax depreciation, if any.

Teekay LNG owns a 70% interest in Teekay Nakilat Corporation (or *Teekay Nakilat Joint Venture*) that was the lessee under three separate 30-year capital lease arrangements with a third party for three LNG carriers (or the *RasGas II LNG Carriers*). Under the terms of the leasing arrangements for the *RasGas II LNG Carriers*, the lessor claimed tax depreciation on the capital expenditures it incurred to acquire these vessels. As is typical in these leasing arrangements, tax and change of law risks were assumed by the lessee, in this case the Teekay Nakilat Joint Venture. Lease payments under the lease arrangements were based on certain tax and financial assumptions at the commencement of the leases and subsequently adjusted to maintain the lessor's agreed after-tax margin. On December 22, 2014, the Teekay Nakilat Joint Venture terminated the leasing of the *RasGas II LNG Carriers*. However, the Teekay Nakilat Joint Venture remains obligated to the lessor to maintain the lessor's agreed after-tax margin from the commencement of the lease to the lease termination date and placed \$6.8 million on deposit with the lessor as security against any future claims.

The UK taxing authority (or *HMRC*) has been challenging the use of similar lease structures in the UK courts. One of those challenges was eventually decided in favor of HMRC (*Lloyds Bank Equipment Leasing No. 1 or LEL1*), with the lessor and lessee choosing not to appeal further. The *LEL1* tax case concluded that capital allowances were not available to the lessor. On the basis of this conclusion, HMRC is now asking lessees on other leases, including the Teekay Nakilat Joint Venture, to accept that capital allowances are not available to their lessor. The Teekay Nakilat Joint Venture does not accept this contention and has informed HMRC of this position. It is not known at this time whether the Teekay Nakilat Joint Venture would eventually prevail in court. If the former lessor of the *RasGas II LNG Carriers* were to lose on a similar claim from HMRC, Teekay LNG's 70% share of the Teekay Nakilat Joint Venture's potential exposure is estimated to be approximately \$60 million. Such estimate is primarily based on information received from the lessor.

In addition, Teekay LNG's subsidiaries of another joint venture formed to service the Tangguh LNG project in Indonesia have lease arrangements with a third party for two LNG carriers. The terms of the lease arrangements provide similar tax and change of law risk assumption by this joint venture as Teekay LNG had with the three *RasGas II LNG Carriers*.

***Our joint venture arrangements impose obligations upon us but limit our control of the joint ventures, which may affect our ability to achieve our joint venture objectives.***

For financial or strategic reasons, we conduct a portion of our business through joint ventures. Generally, we are obligated to provide proportionate financial support for the joint ventures although our control of the business entity may be substantially limited. Due to this limited control, we generally have less flexibility to pursue our own objectives through joint ventures or to access available cash of the joint ventures than we would with our own subsidiaries. There is no assurance that our joint venture partners will continue their relationships with us in the future or that we will be able to achieve our financial or strategic objectives relating to the joint ventures and the markets in which they operate. In addition, our joint venture partners may have business objectives that are inconsistent with ours, experience financial and other difficulties that may affect the success of the joint venture, or be unable or unwilling to fulfill their obligations under the joint ventures, which may affect our financial condition or results of operations.

***Allegations of improper payments may harm our reputation and business***

In May 2016, a former executive of Transpetro, the transportation and logistics subsidiary of Petrobras S.A., alleged in a plea bargain that a subsidiary of Teekay Offshore, among a number of other shipping companies, purportedly made improper payments to local Brazilian agents. Such payments were alleged to have been made by the subsidiary between 2004 and 2006, in an aggregate amount of approximately 1.5 million Brazilian Reals (less than \$0.5 million at the December 31, 2016 exchange rate). Although we believe we have robust anti-corruption programs in place, we have commenced an internal investigation to determine the veracity of these allegations. It is uncertain at this time how these allegations may affect us, if at all, including the possibility of penalties that could be assessed by the relevant authorities. In addition, any dispute with Petrobras in connection with this matter may adversely affect our relationship with Petrobras.

In January 2015, Teekay Offshore, through the Libra joint venture, its 50/50 joint venture with Odebrecht Oil & Gas S.A. (or *OOG*), finalized the contract with Petrobras to provide an FPSO unit for the Libra field located in the Santos Basin offshore Brazil. The contract will be serviced by a new FPSO unit being converted from Teekay Offshore's 1995-built shuttle tanker, the *Navion Norvegia*, which was sold by Teekay Offshore to the joint venture. The converted unit is scheduled to commence operations in mid-2017 under a 12-year firm period fixed-rate contract with Petrobras and its international partners. Senior Odebrecht S.A. personnel, including a former executive of *OOG*, have been implicated in corruption charges related to improper payments to Brazilian politicians and political parties. Any adverse effect of these charges against *OOG* may harm Teekay Offshore's growth prospects and results of operations and inhibit the near-term ability of its joint venture with *OOG* to drawdown on the existing loan facility to fund the remaining amount of the Libra FPSO conversion.

***We depend on certain joint venture partners to assist us in operating our businesses and competing in our markets.***

Our ability to compete for offshore oil marine transportation, processing, floating accommodation, towage and storage projects and to enter into new charters or contracts of affreightment and expand our customer relationships depends largely on our ability to leverage our relationship with our joint venture partners and their reputation and relationships in the shipping industry. If our joint venture partners suffer material damage to its financial condition, reputation or relationships, it may harm the ability of us or our subsidiaries to:

- renew existing charters and contracts of affreightment upon their expiration;
- obtain new charters and contracts of affreightment;
- successfully interact with shipyards during periods of shipyard construction constraints;
- obtain financing on commercially acceptable terms; or
- maintain satisfactory relationships with suppliers and other third parties.

If our or our subsidiaries' ability to do any of the things described above is impaired, it could have a material adverse effect on our business, results of operations and financial condition and our ability to make cash distributions.

***We may experience operational problems with vessels that reduce revenue and increase costs.***

Shuttle tankers, FSO and FPSO units, towing and offshore installation vessels and UMS are complex and their operations are technically challenging. Marine transportation and oil production operations are subject to mechanical risks and problems as well as environmental risks. Operational problems may lead to loss of revenue or higher than anticipated operating expenses or require additional capital expenditures. Any of these results could harm our business, financial condition and operating results.

***Teekay Tankers' U.S. Gulf lightering business competes with alternative methods of delivering crude oil to ports, which may limit its earnings in this area of its operations.***

Teekay Tankers' U.S. Gulf lightering business faces competition from alternative methods of delivering crude oil shipments to port, including offshore offloading facilities. While we believe that lightering offers advantages over alternative methods of delivering crude oil to U.S. Gulf ports, Teekay Tankers' lightering revenues may be limited due to the availability of alternative methods.

***Teekay Tankers' full service lightering operations are subject to specific risks that could lead to accidents, oil spills or property damage.***

Lightering is subject to specific risks arising from the process of safely bringing two large moving tankers next to each other and mooring them for lightering operations. These operations require a high degree of expertise and present a higher risk of collision compared to when docking a vessel at port. Lightering operations, similar to marine transportation in general, are also subject to risks due to events such as mechanical failures, human error, and weather conditions.

## **Tax Risks**

In addition to the following risk factors, you should read Item 4E — Taxation of the Company, Item 10 — Additional Information — Material U.S. Federal Income Tax Considerations and Item 10 — Additional Information — Non-United States Tax Consequences for a more complete discussion of the expected material U.S. federal and non-U.S. income tax considerations relating to us and the ownership and disposition of our common stock.

***U.S. tax authorities could treat us as a "passive foreign investment company," which could have adverse U.S. federal income tax consequences to U.S. shareholders.***

A non-U.S. entity treated as a corporation for U.S. federal income tax purposes will be treated as a "passive foreign investment company" (or *PFIC*) for such purposes in any taxable year for which either (a) at least 75% of its gross income consists of "passive income" or (b) at least 50% of the average value of the entity's assets is attributable to assets that produce or are held for the production of "passive income." For purposes of these tests, "passive income" includes dividends, interest, gains from the sale or exchange of investment property and rents and royalties (other than rents and royalties that are received from unrelated parties in connection with the active conduct of a trade or business). By contrast, income derived from the performance of services does not constitute "passive income."

There are legal uncertainties involved in determining whether the income derived from our time-chartering activities constitutes rental income or income derived from the performance of services, including the decision in *Tidewater Inc. v. United States*, 565 F.3d 299 (5th Cir. 2009), which held that income derived from certain time-chartering activities should be treated as rental income rather than services income for purposes of a foreign sales corporation provision of the Internal Revenue Code of 1986, as amended (or the *Code*). However, the Internal Revenue Service (or *IRS*) stated in an Action on Decision (AOD 2010-01) that it disagrees with, and will not acquiesce to, the way that the rental versus services framework was applied to the facts in the *Tidewater* decision, and in its discussion stated that the time charters at issue in *Tidewater* would be treated as producing services income for PFIC purposes. The IRS's statement with respect to *Tidewater* cannot be relied upon or otherwise cited as precedent by taxpayers. Consequently, in the absence of any binding legal authority specifically relating to the statutory provisions governing PFICs, there can be no assurance that the IRS or a court would not follow the *Tidewater* decision in interpreting the PFIC provisions of the Code. Nevertheless, based on the current composition of our assets and operations (and those of our subsidiaries), we intend to take the position that we are not now and have never been a PFIC. No assurance can be given, however, that this position would be sustained by a court if contested by the IRS or that we would not constitute a PFIC for any future taxable year if there were to be changes in our assets, income or operations.

If the IRS were to determine that we are or have been a PFIC for any taxable year during which a U.S. Holder (as defined below under Item 10 — Additional Information — Material U.S. Federal Income Tax Considerations) held our common stock, such U.S. Holder would face adverse tax consequences. For a more comprehensive discussion regarding the tax consequences to U.S. Holders if we are treated as a PFIC, please read Item 10 — Additional Information — Material U.S. Federal Income Tax Considerations — United States Federal Income Taxation of U.S. Holders — Consequences of Possible PFIC Classification.

***We may be subject to taxes, which could affect our operating results.***

We or our subsidiaries are subject to tax in certain jurisdictions in which we or our subsidiaries are organized, own assets or have operations, which reduces our operating results. In computing our tax obligations in these jurisdictions, we are required to take various tax accounting and reporting positions on matters that are not entirely free from doubt and for which we have not received rulings from the governing authorities. We cannot assure you that upon review of these positions, the applicable authorities will agree with our positions. A successful challenge by a tax authority could result in additional tax imposed on us or our subsidiaries, further reducing our operating results. In addition, changes in our operations or ownership could result in additional tax being imposed on us or on our subsidiaries in jurisdictions in which operations are conducted. For example, changes in the ownership of our stock may cause us to be unable to claim an exemption from U.S. federal income tax under Section 883 of the Code. If we were not exempt from tax under Section 883 of the Code, we will be subject to U.S. federal income tax on shipping income attributable to our subsidiaries' transportation of cargoes to or from the U.S., the amount of which is not within our complete control. Also, jurisdictions in which we or our subsidiaries are organized, own assets or have operations may change their tax laws, or we may enter into new business transactions relating to such jurisdictions, which could result in increased tax liability and reduce our operating results. Please read Item 4 — Information on the Company — Taxation of the Company.

#### **Item 4. Information on the Company**

##### **A. Overview, History and Development**

###### **Overview**

We are a leading provider of international crude oil and gas marine transportation services and we also offer offshore oil production, storage and offloading services, primarily under long-term, fixed-rate contracts. Over the past decade, we have undergone a major transformation from being primarily an owner of ships in the cyclical spot tanker business to being a growth-oriented asset manager in the "Marine Midstream" sector. This transformation has included our expansion into the liquefied natural gas (or *LNG*) and liquefied petroleum gas (or *LPG*) shipping sectors through our publicly-listed subsidiary Teekay LNG Partners L.P. (NYSE: TGP) (or *Teekay LNG*), further growth of our operations in the offshore production, storage and transportation sector through our publicly-listed subsidiary Teekay Offshore Partners L.P. (NYSE: TOO) (or *Teekay Offshore*) and through our 100% ownership interest in Teekay Petrojarl AS, and the continuation of our conventional tanker business through our publicly-listed subsidiary Teekay Tankers Ltd. (NYSE: TNK) (or *Teekay Tankers*). We are responsible for managing and operating consolidated assets of approximately \$13 billion, comprised of approximately 220 liquefied gas, offshore, and conventional tanker assets (excluding vessels managed for third parties). With offices in 14 countries and approximately 8,000 seagoing and shore-based employees, Teekay provides a comprehensive set of marine services to the world's leading oil and gas companies. Our organizational structure can be divided into (a) our controlling interests in our publicly-listed subsidiaries, Teekay Offshore, Teekay LNG and Teekay Tankers (or *the Daughter Companies*), and (b) Teekay and its remaining subsidiaries, which is referred to herein as *Teekay Parent*.

Teekay Offshore includes a majority of our FPSO units, our shuttle tanker operations, the *HiLoad DP* unit, FSO units, and offshore support which includes UMS, all of which primarily operate under long-term fixed-rate contracts, and long-distance towing and offshore installation vessels. As of December 31, 2016, our shuttle tanker fleet, including newbuildings, had a total cargo capacity of approximately 4.4 million deadweight tonnes (or *dwt*), which represented approximately 39% of the total tonnage of the world shuttle tanker fleet. Please read "—B. Operations—Our Fleet."

Teekay LNG includes all of our LNG and LPG carriers. LNG carriers are usually chartered to carry LNG pursuant to time-charter contracts, where a vessel is hired for a fixed period of time. LPG carriers are mainly chartered to carry LPG on time charters, on contracts of affreightment or spot voyage charters. As of December 31, 2016, Teekay LNG's fleet, including newbuildings on order, had a total cargo carrying capacity of approximately 9.1 million cubic meters. Please read "—B. Operations—Our Fleet."

Teekay Tankers, including Teekay Tankers' minority investment in TIL, includes a substantial majority of our conventional crude oil tankers and product carriers. Our conventional crude oil tankers and product tankers primarily operate in the spot-tanker market or are subject to time charters or contracts of affreightment that are priced on a spot-market basis or are short-term, fixed-rate contracts. We consider contracts that have an original term of less than one year in duration to be short-term. Certain of our conventional crude oil tankers and product tankers are on fixed-rate time-charter contracts with an initial duration of at least one year. Our conventional Aframax, Suezmax, and large product tankers are among the vessels included in Teekay Tankers. Please read "—B. Operations—Our Fleet."

Teekay Parent currently owns three FPSO units and a minority investment in TIL. Our long-term vision is for Teekay Parent not to have a direct ownership in any vessels.

The Teekay organization was founded in 1973. We are incorporated under the laws of the Republic of The Marshall Islands as Teekay Corporation and maintain our principal executive office at 4th floor, Belvedere Building, 69 Pitts Bay Road, Hamilton, HM 08, Bermuda. Our telephone number at such address is (441) 298-2530.

## **Recent Equity Offerings and Transactions by Subsidiaries**

### *Equity Offerings and Related Transactions by Teekay Tankers*

During August 2014, Teekay Tankers purchased from Teekay a 50% interest in Teekay Tanker Operations Ltd. (or *TTOL*), which owns conventional tanker commercial management and technical management operations, including the direct ownership in three commercially managed tanker pools, for an aggregate price of approximately \$23.5 million, including net working capital. As consideration for this acquisition, Teekay Tankers issued to Teekay 4.2 million Class B common shares. The 4.2 million Class B common shares had an approximate value of \$15.6 million, or \$3.70 per share, when the purchase price was agreed to between the parties and a value of \$17.0 million, or \$4.03 per share, on the acquisition closing date. The purchase price, for accounting purposes, is based upon the value of the Class B common shares on the acquisition closing date.

During December 2014, Teekay Tankers issued 20.0 million shares of Class A common stock in a public offering and 4.2 million common shares of Class A common stock in a concurrent private placement with Teekay, in each case at a price of \$4.80 per share for proceeds of \$116.0 million (net proceeds of \$111.2 million). In connection with this offering, Teekay Tankers granted its underwriters a 30-day option to purchase up to an additional 3 million shares of Class A common stock. The underwriters exercised this option in late-December 2014 and on January 2, 2015, Teekay Tankers issued a further 3 million shares of Class A common stock for gross proceeds of \$14.4 million (net proceeds of \$13.7 million). The proceeds from the issuance were used to acquire modern second hand tankers and for general corporate purposes.

During June 2015, Teekay Tankers implemented a continuous offering program (or *COP*) under which Teekay Tankers could issue shares of its Class A common stock at market prices up to a maximum aggregate amount of \$80.0 million. In September 2015, Teekay Tankers concluded this *COP* and sold approximately 11.3 million shares for net proceeds of \$78.2 million.

In November 2015, Teekay Tankers implemented a new *COP* in the aggregate amount of \$80.0 million. As of December 31, 2015, Teekay Tankers had sold approximately 2.1 million shares under this *COP* for net proceeds of \$14.2 million. In December 2016, Teekay Tankers sold 3.0 million shares under this *COP* for net proceeds of \$7.6 million. In January 2017, Teekay Tankers sold approximately 3.8 million shares under its *COP* for net proceeds of \$8.6 million.

During July 2015, Teekay Tankers issued approximately 6.5 million shares of Class B common stock to Teekay Corporation, for net proceeds of \$45.5 million. Teekay Tankers used the net proceeds from the sale to acquire the ship-to-ship transfer business (or *TMS*, previously referred to as *SPT*) from a company jointly owned by Teekay Corporation and a Norway-based marine transportation company, I.M. Skaugen SE (or *Skaugen*) for an aggregate purchase price of approximately \$47.3 million (including \$1.8 million for working capital).

During August 2015, Teekay Tankers issued approximately 9.1 million shares of Class A common stock to the public and approximately 4.5 million shares to Teekay for net proceeds of \$90.6 million. Teekay Tankers used the net proceeds from the sale of the common units to partially fund the acquisition of 12 modern Suezmax tankers from Principal Maritime Tankers Corporation (or *Principal Maritime*) for an aggregate purchase price of \$661.3 million. Teekay Tankers also issued approximately 7.2 million shares of Class A common stock to Principal Maritime as partial consideration for the vessels acquired.

During January 2017, Teekay Tankers issued 2.2 million shares of Class A common stock to Teekay Corporation in a private placement for gross proceeds of \$5.0 million, at a per share price equal to the weighted average price of Teekay Tankers' Class A common stock for the ten trading days ending on the date of issuance.

Our ownership of Teekay Tankers was 25.7% as of March 1, 2017. We maintain voting control of Teekay Tankers through our ownership of shares of Class A and Class B Common Stock and continue to consolidate this subsidiary. Please read "Item 18. Financial Statements: Note 5—Financing Transactions."

### *Equity Offerings, Unit Issuances and Related Transactions by Teekay Offshore*

During May 2014, Teekay Offshore issued \$300 million in new senior unsecured non-rated bonds in the United States which mature in January 2019. The bonds are listed on the New York Stock Exchange and bear interest at a fixed rate of 6.0%. Teekay Offshore used the net proceeds of \$293.5 million from the bond offering for general partnership purposes.

During November 2014, Teekay Offshore issued 6.7 million common units to a group of institutional investors, generating net proceeds of \$178.5 million (including Teekay Offshore's general partner's 2% proportionate capital contribution). The net proceeds from the issuance of these common units were used for general partnership purposes, which include funding vessel conversion projects and financing newbuilding UMS and towage vessels.

During May 2013, Teekay Offshore implemented a COP, under which Teekay Offshore may issue new common units; representing limited partner interests, at market prices up to a maximum aggregate amount of \$100 million. During 2014, Teekay Offshore sold an aggregate of 0.2 million common units under the COP, generating net proceeds of \$7.6 million (including Teekay Offshore's general partner's 2% proportionate capital contribution). The net proceeds from the issuance of these common units were used for general partnership purposes.

During April 2015, Teekay Offshore issued 5.0 million of its 8.50% Series B Cumulative Redeemable Preferred Units (or *Series B Preferred Units*) in a public offering for net proceeds of \$120.8 million. Teekay Offshore used the net proceeds for general partnership purposes, including the funding of newbuilding installments, capital conversion projects and vessel acquisitions.

In July 2015, Teekay Offshore issued 10.4 million of its 8.60% Series C Cumulative Convertible Perpetual Preferred Units (or *Series C Preferred Units*) in a private placement for net proceeds of approximately \$249.8 million. The terms of the Series C Preferred Units provided that at any time after the 18-month anniversary of the closing date, at the election of each holder, the Series C Preferred Units could be converted on a one-for-one basis into common units of Teekay Offshore. Teekay Offshore used the net proceeds from the private placement to partially finance the acquisition of the *Petrojarl Knarr* FPSO unit from Teekay Corporation and the initial installments for the three shuttle tanker newbuildings for the East Coast of Canada contract.

In July 2015, Teekay Offshore issued 14.4 million common units to Teekay for net proceeds of \$306.1 million to partially finance the July 1, 2015 acquisition of the *Petrojarl Knarr* FPSO from Teekay.

During 2015, Teekay Offshore sold an aggregate of 0.2 million common units under the COP, generating net proceeds of \$3.5 million (including Teekay Offshore's general partner's 2% proportionate capital contribution). The net proceeds from the issuance of these common units were used for general partnership purposes.

In June 2016, Teekay Offshore implemented a replacement \$100.0 million COP. During 2016, Teekay Offshore sold an aggregate of 5.5 million common units under the COP, generating net proceeds of \$31.0 million (including Teekay Offshore's general partner's 2% proportionate capital contribution) The net proceeds from the issuance of the common units were used for general partnership purposes.

In June 2016, Teekay Offshore issued 22.0 million common units for net proceeds of approximately \$99.5 million (including Teekay Offshore's general partner's 2% proportionate capital contribution). Teekay Offshore used the proceeds for general partnership purposes, which included funding existing newbuilding installments and capital conversion projects.

In June 2016, Teekay Offshore and the holders of the Series C Preferred Units exchanged approximately 1.9 million of the Series C Preferred Units for approximately 8.3 million common units of Teekay Offshore. In June 2016, Teekay Offshore and the holders of the Series C Preferred Units also exchanged the remaining approximately 8.5 million Series C Preferred Units for approximately 8.5 million 8.60% Series C-1 Cumulative Convertible Perpetual Preferred Units (or the *Series C-1 Preferred Units*). Unlike the Series C Preferred Units, for which distributions were to be paid in cash, quarterly distributions on the Series C-1 Preferred Units for the eight consecutive quarters ending March 31, 2018 may be paid in Teekay Offshore's sole discretion in cash, common units (at a discount of 2% to the 10-trading day volume weighted average price ending on the distribution declaration date) or a combination of cash and common units (at the same discount), and thereafter, the distributions will be paid in cash.

In June 2016, Teekay Offshore issued in a private placement 4.0 million of its 10.50% Series D Cumulative Convertible Perpetual Preferred Units (or the *Series D Preferred Units*) for net proceeds of \$97.2 million and 4.5 million warrants exercisable to acquire up to 4.5 million common units at an exercise price equal to the closing price of Teekay Offshore's common units on June 16, 2016, or \$4.55 per unit (or the *\$4.55 Warrants*) and 2.25 million warrants exercisable to acquire up to 2.25 million common units with an exercise price at a 33% premium to the closing price of Teekay Offshore's common units on June 16, 2016, or \$6.05 per unit (or the *\$6.05 Warrants*) (together, *the Warrants*). The Warrants have a seven-year term and are exercisable any time after six months following their issuance date. The Warrants are to be net settled in either cash or common units at Teekay Offshore's option.

As part of the private placement, Teekay Corporation purchased for \$26.0 million a total of 1,040,000 of Teekay Offshore's Series D Preferred Units. Teekay Corporation also received 1,170,000 of the \$4.55 Warrants and 585,000 of the \$6.05 Warrants.

In 2016, Teekay Offshore issued 4.7 million common units for a total value of \$24.9 million (including the general partner's 2% proportionate capital contribution of \$0.5 million) as a payment-in-kind for the distributions on Teekay Offshore's Series C-1 Preferred Units, Series D Preferred Units and common units and general partner interest held by subsidiaries of Teekay Corporation. In June 2016, Teekay Offshore agreed with Teekay Corporation that, until the Teekay Offshore's Norwegian Kroner bonds maturing in 2018 have been repaid, all cash distributions (other than with respect to any incentive distribution rights) to be paid by Teekay Offshore to Teekay Corporation or its affiliates, including Teekay Offshore's general partner, will instead be paid in common units or from the proceeds of the sale of common units. Teekay Offshore issued Teekay Corporation 2.5 million common units (including the general partner's 2% proportionate capital contribution) as a payment-in-kind for the distributions on Teekay Offshore's Series D Preferred Units, common units and general partner interest held by Teekay Corporation and its subsidiaries.

Net cash proceeds from the sale of these securities of \$71.3 million, which excludes Teekay Corporation's investment, were allocated on a relative fair value basis to the Series D Preferred Units (\$61.1 million), to the \$4.55 Warrants (\$7.0 million) and to the \$6.05 Warrants (\$3.1 million). The Warrants qualify as freestanding financial instruments and are accounted for separately from the Series D Preferred Units. The Series D Preferred Units are presented in our consolidated balance sheets as redeemable non-controlling interest in temporary equity which is above the equity section but below the liabilities section as they are not mandatorily redeemable and the prospect of a forced redemption paid with cash due to a change of control event is not presently probable. The Warrants are recorded as non-controlling interests in our consolidated balance sheets.

Our ownership of Teekay Offshore was 29.0% (including our 2% general partner interest) as of March 1, 2017. We maintain control of Teekay Offshore by virtue of our control of the general partner and will continue to consolidate this subsidiary. Please read "Item 18. Financial Statements: Note 5—Financing Transactions."

#### *Equity Offerings, Unit Issuances and Related Transactions by Teekay LNG.*

During July 2014, Teekay LNG completed a public offering of 3.1 million common units (including 0.3 million common units issued upon exercise of the underwriters' over-allotment option) at a price of \$44.65 per unit, for gross proceeds of approximately \$140.8 million (including Teekay LNG's general partner's 2% proportionate capital contribution). Teekay LNG used the net proceeds from the offering of approximately \$140.5 million to prepay a portion of its outstanding debt under two of its revolving credit facilities, to fund its portion of the first installment payment of \$95.3 million for six newbuilding LNG carriers ordered by its 50/50 joint venture with China LNG for the Yamal LNG Project and to fund a portion of its MEG1 newbuildings' shipyard installments.

During 2014, Teekay LNG sold an aggregate of approximately 1.2 million common units under its COP for net proceeds of \$48.4 million (including Teekay LNG's general partner's 2% proportionate capital contribution). Teekay LNG received a portion of these proceeds (\$6.8 million for 0.2 million common units) in January 2015.

During 2015, Teekay LNG sold an aggregate of approximately 1.2 million common units of which 0.2 million units were from 2014 transactions which settled in 2015, under its COP for net proceeds of \$35.4 million (including its general partner's 2% proportionate capital contribution).

In October 2016, Teekay LNG issued in a public offering 5.0 million of its 9.00% Series A Cumulative Redeemable Perpetual Preferred Units (or the *Series A Preferred Units*) at \$25.00 per unit for net proceeds of approximately \$120.7 million. Distributions are payable on the Series A Preferred Units at a rate of 9.0% per annum of the stated liquidation preference of \$25.00 per unit. At any time on or after October 5, 2021, Teekay LNG may redeem the Series A Preferred Units, in whole or in part, at a redemption price of \$25.00 per unit plus all accumulated and unpaid distributions to the date of redemption, whether or not declared.

Our ownership of Teekay LNG was 33.7% (including our 2% general partner interest) as of March 1, 2017. We maintain control of Teekay LNG by virtue of our control of the general partner and will continue to consolidate this subsidiary. Please read "Item 18. Financial Statements: Note 5— Financing Transactions."

Please read "Item 5. Operating and Financial Review and Prospects—Management's Discussion and Analysis of Financial Condition and Results of Operations— Recent Developments and Results of Operations" for more information on recent transactions.

## **B. Operations**

We have four primary lines of business: offshore logistics (shuttle tankers, the *HiLoad DP* unit, FSO units, UMS and long-distance towing and offshore installation vessels), offshore production (FPSO units), liquefied gas carriers and conventional tankers. We manage these businesses for the benefit of all stakeholders. We allocate capital and assess performance from the separate perspectives of the Daughter Companies and Teekay Parent as well as from the perspective of the lines of business (or the *Line of Business approach*). The primary focus of our organizational structure, internal reporting and allocation of resources by the chief operating decision maker, is on the Daughter Companies and Teekay Parent (or the *Legal Entity approach*).

As such, a substantial majority of the information provided herein has been presented in accordance with the Legal Entity approach. However, we have continued to incorporate the Line of Business approach as in certain cases there is more than one line of business in each Daughter Company and we believe this information allows a better understanding of our performance and prospects for future net cash flows.



## Teekay Offshore – Offshore Logistics

### *Shuttle Tankers*

A shuttle tanker is a specialized ship designed to transport crude oil and condensates from offshore oil field installations to onshore terminals and refineries. Shuttle tankers are equipped with sophisticated loading systems and dynamic positioning systems that allow the vessels to load cargo safely and reliably from oil field installations, even in harsh weather conditions. Shuttle tankers were developed in the North Sea as an alternative to pipelines. The first cargo from an offshore field in the North Sea was shipped in 1977, and the first dynamically positioned shuttle tankers were introduced in the early 1980s. Shuttle tankers are often described as “floating pipelines” because these vessels typically shuttle oil from offshore installations to onshore facilities in much the same way a pipeline would transport oil along the ocean floor.

Teekay Offshore’s shuttle tankers are primarily subject to long-term, fixed-rate time-charter contracts or bareboat charter contracts for a specific offshore oil field, where a vessel is hired for a fixed period of time, or under contracts of affreightment for various fields, where Teekay Offshore commits to be available to transport the quantity of cargo requested by the customer from time to time over a specified trade route within a given period of time. The number of voyages performed under these contracts of affreightment normally depends upon the oil production of each field. Competition for charters is based primarily upon price, availability, the size, technical sophistication, age and condition of the vessel and the reputation of the vessel’s manager. Technical sophistication of the vessel is especially important in harsh operating environments such as the North Sea. Although the size of the world shuttle tanker fleet has been relatively unchanged in recent years, conventional tankers can be converted into shuttle tankers by adding specialized equipment to meet customer requirements. Shuttle tanker demand may also be affected by the possible substitution of sub-sea pipelines to transport oil from offshore production platforms.

As of December 31, 2016, there were approximately 100 vessels in the world shuttle tanker fleet (including 12 newbuildings), the majority of which operate in the North Sea and Brazil. Shuttle tankers also operate off the East Coast of Canada and in the U.S. Gulf. As of December 31, 2016, Teekay Offshore had owned 31 shuttle tankers (including three vessels under construction and the *HiLoad DP* unit), in which their ownership interests ranged from 50% to 100%, and chartered-in an additional three shuttle tankers. Other shuttle tanker owners include Knutsen NYK Offshore Tankers AS, SCF Group, Viken Shipping and AET Inc. Limited (or *AET*), which, as of December 31, 2016, controlled fleets of 4 to 29 shuttle tankers each. We believe that we have competitive advantages in the shuttle tanker market as a result of the quality, type and dimensions of our vessels combined with our market share in the North Sea, Brazil and the East Coast of Canada.

### *FSO Units*

FSO units provide on-site storage for oil field installations that have no storage facilities or that require supplemental storage. An FSO unit is generally used in combination with a jacked-up fixed production system, floating production systems that do not have sufficient storage facilities or as supplemental storage for fixed platform systems, which generally have some on-board storage capacity. An FSO unit is usually of similar design to a conventional tanker, but has specialized loading and off-take systems required by field operators or regulators. FSO units are moored to the seabed at a safe distance from a field installation and receive the cargo from the production facility via a dedicated loading system. An FSO unit is also equipped with an export system that transfers cargo to shuttle or conventional tankers. Depending on the selected mooring arrangement and where they are located, FSO units may or may not have any propulsion systems. Conversions, which include installation of a loading and off-take system and hull refurbishment, can generally extend the lifespan of a vessel as an FSO unit by up to 20 years over the normal conventional or shuttle tanker lifespan of 25 years.

Teekay Offshore’s FSO units are generally placed on long-term, fixed-rate time charters or bareboat charters as an integrated part of the field development plan, which provides more stable cash flow to Teekay Offshore. Under a bareboat charter, the customer pays a fixed daily rate for a fixed period of time for the full use of the vessel and is responsible for all crewing, management and navigation of the vessel and related expenses.

As of December 31, 2016, there were approximately 94 FSO units operating and five FSO units on order in the world fleet. As at December 31, 2016, Teekay Offshore had ownership interests in seven FSO units, including one vessel currently undergoing conversion into an FSO unit. The major markets for FSO units are Asia, West Africa, Northern Europe, the Mediterranean and the Middle East. Our primary competitors in the FSO market are conventional tanker owners, who have access to tankers available for conversion, and oil field services companies and oil field engineering and construction companies who compete in the floating production system market. Competition in the FSO market is primarily based on price, expertise in FSO operations, management of FSO conversions and relationships with shipyards, as well as the ability to access vessels for conversion that meet customer specifications.

### *Towage Vessels*

Long-distance towing and offshore installation vessels are used for the towing, station-keeping, installation and decommissioning of large floating objects, such as exploration, production and storage units, including FPSO units, floating liquefied natural gas (or *FLNG*) units and floating drill rigs. Teekay Offshore operates with high-end vessels which can be defined as long-distance towing and offshore installation vessels with a bollard pull of greater than 180 tonnes and a fuel capacity of more than 2,000 metric tonnes. Teekay Offshore’s focus is on intercontinental towages requiring trans-ocean movements.

Teekay Offshore is the sole provider of long-distance towing and offshore installation vessels with DP2 capability. Teekay Offshore’s towage vessels operate on voyage-charter towage contracts. Voyage-charter contract revenue is less volatile than revenue from spot-market rates, as project budgets are prepared and maintained well in advance of the contract commencement.

As of December 31, 2016, there were approximately 34 long-distance towing and offshore installation vessels operating and three long-distance towing and offshore installation vessels on order in the world fleet. At December 31, 2016, Teekay Offshore's fleet includes ten long-distance towing and offshore installation vessels (including three ultra-long distance towing and offshore installation vessel newbuildings, which are all scheduled to deliver during 2017), in all of which Teekay Offshore has 100% ownership interests.

## UMS

UMS are used primarily for offshore accommodation, storage and support for maintenance and modification projects on existing offshore installations, or during the installation and decommissioning of large floating exploration, production and storage units, including FPSO units, FLNG units and floating drill rigs. Teekay Offshore's UMS unit is available for world-wide operations, excluding operations within the Norwegian Continental Shelf, and includes DP3 keeping systems that are capable of operating in deep water and harsh weather. As of December 31, 2016, there were approximately 43 DP UMS operating and 21 units on order in the world fleet. As at December 31, 2016, Teekay Offshore's fleet consisted of one unit, the *Arendal Spirit*, in which Teekay Offshore owns a 100% interest.

## Teekay Offshore – Offshore Production

### FPSO Units

FPSO units are offshore production facilities that are ship-shaped or cylindrical-shaped and store processed crude oil in tanks located in the hull of the vessel. FPSO units are typically used as production facilities to develop marginal oil fields or deepwater areas remote from existing pipeline infrastructure. Of four major types of floating production systems, FPSO units are the most common type. Typically, the other types of floating production systems do not have significant storage and need to be connected into a pipeline system or use an FSO unit for storage. FPSO units are less weight-sensitive than other types of floating production systems and their extensive deck area provides flexibility in process plant layouts. In addition, the ability to utilize surplus or aging tanker hulls for conversion to an FPSO unit provides a relatively inexpensive solution compared to the new construction of other floating production systems. A majority of the cost of an FPSO comes from its top-side production equipment and thus, FPSO units are expensive relative to conventional tankers. An FPSO unit carries on board all the necessary production and processing facilities normally associated with a fixed production platform. As the name suggests, FPSO units are not fixed permanently to the seabed but are designed to be moored at one location for long periods of time. In a typical FPSO unit installation, the untreated well-stream is brought to the surface via subsea equipment on the sea floor that is connected to the FPSO unit by flexible flow lines called risers. The risers carry oil, gas and water from the ocean floor to the vessel, which processes it on board. The resulting crude oil is stored in the hull of the vessel and subsequently transferred to tankers either via a buoy or tandem loading system for transport to shore.

Traditionally for large field developments, the major oil companies have owned and operated new, custom-built FPSO units. FPSO units for smaller fields have generally been provided by independent FPSO contractors under life-of-field production contracts, where the contract's duration is for the useful life of the oil field. FPSO units have been used to develop offshore fields around the world since the late 1970s. Most independent FPSO contractors have backgrounds in marine energy transportation, oil field services or oil field engineering and construction. As of December 2016, there were approximately 191 FPSO units operating and 18 FPSO units on order in the world fleet. At December 31, 2016, Teekay Offshore owned six FPSO units, in which it has 100% ownership interests, and two FPSO units, in which it has 50% ownership interests. One of these 50% owned FPSO units is undergoing a conversion and another of the FPSO units is undergoing upgrades. Other major independent FPSO contractors are SBM Offshore N.V., BW Offshore, MODEC, Bluewater and Bumi Armada.

## Teekay LNG

Teekay LNG's vessels primarily compete in the LNG and LPG markets. LNG carriers are usually chartered to carry LNG pursuant to time-charter contracts, where a vessel is hired for a fixed period of time and with charter rates payable to the owner on a monthly basis. LNG shipping historically has been transacted with these long-term, fixed-rate time-charter contracts. LNG projects require significant capital expenditures and typically involve an integrated chain of dedicated facilities and cooperative activities. Accordingly, the overall success of an LNG project depends heavily on long-range planning and coordination of project activities, including marine transportation. Most shipping requirements for new LNG projects continue to be provided on a long-term basis, though the level of spot voyages (typically consisting of a single voyage), short-term time charters and medium-term time charters have grown in the past few years.

In the LNG markets, Teekay LNG competes principally with private and state-controlled energy and utilities companies, which generally operate captive fleets, and independent ship owners and operators. Many major energy companies compete directly with independent owners by transporting LNG for third parties in addition to their own LNG. Given the complex, long-term nature of LNG projects, major energy companies historically have transported LNG through their captive fleets. However, independent fleet operators have been obtaining an increasing percentage of charters for new or expanded LNG projects as major energy companies have continued to divest non-core businesses. Other major operators of LNG carriers include Qatar Gas Transport (Nakilat), Malaysian International Shipping Company, Mitsui O.S.K. Lines, GasLog, Maran Gas Maritime, BW Gas, NYK Line, and Golar LNG.

LNG carriers transport LNG internationally between liquefaction facilities and import terminals. After natural gas is transported by pipeline from production fields to a liquefaction facility, it is super-cooled to a temperature of approximately negative 260 degrees Fahrenheit. This process reduces its volume to approximately 1 / 600th of its volume in a gaseous state. The reduced volume facilitates economical storage and transportation by ship over long distances, enabling countries with limited natural gas reserves or limited access to long-distance transmission pipelines to meet their demand for natural gas. LNG carriers include a sophisticated containment system that holds and insulates the LNG so it maintains its liquid form. The LNG is transported overseas in specially built tanks on double-hulled ships to a receiving terminal, where it is offloaded and stored in heavily insulated tanks. In regasification facilities at the receiving terminal, the LNG is returned to its gaseous state (or *regasified*) and then shipped by pipeline for distribution to natural gas customers.

LPG carriers are mainly chartered to carry LPG on time charters of three to five years, on contracts of affreightment or spot voyage charters. The two largest consumers of LPG are residential users and the petrochemical industry. Residential users, particularly in developing regions where electricity and gas pipelines are not developed, do not have fuel switching alternatives and generally are not LPG price sensitive. The petrochemical industry, however, has the ability to switch between LPG and other feedstock fuels depending on price and availability of alternatives.

Most new LNG carriers, including all of our vessels, are built with a membrane containment system. These systems consist of insulation between thin primary and secondary barriers and are designed to accommodate thermal expansion and contraction without overstressing the membrane. New LNG carriers are generally expected to have a lifespan of approximately 35 to 40 years. New LPG carriers are generally expected to have a lifespan of approximately 30 to 35 years. Unlike the oil tanker industry, there are currently no regulations that require the phase-out from trading of LNG and LPG carriers after they reach a certain age. As at December 31, 2016, there were approximately 472 vessels in the worldwide LNG fleet, with an average age of approximately 11 years, and an additional 133 LNG carriers under construction or on order for delivery through 2020. As of December 31, 2016, the worldwide LPG tanker fleet consisted of approximately 1,410 vessels with an average age of approximately 15 years and approximately 114 additional LPG vessels on order for delivery through 2019. LPG carriers range in size from approximately 100 to approximately 87,000 cubic meters (or *cbm*). Approximately 45% (in terms of vessel numbers) of the worldwide fleet is less than 5,000 cbm.

Teekay LNG includes substantially all of our LNG and LPG carriers. As at December 31, 2016, Teekay LNG had ownership interests in 31 LNG carriers, as well as 19 additional newbuilding LNG carriers on order. In addition, as at December 31, 2016, Teekay LNG had full ownership of six LPG carriers and part ownership, through its joint venture agreement with Exmar, in another 17 LPG carriers, four newbuilding LPG carriers on order, and two chartered-in LPG carriers.

## **Teekay Tankers**

Teekay Tankers owns a substantial majority of our conventional crude oil tankers and product carriers. Our conventional crude oil tankers and product tankers primarily operate in the spot-tanker market or are subject to time charters or contracts of affreightment that are priced on a spot-market basis or are short-term, fixed-rate contracts. We consider contracts that have an original term of less than one year in duration to be short-term. Certain of our conventional crude oil tankers and product tankers are on fixed-rate time-charter contracts with an initial duration of at least one year. Teekay Tankers and we also have minority interests in TIL, which owns conventional and product tankers.

Teekay Tankers' vessels compete primarily in the Aframax and Suezmax tanker markets. In these markets, international seaborne oil and other petroleum products transportation services are provided by two main types of operators: captive fleets of major oil companies (both private and state-owned) and independent ship-owner fleets. Many major oil companies and other oil trading companies, the primary charterers of our vessels, also operate their own vessels and transport their own oil and oil for third-party charterers in direct competition with independent owners and operators. Competition for charters in the Aframax and Suezmax spot charter market is intense and is based upon price, location, the size, age, condition and acceptability of the vessel, and the reputation of the vessel's manager.

Teekay Tankers competes principally with other owners in the spot-charter market through the global tanker charter market. This market is comprised of tanker broker companies that represent both charterers and ship-owners in chartering transactions. Within this market, some transactions, referred to as "market cargoes," are offered by charterers through two or more brokers simultaneously and shown to the widest possible range of owners; other transactions, referred to as "private cargoes," are given by the charterer to only one broker and shown selectively to a limited number of owners whose tankers are most likely to be acceptable to the charterer and are in position to undertake the voyage.

Most of Teekay Tankers' conventional tankers operate pursuant to pooling or revenue sharing commercial management arrangements. Under such arrangements, different vessel owners pool their vessels, which are managed by a pool manager, to improve utilization and reduce expenses. In general, revenues generated by the vessels operating in a pool or revenue sharing commercial management arrangement, less related voyage expenses (such as fuel and port charges) and administrative expenses, are pooled and allocated to the vessel owners according to a pre-determined formula. As of December 31, 2016, Teekay Tankers participated in three main pooling or revenue sharing commercial management arrangements. These include an Aframax tanker revenue sharing commercial management arrangement (or the *Aframax RSA*), an LR2 tanker pool (or the *Taurus Pool*), and a Suezmax tanker revenue sharing commercial management arrangement (or the *Suezmax RSA*). As of December 31, 2016, six of Teekay Tankers' Aframax tankers operated in the Aframax RSA, five of Teekay Tankers' LR2 tankers operated in the Taurus Pool, and 16 of Teekay Tankers' Suezmax tankers operated in the Suezmax RSA. Each of these pools or revenue sharing commercial management arrangements is either solely or jointly managed by us.

Teekay Tankers' competition in the Aframax (80,000 to 119,999 dwt) market is also affected by the availability of other size vessels that compete in that market. Suezmax (120,000 to 199,999 dwt) vessels and Panamax (55,000 to 79,999 dwt) vessels can compete for many of the same charters for which our Aframax tankers compete. Similarly, Aframax tankers and Very Large Crude Carriers (200,000 to 319,999 dwt) (or VLCCs) can compete for many of the same charters for which our Suezmax vessels compete. Because VLCCs comprise a substantial portion of the total capacity of the market, movements by such vessels into Suezmax trades or of Suezmax vessels into Aframax trades would heighten the already intense competition.

We believe that we have competitive advantages in the Aframax and Suezmax tanker market as a result of the quality, type and dimensions of our vessels and our market share in the Indo-Pacific and Atlantic Basins. As of December 31, 2016, our Aframax tanker fleet (excluding Aframax-size shuttle tankers and newbuildings) had an average age of approximately 12 years and our Suezmax tanker fleet (excluding Suezmax-size shuttle tankers and newbuildings) had an average age of approximately 8.5 years. This compares to an average age for the world oil tanker fleet of approximately 9.5 years, for the world Aframax tanker fleet of approximately 10.2 years and for the world Suezmax tanker fleet of approximately 9.9 years.

As of December 31, 2016, other large operators of Aframax tonnage (including newbuildings on order) included Sovcomflot (approximately 42 vessels), Malaysian International Shipping Corporation (approximately 36 Aframax vessels), Sigma Pool (approximately 29 vessels), and the Navig8 Pool (approximately 20 vessels). Other large operators of Suezmax tonnage (including newbuildings on order) as of such date included the Nordic American Tankers (approximately 30 vessels), the Stena Sonangol Pool (approximately 22 vessels), Euronav (approximately 21 vessels), Navig8 (approximately 20 vessels), the Blue Fin Pool (approximately 16 vessels) and Sovcomflot (approximately 15 vessels).

Teekay Tankers acquired SPT (now known as Teekay Marine Solutions or *TMS*) in July 2015 from a company jointly owned by Teekay and Skaugen. TMS provides a full suite of ship-to-ship transfer services in the oil, gas and dry bulk industries. In addition to full service lightering and lightering support, it also provides consultancy, terminal management and project development services. TMS owns a fleet of four STS support vessels and has two in-chartered Aframax tankers.

We have chartering staff located in Singapore; London, England; and Houston, USA. Each office serves our clients headquartered in that office's region. Fleet operations, vessel positions and charter market rates are monitored around the clock. We believe that monitoring such information is critical to making informed bids on competitive brokered business.

#### **Teekay Parent**

Teekay Parent continues to own three FPSO units and also in-charters a number of vessels. However, our long-term vision is for Teekay Parent to be primarily a general partner whose role is that of portfolio manager and project developer. Our primary financial objective for Teekay Parent is to increase its free cash flow per share. To support this objective, over the longer term we intend to de-lever the balance sheet of Teekay Parent by completing the sales of the remaining FPSOs to Teekay Offshore or third parties and to seek to grow the distributions of Teekay Offshore and Teekay LNG. Consequently, we expect the Daughter Companies will ultimately hold all of the direct ownership interests in our operating assets and that each of these entities will directly pursue their own merger and acquisition and organic growth opportunities.

## Our Consolidated Fleet

As at December 31, 2016, our fleet (excluding vessels managed for third parties) consisted of 214 vessels, including chartered-in vessels and newbuildings/conversions on order. The following table summarizes our fleet as at December 31, 2016:

	Owned Vessels	Chartered-in Vessels	Newbuildings / Conversions	Total
<b>Teekay Offshore</b>				
Shuttle Tankers	27 <sup>(1)</sup>	3	3 <sup>(4)</sup>	33
FSO Units	6 <sup>(2)</sup>	—	1	7
FPSO Units	6 <sup>(3)</sup>	—	2 <sup>(3)</sup>	8
Unit for Maintenance and Safety (UMS)	1	—	—	1
Towage Vessels	7	—	3	10
HiLoad Dynamic Positioning Unit	1	—	—	1
Aframax Tankers	—	2	—	2
	<u>48</u>	<u>5</u>	<u>9</u>	<u>62</u>
<b>Teekay LNG</b>				
LNG Vessels	31 <sup>(5)</sup>	—	19 <sup>(6)</sup>	50
LPG/Multigas Vessels	23 <sup>(7)</sup>	2	4 <sup>(9)</sup>	29
Suezmax Tankers	5 <sup>(8)</sup>	—	—	5
Product Tanker	1	—	—	1
	<u>60</u>	<u>2</u>	<u>23</u>	<u>85</u>
<b>Teekay Tankers</b>				
Aframax Tankers	14	6	—	20
Suezmax Tankers	22 <sup>(10)</sup>	—	—	22
VLCC	1 <sup>(11)</sup>	—	—	1
Product Tankers	7	1	—	8
STS Support Vessels	4	3	—	7
	<u>48</u>	<u>10</u>	<u>—</u>	<u>58</u>
<b>Teekay Parent <sup>(12)</sup></b>				
FPSO Units	3	—	—	3
Aframax Tankers	—	2	—	2
Bunker Barge	—	1	—	1
Infield Support Vessels	—	1 <sup>(13)</sup>	2	3
	<u>3</u>	<u>4</u>	<u>2</u>	<u>9</u>
<b>Total</b>	<b><u>159</u></b>	<b><u>21</u></b>	<b><u>34</u></b>	<b><u>214</u></b>

(1) Includes six shuttle tankers 50% owned by Teekay Offshore.

(2) Includes one FSO unit 89% owned by Teekay Offshore. Includes one FSO unit that is classified as held-for-sale at year end.

(3) Owned vessels and Newbuildings / Conversions each include one FPSO unit 50% owned by Teekay Offshore. One of the FPSO units is in lay-up.

(4) Includes two vessels scheduled to deliver during 2017.

(5) Includes a 70% interest in three LNG carriers, a 69% interest in two LNG carriers, a 52% interest in six LNG carriers, a 50% interest in one LNG carrier, a 49% interest in one LNG carrier, a 40% interest in four LNG carriers, and a 33% interest in four LNG carriers owned by Teekay LNG.

(6) Includes a 50% interest in six LNG newbuildings, a 30% interest in two LNG newbuildings, and a 20% interest in two LNG newbuildings.

(7) Includes 16 LPG carriers 50% owned by Teekay LNG. Includes one LPG carrier 50% owned by Teekay LNG, *Brugge Venture*, that was classified as held-for-sale as at December 31, 2016.

(8) Includes one vessel, *Asian Spirit*, that was classified as held-for-sale as at December 31, 2016. This vessel was sold on January 10, 2017.

(9) All LPG newbuildings are 50% owned by Teekay LNG.

(10) Includes two vessels, *Ganges Spirit*, which was sold on January 3, 2017, and *Yamuna Spirit*, which was sold on March 5, 2017.

(11) VLCC is 50% owned by Teekay Tankers.

(12) Excludes two LNG carriers chartered from Teekay LNG, and two shuttle tankers and three FSO units chartered from Teekay Offshore, all of which are included in the respective Daughter Company totals in this table.

(13) KT Maritime (Pty) Ltd, the charterer of the Infield Support Vessel, is owned 50% by Teekay Corporation.

Our vessels are of Bahamian, Belgian, Canadian, Cyprus, Danish, Greek, Hong Kong, Isle of Man, Liberian, Malta, Marshall Islands, Netherlands, Norwegian, Panama, Singapore, and Spanish registry.

Many of our Aframax and Suezmax vessels and some of our shuttle tankers have been designed and constructed as substantially identical sister ships. These vessels can, in many situations, be interchanged, providing scheduling flexibility and greater capacity utilization. In addition, spare parts and technical knowledge can be applied to all the vessels in the particular series, thereby generating operating efficiencies.

As of December 31, 2016, we had 19 LNG carriers, three shuttle tankers, and three long-distance towing and offshore installation vessels on order, one FSO under conversion, and one FPSO undergoing upgrades. In addition, we had a 50% interest in one FPSO under conversion, a 50% interest in six LNG newbuilding orders, a 30% interest in two LNG newbuilding orders, a 20% interest in two LNG newbuilding orders, and a 50% interest in four LPG newbuilding orders. Please read "Item 5. Operating and Financial Review and Prospects: Management's Discussion and Analysis of Financial Condition and Results of Operations," and "Item 18. Financial Statements: Notes 15(a) and 15(b)—Commitments and Contingencies—Vessels Under Construction and Joint Ventures."

Please read "Item 18. Financial Statements: Note 7—Long-Term Debt" for information with respect to major encumbrances against our vessels.

### **Safety, Management of Ship Operations and Administration**

Safety and environmental compliance are our top operational priorities. We operate our vessels in a manner intended to protect the safety and health of our employees, the general public and the environment. We seek to manage the risks inherent in our business and are committed to eliminating incidents that threaten the safety and integrity of our vessels, such as groundings, fires, collisions and petroleum spills. In 2008, we introduced the Quality Assurance and Training Officers Program (or QATO) to conduct rigorous internal audits of our processes and provide our seafarers with on-board training. In 2007, we introduced a behavior-based safety program called "Safety in Action" to improve the safety culture in our fleet. We are also committed to reducing our emissions and waste generation. In 2010, we introduced a training program for our employees titled "Operational Leadership, The Journey" which sets out our operational expectations, the responsibilities of individual employees and our commitment to empowering our employees to work safely and live Teekay's vision through a positive and responsible attitude. The Operational Leadership Team composed of heads of operations of Teekay Business Units and Global HSEQ, developed and is sponsoring a 5-year Safety Road Map that comprises of number of safety aimed projects to further enhance safety culture on board Teekay vessels.

Key performance indicators facilitate regular monitoring of our operational performance. Targets are set on an annual basis to drive continuous improvement, and indicators are reviewed quarterly to determine if remedial action is necessary to reach the targets.

We, through certain of our subsidiaries, assist our operating subsidiaries in managing their ship operations. All vessels are operated under our comprehensive and integrated Safety Management System that complies with the International Safety Management Code (or *ISM Code*), the International Standards Organization's (or *ISO*) 9001 for Quality Assurance, ISO 14001 for Environment Management Systems, Occupational Health and Safety Advisory Services (or *OHSAS*) 18001 and the Maritime Labour Convention 2006 (MLC 2006) that became effective in 2013. The management system is certified by Det Norske Veritas Germanischer Lloyd (or *DNV-GL*), the Norwegian classification society. It has also been separately approved by the Australian and Spanish Flag administrations. Although certification is valid for five years, compliance with the above mentioned standards is confirmed on a yearly basis by a rigorous auditing procedure that includes both internal audits as well as external verification audits by DNV-GL and certain flag states.

We provide, through certain of our subsidiaries, expertise in various functions critical to the operations of our operating subsidiaries. We believe this arrangement affords a safe, efficient and cost-effective operation. Our subsidiaries also provide to us access to human resources, financial and other administrative functions pursuant to administrative services agreements.

Critical ship management functions undertaken by our subsidiaries are:

- vessel maintenance (including repairs and dry docking) and certification;
- crewing by competent seafarers;
- procurement of stores, bunkers and spare parts;
- management of emergencies and incidents;
- supervision of shipyard and projects during new-building and conversions;
- insurance; and
- financial management services.

Integrated on-board and on-shore systems support the management of maintenance, inventory control and procurement, crew management and training and assist with budgetary controls.

Our day-to-day focus on cost efficiencies is applied to all aspects of our operations. We believe that the generally uniform design of some of our existing and new-building vessels and the adoption of common equipment standards provides operational efficiencies, including with respect to crew training and vessel management, equipment operation and repair, and spare parts ordering. In addition, we and two other shipping companies have a purchasing alliance, Teekay Bergesen Worldwide, which leverages the purchasing power of the combined fleets, mainly in such commodity areas as lube oils, paints and other chemicals.

### **Risk of Loss and Insurance**

The operation of any ocean-going vessel carries an inherent risk of catastrophic marine disasters, death or injury of persons and property losses caused by adverse weather conditions, mechanical failures, human error, war, terrorism, piracy and other circumstances or events. In addition, the transportation of crude oil, petroleum products, LNG and LPG is subject to the risk of spills and to business interruptions due to political circumstances in foreign countries, hostilities, labor strikes, sanctions and boycotts. The occurrence of any of these events may result in loss of revenues or increased costs.

We carry hull and machinery (marine and war risks) and protection and indemnity insurance coverage to protect against most of the accident-related risks involved in the conduct of our business. Hull and machinery insurance covers loss of or damage to a vessel due to marine perils such as collision, grounding and weather. Protection and indemnity insurance indemnifies us against liabilities incurred while operating vessels, including injury to our crew or third parties, cargo loss and pollution. The current maximum amount of our coverage for pollution is \$1 billion per vessel per incident. We also carry insurance policies covering war risks (including piracy and terrorism) and, for some of our LNG carriers and for one FPSO, loss of revenues resulting from vessel off-hire time due to a marine casualty. We believe that our current insurance coverage is adequate to protect against most of the accident-related risks involved in the conduct of our business and that we maintain appropriate levels of environmental damage and pollution insurance coverage. However, we cannot guarantee that all covered risks are adequately insured against, that any particular claim will be paid or that we will be able to procure adequate insurance coverage at commercially reasonable rates in the future. More stringent environmental regulations have resulted in increased costs for, and may result in the lack of availability of, insurance against risks of environmental damage or pollution.

In our operations, we use a thorough risk management program that includes, among other things, risk analysis tools, maintenance and assessment programs, a seafarers competence training program, seafarers workshops and membership in emergency response organizations.

We have achieved certification under the standards reflected in ISO 9001 for quality assurance, ISO 14001 for environment management systems, OHSAS 18001, and the IMO's International Management Code for the Safe Operation of Ships and Pollution Prevention on a fully integrated basis.

### **Operations Outside of the United States**

Because our operations are primarily conducted outside of the United States, we are affected by currency fluctuations, to the extent we do not contract in U.S. dollars, and by changing economic, political and governmental conditions in the countries where we engage in business or where our vessels are registered. Past political conflicts in those regions, particularly in the Arabian Gulf, have included attacks on tankers, mining of waterways and other efforts to disrupt shipping in the area. Vessels trading in certain regions have also been subject to acts of piracy. In addition to tankers, targets of terrorist attacks could include oil pipelines, LNG facilities and offshore oil fields. The escalation of existing, or the outbreak of future, hostilities or other political instability in regions where we operate could affect our trade patterns, increase insurance costs, increase tanker operational costs and otherwise adversely affect our operations and performance. In addition, tariffs, trade embargoes, and other economic sanctions by the United States or other countries against countries in the Indo-Pacific Basin or elsewhere as a result of terrorist attacks or otherwise may limit trading activities with those countries, which could also adversely affect our operations and performance.

### **Customers**

We have derived, and believe that we will continue to derive, a significant portion of our revenues from a limited number of customers. Our customers include major energy and utility companies, major oil traders, large oil and LNG consumers and petroleum product producers, government agencies, and various other entities that depend upon marine transportation. Two customers, international oil companies, accounted for a total of 29%, or \$653.6 million, of our consolidated revenues during 2016 (2015 - two customers for 21%, or \$495.2 million, 2014 - two customers for 24%, or \$488.0 million). No other customer accounted for more than 10% of our consolidated revenues during 2016, 2015 or 2014. The loss of any significant customer or a substantial decline in the amount of services requested by a significant customer, or the inability of a significant customer to pay for our services, could have a material adverse effect on our business, financial condition and results of operations.

### **Flag, Classification, Audits and Inspections**

Our vessels are registered with reputable flag states, and the hull and machinery of all of our vessels have been "Classed" by one of the major classification societies and members of International Association of Classification Societies Ltd (or IACS): BV, Lloyd's Register of Shipping, the American Bureau of Shipping or DNV-GL.

The applicable classification society certifies that the vessel's design and build conforms to the applicable Class rules and meets the requirements of the applicable rules and regulations of the country of registry of the vessel and the international conventions to which that country is a signatory. The classification society also verifies throughout the vessel's life that it continues to be maintained in accordance with those rules. In order to validate this, the vessels are surveyed by the classification society, in accordance to the classification society rules, which in the case of our vessels follows a comprehensive five-year special survey cycle, renewed every fifth year. During each five-year period, the vessel undergoes annual and intermediate surveys, the scrutiny and intensity of which is primarily dictated by the age of the vessel. As our vessels are modern and we have enhanced the resiliency of the underwater coatings of each vessel hull and marked the hull to facilitate underwater inspections by divers, their underwater areas are inspected in a dry dock at five-year intervals. In-water inspection is carried out during the second or third annual inspection (i.e. during an Intermediate Survey).

In addition to class surveys, the vessel's flag state also verifies the condition of the vessel during annual flag state inspections, either independently or by additional authorization to class. Also, port state authorities of a vessel's port of call are authorized under international conventions to undertake regular and spot checks of vessels visiting their jurisdiction.

Processes followed onboard are audited by either the flag state or the classification society acting on behalf of the flag state to ensure that they meet the requirements of the ISM Code. DNV-GL typically carries out this task. We also follow an internal process of internal audits undertaken annually at each office and vessel.

We follow a comprehensive inspections scheme supported by our sea staff, shore-based operational and technical specialists and members of our QATO program. We carry out a minimum of two such inspections annually, which helps ensure us that:

- our vessels and operations adhere to our operating standards;
- the structural integrity of the vessel is being maintained;
- machinery and equipment is being maintained to give reliable service;
- we are optimizing performance in terms of speed and fuel consumption; and
- our vessels' appearance supports our brand and meets customer expectations.

Our customers also often carry out vetting inspections under the Ship Inspection Report Program, which is a significant safety initiative introduced by the Oil Companies International Marine Forum to specifically address concerns about sub-standard vessels. The inspection results permit charterers to screen a vessel to ensure that it meets their general and specific risk-based shipping requirements.

We believe that the heightened environmental and quality concerns of insurance underwriters, regulators and charterers will generally lead to greater scrutiny, inspection and safety requirements on all vessels in the oil tanker and LNG and LPG carrier markets and will accelerate the scrapping or phasing out of older vessels throughout these markets.

Overall, we believe that our well-maintained and high-quality vessels provide us with a competitive advantage in the current environment of increasing regulation and customer emphasis on quality of service.

## **Regulations**

### ***General***

Our business and the operation of our vessels are significantly affected by international conventions and national, state and local laws and regulations in the jurisdictions in which our vessels operate, as well as in the country or countries of their registration. Because these conventions, laws and regulations change frequently, we cannot predict the ultimate cost of compliance or their impact on the resale price or useful life of our vessels. Additional conventions, laws, and regulations may be adopted that could limit our ability to do business or increase the cost of our doing business and that may materially affect our operations. We are required by various governmental and quasi-governmental agencies to obtain permits, licenses and certificates with respect to our operations. Subject to the discussion below and to the fact that the kinds of permits, licenses and certificates required for the operations of the vessels we own will depend on a number of factors, we believe that we will be able to continue to obtain all permits, licenses and certificates material to the conduct of our operations.

### ***International Maritime Organization (or IMO)***

The IMO is the United Nations' agency for maritime safety and prevention of pollution. IMO regulations relating to pollution prevention for oil tankers have been adopted by many of the jurisdictions in which our tanker fleet operates. Under IMO regulations and subject to limited exceptions, a tanker must be of double-hull construction in accordance with the requirements set out in these regulations, or be of another approved design ensuring the same level of protection against oil pollution. All of our tankers are double hulled.



Many countries, but not the United States, have ratified and follow the liability regime adopted by the IMO and set out in the International Convention on Civil Liability for Oil Pollution Damage, 1969, as amended (or *CLC*). Under this convention, a vessel's registered owner is strictly liable for pollution damage caused in the territorial waters of a contracting state by discharge of persistent oil (e.g., crude oil, fuel oil, heavy diesel oil or lubricating oil), subject to certain defenses. The right to limit liability to specified amounts that are periodically revised is forfeited under the CLC when the spill is caused by the owner's actual fault or when the spill is caused by the owner's intentional or reckless conduct. Vessels trading to contracting states must provide evidence of insurance covering the limited liability of the owner. In jurisdictions where the CLC has not been adopted, various legislative regimes or common law governs, and liability is imposed either on the basis of fault or in a manner similar to the CLC.

IMO regulations also include the International Convention for Safety of Life at Sea (or *SOLAS*), including amendments to SOLAS implementing the International Ship and Port Facility Security Code (or *ISPS*), the ISM Code, the International Convention on Load Lines of 1966, and, specifically with respect to LNG and LPG carriers, the International Code for Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (the *IGC Code*). The IMO Marine Safety Committee has also published guidelines for vessels with dynamic positioning (*DP*) systems, which would apply to shuttle tankers and DP-assisted FSO units and FPSO units. SOLAS provides rules for the construction of and the equipment required for commercial vessels and includes regulations for their safe operation. Flag states which have ratified the convention and the treaty generally employ the classification societies, which have incorporated SOLAS requirements into their class rules, to undertake surveys to confirm compliance.

SOLAS and other IMO regulations concerning safety, including those relating to treaties on training of shipboard personnel, lifesaving appliances, radio equipment and the global maritime distress and safety system, are applicable to our operations. Non-compliance with IMO regulations, including SOLAS, the ISM Code, ISPS, the IGC Code for LNG and LPG carriers, and the specific requirements for shuttle tankers, FSO units and FPSO units under the NPD (Norway) and HSE (United Kingdom) regulations, may subject us to increased liability or penalties, may lead to decreases in available insurance coverage for affected vessels and may result in the denial of access to or detention in some ports. For example, the U.S. Coast Guard (or *USCG*) and European Union authorities have indicated that vessels not in compliance with the ISM Code will be prohibited from trading in U.S. and European Union ports. The ISM Code requires vessel operators to obtain a safety management certification for each vessel they manage, evidencing the shipowner's development and maintenance of an extensive safety management system. Each of the existing vessels in our fleet is currently ISM Code-certified, and we expect to obtain safety management certificates for each newbuilding vessel upon delivery.

With regard to offshore support vessels, such as UMS, SOLAS permits certain exemptions and equivalents to be allowed by the relevant vessel's flag state. The International Code on Intact Stability, 2008 (adopted by IMO Resolution MSC. 267(85) of December 4, 2008) (or *IS Code*), which became mandatory on July 1, 2010, also applies mandatorily to offshore support vessels (with the exception of certain provisions thereof). In 2016 the IMO's Maritime Safety Committee (or *MSC*) adopted amendments to the IS Code relating to ships engaged in anchor handling operations and to ships engaged in lifting and towing operations, including escort towing. These amendments are expected to enter into force on January 1, 2020. The IMO has also developed non-mandatory codes and guidelines which apply to various types or aspects of offshore support vessels. These include, amongst others, the Code of Safe Practice for the Carriage of Cargoes and Persons by Offshore Supply Vessels (the *OSV Code*) (IMO Resolution A.863(20) of November 27, 1997) as subsequently amended, the Guidelines for the Design and Construction of Offshore Supply Vessels, 2006 (the *OSV Guidelines*) (IMO Resolution MSC.235(82) of December 1, 2006) as subsequently amended, the Guidelines for the Transport and Handling of Limited Amounts of Hazardous and Noxious Liquid Substances in Bulk on Offshore Support Vessels (the *LHNS Guidelines*) (IMO Resolution A.673(16)) of October 19, 1989, as subsequently amended, the Code of Safety for Special Purpose Ships, 2008 (Resolution MSC.266(84) of May 13, 2008 as subsequently amended (including amendments adopted in 2016), the Code of Safety for Dynamically Supported Craft (IMO Resolution A.373(X)) of November 17, 1977) as subsequently amended, the Guidelines for Vessels with Dynamic Positioning Systems (MSC/Circ.645 of June 6, 1994) and the Guidelines for Dynamic Positioning System (DP) Operator Training (MSC/Circ.738/Rev. 1 of July 7, 2006).

LNG and LPG carriers are also subject to regulation under the IGC Code. Each LNG and LPG carrier must obtain a certificate of compliance evidencing that it meets the requirements of the IGC Code, including requirements relating to its design and construction. Each of our LNG and LPG carriers is currently IGC Code compliant, and each of the shipbuilding contracts for our LNG newbuildings, and for the LPG newbuildings requires IGC Code compliance prior to delivery. A revised and updated IGC Code, which takes account of advances in science and technology, was adopted by the IMO's MSC on May 22, 2014 and entered into force on January 1, 2016 with an implementation/application date of July 1, 2016.

In addition, the IMO's MSC has adopted the International Code of Safety for Ships using Gases or other Low-flashpoint Fuels (the *IGF Code*), which is a mandatory code for ships fueled by gases or other low-flashpoint fuels. The IGF Code, which is applicable from January 1, 2017, sets out mandatory provisions for the arrangement, installation, control and monitoring of machinery, equipment and systems using low-flashpoint fuel, in order to minimize the risk to the ship, its crew and the environment taking into account the nature of these fuels.

Annex VI to the IMO's International Convention for the Prevention of Pollution from Ships (*MARPOL*) (or *Annex VI*) sets limits on sulfur oxide and nitrogen oxide emissions from ship exhausts and prohibits emissions of ozone depleting substances, emissions of volatile compounds from cargo tanks and the incineration of specific substances. Annex VI also includes a world-wide cap on the sulfur content of fuel oil and allows for special "emission control areas" (or *ECAs*) to be established with more stringent controls on sulfur emissions.

Annex VI also provides for a three-tier reduction in nitrogen oxide (or *NOx*) emissions from marine diesel engines, with the final tier (or *Tier III*) to apply to engines installed on vessels constructed on or after January 1, 2016 and which operate in the North American ECA or the U.S. Caribbean Sea ECA. The Tier III requirements will also apply to ECAs designated in the future by the IMO. In October 2016 the IMO's MEPC approved the designation of the North Sea and the Baltic Sea as ECAs for *NOx* emissions. These two new *NOx* ECAs and the related amendments to Annex VI of MARPOL are expected to be formally adopted by IMO's MEPC in 2017 and the two new ECAs are expected to enter into effect on January 1, 2021.

The IMO has issued guidance regarding protecting against acts of piracy off the coast of Somalia. We comply with these guidelines.

The IMO's Ballast Water Management Convention has been adopted by 54 countries, the combined merchant fleets of which represent 53.30% of the gross tonnage of the world's merchant shipping, and will enter into force on September 8, 2017. The convention stipulates two standards for discharged ballast water. The D-1 standard covers ballast water exchange while the D-2 standard covers ballast water treatment. Once effective, the convention will require the implementation of either the D-1 or D-2 standard. There will be a transitional period from the entry into force to the International Oil Pollution Prevention (or *IOPP*) renewal survey in which ballast water exchange (reg. D-1) can be employed. After the first *IOPP* renewal survey, vessels will be required to meet the discharge standard D-2 by installing an approved Ballast Water Management System (or *BWMS*). Ships constructed after entry into force will be required to have a treatment system installed at delivery. Besides the IMO convention, ships sailing in U.S. waters are required to employ a type-approved *BWMS* which is compliant with USCG regulations. To date the USCG have issued Type Approval (or *TA*) for the following ballast water treatment systems (or *BWTS*):

- Alfa Laval;
- Ocean Saver; and
- Optimarin.

We expect the USCG will issue more *TAs* for *BWTS* in the future. Plans have been set for the decoupling of *IOPP* surveys with Harmonised System of Survey and Certification for vessels planning to drydock in 2018 with approval from the Flag and Classification Society. We estimate that the installation of approved *BWTS* may cost between \$2 million and \$3 million per vessel.

The IMO has also developed and adopted an International Code for Ships Operating in Polar Waters (or *Polar Code*) which deals with matters regarding design, construction, equipment, operation, search and rescue and environmental protection in relation to ships operating in waters surrounding the two poles. The *Polar Code* includes both safety and environmental provisions and will be mandatory, with the safety provisions becoming part of SOLAS and the environmental provisions becoming part of MARPOL. In November 2014, the IMO's MSC adopted the *Polar Code* and the related amendments to SOLAS in relation to safety, while in May 2015, the IMO's Marine Environment Protection Committee (or *MEPC*) adopted the environmental provisions of the *Polar Code* and associated amendments to MARPOL. The *Polar Code* has become mandatory for new vessels built after January 1, 2017. For existing ships, this code will be applicable from the first intermediate or renewal survey beginning on or after January 1, 2018.

MARPOL Annex I also states that oil residue may be discharged directly from the sludge tank to the shore reception facility through standard discharge connections. They may also be discharged to the incinerator or to an auxiliary boiler suitable for burning the oil by means of a dedicated discharge pump. Oil residue tanks shall have no discharge connection to the engine room bilge system, bilge tank or OWS except in the following cases:

- the residue tank may be fitted with manually operated self closing valves and arrangements for subsequent visual monitoring of the settled water that lead to an oily water holding tank or bilge well;
- the sludge tank discharge piping and bilge water piping may be connected to a common line leading to the standard discharge connection; however, the interconnection of line shall not allow for the transfer of sludge to the bilge system; and
- a screw down non-return valve in lines connecting to the standard discharge connection, provides an acceptable means for not allowing for the transfer of sludge to the bilge system. Ship operators and managers should, before the first *IOPP* renewal survey, ensure that such systems are compliant. In the event that modifications are required, system drawings will be subject to approval.

Annex I is applicable for existing vessels with a first renewal survey beginning on or after January 1, 2017. It is anticipated that most vessels constructed after December 31, 1991 already comply with Annex I as MARPOL has since provided a unified interpretation prohibiting interconnections between sludge and bilge systems.

MSC 91 adopted amendments to SOLAS Regulation II-2/10 to add a new paragraph 10.4 to clarify that a minimum of two-way portable radiotelephone apparatus for each fire party for firefighters' communication shall be carried on board. These radio devices shall be of explosion proof type or intrinsically safe type. All existing ships built before July 1, 2014 should comply with this requirement by the first safety equipment survey after July 1, 2018. All new vessels constructed (keel laid) on or after July 1, 2014 must comply with this requirement at the time of delivery.

As per MSC. 338(91), requirements have been highlighted for audio and visual indicators for breathing apparatus which will alert the user before the volume of the air in the cylinder has been reduced to no less than 200 liters. This applies to ships constructed on or after July 1, 2014. Ships constructed before July 1, 2014 must comply no later than July 1, 2019.

## **European Union (or EU)**

Like the IMO, the EU has adopted regulations phasing out single-hull tankers. All of our tankers are double-hulled.

On May 17, 2011 the European commission carried out a number of unannounced inspections, at the offices of some of the world's largest container line operators starting an antitrust investigation. We are not directly affected by this investigation and believe that we are compliant with antitrust rules. Nevertheless, it is possible that the investigation could be widened and new companies and practices could come under scrutiny within the EU.

The EU has also adopted legislation (Directive 2009/16/EC on Port State Control as subsequently amended) that: bans from European waters manifestly sub-standard vessels (defined as vessels that have been detained twice by EU port authorities, in the preceding two years); creates obligations on the part of EU member port states to inspect minimum percentages of vessels using these ports annually; provides for increased surveillance of vessels posing a high risk to maritime safety or the marine environment; and provides the EU with greater authority and control over classification societies, including the ability to seek to suspend or revoke the authority of negligent societies (Directive 2009/15/EC as amended by Directive 2014/111/EU of December 17, 2014).

Two new regulations were introduced by the European Commission in September 2010, as part of the implementation of the Port State Control Directive. These came into force on January 1, 2011 and introduced a ranking system (published on a public website and updated daily) displaying shipping companies operating in the EU with the worst safety records. The ranking is judged upon the results of the technical inspections carried out on the vessels owned by a particular shipping company. Those shipping companies that have the most positive safety records are rewarded by subjecting them to fewer inspections, while those with the most safety shortcomings or technical failings recorded upon inspection will in turn be subject to a greater frequency of official inspections to their vessels.

The EU has, by way of Directive 2005/35/EC, which has been amended by Directive 2009/123/EC created a legal framework for imposing criminal penalties in the event of discharges of oil and other noxious substances from ships sailing in its waters, irrespective of their flag. This relates to discharges of oil or other noxious substances from vessels. Minor discharges shall not automatically be considered as offenses, except where repetition leads to deterioration in the quality of the water. The persons responsible may be subject to criminal penalties if they have acted with intent, recklessly or with serious negligence and the act of inciting, aiding and abetting a person to discharge a polluting substance may also lead to criminal penalties.

The EU has adopted a Directive requiring the use of low sulfur fuel. Since January 1, 2015, vessels have been required to burn fuel with sulfur content not exceeding 0.1% while within EU member states' territorial seas, exclusive economic zones and pollution control zones that are included in SOX Emission Control Areas. Other jurisdictions have also adopted regulations requiring the use of low sulfur fuel. Since January 1, 2014, the California Air Resources Board has required vessels to burn fuel with 0.1% sulfur content or less within 24 nautical miles of California. China also established emission control areas in the Pearl River Delta, the Yangtze River Delta and the Bohai Bay rim area with restrictions, commencing on January 1, 2016, in the maximum sulfur content of the fuel to be used by vessels within those areas, which limits become progressively stricter over time. Commencing January 1, 2017, all the key ports within the three China ECAs (i.e. Tianjin, Qinhuangdao, Tangshan, Huanghua, Shenzhen, Guangzhou, Zhuhai, Shanghai, Ningbo-Zhoushan, Suzhou and Nantong) have implemented the low sulfur bunker requirements.

IMO regulations require that as of January 1, 2015, all vessels operating within ECAs worldwide recognized under MARPOL Annex VI must comply with 0.1% sulfur requirements. Currently, the only grade of fuel meeting 0.1% sulfur content requirement is low sulfur marine gas oil (or *LSMGO*). Since January 1, 2015, the applicable sulfur content limits in the North Sea, the Baltic Sea and the English Channel ECAs have been 0.1%. Other established ECAs under Annex VI to MARPOL are the North American ECA and the United States Caribbean Sea ECA. Certain modifications were completed on our Suezmax tankers in order to optimize operation on *LSMGO* of equipment originally designed to operate on Heavy Fuel Oil (or *HFO*), and to ensure our compliance with the EU Directive. In addition, *LSMGO* is more expensive than *HFO* and this impacts the costs of operations. However, for vessels employed on fixed term business, all fuel costs, including any increases, are borne by the charterer. Our exposure to increased cost is in our spot trading vessels, although our competitors bear a similar cost increase as this is a regulatory item applicable to all vessels. All required vessels in our fleet trading to and within regulated low sulfur areas are able to comply with fuel requirements. The global cap on the sulfur content of fuel oil is currently 3.5%, to be reduced to 0.5% by January 1, 2020. The reduced global cap of 0.5% as of January 1, 2020 was subject to a feasibility review, which was completed in 2016 and on the basis of which the IMO's Marine Environment Protection Committee (or the *MEPC*) decided in October 2016 to implement the 0.5% global sulfur cap as of January 1, 2020.

The EU Ship Recycling Regulation (1257/2013) (or the *EU Ship Recycling Regulation*) entered into force on December 30, 2013. It aims to prevent, reduce and minimize accidents, injuries and other negative effects on human health and the environment when ships are recycled and the hazardous waste they contain is removed. The legislation applies to all ships flying the flag of an EU country and to vessels with non-EU flags that call at an EU port or anchorage. It sets out responsibilities for ship owners and for recycling facilities both in the EU and in other countries. Each new ship has to have on board an inventory of the hazardous materials (such as asbestos, lead or mercury) it contains in either its structure or equipment. The use of certain hazardous materials is forbidden. Before a ship is recycled, its owner must provide the company carrying out the work with specific information about the vessel and prepare a ship recycling plan. Recycling may only take place at facilities listed on the EU 'List of facilities'. In 2014, the Council Decision 2014/241/EU was adopted, authorizing EU countries having ships flying their flag or registered under their flag to ratify or to accede to the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships. The EU Ship Recycling Regulation is to apply not later than December 31, 2018, although certain of its provisions are to apply at different stages, with some of them being applicable from December 31, 2020. Pursuant to the EU Ship Recycling Regulation, the EU Commission has recently published the first version of a European List of approved ship recycling facilities meeting the requirements of the regulation, as well as four further implementing decisions dealing with certification and other administrative requirements set out in the EU Ship Recycling Regulation.

### **North Sea, Canada, and Brazil**

Our shuttle tankers and FPSO units primarily operate in the North Sea and Brazil.

There is no international regime in force which deals with compensation for oil pollution from offshore craft, such as FPSOs. The issue whether the CLC and the International Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage 1971, as amended by the 1992 Protocol (or the Fund Convention), which deal with liability and compensation for oil pollution and the Convention on Limitation of Liability for Maritime Claims 1976, as amended by the 1996 Protocol to it (or the 1976 Limitation of Liability Convention), which deals with limitation of liability for maritime claims, apply to FPSOs is neither straightforward nor certain. The CLC and the Fund Convention were not drafted with FPSOs and offshore craft in mind and it is doubtful whether FPSOs and any claims for oil pollution caused by them fall within the ambit of the CLC and the Fund Convention. This is due to the definition of "ship" under these conventions and the requirement that oil is "carried" on board the relevant vessel. Nevertheless, the wording of the 1992 Protocol to the CLC leaves room for arguing that FPSOs and oil pollution caused by them can come under the ambit of these conventions for the purposes of liability and compensation. However, the application of these conventions also depends on their implementation by the relevant domestic laws of the countries which are parties to them.

UK's Merchant Shipping Act 1995, as amended (or *MSA*), implements the CLC but uses a wider definition of a "ship" than the one used in the CLC and in its 1992 Protocol but still refers to the criteria used by the CLC. It is therefore doubtful that FPSOs fall within its wording. However, the MSA also includes separate provisions for liability for oil pollution otherwise than under the CLC (section 154 of Chapter III of Part VI of the MSA). These apply to vessels which fall within a much wider definition and include non-seagoing vessels. It is arguable that the wording of these MSA provisions is wide enough to cover oil pollution caused by offshore crafts such as FPSOs. The liability regime under these MSA provisions is similar to that imposed under the CLC but limitation of liability is subject to the 1976 Limitation of Liability Convention regime (as implemented in the MSA),

With regard to the 1976 Limitation of Liability Convention, it is, again, doubtful whether it applies to FPSOs, as it contains certain exceptions in relation to vessels constructed for or adapted to and engaged in drilling and in relation to floating platforms constructed for the purpose of exploring or exploiting natural resources of the seabed or its subsoil. However, these exceptions are not included in the legislation implementing the 1976 Limitation of Liability Convention in the UK, which is also to be found in the MSA. In addition, the MSA sets out a very wide definition of "ship" in relation to which the 1976 Limitation of Liability Convention is to apply and there is room for argument that if FPSOs fall within that definition of "ship", they are subject in the UK to the limitation provisions of the 1976 Limitation of Liability Convention.

In the absence of an international regime regulating liability and compensation for oil pollution caused by offshore oil and gas facilities, the Offshore Pollution Liability Agreement 1974 (or *OPOL*) was entered into by a number of oil companies and became effective in 1975. This is a voluntary industry oil pollution compensation scheme which is funded by the parties to it. These are operators or intending operators of offshore facilities used in the exploration for and production of oil and gas located within the jurisdictions of a number of "Designated States" which include the UK, Denmark, Norway, Germany, France, Greenland, Ireland, the Netherlands, the Isle of Man and the Faroe Islands. The scheme provides for strict liability of the relevant operator for pollution damage and remedial costs, subject to a limit, and the operators must provide evidence of financial responsibility in the form of insurance or other security to meet the liability under the scheme.

With regard to FPSOs, Chapter 7 of Annex I of MARPOL (which contains regulations for the prevention of oil pollution) sets out special requirements for fixed and floating platforms, including, amongst others, FPSOs and FSUs. The IMO's Marine Environment Protection Committee has issued guidelines for the application of MARPOL Annex I requirements (as revised from time to time) to FPSOs and FSUs.

The EU's Directive 2004/35/CE on environmental liability with regard to the prevention and remedying of environmental damage (or the Environmental Liability Directive) deals with liability for environmental damage on the basis of the "polluter pays" principle. Environmental damage includes damage to protected species and natural habitats and damage to water and land. Under this Directive, operators whose activities caused the environmental damage or the imminent threat of such damage are to be held liable for the damage (subject to certain exceptions). With regard to environmental damage caused by specific activities listed in the Directive, operators are strictly liable, regardless of fault or negligence. This is without prejudice to their right to limit their liability in accordance with national legislation implementing the 1976 Limitation of Liability Convention. The Directive applies both to damage which has already occurred and where there is an imminent threat of damage. It also requires the relevant operator to take preventive action, to report an imminent threat and any environmental damage to the regulators and to perform remedial measures, such as clean-up. The Environmental Liability Directive has been implemented in the UK by the Environmental Damage (Prevention and Remediation) Regulations 2009.

In June 2013 the EU adopted Directive 2013/30/EU on safety of offshore oil and gas operations and amending Directive 2004/35/EC (or the Offshore Safety Directive). This new Directive lays down minimum requirements for member states and the European Maritime Safety Agency for the purposes of reducing the occurrence of major accidents related to offshore oil and gas operations, thus increasing protection of the marine environment and coastal economies against pollution, establishing minimum conditions for safe offshore exploration and exploitation of oil and gas, and limiting disruptions to the EU's energy production and improving responses to accidents. The Offshore Safety Directive sets out extensive requirements, such as preparation of a major hazard report with risk assessment, emergency response plan and safety and environmental management system applicable to the relevant oil and gas installation before the planned commencement of the operations, independent verification of safety and environmental critical elements identified in the risk assessment for the relevant oil and gas installation, and ensuring that factors such as the applicant's safety and environmental performance and its financial capabilities or security to meet potential liabilities arising from the oil and gas operations are taken into account when considering granting a license. Under the Offshore Safety Directive, Member States are to ensure that the relevant licensee is financially liable for the prevention and remediation of environmental damage (as defined in the Environmental Liability Directive) caused by offshore oil and gas operations carried out by or on behalf of the licensee or the operator. Member States must lay down rules on penalties applicable to infringements of the legislation adopted pursuant to this Directive. Member States were required to bring into force laws, regulations and administrative provisions necessary to comply with this Directive by 19 July 2015. The Offshore Safety Directive has been implemented in the UK by a number of different UK Regulations, including the Environmental Damage (Prevention and Remediation) (England) Regulations 2015, as amended, (which revoked and replaced the Environmental Damage (Prevention and Remediation) Regulations 2009)) and the Offshore Installations (Offshore Safety Directive) (Safety Case etc.) Regulations 2015, both of which entered into force on July 19, 2015.

In addition to the regulations imposed by the IMO and EU, countries having jurisdiction over North Sea areas impose regulatory requirements in connection with operations in those areas, including HSE in the United Kingdom and NPD in Norway. These regulatory requirements, together with additional requirements imposed by operators in North Sea oil fields, require that we make further expenditures for sophisticated equipment, reporting and redundancy systems on the shuttle tankers and for the training of seagoing staff. Additional regulations and requirements may be adopted or imposed that could limit our ability to do business or further increase the cost of doing business in the North Sea.

In Norway, the Norwegian Pollution Control Authority requires the installation of volatile organic compound emissions (or VOC) reduction units on most shuttle tankers serving the Norwegian continental shelf. Customers bear the cost to install and operate the VOC equipment on board the shuttle tankers.

In addition to the requirements of major IMO shipping conventions, the exploration for and production of oil and gas within the Newfoundland & Labrador (or NL) offshore area is conducted pursuant to the Canada Newfoundland and Labrador Atlantic Accord Implementation Act (the *Accord Act*) in accordance with the conditions of a license and authorization issued by the Canada-Newfoundland and Labrador Offshore Petroleum Board (or CNLOPB). Various regulations dealing with environmental, occupational health and safety, and other aspects of offshore oil and gas activities have been enacted under the Accord Act. The CNLOPB has also issued interpretive guidelines concerning compliance with the regulations, and compliance with CNLOPB guidelines may be a condition of the issuance or renewal of the license and authorizations. These regulations and guidelines require that the shuttle tankers in the NL offshore area meet stringent standards for equipment, reporting and redundancy systems, and for the training and equipping of seagoing staff. Further, licensees are required by the Accord Act to provide a benefits plan satisfactory to CNLOPB. Such plans generally require the licensee to: establish an office in NL; give NL residents first consideration for training and employment; make expenditures for research and development and education and training to be carried out in NL; and give first consideration to services provided from within NL and to goods manufactured in NL. These regulatory requirements may change as regulations and CNLOPB guidelines are amended or replaced from time to time.

In addition to the regulations imposed by the IMO, Brazil imposes regulatory requirements in connection with operations in its territory, including specific requirements for the operations of vessels flagged in countries other than Brazil. Brazil has several maritime regulations and frequent amendments and updates. Firstly, in regard to environmental protection while operating under Brazilian Waters, the Federal Constitution establishes that the State shall regulate and impose protections to the Environment, establishing liability in the civil, administrative and criminal spheres. Law no. 6938/1981 sets the National Environmental Policy and Law no. 9966/2000, known as "The Oil Law", institutes several rules, liabilities and penalties regarding the handling oil or other dangerous substances, being applicable to foreign vessels and platforms operating in Brazilian waters.

Regulating the exploitation and production of oil and natural gas, Law no. 9.478/1997, known as "The Petroleum Law", created the National Petroleum Agency (or ANP), responsible for regulating and supervising the industry through directives and resolutions. After the discovery of the pre-salt, the mentioned law was altered in some points by Law no. 12.351/2010 being the industry also regulated by several administrative Regulations issued by the ANP.

Additional requirements and restrictions for the operation of offshore vessels and shuttle tankers are imposed by Law 9.432/97 and by the National Waterway Transport Agency (or ANTAQ), instituted by Law 10.233/2001, by way of frequently updated administrative resolutions.

The transit of vessels and permanence and operation of offshore units in Brazil are further regulated by the Maritime Authorities, through law and administrative Ordinances known as "NORMAM". Under Brazil's environmental laws, owners and operators of vessels are strictly liable for damages to the environment. Other penalties for non-compliance with environmental laws include fines, loss of tax incentives and suspension of activities. Operators such as Petrobras may impose additional requirements, such as compliance with specific health, safety and environmental standards or the use of local labor. Additional regulations and requirements may be adopted or imposed that could limit our ability to do business or further increase the cost of doing business in Brazil.

### **United States**

The United States has enacted an extensive regulatory and liability regime for the protection and cleanup of the environment from oil spills, including discharges of oil cargoes, bunker fuels or lubricants, primarily through the Oil Pollution Act of 1990 (or OPA 90) and the Comprehensive Environmental Response, Compensation and Liability Act (or CERCLA). OPA 90 affects all owners, bareboat charterers, and operators whose vessels trade to the United States or its territories or possessions or whose vessels operate in United States waters, which include the U.S. territorial sea and 200-mile exclusive economic zone around the United States. CERCLA applies to the discharge of "hazardous substances" rather than "oil" and imposes strict joint and several liabilities upon the owners, operators or bareboat charterers of vessels for cleanup costs and damages arising from discharges of hazardous substances. We believe that petroleum products and LNG and LPG should not be considered hazardous substances under CERCLA, but additives to oil or lubricants used on LNG or LPG carriers and other vessels might fall within its scope.

Under OPA 90, vessel owners, operators and bareboat charterers are "responsible parties" and are jointly, severally and strictly liable (unless the oil spill results solely from the act or omission of a third party, an act of God or an act of war and the responsible party reports the incident and reasonably cooperates with the appropriate authorities) for all containment and cleanup costs and other damages arising from discharges or threatened discharges of oil from their vessels. These other damages are defined broadly to include:

- natural resources damages and the related assessment costs;
- real and personal property damages;
- net loss of taxes, royalties, rents, fees and other lost revenues;
- lost profits or impairment of earning capacity due to property or natural resources damage;
- net cost of public services necessitated by a spill response, such as protection from fire, safety or health hazards; and
- loss of subsistence use of natural resources.

OPA 90 limits the liability of responsible parties in an amount it periodically updates. The liability limits do not apply if the incident was proximately caused by violation of applicable U.S. federal safety, construction or operating regulations, including IMO conventions to which the United States is a signatory, or by the responsible party's gross negligence or willful misconduct, or if the responsible party fails or refuses to report the incident or to cooperate and assist in connection with the oil removal activities. Liability under CERCLA is also subject to limits unless the incident is caused by gross negligence, willful misconduct or a violation of certain regulations. We currently maintain for each of our vessels pollution liability coverage in the maximum coverage amount of \$1 billion per incident. A catastrophic spill could exceed the coverage available, which could harm our business, financial condition and results of operations.

Under OPA 90, with limited exceptions, all newly built or converted tankers delivered after January 1, 1994 and operating in U.S. waters must be double-hulled. All of our tankers are double-hulled.

OPA 90 also requires owners and operators of vessels to establish and maintain with the United States Coast Guard (or *Coast Guard*) evidence of financial responsibility in an amount at least equal to the relevant limitation amount for such vessels under the statute. The Coast Guard has implemented regulations requiring that an owner or operator of a fleet of vessels must demonstrate evidence of financial responsibility in an amount sufficient to cover the vessel in the fleet having the greatest maximum limited liability under OPA 90 and CERCLA. Evidence of financial responsibility may be demonstrated by insurance, surety bond, self-insurance, guaranty or an alternate method subject to approval by the Coast Guard. Under the self-insurance provisions, the ship owners or operators must have a net worth and working capital, measured in assets located in the United States against liabilities located anywhere in the world, that exceeds the applicable amount of financial responsibility. We have complied with the Coast Guard regulations by using self-insurance for certain vessels and obtaining financial guaranties from a third party for the remaining vessels. If other vessels in our fleet trade into the United States in the future, we expect to obtain guaranties from third-party insurers.

OPA 90 and CERCLA permit individual U.S. states to impose their own liability regimes with regard to oil or hazardous substance pollution incidents occurring within their boundaries, and some states have enacted legislation providing for unlimited strict liability for spills. Several coastal states, such as California, Washington and Alaska require state-specific evidence of financial responsibility and vessel response plans. We intend to comply with all applicable state regulations in the ports where our vessels call.

Owners or operators of vessels, including tankers operating in U.S. waters, are required to file vessel response plans with the Coast Guard, and their tankers are required to operate in compliance with their Coast Guard approved plans. Such response plans must, among other things:

- address a “worst case” scenario and identify and ensure, through contract or other approved means, the availability of necessary private response resources to respond to a “worst case discharge”;
- describe crew training and drills; and
- identify a qualified individual with full authority to implement removal actions.

We have filed vessel response plans with the Coast Guard and have received its approval of such plans. In addition, we conduct regular oil spill response drills in accordance with the guidelines set out in OPA 90. The Coast Guard has announced it intends to propose similar regulations requiring certain vessels to prepare response plans for the release of hazardous substances.

OPA 90 and CERCLA do not preclude claimants from seeking damages resulting from the discharge of oil and hazardous substances under other applicable law, including maritime tort law. Such claims could include attempts to characterize the transportation of LNG or LPG aboard a vessel as an ultra-hazardous activity under a doctrine that would impose strict liability for damages resulting from that activity. The application of this doctrine varies by jurisdiction.

The U.S. Clean Water Act (or the *Clean Water Act*) also prohibits the discharge of oil or hazardous substances in U.S. navigable waters and imposes strict liability in the form of penalties for unauthorized discharges. The Clean Water Act imposes substantial liability for the costs of removal, remediation and damages and complements the remedies available under OPA 90 and CERCLA discussed above.

Our vessels that discharge certain effluents, including ballast water, in U.S. waters must obtain a Clean Water Act permit from the Environmental Protection Agency (or *EPA*) titled the “Vessel General Permit” and comply with a range of effluent limitations, best management practices, reporting, inspections and other requirements. The current Vessel General Permit incorporates Coast Guard requirements for ballast water exchange and includes specific technology-based requirements for vessels, and includes an implementation schedule to require vessels to meet the ballast water effluent limitations by the first dry docking after January 1, 2016, depending on the vessel size. Vessels that are constructed after December 1, 2013 are subject to the ballast water numeric effluent limitations. Several U.S. states have added specific requirements to the Vessel General Permit and, in some cases, may require vessels to install ballast water treatment technology to meet biological performance standards.

### **Greenhouse Gas Regulation**

In February 2005, the Kyoto Protocol to the United Nations Framework Convention on Climate Change (or the *Kyoto Protocol*) entered into force. Pursuant to the Kyoto Protocol, adopting countries are required to implement national programs to reduce emissions of greenhouse gases. In December 2009, more than 27 nations, including the United States, entered into the Copenhagen Accord. The Copenhagen Accord is non-binding, but is intended to pave the way for a comprehensive, international treaty on climate change. In December 2015 the Paris Agreement (or the *Paris Agreement*) was adopted by a large number of countries at the 21st Session of the Conference of Parties (commonly known as COP 21, a conference of the countries which are parties to the United Nations Framework Convention on Climate Change; the COP is the highest decision-making authority of this organization). The Paris Agreement, which entered into force on November 4, 2016, deals with greenhouse gas emission reduction measures and targets from 2020 in order to limit the global temperature increases to well below 2° Celsius above pre-industrial levels. Although shipping was ultimately not included in the Paris Agreement, it is expected that the adoption of the Paris Agreement may lead to regulatory changes in relation to curbing greenhouse gas emissions from shipping.

In July 2011, the IMO adopted regulations imposing technical and operational measures for the reduction of greenhouse gas emissions. These new regulations formed a new chapter in Annex VI and became effective on January 1, 2013. The new technical and operational measures include the “Energy Efficiency Design Index” (or the *EEDI*), which is mandatory for newbuilding vessels, and the “Ship Energy Efficiency Management Plan,” which is mandatory for all vessels. In October 2016, the IMO’s MEPC adopted updated guidelines for the calculation of the EEDI. In addition, the IMO is evaluating various mandatory measures to reduce greenhouse gas emissions from international shipping, which may include market-based instruments or a carbon tax. In October 2014, the IMO’s MEPC agreed in principle to develop a system of data collection regarding fuel consumption of ships. In October 2016, the IMO adopted a mandatory data collection system under which vessels of 5,000 gross tonnages and above are to collect fuel consumption and other data and to report the aggregated data so collected to their flag state at the end of each calendar year. The new requirements are expected to enter into force on March 1, 2018. The IMO also approved a roadmap for the development of a comprehensive IMO strategy on reduction of greenhouse gas emissions from ships with an initial strategy to be adopted in 2018 and a revised strategy to be adopted in 2023.

The EU also has indicated that it intends to propose an expansion of an existing EU emissions trading regime to include emissions of greenhouse gases from vessels, and individual countries in the EU may impose additional requirements. The EU has adopted Regulation (EU) 2015/757 on the monitoring, reporting and verification (or *MRV*) of CO<sub>2</sub> emissions from vessels (or the *MRV Regulation*), which entered into force on July 1, 2015. The MRV Regulation aims to quantify and reduce CO<sub>2</sub> emissions from shipping. It lists the requirements on the MRV of carbon dioxide emissions and requires ship owners and operators to annually monitor, report and verify CO<sub>2</sub> emissions for vessels larger than 5,000 gross tonnage calling at any EU and EFTA (Norway and Iceland) port (with a few exceptions, such as fish-catching or fish-processing vessels). Data collection takes place on a per voyage basis and starts January 1, 2018. The reported CO<sub>2</sub> emissions, together with additional data, such as cargo and energy efficiency parameters, are to be verified by independent verifiers and sent to a central database, managed by the European Maritime Safety Agency. To comply with the MRV Regulation, we have prepared an EU MRV monitoring plan and EU MRV monitoring template in line with legislative requirement. The approved EU-MRV monitoring plan is expected to be placed on all our vessels by August 31, 2017. The EU is currently considering a proposal for the inclusion of shipping in the EU Emissions Trading System as from 2021 in the absence of a comparable system operating under the IMO.

In the United States, the EPA issued an “endangerment finding” regarding greenhouse gases under the Clean Air Act. While this finding in itself does not impose any requirements on our industry, it authorizes the EPA to regulate directly greenhouse gas emissions through a rule-making process. In addition, climate change initiatives are being considered in the United States Congress and by individual states. Any passage of new climate control legislation or other regulatory initiatives by the IMO, EU, the United States or other countries or states where we operate that restrict emissions of greenhouse gases could have a significant financial and operational impact on our business that we cannot predict with certainty at this time.

### **Vessel Security**

The ISPS was adopted by the IMO in December 2002 in the wake of heightened concern over worldwide terrorism and became effective on July 1, 2004. The objective of ISPS is to enhance maritime security by detecting security threats to ships and ports and by requiring the development of security plans and other measures designed to prevent such threats. Each of the existing vessels in our fleet currently complies with the requirements of ISPS and Maritime Transportation Security Act of 2002 (U.S. specific requirements). Procedures are in place to inform the Maritime Security Council Horn of Africa (or *MSCHOA*) whenever our vessels are calling in the Indian Ocean Region or West Coast of Africa (or *WAC*) high risk area. In order to mitigate the security risk, security arrangements are required for vessels which travel through the Gulf of Aden and WAC region.

## **C. Organizational Structure**

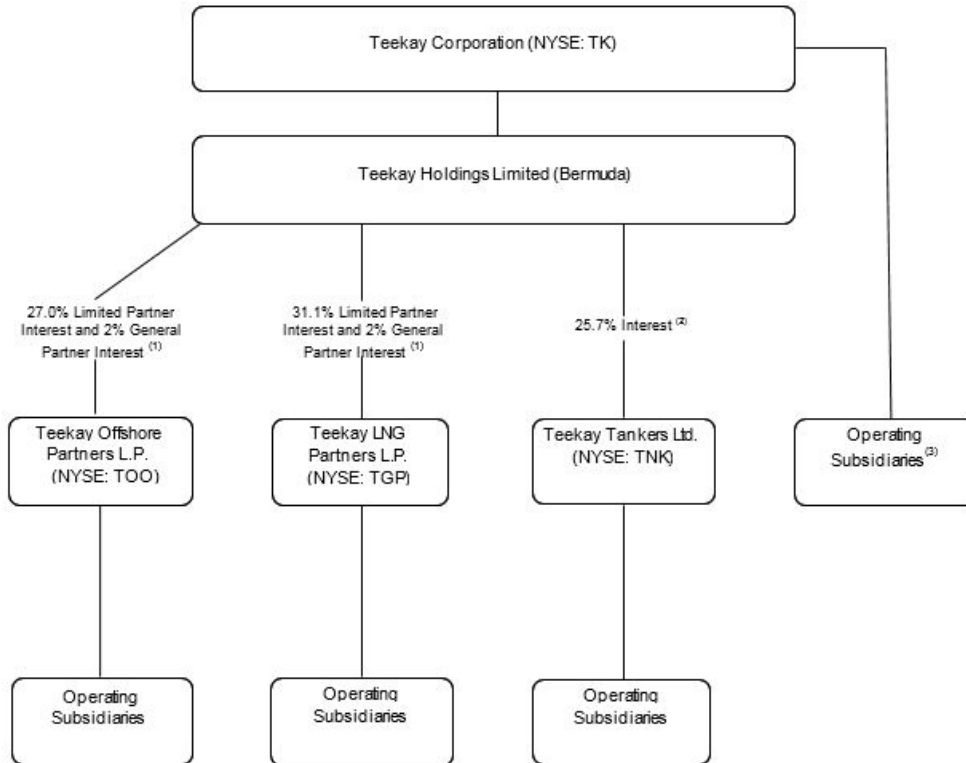
Our organizational structure includes, among others, our interests in Teekay Offshore, Teekay LNG and Teekay Tankers, which are our publicly listed subsidiaries. We created Teekay Offshore and Teekay LNG primarily to hold our assets that generate long-term fixed-rate cash flows. The strategic rationale for establishing these two limited partnerships was to:

- illuminate higher value of fixed-rate cash flows to Teekay investors;
- realize advantages of a lower cost of equity when investing in new offshore or LNG projects; and
- enhance returns to Teekay through fee-based revenue and ownership of the limited partnership's incentive distribution rights, which entitle the holder to disproportionate distributions of available cash as cash distribution levels to unitholders increase.

We also established Teekay Offshore, Teekay LNG and Teekay Tankers to increase our access to capital to grow each of our businesses in the offshore, LNG, and conventional tanker markets.



The following chart provides an overview of our organizational structure as at March 1, 2017. Please read Exhibit 8.1 to this Annual Report for a list of our subsidiaries as at March 1, 2017.



- (1) The partnership is controlled by its general partner. Teekay Corporation has a 100% beneficial ownership in the general partner. However, in certain limited cases, approval of a majority or supermajority of the common unitholders is required to approve certain actions.
- (2) Proportion of voting power held is 52.5%.
- (3) Including our 100% interest in *Teekay Petrojarl*.

Teekay LNG is a Marshall Islands limited partnership formed by us in 2005 as part of our strategy to expand our operations in the LNG and LPG shipping sectors. Teekay LNG provides LNG, LPG and crude oil marine transportation service under long-term, fixed-rate contracts with major energy and utility companies. As of December 31, 2016, Teekay LNG's fleet included 50 LNG carriers (including 19 newbuildings), 29 LPG/multigas carriers (including four newbuildings), five conventional tankers and one product tanker. Teekay LNG's ownership interests in these vessels range from 20% to 100%.

Teekay Offshore is a Marshall Islands limited partnership formed by us in 2006 as part of our strategy to expand our operations in the offshore oil marine transportation, processing and storage sectors. As of December 31, 2016, Teekay Offshore's fleet included 33 shuttle tankers (including three chartered-in vessels and three newbuildings), one *HiLoad DP* unit, seven FSO units (including one unit under conversion), eight FPSO units (including one unit under conversion and one unit undergoing an upgrade), one UMS, ten towage vessels (including three newbuildings), and two in-chartered conventional Aframax tankers. Teekay Offshore's ownership interests in its owned vessels range from 50% to 100%. Most of Teekay Offshore's vessels operate under long-term, fixed-rate contracts. Pursuant to an omnibus agreement we entered into in connection with Teekay Offshore's initial public offering in 2006, we have agreed to offer to Teekay Offshore FPSO units that are servicing contracts in excess of three years in length.

In December 2007, we added Teekay Tankers to our structure. Teekay Tankers is a Marshall Islands corporation formed by us to own our conventional tanker business. As of December 31, 2016, Teekay Tankers' fleet included 14 double-hull Aframax tankers, 22 double-hull Suezmax tankers, seven product tankers, four ship-to-ship (or *STS*) support vessels, one VLCC, six in-chartered Aframax, one in-chartered product tanker and three in-chartered STS support vessels, all of which trade either in the spot tanker market or under short- or medium-term, fixed-rate time-charter contracts. Teekay Tankers owns 100% of its fleet, other than a 50% interest in the VLCC and the in-chartered vessels. Teekay Tankers' primary objective is to grow through the acquisition of conventional tanker assets from third parties and from us. Through a wholly-owned subsidiary, we provide Teekay Tankers with commercial, technical, administrative, and strategic services under a long-term management agreement.

We entered into an omnibus agreement with Teekay LNG, Teekay Offshore and related parties governing, among other things, when we, Teekay LNG, and Teekay Offshore may compete with each other and certain rights of first offer on LNG carriers, oil tankers, shuttle tankers, FSO units and FPSO units.

## D. Properties

Other than our vessels, we do not have any material property. Please read “Item 18. Financial Statements: Note 7—Long-Term Debt for information about major encumbrances against our vessels.

## E. Taxation of the Company

### United States Taxation

The following is a discussion of the expected material U.S. federal income tax considerations applicable to us. This discussion is based upon the provisions of the Internal Revenue Code of 1986, as amended (or the *Code*), legislative history, applicable U.S. Treasury Regulations (or *Treasury Regulations*), judicial authority and administrative interpretations, all as in effect on the date of this Annual Report, and which are subject to change, possibly with retroactive effect, or are subject to different interpretations. Changes in these authorities may cause the tax consequences to vary substantially from the consequences described below.

**Taxation of Operating Income.** A significant portion of our gross income will be attributable to the transportation of crude oil and related products. For this purpose, gross income attributable to transportation (or *Transportation Income*) includes income derived from, or in connection with, the use (or hiring or leasing for use) of a vessel to transport cargo, or the performance of services directly related to the use of any vessel to transport cargo, and thus includes income from time charters, contracts of affreightment, bareboat charters, and voyage charters.

Fifty percent (50%) of Transportation Income attributable to transportation that either begins or ends, but that does not both begin and end, in the United States (or *U.S. Source International Transportation Income*) is considered to be derived from sources within the United States. Transportation Income attributable to transportation that both begins and ends in the United States (or *U.S. Source Domestic Transportation Income*) is considered to be 100% derived from sources within the United States. Transportation Income attributable to transportation exclusively between non-U.S. destinations is considered to be 100% derived from sources outside the United States. Transportation Income derived from sources outside the United States generally will not be subject to U.S. federal income tax.

Based on our current operations, a substantial portion of our Transportation Income is from sources outside the United States and not subject to U.S. federal income tax. However, certain of our subsidiaries which have made special U.S. tax elections to be treated as partnerships or disregarded as entities separate from us for U.S. federal income tax purposes are potentially engaged in activities which could give rise to U.S. Source International Transportation Income. Unless the exemption from U.S. taxation under Section 883 of the Code (or the *Section 883 Exemption*) applies, our U.S. Source International Transportation Income generally is subject to U.S. federal income taxation under either the net basis and branch profits taxes or the 4% gross basis tax, each of which is discussed below. Furthermore, certain of our subsidiaries engaged in activities which could give rise to U.S. Source International Transportation Income rely on our ability to claim exemption under the Section 883 Exemption.

**The Section 883 Exemption.** In general, the Section 883 Exemption provides that if a non-U.S. corporation satisfies the requirements of Section 883 of the Code and the Treasury Regulations thereunder (or the *Section 883 Regulations*), it will not be subject to the net basis and branch profits taxes or the 4% gross basis tax described below on its U.S. Source International Transportation Income. As discussed below, we believe the Section 883 Exemption will apply and we will not be taxed on our U.S. Source International Transportation Income. The Section 883 Exemption does not apply to U.S. Source Domestic Transportation Income.

A non-U.S. corporation will qualify for the Section 883 Exemption if, among other things, it (i) is organized in a jurisdiction outside the United States that grants an exemption from tax to U.S. corporations on international Transportation Income (or an *Equivalent Exemption*), (ii) meets one of three ownership tests (or *Ownership Tests*) described in the Section 883 Regulations, and (iii) meets certain substantiation, reporting and other requirements (or the *Substantiation Requirements*).

We are organized under the laws of the Republic of The Marshall Islands. The U.S. Treasury Department has recognized the Republic of The Marshall Islands as a jurisdiction that grants an Equivalent Exemption. We also believe that we will be able to satisfy the Substantiation Requirements necessary to qualify for the Section 883 Exemption. Consequently, our U.S. Source International Transportation Income (including for this purpose, our share of any such income earned by our subsidiaries that have properly elected to be treated as partnerships or disregarded as entities separate from us for U.S. federal income tax purposes) will be exempt from U.S. federal income taxation provided we satisfy one of the Ownership Tests. We believe that we should satisfy one of the Ownership Tests because our stock is primarily and regularly traded on an established securities market in the United States within the meaning of Section 883 of the Code and the Section 883 Regulations. We can give no assurance, however, that changes in the ownership of our stock subsequent to the date of this report will permit us to continue to qualify for the Section 883 exemption.

**The Net Basis and Branch Profits Taxes.** If the Section 883 Exemption does not apply, our U.S. Source International Transportation Income may be treated as effectively connected with the conduct of a trade or business in the United States (or *Effectively Connected Income*) if we have a fixed place of business in the United States and substantially all of our U.S. Source International Transportation Income is attributable to regularly scheduled transportation or, in the case of income derived from bareboat charters, is attributable to a fixed place of business in the United States. Based on our current operations, none of our potential U.S. Source International Transportation Income is attributable to regularly scheduled transportation or is derived from bareboat charters attributable to a fixed place of business in the United States. As a result, we do not anticipate that any of our U.S. Source International Transportation Income will be treated as Effectively Connected Income. However, there is no assurance that we will not earn income pursuant to regularly scheduled transportation or bareboat charters attributable to a fixed place of business in the United States in the future, which would result in such income being treated as Effectively Connected Income. U.S. Source Domestic Transportation Income generally will be treated as Effectively Connected Income.

Any income we earn that is treated as Effectively Connected Income would be subject to U.S. federal corporate income tax (the highest statutory rate currently is 35%) and a 30% branch profits tax imposed under Section 884 of the Code. In addition, a branch interest tax could be imposed on certain interest paid, or deemed paid, by us.

On the sale of a vessel that has produced Effectively Connected Income, we generally would be subject to the net basis and branch profits taxes with respect to our gain recognized up to the amount of certain prior deductions for depreciation that reduced Effectively Connected Income. Otherwise, we would not be subject to U.S. federal income tax with respect to gain realized on the sale of a vessel, provided the sale is considered to occur outside of the United States under U.S. federal income tax principles.

**The 4% Gross Basis Tax.** If the Section 883 Exemption does not apply and we are not subject to the net basis and branch profits taxes described above, we would be subject to a 4% U.S. federal income tax on our subsidiaries' gross U.S. Source International Transportation Income, without benefit of deductions. For 2016, we estimate that, if the Section 883 Exemption and the net basis tax did not apply, the U.S. federal income tax on such U.S. Source International Transportation Income would have been approximately \$3.8 million. In addition, we estimate that certain of our subsidiaries that are unable to claim the Section 883 Exemption were subject to approximately \$260,000 in the aggregate of U.S. federal income tax on the U.S. source portion of their U.S. Source International Transportation Income for 2016 and we estimate that these subsidiaries will be subject to approximately \$260,000 in the aggregate of U.S. federal income tax on the U.S. source portion of their U.S. Source International Transportation Income in subsequent years. The amount of such tax for which we or our subsidiaries may be liable in any year will depend upon the amount of income we earn from voyages into or out of the United States in such year, however, which is not within our complete control.

#### **Marshall Islands Taxation**

We believe that neither we nor our subsidiaries will be subject to taxation under the laws of the Marshall Islands, or that distributions by our subsidiaries to us will be subject to any taxes under the laws of the Marshall Islands, other than taxes or fees due to (i) the continued existence of legal entities registered in the Republic of the Marshall Islands, (ii) the incorporation or dissolution of legal entities registered in the Republic of the Marshall Islands, (iii) filing certificates (such as certificates of incumbency, merger, or redomiciliation) with the Marshall Islands registrar, (iv) obtaining certificates of good standing from, or certified copies of documents filed with, the Marshall Islands registrar, or (v) compliance with Marshall Islands law concerning vessel ownership, such as tonnage tax.

#### **Other Taxation**

In certain non-U.S. jurisdictions, we and our subsidiaries are subject to taxation because we or our subsidiaries are either organized in, or conduct business or operations in those jurisdictions. In other non-U.S. jurisdictions, we rely on statutory exemptions from tax. We cannot assure that any statutory exemptions from tax on which we rely will continue as tax laws in those jurisdictions may change or we may enter into new business transactions relating to such jurisdictions, which could affect our tax liability. Please read "Item 18. Financial Statements: Note 20 -Income Taxes".

#### **Item 4A. Unresolved Staff Comments**

None.

#### **Item 5. Operating and Financial Review and Prospects**

*The following discussion should be read in conjunction with the financial statements and notes thereto appearing elsewhere in this report.*

#### **Management's Discussion and Analysis of Financial Condition and Results of Operations**

##### **Overview**

Teekay Corporation is an operational leader and project developer in the marine midstream space. We have general partnership interests in two publicly-listed master limited partnerships, Teekay Offshore and Teekay LNG. In addition, we have a controlling ownership of publicly-listed Teekay Tankers and we have a small fleet of directly-owned vessels. Teekay provides a comprehensive set of marine services to the world's leading oil and gas companies.

## Structure

To understand our financial condition and results of operations, a general understanding of our organizational structure is required. Our organizational structure can be divided into (a) our controlling interests in three publicly-traded subsidiaries, Teekay Offshore, Teekay LNG, and Teekay Tankers (together, *the Daughter Companies*), and (b) Teekay and its remaining subsidiaries, which is referred to herein as *Teekay Parent*. As of December 31, 2016, we had economic interests in Teekay Offshore, Teekay LNG and Teekay Tankers of 29.0%, 33.1% and 25.4%, respectively. Since we control the voting interests of the Daughter Companies through our ownership of the sole general partner interests of Teekay Offshore and Teekay LNG and of Class A and Class B common shares of Teekay Tankers, we consolidate the results of these subsidiaries. Please read "Item 4C. Information on the Company – Organizational Structure."

Teekay Offshore and Teekay LNG primarily hold our assets that generate long-term fixed-rate cash flows. The strategic rationale for establishing these two master limited partnerships was to illuminate the higher value of fixed-rate cash flows to Teekay investors, realize advantages of a lower cost of equity when investing in new offshore or LNG projects, enhance returns to Teekay through fee-based revenue and ownership of the partnerships' incentive distribution rights and increase our access to capital for growth. Teekay Tankers holds a substantial majority of our conventional tanker assets. Teekay Parent continues to own three FPSO units and to in-charter a number of vessels. However, our long-term vision is for Teekay Parent to be primarily a general partner whose role is that of portfolio manager and project developer. Our primary financial objective for Teekay Parent is to increase its free cash flow per share. To support this objective, we intend to de-lever the balance sheet of Teekay Parent by completing the sales of the remaining FPSO units to Teekay Offshore or third parties over the next several years and to seek to grow the distributions of Teekay LNG and Teekay Offshore over the long-term. However, lower oil and gas prices and the resulting impact on the capital markets has resulted in the cost of equity increasing for us, Teekay Offshore and Teekay LNG. Consequently, in the near-term, we do not expect to sell any of the remaining FPSO units to Teekay Offshore. In addition, in December 2015, we announced a plan to reduce our quarterly dividend, in response to announcements by the general partners of Teekay Offshore and Teekay LNG of their plans to reduce their respective quarterly cash distribution amounts to partially finance committed capital expenditures and to repay debt.

Teekay entered into an omnibus agreement with Teekay LNG, Teekay Offshore and related parties governing, among other things, when Teekay, Teekay LNG, and Teekay Offshore may compete with each other and certain rights of first offer on LNG carriers, oil tankers, shuttle tankers, FSO units and FPSO units.

We have four primary lines of business: offshore logistics (shuttle tankers, the *HiLoad DP* unit, FSO units, UMS and long-distance towing and offshore installation vessels), offshore production (FPSO units), liquefied gas carriers and conventional tankers. We manage these businesses for the benefit of all stakeholders. We allocate capital and assess performance from the separate perspectives of the Daughter Companies and Teekay Parent as well as from the perspective of the lines of business (the *Line of Business approach*). The primary focus of our organizational structure, internal reporting and allocation of resources by the chief operating decision maker, is on the Daughter Companies and Teekay Parent (the *Legal Entity approach*). As such, a substantial majority of the information provided herein has been presented in accordance with the Legal Entity approach. However, we have continued to incorporate the Line of Business approach as in certain cases there is more than one line of business in each Daughter Company and we believe this information allows a better understanding of our performance and prospects for future net cash flows.

Effective for the quarterly dividend and distributions of the fourth quarter of 2015, Teekay Parent reduced its quarterly cash dividend per share to \$0.055 from \$0.55, Teekay Offshore reduced its quarterly cash distribution per common unit to \$0.11 from \$0.56 and Teekay LNG reduced its quarterly cash distribution per common unit to \$0.14 from \$0.70. At the time these changes were made, there was a dislocation in the capital markets relative to the stability of our businesses. More specifically, the future equity capital requirements for our committed growth projects, coupled with the uncertainty regarding how long it would have taken for the energy and capital markets to normalize, resulted in us concluding that it would be in the best interests of our shareholders to conserve more of our internally generated cash flows for committed existing and future growth projects and to reduce debt levels. Teekay Parent, Teekay Offshore and Teekay LNG each maintained these reduced dividend and distribution levels for 2016. Despite the challenges in the global energy and capital markets, our cash flows from vessels operations remain largely stable and are supported by a large and well-diversified portfolio of fee-based contracts with high quality counterparties. In addition to using more of our internally generated cash flows for existing growth projects and to reduce our debt levels, we will continue to seek alternative sources of financing such as sale and leaseback transactions, asset sales, new bank borrowings and the issuance of new debt and equity securities.

Since early 2016, Teekay Parent and the Daughter Companies have been executing on a series of financing initiatives intended to contribute to the funding of our upcoming capital expenditures and debt maturities. For additional information about these initiatives, please read "Liquidity and Capital Resources".

## IMPORTANT FINANCIAL AND OPERATIONAL TERMS AND CONCEPTS

We use a variety of financial and operational terms and concepts when analyzing our performance. These include the following:

**Revenues.** Revenues primarily include revenues from voyage charters, pool arrangements, time charters accounted for under operating and direct financing leases, contracts of affreightment and FPSO contracts. Revenues are affected by hire rates and the number of days a vessel operates, the daily production volume on FPSO units, and the oil price for certain FPSO units. Revenues are also affected by the mix of business between time charters, voyage charters, contracts of affreightment and vessels operating in pool arrangements. Hire rates for voyage charters are more volatile, as they are typically tied to prevailing market rates at the time of a voyage.

**Voyage Expenses.** Voyage expenses are all expenses unique to a particular voyage, including any bunker fuel expenses, port fees, cargo loading and unloading expenses, canal tolls, agency fees and commissions. Voyage expenses are typically paid by the customer under time charters and FPSO contracts and by us under voyage charters and contracts of affreightment.

**Net Revenues.** Net revenues represent revenues less voyage expenses. The amount of voyage expenses we incur for a particular charter depends upon the form of the charter. For example, under time-charter contracts and FPSO contracts the customer usually pays the voyage expenses and for contracts of affreightment the ship-owner usually pays the voyage expenses, which typically are added to the hire rate at an approximate cost. Consequently, we use net revenues to improve the comparability between periods of reported revenues that are generated by the different forms of charters and contracts. We principally use net revenues, a non-GAAP financial measure, because it provides more meaningful information to us about the deployment of our vessels and their performance than revenues, the most directly comparable financial measure under United States generally accepted accounting principles (or *GAAP*).

**Vessel Operating Expenses.** Under all types of charters and contracts for our vessels, except for bareboat charters, we are responsible for vessel operating expenses, which include crewing, repairs and maintenance, insurance, stores, lube oils and communication expenses. The two largest components of our vessel operating expenses are crew costs and repairs and maintenance. We expect these expenses to increase as our fleet matures and to the extent that it expands. We are taking steps to maintain these expenses at a stable level, but expect an increase in line with inflation in respect of crew, material, and maintenance costs. The strengthening or weakening of the U.S. Dollar relative to foreign currencies may result in significant decreases or increases, respectively, in our vessel operating expenses, depending on the currencies in which such expenses are incurred.

**Income from Vessel Operations.** To assist us in evaluating our operations by segment, we analyze our income from vessel operations for each segment, which represents the income we receive from the segment after deducting operating expenses, but prior to the deduction of interest expense, realized and unrealized gains (losses) on non-designated derivative instruments, income taxes, foreign currency and other income and losses.

**Dry docking.** We must periodically dry dock each of our vessels for inspection, repairs and maintenance and any modifications to comply with industry certification or governmental requirements. Generally, we dry dock each of our vessels every two and a half to five years, depending upon the type of vessel and its age. In addition, a shipping society classification intermediate survey is performed on our LNG carriers between the second and third year of the five-year dry-docking cycle. We capitalize a substantial portion of the costs incurred during dry docking and for the survey, and amortize those costs on a straight-line basis from the completion of a dry docking or intermediate survey over the estimated useful life of the dry dock. We expense as incurred costs for routine repairs and maintenance performed during dry dockings that do not improve or extend the useful lives of the assets and annual class survey costs for our FPSO units. The number of dry dockings undertaken in a given period and the nature of the work performed determine the level of dry-docking expenditures.

**Depreciation and Amortization.** Our depreciation and amortization expense typically consists of:

- charges related to the depreciation and amortization of the historical cost of our fleet (less an estimated residual value) over the estimated useful lives of our vessels;
- charges related to the amortization of dry-docking expenditures over the useful life of the dry dock; and
- charges related to the amortization of intangible assets, including the fair value of time charters, contracts of affreightment and customer relationships where amounts have been attributed to those items in acquisitions; these amounts are amortized over the period in which the asset is expected to contribute to our future cash flows.

**Time-Charter Equivalent (TCE) Rates.** Bulk shipping industry freight rates (TCE) are commonly measured in the shipping industry at the net revenues level in terms of “time-charter equivalent” (or *TCE*) rates, which represent net revenues divided by revenue days.

**Revenue Days.** Revenue days are the total number of calendar days our vessels were in our possession during a period, less the total number of off-hire days during the period associated with major repairs, dry dockings or special or intermediate surveys. Consequently, revenue days represent the total number of days available for the vessel to earn revenue. Idle days, which are days when the vessel is available for the vessel to earn revenue, yet is not employed, are included in revenue days. We use revenue days to explain changes in our net revenues between periods.

**Calendar-Ship-Days.** Calendar-ship-days are equal to the total number of calendar days that our vessels were in our possession during a period. As a result, we use calendar-ship-days primarily in explaining changes in vessel operating expenses, time-charter hire expense and depreciation and amortization.

## ITEMS YOU SHOULD CONSIDER WHEN EVALUATING OUR RESULTS

You should consider the following factors when evaluating our historical financial performance and assessing our future prospects:

- **Our revenues are affected by cyclicity in the tanker markets.** The cyclical nature of the tanker industry causes significant increases or decreases in the revenue we earn from our vessels, particularly those we trade in the spot conventional tanker market.

- **Tanker rates also fluctuate based on seasonal variations in demand.** Tanker markets are typically stronger in the winter months as a result of increased oil consumption in the Northern Hemisphere but weaker in the summer months as a result of lower oil consumption in the Northern Hemisphere and increased refinery maintenance. In addition, unpredictable weather patterns during the winter months tend to disrupt vessel scheduling, which historically has increased oil price volatility and oil trading activities in the winter months. As a result, revenues generated by our vessels have historically been weaker during the quarters ended June 30 and September 30, and stronger in the quarters ended December 31 and March 31.
- **The size of and types of vessels in our fleet continues to change.** Our results of operations reflect changes in the size and composition of our fleet due to certain vessel deliveries, vessel dispositions and changes to the number of vessels we charter in, as well as our entry into new markets. Please read “—Results of Operations” below for further details about vessel dispositions, deliveries and vessels chartered in. Due to the nature of our business, we expect our fleet to continue to fluctuate in size and composition.
- **Vessel operating and other costs are facing industry-wide cost pressures.** The shipping industry continues to forecast a shortfall in qualified personnel, although weak shipping and offshore markets and slowing growth may ease officer shortages. We will continue to focus on our manning and training strategies to meet future needs, but going forward crew compensation may increase. In addition, factors such as pressure on commodity and raw material prices, as well as changes in regulatory requirements could also contribute to operating expenditure increases. We continue to take action aimed at improving operational efficiencies and to temper the effect of inflationary and other price escalations; however, increases to operational costs are still likely to occur in the future.
- **Our net income is affected by fluctuations in the fair value of our derivative instruments.** Most of our existing cross currency and interest rate swap agreements and foreign currency forward contracts are not designated as hedges for accounting purposes. Although we believe the non-designated derivative instruments are economic hedges, the changes in their fair value are included in our consolidated statements of income as unrealized gains or losses on non-designated derivatives. The changes in fair value do not affect our cash flows or liquidity.
- **The amount and timing of dry dockings of our vessels can affect our revenues between periods.** Our vessels are off hire at various times due to scheduled and unscheduled maintenance. During 2016 and 2015, on a consolidated basis we incurred 601 and 1,591 off-hire days relating to dry docking, respectively. The financial impact from these periods of off-hire, if material, is explained in further detail below in “—Results of Operations”. 26 of our vessels are scheduled for dry docking during 2017.
- **The division of our results of operations between the Daughter Companies and Teekay Parent is impacted by the sale of vessels from Teekay Parent to the Daughter Companies.** During 2015, Teekay Parent sold certain of its vessels to Teekay Offshore. Teekay Offshore and the other Daughter Companies account for the acquisition of the vessels from Teekay as a transfer of a business between entities under common control. The method of accounting for such transfers is similar to the pooling of interests method of accounting. Under this method, the carrying amount of net assets recognized in the balance sheets of each combining entity are carried forward to the balance sheet of the combined entity, and no other assets or liabilities are recognized as a result of the combination. In addition, such transfers are accounted for as if the transfer occurred from the date that the acquiring subsidiary and the acquired vessels were both under the common control of Teekay and had begun operations. As a result, the historical financial information of Teekay Offshore included in this Annual Report reflects the financial results of the vessels acquired from Teekay Parent from the date the vessels were both under the common control of Teekay and had begun operations but prior to the date they were owned by Teekay Offshore.
- **Three of Teekay LNG’s Suezmax tankers and one of its LPG carriers earned revenues based partly on spot market rates.** The time-charter contract for one of Teekay LNG’s Suezmax tankers, the *Teide Spirit*, and one of its LPG carriers, the *Norgas Napa*, contain a component providing for additional revenue to Teekay LNG beyond the fixed-hire rate when spot market rates exceed certain threshold amounts. The time-charter contracts for the *Bermuda Spirit* and *Hamilton Spirit* were amended in the fourth quarter of 2012 for a period of 24 months, which ended on September 30, 2014, and during this period these charters contained a component providing for additional revenues to Teekay LNG beyond the fixed-hire rate when spot market rates exceeded certain threshold amounts. Accordingly, even though declining spot market rates did not result in Teekay LNG receiving less than the fixed-hire rate, Teekay LNG’s results of operations and cash flow from operations were influenced by the variable component of the charters in periods where the spot market rates exceeded the threshold amounts.
- **Our financial results are affected by fluctuations in currency exchange rates.** Under GAAP, all foreign currency-denominated monetary assets and liabilities (including cash and cash equivalents, restricted cash, accounts receivable, accounts payable, accrued liabilities, unearned revenue, advances from affiliates, and long-term debt) are revalued and reported based on the prevailing exchange rate at the end of the period. These foreign currency translations fluctuate based on the strength of the U.S. Dollar relative to the applicable foreign currency, mainly to the Euro and NOK, and are included in our results of operations. The translation of all foreign currency-denominated monetary assets and liabilities at each reporting date results in unrealized foreign currency exchange gains or losses but do not impact our cash flows.

- **The duration of many of our shuttle tanker, FSO and FPSO contracts is the life of the relevant oil field or is subject to extension by the field operator or vessel charterer. If the oil field no longer produces oil or is abandoned or the contract term is not extended, we will no longer generate revenue under the related contract and will need to seek to redeploy affected vessels.** Many of our shuttle tanker contracts have a "life-of-field" duration, which means that the contract continues until oil production at the field ceases. If production terminates for any reason, we no longer will generate revenue under the related contract. Other shuttle tanker, FSO and FPSO contracts under which our vessels operate are subject to extensions beyond their initial term. The likelihood of these contracts being extended may be negatively affected by reductions in oil field reserves, low oil prices generally or other factors. If we are unable to promptly redeploy any affected vessels at rates at least equal to those under the contracts, if at all, our operating results will be harmed. Any potential redeployment may not be under long-term contracts, which may affect the stability of our cash flow and our ability to make cash distributions. FPSO units, in particular, are specialized vessels that have very limited alternative uses and high fixed costs. In addition, FPSO units typically require substantial capital investments prior to being redeployed to a new field and production service agreement. Any idle time prior to the commencement of a new contract or our inability to redeploy the vessels at acceptable rates may have an adverse effect on our business and operating results.

## RECENT DEVELOPMENTS AND RESULTS OF OPERATIONS

The results of operations that follow have first been divided into (a) our controlling interests in each of our publicly traded subsidiaries Teekay Offshore, Teekay LNG and Teekay Tankers and (b) Teekay Parent. Within each of these four groups, we have further subdivided the results into their respective lines of business. The following table presents revenue and income from vessel operations for each of these three subsidiaries and Teekay Parent and how they reconcile to our consolidated financial statements.

(in thousands of U.S. dollars)	Revenues			Income from Vessel Operations		
	2016	2015	2014	2016	2015	2014
Teekay Offshore	1,152,390	1,229,413	1,019,539	230,853	283,399	256,218
Teekay LNG	396,444	397,991	402,928	153,181	181,372	183,823
Teekay Tankers <sup>(1)</sup>	526,896	504,347	235,593	86,456	184,083	58,271
Teekay Parent	340,513	419,166	450,112	(96,496)	(30,228)	(73,723)
Elimination of intercompany <sup>(2)(3)</sup>	(87,674)	(100,535)	(114,252)	10,296	6,506	2,570
Teekay Corporation Consolidated	<u>2,328,569</u>	<u>2,450,382</u>	<u>1,993,920</u>	<u>384,290</u>	<u>625,132</u>	<u>427,159</u>

- (1) In December 2015, Teekay Offshore sold two Aframax tankers to Teekay Tankers and the results of the two vessels are included in Teekay Offshore up to the date of sale and in Teekay Tankers from the date of acquisition.
- (2) During 2016, Teekay Parent chartered in three FSO units, three shuttle tankers and one Aframax tanker from Teekay Offshore, two LNG carriers from Teekay LNG and two Aframax tankers from Teekay Tankers. During 2015, Teekay Parent chartered in three FSO units, two shuttle tankers and four Aframax tankers from Teekay Offshore, and two LNG carriers from Teekay LNG, and Teekay Parent chartered out one Aframax tanker to Teekay Tankers. During 2014, Teekay Parent chartered in three FSO units, two shuttle tankers and four Aframax tankers from Teekay Offshore, two LNG carriers from Teekay LNG and two Aframax tankers from Teekay Tankers. Internal charter hire between Teekay Parent and its subsidiaries Teekay Offshore, Teekay LNG and Teekay Tankers is eliminated upon consolidation.
- (3) During 2014, Teekay Parent sold to Teekay Tankers a 50% interest in Teekay Tankers Operations Ltd (or *TTOL*), which owns the conventional tanker commercial management and technical management operations, including direct ownership in three commercially managed tanker pools of the Teekay group. Teekay Tankers and Teekay Parent each account for their 50% interests in *TTOL* as equity-accounted investments and, as such, *TTOL*'s results are reflected in equity income of Teekay Tankers and Teekay Parent. Upon consolidation of Teekay Tankers into Teekay Corporation, the results of *TTOL* are accounted for on a consolidated basis by Teekay Corporation. The impact on our income from vessel operations of consolidating *TTOL* in 2016 was an increase of \$10.3 million (2015 - \$6.5 million, 2014 - \$2.6 million).

## Summary

Teekay Corporation consolidated income from vessels operations decreased to \$384 million for the year ended December 31, 2016 compared to \$625 million in the prior year. The primary reasons for this decrease are as follows:

- in Teekay Offshore, the cancellation of the construction contracts for its two UMS newbuildings, lower revenue from its UMS being off-hire for a portion of 2016 due to damage suffered to the gangway and the suspension of charter hire payments since early-November 2016 due to an operational review being conducted by the charterer, the expiration of certain shuttle tanker time-charter and affreightment contracts, change in estimate of useful life of certain shuttle tankers which increased depreciation expense, and the termination of the contract of the *Petrojarl Varg* FPSO;
- in Teekay LNG, the sale of three conventional tankers, partially offset by the delivery of two LNG newbuildings in 2016;
- in Teekay Tankers, lower average TCE rates earned in the spot tanker market in 2016 compared to 2015; and
- in Teekay Parent, terminations of time charters and the lay-up of the *Arctic Spirit* and *Polar Spirit* LNG carriers in 2016, loss on sale of the *Shoshone Spirit* tanker, lower average TCE rates earned in the spot tanker market, and a contract amendment related to the *Hummingbird Spirit* FPSO which reduced its revenues.

Details of the changes to our results of operations for the year ended December 31, 2016, compared to the year ended December 31, 2015 are provided in the following section.

## Year Ended December 31, 2016 versus Year Ended December 31, 2015

### Teekay Offshore

#### Recent Developments in Teekay Offshore

In January 2017, Teekay Offshore was awarded a new five-year shuttle tanker contract of affreightment (or CoA), plus extension options, with a consortium of oil companies to service a development located in the UK Central North Sea. The CoA is expected to commence during the first quarter of 2018 and require the use of shuttle tankers from Teekay Offshore's existing CoA shuttle tanker fleet. The CoA will require the use of approximately 0.5 shuttle tanker equivalents per annum.

In September 2016, Teekay Offshore was awarded a new three-year shuttle tanker CoA, plus extension options, with BP plc, Royal Dutch Shell and OMV Group, to service the new *Glen Lyon* FPSO unit located west of Shetland in the North Sea. This CoA is expected to commence in mid-2017 and require the use of approximately two shuttle tankers from Teekay Offshore's existing CoA shuttle tanker fleet.

In June 2016, as part of its financing initiatives, Teekay Offshore canceled the construction contracts for its two UMS newbuildings. As a result, Teekay Offshore incurred a \$43.7 million write-down related to these two UMS newbuildings for the year ended December 31, 2016, which is included in Asset Impairments in Teekay's consolidated statements of income. In addition, Teekay Offshore accrued for potential damages resulting from the cancellations and reversed contingent liabilities previously recorded that were relating to the delivery of the UMS newbuildings. This net loss provision of \$23.4 million for the year ended December 31, 2016 is reported in Other (loss) income in Teekay's consolidated statements of income. The newbuilding contracts are held in separate subsidiaries of Teekay Offshore and obligations of these subsidiaries are non-recourse to Teekay Offshore. For additional information, please read Item 18 - Financial Statements: Note 15d. Commitments and Contingencies.

In April 2016, during the process to lift off the gangway connecting the *Arendal Spirit* to an FPSO unit, the gangway of the *Arendal Spirit* suffered damage. The gangway was replaced and underwent extensive testing and the unit recommenced operations in early-July 2016. As a result of this incident, Teekay Offshore reversed contingent liabilities previously recorded that were subject to material defects of the UMS.

In November 2016, the *Arendal Spirit* UMS experienced an operational incident relating to its dynamic-positioning system. As a result of this operational incident, and a gangway incident that occurred in April 2016, the charterer, Petrobras, initiated an operational review. Until the results of the review are available, Petrobras has suspended its charter hire payments from early-November 2016. Teekay Offshore has completed an investigation to identify the cause of the incidents and has implemented corrective measures. Teekay Offshore is working to address Petrobras' concerns to bring the unit back into operation as soon as possible.

In September 2016, Teekay Offshore took delivery of the *ALP Striker*, the first of four state-of-the-art SX-157 Ulstein Design ultra-long distance towing and offshore installation newbuildings being constructed by Niigata Shipbuilding & Repair in Japan. In connection with the delivery, Teekay Offshore received cash compensation from the shipyard totaling approximately \$7 million due to the delayed delivery of the vessel. In April 2017, Teekay Offshore received additional delayed delivery cash compensation of \$24.3 million for the remaining three towing and offshore installation newbuildings, which are scheduled to deliver during 2017.

In March 2016, Teekay Offshore terminated an above-market time-charter contract of the *Kilimanjaro Spirit* conventional tanker with a subsidiary of Teekay. Subsequently, Teekay Offshore sold the *Kilimanjaro Spirit* and the *Fuji Spirit* conventional tankers for net proceeds of approximately \$50 million. Related to the sale of these vessels, Teekay Offshore is chartering back both vessels for a period of three years with an additional one-year extension option. One vessel is fixed on a two-year time-charter-out contract that commenced during the second quarter of 2016, and the other vessel is trading in the spot conventional tanker market.

In November 2016, Teekay Offshore sold a 1995-built shuttle tanker, the *Navion Europa*, for net proceeds of \$14.4 million, for which Teekay Offshore recorded a gain on sale of \$6.8 million in a 67%-owned subsidiary.



## Operating Results – Teekay Offshore

The following table compares Teekay Offshore's operating results and number of calendar-ship-days for its vessels for 2016 and 2015, and compares its net revenues (which is a non-GAAP financial measure) for 2016 and 2015, to revenues, the most directly comparable GAAP financial measure, for the same periods.

(in thousands of U.S. dollars, except calendar-ship-days)	Offshore Logistics		Offshore Production		Conventional Tankers		Teekay Offshore Total	
	2016	2015	2016	2015	2016	2015	2016	2015
Revenues	636,421	667,629	495,223	531,554	20,746	30,230	1,152,390	1,229,413
Voyage expenses	(79,387)	(95,680)	—	—	(1,363)	(2,326)	(80,750)	(98,006)
Net revenues	557,034	571,949	495,223	531,554	19,383	27,904	1,071,640	1,131,407
Vessel operating expenses	(197,529)	(182,346)	(165,346)	(189,900)	(1,566)	(6,234)	(364,441)	(378,480)
Time-charter hire expense	(62,511)	(51,750)	—	—	(12,974)	—	(75,485)	(51,750)
Depreciation and amortization	(150,813)	(130,102)	(149,198)	(137,914)	—	(6,583)	(300,011)	(274,599)
General and administrative expenses <sup>(1)</sup>	(19,798)	(32,963)	(35,971)	(38,588)	(353)	(1,062)	(56,122)	(72,613)
Asset impairments and gain on sale of vessels	(40,079)	(66,101)	—	—	—	(3,897)	(40,079)	(69,998)
Restructuring charges	(205)	(568)	(4,444)	—	—	—	(4,649)	(568)
Income from vessel operations	86,099	108,119	140,264	165,152	4,490	10,128	230,853	283,399
Equity income	—	—	17,933	7,672	—	—	17,933	7,672
Calendar-Ship-Days <sup>(2)</sup>								
Shuttle Tankers	11,913	12,319	—	—	—	—	11,913	12,319
FSO Units	2,562	2,395	—	—	—	—	2,562	2,395
FPSO Units	—	—	2,196	2,122	—	—	2,196	2,122
Conventional Tankers	—	—	—	—	732	1,432	732	1,432
UMS	366	318	—	—	—	—	366	318
Towage vessels	2,307	1,606	—	—	—	—	2,307	1,606

(1) Includes direct general and administrative expenses and indirect general and administrative expenses allocated to offshore logistics, offshore production and conventional tankers based on estimated use of corporate resources.

(2) Calendar-ship-days presented relate to owned and in-chartered consolidated vessels.

### Teekay Offshore – Offshore Logistics

Offshore Logistics consists of Teekay Offshore's shuttle tankers, FSO units, its HiLoad Dynamic Positioning (or *HiLoad DP*) unit, towage vessels and one UMS. As at December 31, 2016, the shuttle tanker fleet consisted of 30 vessels that operate under fixed-rate CoAs, time charters and bareboat charters, three shuttle tanker newbuildings and the *HiLoad DP* unit, which is currently in lay-up. Of these 34 shuttle tankers, six are owned through 50% owned subsidiaries and three were chartered-in. The remaining vessels were owned 100% by Teekay Offshore. In November 2016, Teekay Offshore sold a 1995-built shuttle tanker, the *Navion Europa*. In January 2016, Teekay Offshore sold a 1992-built shuttle tanker, the *Navion Torinita*, which was in lay-up and classified as held for sale on Teekay's consolidated balance sheet as of December 31, 2015. In July 2016, Teekay Offshore agreed to in-charter a shuttle tanker, the *Grena Knutsen*, on a three-year charter contract for its North Sea fleet commencing in September 2016. All of Teekay Offshore's operating shuttle tankers, with the exception of the *HiLoad DP* unit, provide transportation services to energy companies in the North Sea, Brazil and the East Coast of Canada. Teekay Offshore's shuttle tankers occasionally service the conventional spot tanker market. Teekay Offshore commenced the FSO conversion of the *Randgrid* shuttle tanker during the second quarter of 2015. During the first quarter of 2015, Teekay Offshore sold the *Navion Svenita* shuttle tanker. The strengthening or weakening of the U.S. Dollar relative to the Norwegian Kroner, Euro and Brazilian Real may result in significant decreases or increases, respectively, in vessel operating expenses.

The average size of Teekay Offshore's owned shuttle tanker fleet decreased in 2016 compared to 2015, primarily due to the sales of the *Navion Svenita*, the *Navion Torinita* and the *Navion Europa* in March 2015, January 2016 and November 2016, respectively, and the commencement of the FSO conversion of the *Randgrid* in June 2015. Three shuttle tanker newbuildings have been excluded from calendar-ship-days until they are delivered to Teekay Offshore. The average size of Teekay Offshore's chartered-in shuttle tanker fleet increased in 2016 compared to 2015 primarily due to the in-chartering of two shuttle tankers, the *Jasmine Knutsen* and the *Heather Knutsen*, for the East Coast of Canada contract, which commenced in June 2015, the in-chartering of the *Grena Knutsen* for three years which commenced in September 2016 and increased spot in-chartering of shuttle tankers, partially offset by redelivery of the *Grena Knutsen* and *Aberdeen* to their owners in June 2015 and December 2016, respectively. The *Grena Knutsen* was subsequently rechartered in by Teekay Offshore in September 2016.

As of December 31, 2016, Teekay Offshore's FSO fleet consisted of five units that operate under fixed-rate time charters or fixed-rate bareboat charters in which Teekay Offshore's ownership interest ranged from 89% to 100%, and one shuttle tanker, the *Randgrid*, currently undergoing conversion into an FSO unit, in which Teekay Offshore's ownership interest increased from 67% to 100% during the third quarter of 2015. The *Navion Saga* FSO unit was held for sale as at December 31, 2016. FSO units provide an on-site storage solution to oil field installations that have no oil storage facilities or that require supplemental storage. Teekay Offshore's revenues and vessel operating expenses for the FSO segment are affected by fluctuations in currency exchange rates, as a significant component of revenues are earned and vessel operating expenses are incurred in Norwegian Kroner and Australian Dollars for certain vessels. The strengthening or weakening of the U.S. Dollar relative to the Norwegian Kroner or Australian Dollar may result in significant decreases or increases, respectively, in revenues and vessel operating expenses.

The average number of Teekay Offshore's FSO units increased in 2016 compared to 2015, due to the commencement of the FSO conversion of the *Randgrid* on June 9, 2015. No earnings are expected from the *Randgrid* until its conversion is completed in mid-2017, when the unit is scheduled to commence operations under a three-year time-charter contract with Statoil ASA, which includes 12 additional one-year extension options. Additionally, the *Navion Saga* FSO unit was redelivered to Teekay Offshore in October 2016 and was classified as held for sale as at December 31, 2016, resulting in a \$1.0 million write-down of the unit.

As at December 31, 2016, Teekay Offshore's towage vessel fleet consisted of seven long-distance towing and offshore installation vessels and three long-distance towing and offshore installation vessel newbuildings, which are scheduled to deliver during 2017. Teekay Offshore owns a 100% interest in each of the vessels in its towage fleet. Long-distance towing and offshore installation vessels are used for the towage, station-keeping, installation and decommissioning of large floating objects such as exploration, production and storage units, including FPSO units, floating liquefied natural gas (or *FLNG*) units and floating drill rigs.

The average number of Teekay Offshore's towing and offshore installation vessels increased in 2016 compared to 2015, due to the acquisition of three vessels during the first quarter of 2015, two vessels during the second quarter of 2015, one vessel during the third quarter of 2015, and the delivery of Teekay Offshore's first towage newbuilding vessel in September 2016.

As at December 31, 2016, Teekay Offshore's UMS fleet consisted of one unit, the *Arendal Spirit*, in which Teekay Offshore owns a 100% interest. During the second quarter of 2016, Teekay Offshore canceled the UMS construction contracts for its two UMS newbuildings, resulting in a write-down of the UMS newbuildings to \$nil. The UMS unit is used primarily for offshore accommodation, storage and support for maintenance and modification projects on existing offshore installations, or during the installation and decommissioning of large floating exploration, production and storage units, including FPSO units, FLNG units and floating drill rigs. Teekay Offshore's UMS unit is available for world-wide operations, excluding operations within the Norwegian Continental Shelf, and includes DP3 keeping systems that are capable of operating in deep water and harsh weather.

Income from vessel operations for Teekay Offshore's Offshore Logistics business decreased to \$86.1 million in 2016 from \$108.1 million in 2015, primarily as a result of:

- a decrease of \$55.6 million relating to the UMS fleet, primarily due to the write-downs relating to the cancellation of the two UMS newbuilding contracts, an increase in spare parts and consumables in 2016 due to these costs being covered under warranty during 2015, and lower revenues due to the unit being off-hire from mid-April 2016 until early-July 2016 due to damage suffered to the gangway and the suspension of charter hire payments since early-November 2016 due to an operational review being conducted by the charterer;
- a decrease of \$23.6 million due to higher depreciation expense related to the change in the estimated useful life of the shuttle component for all shuttle tankers from 25 to 20 years, the accelerated amortization of the tanker component for eight older shuttle tankers commencing the first quarter of 2016, the acquisition of the six towing and offshore installation vessels during 2015, the delivery of the *ALP Striker* towage vessel in September 2016 and the commencement of the charter contract of the *Arendal Spirit* UMS in June 2015. This is partially offset by dry-dock costs for the *Navion Saga* shuttle tanker being fully depreciated during the fourth quarter of 2015, a write-down of the carrying values of seven shuttle tankers during 2015, and the *Navion Europa* shuttle tanker being fully amortized during the second quarter of 2015;
- a decrease of \$22.7 million due to the expiration in April 2015 of a long-term contract at the Heidrun field serviced by Teekay Offshore's CoA fleet;
- a decrease of \$17.9 million due to the redelivery of two shuttle tankers to Teekay Offshore in April 2015 and June 2016, respectively, as they completed their time-charter-out agreement;
- a decrease of \$9.7 million due to fewer opportunities to trade excess shuttle tanker capacity in the conventional tanker spot market;
- a decrease of \$8.7 million relating to the towage fleet primarily due to a decrease in rates and utilization of the towing and offshore installation vessels due to volatility in the offshore market, an increase in operating expenses due to the delivery of the *ALP Striker* in September 2016, an increase in repairs and maintenance expenses due to engine overhauls on the *ALP Winger* and *ALP Centre* during the first quarter of 2016, and an increase in crew costs compared to 2015 due to higher crew levels, partially offset by a more cost-efficient crew composition in 2016;
- a decrease of \$5.2 million due to the in-chartering of the *Grena Knutsen* starting September 2016; and
- a decrease of \$4.2 million related to higher repair and maintenance activities on the *Navion Anglia* shuttle tanker to prepare the vessel to trade in Teekay Offshore's CoA fleet in the North Sea as the vessel was redelivered to Teekay Offshore in June 2016 due to the completion of its time-charter-out agreement in Brazil;

partially offset by

- an increase of \$69.7 million due to a write-down of shuttle tankers of \$65.1 million in 2015 and a \$6.7 million gain on the sale of a shuttle tanker in 2016, partially offset by a write-down of a shuttle tanker of \$2.1 million in 2016;
- an increase of \$15.9 million due to an increase in rates as provided in certain contracts in Teekay Offshore's time-chartered-out fleet and an increase in revenues in Teekay Offshore's CoA fleet due to higher average rates and higher fleet utilization;
- an increase of \$13.2 million due to lower general and administrative expenses from lower management fees relating to Teekay Offshore's shuttle tanker and FSO fleets primarily from cost saving initiatives, and a decrease in development fees to Teekay of \$4.2 million in connection with Teekay Offshore's acquisition of six long-distance towing and offshore installation vessels and the *Arendal Spirit* UMS in 2015, partially offset by an increase in management fees due to the commencement of the charter contract of the *Arendal Spirit* in June 2015;
- an increase of \$10.8 million due to an increase in net revenues from the commencement of the East Coast of Canada contract in June 2015, partially offset by lower reimbursable expenses in relation to this contract and the in-chartering of three shuttle tankers for this contract, one of which was redelivered by Teekay Offshore in August 2015 and was replaced by Teekay's own shuttle tanker, the *Navion Hispania*;
- an increase of \$5.6 million due a reduction in operating expenses and amortization expense due to the commencement of the FSO conversion of the *Randgrid* in June 2015;
- an increase of \$4.0 million due to the redeliveries by Teekay Offshore of the *Grena Knutsen* and *Aberdeen* shuttle tankers in June 2015 and December 2016, respectively, partially offset by increased spot in-chartering of shuttle tankers in 2016;
- an increase of \$4.0 million due to the *Navion Europa* shuttle tanker acting as a substitute vessel while the *Apollo Spirit* FSO unit was undergoing a dry dock in the third quarter of 2016; and
- an increase of \$3.2 million due to lower shuttle tanker operating expenses due to lower fleet and onshore overhead mainly related to lower crew training costs in 2016, and the strengthening of the U.S. Dollar against the Norwegian Kroner, Euro and Brazilian Real, partially offset by higher crew costs relating to a change in crew composition.

#### **Teekay Offshore – Offshore Production**

Offshore Production consists of Teekay Offshore's FPSO units. As of December 31, 2016, Teekay Offshore's FPSO fleet consisted of the *Petrojarl Knarr*, the *Petrojarl Varg*, the *Cidade de Rio das Ostras* (or *Rio das Ostras*), the *Piranema Spirit*, the *Voyageur Spirit*, and the *Petrojarl I* FPSO units, all of which Teekay Offshore owns 100%, and the *Itajai* and *Libra* FPSO units, of which Teekay Offshore owns 50%. One equity accounted FPSO unit, the *Libra* FPSO unit owned through Teekay Offshore's 50/50 joint venture with Odebrecht Oil & Gas S.A. (or *OOG*) has completed its conversion into an FPSO unit and is en route to the *Libra* field located in the Santos Basin offshore Brazil where it is scheduled to commence operations in mid-2017. The *Petrojarl I* FPSO unit is currently undergoing upgrades at the Damen Shipyard Group's DSR Schiedam Shipyard (or *Damen*) in the Netherlands and is scheduled to commence operations under a five-year fixed-rate charter contract with Queiroz Galvão Exploração e Produção SA (or *QGEP*) at the end of 2017. Teekay Offshore acquired the *Petrojarl Knarr* FPSO unit from Teekay in July 2015.

In late-2015, Teekay Offshore received a termination notice for the *Petrojarl Varg* FPSO charter contract from Repsol S.A. (or *Repsol*), based on a termination right that was specific to the *Petrojarl Varg* FPSO contract. In accordance with the termination provision of the charter contract, the charterer ceased paying the capital component of the charter hire six months prior to the redelivery date, which redelivery occurred at the end of July 2016.

FPSO units provide production, processing and storage services to oil companies operating offshore oil field installations. These services are typically provided under long-term, fixed-rate FPSO contracts, some of which also include certain incentive compensation or penalties based on the level of oil production and other operational measures. Historically, the utilization of FPSO units and other vessels in the North Sea, where the *Voyageur Spirit* and *Petrojarl Knarr* operate, is higher in the winter months, as favorable weather conditions in the summer months provide opportunities for repairs and maintenance to vessels and the offshore oil platforms, which generally reduces oil production. The strengthening or weakening of the U.S. Dollar relative to the Norwegian Kroner, Brazilian Real, and British Pound may result in significant decreases or increases, respectively, in our revenues and vessel operating expenses.

The average number of Teekay Offshore's FPSO units increased in 2016 compared to 2015, due to the acquisition of the *Petrojarl Knarr* on July 1, 2015.

Income from vessel operations for Teekay Offshore's Offshore Production business decreased to \$140.3 million in 2016 compared to \$165.2 million in 2015, primarily as a result of:

- a decrease of \$46.6 million for the *Petrojarl Varg* FPSO unit, due to the termination of the charter contract by Repsol effective at the end of July 2016, partially offset by lower vessel operating expenses as the unit is now in layup;
- a decrease of \$4.4 million relating to the restructuring costs associated with the reorganization of the FPSO business to create better alignment with the offshore operations and resulting in a lower cost organization going forward; and
- a decrease of \$2.9 million relating to the *Voyageur Spirit* FPSO unit due to a lower production bonus earned in 2016 compared to 2015, partially offset by lower repair and maintenance costs reimbursed by the charterer in 2016;

partially offset by

- an increase of \$28.2 million due to the *Petrojarl Knarr* FPSO unit commencing operations on March 9, 2015;
- an increase of \$2.6 million due to lower general and administrative expenses due to (a) a decrease in business development fees paid to Teekay in 2016 compared to 2015 of \$9.7 million in connection with the 2015 acquisition for the *Petrojarl Knarr* FPSO and (b) the redelivery and lay up of the *Petrojarl Varg* FPSO unit in 2016, partially offset by the increase in general and administration expenses as a result of the acquisition of the *Petrojarl Knarr* FPSO unit in July 2015; and
- an increase of \$1.9 million for the *Rio das Ostras* FPSO unit, primarily due to higher incentive compensation and a bonus earned from the charterer of the unit for unused maintenance days under the service contract during 2016.

Equity income increased to \$17.9 million for 2016 compared to \$7.7 million for 2015, primarily due to an increase in unrealized gains on derivative instruments relating to Teekay Offshore's investment in the *Libra* FPSO joint venture and the *Itajai* FPSO joint venture, lower repairs and maintenance expenses in 2016 due to turbine repairs made during 2015 and an insurance claim payment received during 2016 relating to these turbine repairs for the *Itajai* FPSO unit.

### **Teekay Offshore – Conventional Tankers**

As at December 31, 2016, Teekay Offshore's conventional tanker fleet consisted of two in-chartered conventional tankers. In March 2016, Teekay Offshore terminated the time-charter contract of the *Kilimanjaro Spirit* with a subsidiary of Teekay and received an early termination fee of \$4.0 million from Teekay. Subsequently, Teekay Offshore sold the *Kilimanjaro Spirit* and the *Fuji Spirit* conventional tankers. The *Kilimanjaro Spirit* was renamed *Blue Pride* and the *Fuji Spirit* was renamed *Blue Power*. As part of the sales, Teekay Offshore is in-chartering these vessels for three years with additional one-year extension options. One vessel is trading on a fixed two-year time-charter-out contract which commenced during the second quarter of 2016 and the other vessel is trading in the spot conventional tanker market.

In December 2015, Teekay Offshore sold its 100% interest in SPT Explorer L.L.C. and Navigator Spirit L.L.C., which own the *SPT Explorer* and the *Navigator Spirit* conventional tankers, respectively, to Teekay Tankers.

Income from vessel operations decreased to \$4.5 million in 2016 from \$10.1 million in 2015, primarily as a result of:

- a net decrease of \$10.7 million in 2016 due to the sale of the *Kilimanjaro Spirit* and *Fuji Spirit* in March 2016, and the subsequent in-chartering of the *Blue Power* and *Blue Pride*; and
- a decrease of \$5.4 million for 2016 due to the sale of the *Explorer Spirit* and *Navigator Spirit* in December 2015;

partially offset by

- an increase of \$5.8 million relating to a \$4.0 million termination fee received from Teekay due to the early termination of the time-charter-out contract for the *Kilimanjaro Spirit* in March 2016 and net termination fees of \$1.8 million paid to Teekay due to the early terminations of bareboat and time-charter contracts for the *SPT Explorer*, *Navigator Spirit*, and *Fuji Spirit* in December 2015; and
- an increase of \$3.9 million due to a write-down of two conventional tankers in 2015.

### **Teekay LNG**

#### **Recent Developments in Teekay LNG**

On November 15, 2016, the joint venture among National Oil & Gas Authority (or *Nogaholding*), Samsung C&T (or *Samsung*), Gulf Investment Corporation (or *GIC*) and Teekay LNG (or the *Bahrain LNG Joint Venture*), secured debt financing of \$741.1 million related to the development of an LNG receiving and regasification terminal in Bahrain. The receiving and regasification terminal will be owned and operated by the Bahrain LNG Joint Venture under a 20-year agreement with Nogaholding which is scheduled to commence operations in early-2019. In conjunction with this project, Teekay LNG will supply a floating storage unit (or *FSU*), which will be modified from one of Teekay LNG's nine wholly-owned LNG carrier newbuildings, and charter the FSU to the Bahrain LNG Joint Venture through a 20-year time-charter contract.

Teekay LNG has six LPG carriers currently on bareboat charter contracts with I.M. Skaugen SE (or *Skaugen*) with contract terms ending between 2019 and 2026. As at December 31, 2016, Teekay LNG had not been paid by Skaugen for a portion of the hire invoices for the period from August 2016 to December 2016 relating to these six vessels and totaling approximately \$9.2 million. As an alternative payment for a portion of these amounts, Skaugen offered to Teekay LNG its 35% ownership interest in an LPG carrier, the *Norgas Sonoma*, which is owned by Skaugen Gulf Petchem Carriers B.S.C.(c), a joint venture between Skaugen (35%), or Nogaholding (35%) and Suffun Bahrain W.L.L. (or *Suffun*) (30%) (or the *Skaugen LPG Joint Venture*). Both Nogaholding and Suffun exercised their option to participate in the purchase and sale of the Skaugen LPG Joint Venture and as a result, Teekay LNG is finalizing the acquisition of the Skaugen LPG Joint Venture for approximately \$13 million. Upon closing of this transaction, Teekay LNG will apply the purchase price of \$4.7 million, to be adjusted for working capital adjustments, relating to Skaugen's 35% ownership interest in the Skaugen LPG Joint Venture, to the outstanding hire invoices owed by Skaugen to Teekay LNG. As a result, as at December 31, 2016, Teekay LNG has not recognized any revenue relating to the remaining \$4.5 million of hire invoices outstanding from Skaugen given the uncertainty of its collection. Upon acquisition of the Skaugen LPG Joint Venture, Teekay LNG expects to continue to trade the *Norgas Sonoma* in the Norgas pool. In addition, there is uncertainty about Skaugen's ability to pay future invoices for our six LPG carriers on charter to them, which may impact Teekay LNG's revenues and cash flows in future periods if Teekay LNG is not able to redeploy the vessels at similar rates. Currently, lease payments from Skaugen represent approximately \$6 million of revenue each quarter.

During February and March 2016, Centrofin Management Inc. (or *Centrofin*), the charterer for both the *Bermuda Spirit* and *Hamilton Spirit* Suezmax tankers of Teekay LNG, exercised its option under the charter contracts to purchase both vessels. As a result of Centrofin's acquisition of the vessels, Teekay LNG recorded a \$27.4 million loss on the sale of the vessels and associated charter contracts in the first quarter of 2016. The *Bermuda Spirit* was sold in April 2016 and the *Hamilton Spirit* was sold in May 2016. Teekay LNG used the total proceeds of \$94.3 million from the sales primarily to repay existing term loans associated with these vessels.

On November 30, 2016, Teekay LNG reached an agreement to sell the *Asian Spirit* for net proceeds of \$20.6 million. As a result, Teekay LNG recorded a \$11.5 million impairment on the write-down of the vessel in the fourth quarter of 2016. Delivery of the vessel to the new owners occurred on March 21, 2017. Teekay LNG used the net proceeds from the sales primarily to repay an existing term loan associated with the vessel.

In February 2016 and July 2016, Teekay LNG took delivery of the first two of the 11 M-type, Electronically Controlled Gas Injection (or *MEGI*) LNG carrier newbuildings on order, which commenced their five-year charter contracts with a subsidiary of Cheniere Energy, Inc. in February 2016 and August 2016, respectively. As at December 31, 2016, Teekay LNG had nine wholly-owned LNG carrier newbuildings on order, of which one, the *Torben Spirit*, was delivered in February 2017, and the remaining eight are scheduled for delivery between late-2017 and early-2019.

On September 27, 2016, Teekay LNG entered into a 15-year time-charter contract with the Yamal LNG project (or the *Yamal LNG Project*), sponsored by Novatek OAO, Total SA, China National Petroleum Corporation and Silk Road Fund, to provide the Yamal LNG Project with conventional LNG transportation services. The Yamal LNG Project, which is now fully financed, is currently scheduled to commence production in late-2017. The charter contract will be serviced by one of Teekay LNG's previously unchartered 174,000 cubic meter (or *cbm*) MEGI LNG carrier newbuilding that is scheduled for delivery in early-2019.

Additionally, in November 2016, Teekay LNG entered into a 10-month plus one-year option charter contract with a major energy company. The charter contract commenced on March 3, 2017 and is being serviced by Teekay LNG's final previously unchartered 173,400 cbm MEGI LNG carrier newbuilding, the *Torben Spirit*, which was delivered to Teekay LNG on February 28, 2017. Prior to the conclusion of this charter, Teekay LNG will seek to secure a long-term contract on this vessel.

In December 2016, Teekay LNG entered into a 10-year \$682.8 million sale-leaseback agreement with ICBC Financial Leasing Co., Ltd. (or *ICBC Leasing*) for four of its nine wholly-owned LNG carrier newbuildings delivering in 2017 and 2018, and at such dates, ICBC Leasing will take delivery and charter each respective vessel back to Teekay LNG. At the end of the 10-year tenor of these leases, Teekay LNG has an obligation to repurchase the vessels from ICBC Leasing.

In addition to Teekay LNG's nine LNG wholly-owned carrier newbuildings, it has a 20% interest in two LNG carrier newbuildings and a 30% interest in another two LNG carrier newbuildings (or the *BG Joint Venture*) scheduled for delivery between 2017 and 2019 and six LNG carrier newbuildings relating to Teekay LNG's 50% owned joint venture with China LNG Shipping (Holdings) Limited (or the *Yamal LNG Joint Venture*) scheduled for delivery between 2018 and 2020. Including the transactions described above, Teekay LNG has entered into time-charter contracts for all of its remaining newbuildings.

In February, June, and November 2016, Exmar LPG BVBA (or the *Exmar LPG Joint Venture*), of which Teekay LNG has a 50% ownership interest, took delivery of the sixth, seventh, and eighth of its 12 LPG carrier newbuildings on order. The five-year charter contracts for the sixth and seventh LPG carriers with an international energy company based in Norway commenced in February 2016 and August 2016, respectively. As at December 31, 2016, the Exmar LPG Joint Venture had four LPG carrier newbuildings, of which one delivered in March 2017 and the remaining three are scheduled for delivery between mid-2017 and early-2018. The Exmar LPG Joint Venture has secured financing in place upon delivery of each respective vessel.

Two of the six LNG carriers (or *MALT LNG Carriers*) in Teekay LNG's 52% joint venture with Marubeni Corporation (or the *Teekay LNG-Marubeni Joint Venture*), the *Marib Spirit* and *Arwa Spirit*, are currently under long-term contracts expiring in 2029 with Yemen LNG Ltd. (or *YLNG*), a consortium led by Total SA. Due to the political situation in Yemen, YLNG decided to temporarily close operation of its LNG plant in Yemen in 2015. As a result, the Teekay LNG-Marubeni Joint Venture agreed in December 2015 to defer a portion of the charter payments for the two LNG carriers from January 1, 2016 to December 31, 2016 and a further deferral was agreed and effective in August 2016 and in January 2017, the deferral period was extended to December 31, 2017. Once the LNG plant in Yemen resumes operations, it is intended that YLNG will repay the deferred amounts in full, plus interest over a period of time to be agreed upon. However, there is no assurance if or when the LNG plant will resume operations or if YLNG will repay the deferred amounts, and this deferral period may extend beyond 2017. Teekay LNG's proportionate share of the impact of the charter payment deferral for 2016 was a reduction to equity income of \$21.2 million and this deferral period may extend beyond 2017. Teekay LNG's proportionate share of the estimated impact of the charter payment deferral for 2017 compared to original charter rates earned prior to December 31, 2015 is estimated to be a reduction to equity income ranging from \$20 million to \$30 million depending on any sub-chartering employment opportunities.

In 2015, the *Magellan Spirit*, one of the MALT LNG Carriers in the Teekay LNG-Marubeni Joint Venture, had a grounding incident. The charterer during that time claimed that the vessel was off-hire for more than 30 consecutive days during the first quarter of 2015, which, in the view of the charterer, permitted the charterer to terminate the charter contract. The Teekay LNG-Marubeni Joint Venture disputed both the charterer's aggregate off-hire claims as well as the charterer's ability to terminate the charter contract, which originally would have expired in August 2016. In May 2016, the Teekay LNG-Marubeni Joint Venture reached a settlement agreement with the charterer, under which the charter contract was deemed terminated and the charterer paid \$39.0 million to the Teekay LNG-Marubeni Joint Venture for lost revenues, of which Teekay LNG's proportionate share was \$20.3 million, which was received and included in equity income in the year ended December 31, 2016.

## Operating Results – Teekay LNG

The following table compares Teekay LNG's operating results and number of calendar-ship-days for its vessels for 2016 and 2015, and compares its net revenues (which is a non-GAAP financial measure) for 2016 and 2015, to revenues, the most directly comparable GAAP financial measure, for the same periods.

(in thousands of U.S. dollars, except calendar-ship-days)	Liquefied Gas Carriers		Conventional Tankers		Teekay LNG Total	
	2016	2015	2016	2015	2016	2015
Revenues	336,530	305,056	59,914	92,935	396,444	397,991
Voyage expenses	(449)	203	(1,207)	(1,349)	(1,656)	(1,146)
Net revenues	336,081	305,259	58,707	91,586	394,788	396,845
Vessel operating expenses	(66,087)	(63,344)	(22,503)	(30,757)	(88,590)	(94,101)
Depreciation and amortization	(80,084)	(71,323)	(15,458)	(20,930)	(95,542)	(92,253)
General and administrative expenses <sup>(1)</sup>	(15,310)	(19,392)	(3,189)	(5,726)	(18,499)	(25,118)
Write-down and loss on sale of vessels	—	—	(38,976)	—	(38,976)	—
Restructuring charges	—	—	—	(4,001)	—	(4,001)
Income (loss) from vessel operations	174,600	151,200	(21,419)	30,172	153,181	181,372
Equity income	62,307	84,171	—	—	62,307	84,171
Calendar-Ship-Days <sup>(2)</sup>						
Liquefied Gas Carriers	7,440	6,935	—	—	7,440	6,935
Conventional Tankers	—	—	2,439	2,920	2,439	2,920

(1) Includes direct general and administrative expenses and indirect general and administrative expenses allocated to the liquefied gas carriers and conventional tankers based on estimated use of corporate resources.

(2) Calendar-ship-days presented relate to consolidated vessels.

## Teekay LNG – Liquefied Gas Carriers

As at December 31, 2016, Teekay LNG's liquefied gas fleet, including newbuildings, included 50 LNG carriers and 29 LPG/Multigas carriers, in which its interests ranged from 20% to 100%. The number of calendar-ship-days for Teekay LNG's liquefied gas carriers consolidated in its financial results increased to 7,440 days in 2016 from 6,935 days in 2015, as a result of the deliveries to Teekay LNG of the *Creole Spirit* and *Oak Spirit* in February 2016 and July 2016, respectively. During 2016, one of Teekay LNG's consolidated vessels in this segment was off-hire for a scheduled in-water survey, the *Creole Spirit* was off-hire for 32 days for repairs covered under warranty, and the *Creole Spirit* and *Oak Spirit*'s time-charter contracts commenced in February 2016 and August 2016, respectively, compared to one consolidated vessel in this segment being off-hire for 47 days in 2015. As a result, Teekay LNG's utilization decreased to 99.1% for 2016, compared to 99.3% in 2015.

Income from vessel operations increased to \$174.6 million in 2016 compared to \$151.2 million in 2015, primarily as a result of:

- an increase of \$19.9 million as a result of the deliveries of the *Creole Spirit* and *Oak Spirit* and the commencement of their charter contracts;
- an increase of \$4.1 million as a result of lower general and administrative expenses primarily due to reimbursement from the Bahrain Joint Venture in 2016 of Teekay LNG's proportionate costs, including pre-operation, engineering and financing-related expenses, upon the joint venture securing its financing in the fourth quarter of 2016;
- an increase of \$3.8 million due to lower vessel operating expenses due to the charterer, Teekay, not being able to find employment for the *Arctic Spirit* and *Polar Spirit* for a portion of 2016, which permitted Teekay LNG to operate the vessels with a reduced average number of crew on board and reduce the amount of repair and maintenance activities performed; and
- an increase of \$2.2 million due to the *Polar Spirit* being off-hire for 47 days in 2015 for a scheduled dry docking;

partially offset by

- a decrease of \$4.5 million due to a revenue deferral relating to Teekay LNG's six LPG carriers on charter to Skaugen; and
- a decrease of \$2.0 million for Teekay LNG's Spanish LNG carriers primarily due to a performance claim related to the *Hispania Spirit* recorded in the fourth quarter of 2016 and the *Catalunya Spirit* being off-hire for six days in the first quarter of 2016 for a scheduled in-water survey.

Equity income related to Teekay LNG's liquefied gas carriers decreased to \$62.3 million in 2016 compared to \$84.2 million in 2015, as set forth in the table below:

(in thousands of U.S. Dollars)	Year Ended December 31,						
	Angola LNG Carriers	Exmar LNG Carriers	Exmar LPG Carriers	MALT LNG Carriers	RasGas 3 LNG Carriers	Other	Total Equity Income
2016	15,713	9,038	13,674	4,503	19,817	(438)	62,307
2015	16,144	9,332	32,733	4,620	21,527	(185)	84,171
Difference	(431)	(294)	(19,059)	(117)	(1,710)	(253)	(21,864)

Equity income from Teekay LNG's 50% ownership interest in Exmar LPG BVBA decreased by \$19.1 million primarily due to more vessels trading in the spot market in 2016 compared to higher fixed rates earned in 2015; the redelivery of the in-chartered vessel *Odin* back to its owner in November 2015; and the write-down of the *Brugge Venture* recorded in the fourth quarter of 2016, which was sold in January 2017. These decreases were partially offset by the deliveries to the joint venture of four LPG carrier newbuildings between September 2015 and November 2016.

The slight decrease in equity income from Teekay LNG's 52% investment in the MALT LNG carriers was primarily due to the deferral during 2016 (and which will continue through 2017) of a significant portion of the charter payments from YLNG for the *Marib Spirit* and *Arwa Spirit* LNG carriers chartered to support the LNG plant in Yemen, and a lower charter rate on the redeployment of the *Methane Spirit* after its original time-charter contract expired in March 2015. These decreases were partially offset by the settlement payment awarded to Teekay LNG in 2016 for the disputed contract termination relating to the *Magellan Spirit*, and unscheduled off-hire relating to the *Woodside Donaldson* to repair a damaged propulsion motor in January 2015.

The \$1.7 million decrease in equity income from Teekay LNG's 40% investment in the three RasGas 3 LNG carriers was primarily due to the scheduled maturity of the joint venture's interest rate swaps, which resulted in lower unrealized gain on non-designated derivative instruments, which was partially offset by lower combined interest expense and realized loss on non-designated derivative instruments.

### Teekay LNG – Conventional Tankers

As at December 31, 2016, Teekay LNG's conventional tanker fleet included five Suezmax-class double-hulled conventional crude oil tankers and one Handymax product tanker, three of which it owns and two of which it leases under capital leases. All of Teekay LNG's conventional tankers operate under fixed-rate charters. The number of calendar-ship-days for Teekay LNG's conventional tankers decreased to 2,439 days in 2016 from 2,920 days in 2015, primarily as a result of the sales of the *Bermuda Spirit* and *Hamilton Spirit* in April 2016 and May 2016, respectively. During 2016, none of Teekay LNG's vessels in this segment were off-hire for scheduled dockings, compared to two of its vessels in this segment being off-hire for a total of 24 days for scheduled dry-dockings and another vessel being off-hire for 12 days related to a crew work stoppage during 2015.

Income (loss) from vessel operations decreased to a loss of \$21.4 million during 2016 compared to income of \$30.2 million in 2015, primarily as a result of:

- decreases of \$32.5 million due to the sales of the *Bermuda Spirit* and *Hamilton Spirit* in 2016, resulting in a loss on sale of vessels of \$27.4 million and a decrease in operating income;

- a decrease of \$11.5 million relating to the write-down of the *Asian Spirit* in 2016 as this vessel is classified as held for sale at December 31, 2016;
- a decrease of \$4.4 million due to lower revenues earned by the *Teide Spirit* relating to a profit sharing agreement between Teekay LNG and Compania Espanole de Petroleos, S.A. (or *CEPSA*);
- a decrease of \$3.6 million relating to the *European Spirit*, *African Spirit* and *Asian Spirit* upon the charterer exercising its one-year options in September 2015, November 2015 and January 2016, respectively, at lower charter rates than the original charter rates; and
- a decrease of \$2.8 million due to lower revenues earned by the *Toledo Spirit* in 2016 relating to a profit sharing agreement between Teekay LNG and *CEPSA*.

partially offset by

- an increase of \$2.5 million due to lower general and administrative expenses relating primarily to a reduced amount of business development activities in 2016.

## **Teekay Tankers**

### **Recent Developments in Teekay Tankers**

In October 2016, Teekay Tankers agreed to sell two Suezmax tankers, the *Yamuna Spirit* and *Ganges Spirit*. The vessels were written down to their agreed sales prices, and the resulting fourth quarter impairment in 2016 was \$6.2 million. The *Ganges Spirit* was delivered to its buyer in January 2017 and the *Yamuna Spirit* was delivered to its buyer in March 2017.

In September 2016, Teekay Tankers agreed to sell one Medium Range (or *MR*) tanker, the *Hugli Spirit*, and the sale was completed in November 2016. The vessel was written down to its agreed sales price in the third quarter of 2016.

On August 8, 2016, Teekay Tankers completed the sale of one MR tanker, the *Teesta Spirit*, for \$14.0 million. Teekay Tankers recognized a write-down and a loss on sale of the vessel totaling \$6.6 million in 2016.

On July 31, 2015, Teekay Tankers acquired the ship-to-ship transfer business (or *TMS*, previously referred to as *SPT*) from a company jointly owned by Teekay and Skaugen, for an aggregate purchase price of approximately \$47.3 million (including \$1.8 million for working capital). *TMS* provides a full suite of ship-to-ship transfer services in the oil, gas and dry bulk industries. In addition to full service lightering and lightering support, it also provides consultancy, terminal management and project development services. *TMS* owns a fleet of four STS support vessels and has two in-chartered Aframax tankers. In connection with the *TMS* acquisition, in July 2015, Teekay Tankers issued approximately 6.5 million shares of Class B common stock to Teekay, for net proceeds of \$45.5 million. These shares of Class B common stock were priced at \$6.99 per share.



## Operating Results – Teekay Tankers

The following table compares Teekay Tankers' operating results and number of calendar-ship-days for its vessels for 2016 and 2015, and compares its net revenues (which is a non-GAAP financial measure) for 2016 and 2015, to revenues, the most directly comparable GAAP financial measure, for the same periods.

(in thousands of U.S. dollars, except calendar-ship-days)	Year Ended December 31,	
	2016	2015
Revenues	526,896	504,347
Voyage expenses	(55,241)	(19,566)
Net revenues	471,655	484,781
Vessel operating expenses	(182,598)	(130,775)
Time-charter hire expense	(59,647)	(77,799)
Depreciation and amortization	(104,149)	(71,429)
General and administrative expenses	(18,211)	(16,694)
Asset impairments	(20,462)	—
(Loss) gain on sale of vessels	(132)	771
Restructuring charges	—	(4,772)
Income from vessel operations	86,456	184,083
Equity income	13,101	14,411
Calendar-Ship-Days <sup>(1)</sup>		
Conventional Tankers	19,303	16,636

(1) Calendar-ship-days presented relate to owned and in-chartered consolidated vessels.

### Tanker Market

Tanker rates in 2016 softened from the highs seen in 2015, yet remained in line with the 10-year average as a result of ongoing positive demand fundamentals. Global oil demand remained strong in 2016 with growth of 1.5 million barrels per day (*mb/d*), which is 0.4 *mb/d* higher than the 10-year average. Global oil supply was also strong, with record high OPEC production of 32.6 *mb/d*. However, unexpected supply outages in Nigeria put pressure on mid-sized tanker demand in the middle of the year. Oil prices remained in the mid-\$40 per barrel range for most of 2016 before ticking up in December as OPEC firmed plans for production cuts as a means to rebalance oil markets. While ongoing low prices throughout the year provided some support for tonne-mile demand through strategic and commercial stockpiling programs, record high onshore stock levels towards the second half of the year presented some negative pressure for import requirements as refiners struggled to manage bulging stockpiles. Tanker fleet growth also created some downside pressure to rates towards the second half of the year as crude tanker fleet growth reached 6% scrapping dipped to the lowest level since 1995.

Looking ahead, we anticipate 2017 to present some headwinds to the crude tanker freight market. Fleet growth is forecast to be approximately 4.5%, which is slightly lower than 2016 but in-line with the ten-year average. However, the majority of fleet growth in 2017 will come from the mid-sized segments, with mid-size fleet growth expected to be approximately 5%. The outlook for 2018 is more positive given a lack of ordering and the expectation for increased scrapping due to an aging fleet alongside changes to the regulatory landscape.

Global oil demand is forecast to grow by 1.4 *mb/d* in 2017 (average of the International Energy Agency, U.S. Energy Information Administration, and OPEC forecasts), which is similar growth to 2016 and above the ten-year average growth rate of 1.1 *mb/d*. On the supply side, OPEC production cuts of approximately 1.2 *mb/d*, with the majority of cuts (approximately 0.8 *mb/d*) coming from Middle East OPEC producers, will be negative for overall crude volumes available for transport. While OPEC production cuts may continue through the year, non-OPEC production increases of approximately 0.3 *mb/d* are expected as firming oil prices encourage more drilling, particularly in the US. The result could benefit mid-sized segments as they find some support from increased tonne-mile demand as supply in the Atlantic basin continues to grow. In addition, the Brent - Dubai spread has narrowed considerably as a result of OPEC cuts, and many crude buyers are sourcing Brent-benchmarked crudes as they become more economically attractive. These price / supply factors could offset some of the headwinds that face the crude tanker market in 2017 as they have the potential to introduce volatility into regional tanker demand, which is positive for spot tanker rates.

In summary, we anticipate 2017 will present some headwinds to crude tanker rates due to cuts to OPEC production, rising oil prices, and fleet growth. However, we believe this dip in the current market cycle will be relatively short and shallow. We expect that lower fleet growth and a more balanced oil market from 2018 onward will result in a market improvement in that period. In addition, lower fleet growth, strong oil demand growth, particularly in Asia, and a potential increase in long-haul movements from the Atlantic basin to the Pacific basin is expected to provide support towards the next market upturn.

### **Teekay Tankers – Conventional Tankers**

As at December 31, 2016, Teekay Tankers owned 43 double-hulled conventional oil tankers and four ship-to-ship lightering support vessels, time-chartered in six Aframax tankers and one LR2 product tanker from third parties and owned a 50% interest in one VLCC.

The calendar ship days increased in 2016 compared to 2015 primarily due to the full year of operations of the 12 Suezmax tankers, two LR2 product tankers and three Aframax tanker that Teekay Tankers acquired during 2015, partially offset by the net movement of in-charter tankers during 2015 and 2016 and the sale of two MR product tankers in 2015 and 2016.

Income from vessel operations decreased to \$86.5 million in 2016 compared to \$184.1 million in 2015, primarily as a result of:

- a decrease of \$99.8 million due to lower average realized rates earned by our Suezmax, Aframax, LR2 and MR tankers trading in the spot tanker market in 2016 compared to 2015;
- a decrease of \$20.5 million due to write-downs of two MR product tankers and two Suezmax tankers to their respective sales prices in 2016;
- a decrease of \$6.0 million due to increases in amortization of dry-docking costs during 2016 resulting from high dry-docking activity during the second half of 2015; and
- a decrease of \$3.6 million due to in-process revenue contract amortization that was recognized in revenue in late 2015 and fully amortized in the first quarter of 2016;

partially offset by

- an increase of \$15.8 million due to increased revenue days during 2016 due to fewer net off-hire days in 2016 and an additional revenue day as 2016 is a leap year;
- an increase of \$9.6 million due to higher rates earned from out-chartered Aframax tankers during 2016;
- a net increase of \$4.4 million due to results from the ship-to-ship transfer business which Teekay Tankers acquired during the third quarter of 2015; and
- a net increase of \$3.8 million due to lower pool management fees, commissions, off-hire bunker and other expenses in 2016 compared to 2015, due primarily to lower average TCE rates.

Equity income decreased to \$13.1 million in 2016 from \$14.4 million for 2015 primarily due to:

- a decrease of \$3.8 million due to lower equity earnings from TIL resulting from overall lower realized average spot rates earned in 2016 compared to 2015, partially offset by an increase resulting from Teekay Tankers' increased ownership interest in TIL to 11.31% in 2016 as compared to 10.20% in 2015;

partially offset by

- an increase of \$1.3 million due to higher equity earnings from Teekay Tankers' 50% interest in Teekay Tankers Operations Ltd. (or *TTOL*), primarily relating to its share of cancellation fees paid to Anglo-Eastern during the first quarter of 2015 for acquiring its 49% share in Teekay Marine Ltd. and the timing of vessels which transitioned from the Gemini Suezmax pool to the Teekay Suezmax RSA in 2015. This was partially offset by overall lower realized average spot rates earned in 2016 compared to 2015; and
- an increase of \$1.1 million due to higher equity earnings from the High-Q joint venture primarily resulting from profit share recognized in the second quarter of 2016 as VLCC rates averaged above certain thresholds, triggering a profit sharing with the customer.

### **Teekay Parent**

#### **Recent Developments in Teekay Parent**

The *Banff* FPSO has been operating on the Banff field since its delivery nearly 20 years ago under a charter contract with Canadian Natural Resources (or *CNR*) that permitted CNR to terminate the contract at any time with six months' notice. In January 2017, Teekay Parent entered into a contract amendment with CNR to ensure the unit will stay on the current field at least until the third quarter of 2018 and to revise the charter rate structure to include a variable component (through an oil price and oil production tariff) in addition to a fixed charter rate.

In the first half of 2016, the *Hummingbird Spirit* FPSO was operating in the latter part of its charter contract with Centrica Energy (or *Centrica*) whereby Centrica could terminate the contract at any time with 90 days' notice. In June 2016, Teekay Parent entered into a contract amendment with Centrica to extend the firm period to September 2017 (with Centrica's right to terminate the contract no earlier than March 1, 2017) in exchange for a lower fixed charter rate and an oil price tariff. The contract amendment took effect on July 1, 2016. In February 2017, Teekay Parent entered into a new heads of terms with Centrica to extend the contract for an additional three years from October 2017 to September 2020. This contract extension is expected to be completed during the second quarter of 2017.

In the fourth quarter of 2015, Teekay Parent secured a 12-month, charter-out contract for the *Shoshone Spirit* VLCC at \$49,000 per day, which was scheduled to expire in December 2016. In the second quarter of 2016, Teekay Parent entered into an agreement to sell the *Shoshone Spirit* VLCC to a third party and the vessel was written down to its net realizable value as a result of the expected sale. The vessel was subsequently sold and delivered to its new owner in October 2016.

In December 2014, the Board of Directors of Teekay Offshore's general partner approved the acquisition of the *Petrojarl Knarr* FPSO from Teekay Parent, subject to the unit completing certain operational tests and commencing its charter contract at full rate. The *Petrojarl Knarr* FPSO achieved first oil and commenced its charter contract with BG Norge Limited (or *BG*) in March 2015 on a partial charter rate. In June 2015, the *Petrojarl Knarr* FPSO completed its operational testing and commenced its full charter rate and on July 1, 2015, Teekay Parent completed the sale of the *Petrojarl Knarr* FPSO to Teekay Offshore. Teekay Offshore has included the results of the *Petrojarl Knarr* FPSO from March 9, 2015, when it commenced operations.

## Operating Results – Teekay Parent

The following table compares Teekay Parent's operating results and number of calendar-ship-days for its vessels for 2016 and 2015, and compares its net revenues (which is a non-GAAP financial measure) for 2016 and 2015, to revenues, the most directly comparable GAAP financial measure, for the same periods.

(in thousands of U.S. dollars, except calendar-ship-days)	Offshore Production		Conventional Tankers		Other and Corporate G&A		Teekay Parent Total	
	2016	2015	2016	2015	2016	2015	2016	2015
Revenues	231,435	277,842	32,967	65,777	76,111	75,547	340,513	419,166
Voyage expenses	(269)	(36)	(287)	(763)	(2,879)	(808)	(3,435)	(1,607)
Net revenues	231,166	277,806	32,680	65,014	73,232	74,739	337,078	417,559
Vessel operating expenses	(159,084)	(200,338)	(10,468)	(16,051)	(26,576)	(24,294)	(196,128)	(240,683)
Time-charter hire expense	(33,366)	(29,978)	(23,166)	(38,991)	(48,452)	(44,448)	(104,984)	(113,417)
Depreciation and amortization	(70,855)	(69,508)	(1,717)	(2,852)	449	451	(72,123)	(71,909)
General and administrative expenses <sup>(1)</sup>	(14,099)	(17,261)	(809)	(2,136)	(10,707)	1,221	(25,615)	(18,176)
Net loss on sale of vessels and equipment	(110)	(948)	(12,487)	—	—	—	(12,597)	(948)
Restructuring charges	(1,962)	—	—	—	(20,165)	(2,654)	(22,127)	(2,654)
(Loss) income from vessel operations	(48,310)	(40,227)	(15,967)	4,984	(32,219)	5,015	(96,496)	(30,228)
Equity (loss) income	(575)	(12,196)	5,089	16,712	(1,838)	(1,101)	2,676	3,415
Calendar-Ship-Days <sup>(2)</sup>								
FPSO Units	1,098	1,095	—	—	—	—	1,098	1,095
Conventional Tankers	—	—	1,278	2,516	—	—	1,278	2,516
Gas carriers	—	—	—	—	732	730	732	730
FSO Units	366	365	—	—	732	730	1,098	1,095
Shuttle Tankers	732	730	—	—	—	—	732	730
Bunker Barges	—	—	—	—	672	200	672	200

(1) Includes direct general and administrative expenses and indirect general and administrative expenses allocated to offshore production, conventional tankers and other and corporate G&A based on estimated use of corporate resources.

(2) Apart from three FPSO units and one conventional tanker, all remaining calendar-ship-days presented relate to in-chartered days.

## Teekay Parent – Offshore Production

Offshore Production consists primarily of our FPSO units. As at December 31, 2016, we had a direct interest in three 100% owned FPSO units.

The *Hummingbird Spirit* FPSO charter contract includes an incentive compensation component based on the oil price. In addition, the *Petrojarl Foinaven* FPSO unit's charter contract includes incentives based on total oil production for the year, certain operational measures, and the average annual oil price. The decline in the price of oil has negatively impacted our incentive compensation under these contracts and may negatively impact our future revenues if oil prices remain at or fall below current levels.

The number of Teekay Parent's FPSO calendar-ship days for the year ended December 31, 2016 were consistent compared to the same period last year.

Loss from vessel operations increased to \$48.3 million during 2016 compared to \$40.2 million in 2015, primarily as a result of:

- an increase in loss of \$13.7 million related to the *Petrojarl Banff* FPSO unit as a result of off-hire in the first quarter of 2016 and higher repairs and maintenance costs due to the temporary loss of two mooring lines in the first quarter of 2016;
- an increase in loss of \$5.5 million related to the *Hummingbird* FPSO primarily due to the contract amendment described above that took effect on July 1, 2016, partially offset by lower operating expenses in 2016; and
- an increase in loss of \$2.0 million due to restructuring charges primarily relating to the reorganization of the Company's FPSO business in 2016;

partially offset by

- a decrease in loss of \$9.1 million primarily due to legal costs incurred in 2015 relating to repairs and upgrades to the *Petrojarl Banff* FPSO after the storm event in December 2011, and cost-saving initiatives in 2016; and
- a decrease in loss of \$4.8 million primarily related to the *Petrojarl Foinaven* FPSO, primarily due to the shutdown of the unit in 2015 for maintenance and lower operating costs in 2016.

### **Teekay Parent – Conventional Tankers**

As at December 31, 2016, Teekay Parent chartered-in two conventional tankers from third parties. The average fleet size (including in-chartered vessels), as measured by calendar-ship-days, decreased in 2016 compared with 2015 due to the sale of one VLCC, redeliveries of three Aframax in-chartered vessels to Teekay Offshore and one Aframax in-chartered vessels to Teekay Tankers. The collective impact from the noted fleet changes are referred to below as the *Net Fleet Reductions*.

Loss from vessel operations for Teekay Parent's Conventional Tankers was \$16.0 million in 2016 compared to income from vessel operations of \$5.0 million in 2015, primarily as a result of:

- a decrease in income of \$12.5 million due to the write-down in 2016 of one VLCC to its agreed sales price;
- a decrease in income of \$5.8 million due to lower average realized TCE rates in 2016 compared to 2015;
- a net decrease in income of \$5.7 million due to cancellation fees paid by Teekay Parent to Teekay Offshore in 2016 and 2015 related to the termination of the time-charter contracts of two Aframax tankers, partially offset by cancellations paid to Teekay Parent from Teekay Offshore and Teekay Tankers in 2015 related to the termination of bareboat contracts of two Aframax tankers; and
- a decrease in income of \$2.6 million due to a higher time-charter hire rate for an Aframax in-charter in the first quarter of 2016;

partially offset by

- a net increase in income of \$4.0 million due to lower vessel operating expenses from the termination of bareboat contracts of two Aframax tankers that Teekay Parent in-chartered from Teekay Offshore and the sale of the VLCC and lower time-charter hire expense from the redeliveries of three in-chartered conventional tankers to Teekay Offshore and Teekay Tankers, partially offset by the loss of revenue due to the redeliveries and sale of those tankers; and
- an increase in income of \$2.0 million due to a distribution received from the Gemini Pool in 2016.

### **Teekay Parent – Other and Corporate G&A**

As at December 31, 2016, Teekay Parent had two chartered-in LNG carriers owned by Teekay LNG, two chartered-in FSO units owned by Teekay Offshore and one chartered-in bunker barge.

Loss from vessel operations was \$32.2 million for the year ended December 31, 2016 compared to income from vessel operations \$5.0 million for the year ended December 31, 2015, primarily as a result of:

- an increase in loss of \$32.8 million primarily due to lower revenues earned as a result of the terminations of time charters and the lay-up of the *Arctic Spirit* and *Polar Spirit* LNG carriers in 2016;
- an increase in loss of \$13.9 million due to business development fees received from Teekay Offshore in 2015 in respect of the *Petrojarl Knarr* FPSO unit, the *Arendal Spirit* UMS and the six on-the-water, long distance towing and offshore installation vessels;
- an increase in loss of \$2.7 million primarily due to office closure costs and seafarers' severance amounts relating to tug businesses in Western Australia in 2016; and
- an increase in loss of \$1.6 million due to fees received from TIL in 2015 for our arrangement of the acquisition of certain of its vessels, partially offset by fees received relating to the sale of two vessels in 2016;

partially offset by

- a decrease in loss of \$5.4 million primarily due to lower restructuring charges relating to the reorganization of our marine operations and corporate services in 2015, and lower general and administrative expenses as a result of cost saving initiatives in 2016; and

- a decrease in loss of \$9.4 million primarily due to earnings generated on technical, crew and commercial management services provided for an increased fleet size in 2016.

Equity income was \$2.7 million in 2016 compared to equity income of \$3.4 million in 2015, primarily due to lower equity earnings from Petrotrans Holdings as a result of the gain on the sale of TMS from the joint venture to Teekay Tankers in 2015, and lower equity earnings from TIL resulting from lower realized average spot rates in 2016, partially offset by higher equity earnings due to a deferred tax asset write-down and unrealized foreign exchange losses relating to Teekay Parent's 43% investment in Sevan in 2015.

### Other Consolidated Operating Results

The following table compares our other consolidated operating results for 2016 and 2015:

(in thousands of U.S. dollars, except percentages)	Year Ended December 31,		% Change
	2016	2015	
Interest expense	(282,966)	(242,469)	16.7
Interest income	4,821	5,988	(19.5)
Realized and unrealized loss on non-designated derivative instruments	(35,091)	(102,200)	(65.7)
Foreign exchange loss	(6,548)	(2,195)	198.3
Other (loss) income	(39,013)	1,566	(2,591.3)
Income tax (expense) recovery	(24,468)	16,767	(245.9)

Interest expense. Interest expense increased to \$283.0 million in 2016, compared to \$242.5 million in 2015, primarily due to:

- an increase of \$12.4 million due to additional interest incurred by Teekay Tankers to finance the acquisition of the 12 modern Suezmax tankers which were acquired in the third quarter of 2015;
- an increase of \$12.1 million relating to interest incurred on the capital lease obligations for the *Creole Spirit* and *Oak Spirit* commencing upon their deliveries in February 2016 and July 2016, respectively;
- an increase of \$10.8 million primarily due to the additional issuance of \$200 million of Teekay Parent's 8.5% senior unsecured notes in November 2015, partially offset by reductions in Teekay Parent's equity margin revolving credit facility and loan facility secured by three FPSO units, and the maturity of Teekay Parent's Norwegian Kroner (or NOK) bonds in October 2015;
- an increase of \$9.2 million due to the interest expense associated with the *Petrojarl Knarr* FPSO unit commencing operations in March 2015;
- an increase of \$3.4 million due to interest expense relating to Teekay Offshore's second UMS newbuilding up until its construction contract cancellation in late-June 2016; and
- an increase of \$2.1 million due to an increase in LIBOR on floating-rate debt, net of debt repayments during 2016 and 2015;

partially offset by

- a decrease of \$5.2 million due to an increase in capitalized interest on Teekay Offshore's newbuildings, conversion and upgrade projects; and
- a decrease of \$3.0 million due to the maturity of Teekay Offshore's NOK 500 million senior unsecured bond in January 2016.

*Realized and unrealized (losses) gains on non-designated derivative instruments.* Realized and unrealized (losses) gains related to derivative instruments that are not designated as hedges for accounting purposes are included as a separate line item in the consolidated statements of income. Net realized and unrealized losses on non-designated derivatives were \$35.1 million for 2016, compared to \$102.2 million for 2015, as detailed in the table below:

	Year Ended December 31, 2016 \$	Year Ended December 31, 2015 \$
<b>Realized (losses) gains relating to:</b>		
Interest rate swap agreements	(87,320)	(108,036)
Interest rate swap agreement terminations	(8,140)	(10,876)
Foreign currency forward contracts	(11,186)	(21,607)
Time charter swap agreement	2,154	—
	<u>(104,492)</u>	<u>(140,519)</u>
<b>Unrealized gains (losses) relating to:</b>		
Interest rate swap agreements	62,446	37,723
Foreign currency forward contracts	15,833	(418)
Stock purchase warrants	(9,753)	1,014
Time charter swap agreement	875	—
	<u>69,401</u>	<u>38,319</u>
<b>Total realized and unrealized (losses) gains on derivative instruments</b>	<u><u>(35,091)</u></u>	<u><u>(102,200)</u></u>

The realized losses relate to amounts we actually realized for settlements related to these derivative instruments in normal course, and amounts paid to terminate interest rate swap agreement terminations. The unrealized (losses) gains on interest rate swaps for 2016 and 2015 were primarily due to changes in the forward interest rates.

During 2016 and 2015, we had interest rate swap agreements with aggregate average net outstanding notional amounts of approximately \$3.3 billion and \$3.5 billion, respectively, with average fixed rates of approximately 3.4%. Short-term variable benchmark interest rates during these periods were generally less than 2.0% and, as such, we incurred realized losses of \$87.3 million and \$108.0 million during 2016 and 2015, respectively, under the interest rate swap agreements. We also incurred realized losses of \$8.1 million during 2016, compared to losses of \$10.9 million during 2015, from the termination of interest rate swaps.

We recognized realized losses of \$11.2 million in 2016, compared to \$21.6 million in 2015 under the foreign currency forward contracts.

Effective June 1, 2016, Teekay Tankers entered into a time-charter swap for 55% of two Aframax equivalent vessels. Under such agreement, Teekay Tankers will receive \$27,776 per day, less a 1.25% brokerage commission, and pay 55% of the net revenue distribution of two Aframax equivalent vessels employed in its Aframax revenue sharing pooling arrangement, less \$500 per day, for a period of 11 months plus an additional two months at the counterparty's option. As at December 31, 2016, the time-charter swap had a fair value of \$0.9 million which resulted in an unrealized gain of \$0.9 million. Teekay Tankers also recognized realized gains of \$2.2 million on the time-charter swap in the year ended December 31, 2016.

Primarily as a result of significant changes in long-term benchmark interest rates during 2016 and 2015, we recognized unrealized gains of \$62.4 million for 2016 compared to \$37.7 million for 2015 under the interest rate swap agreements. We recognized unrealized gains of \$15.8 million for 2016 compared to unrealized losses of \$0.4 million for 2015 under the foreign currency forward contracts.

In 2014, we and Teekay Tankers formed TIL. We and Teekay Tankers invested a total of \$50.0 million for an aggregate of 5.0 million shares of TIL's common stock, representing an initial aggregate 20% interest in TIL, as part of a \$250.0 million private placement by TIL. In addition, we and Teekay Tankers received stock purchase warrants entitling us and Teekay Tankers to purchase up to 1.5 million shares of common stock of TIL at a fixed price of \$10 per share. Alternatively, if the shares of TIL's common stock trade on a national securities exchange or over-the-counter market denominated in NOK, we and Teekay Tankers may also exercise the stock purchase warrants at 61.67 NOK per share using a cashless exercise procedure. During 2016, due mainly to a decrease in TIL's share price, we recognized a \$9.8 million unrealized loss on the stock purchase warrants compared to an unrealized gain of \$1.0 million for 2015, which are included in our total unrealized derivative (losses) gains. Please read "Item 18. Financial Statements: Note 14—Derivative Instruments and Hedging Activities."

Foreign Exchange Loss. Foreign currency exchange losses were \$6.5 million in 2016 compared to \$2.2 million in 2015. Our foreign currency exchange losses, substantially all of which are unrealized, were due primarily to the relevant period-end revaluation of our NOK-denominated debt and our Euro-denominated term loans, capital leases and restricted cash for financial reporting purposes and the realized and unrealized gains (losses) on our cross currency swaps. Gains on NOK-denominated and Euro-denominated monetary liabilities reflect a stronger U.S. Dollar against the NOK and Euro on the date of revaluation or settlement compared to the rate in effect at the beginning of the period. Losses on NOK-denominated and Euro-denominated monetary liabilities reflect a weaker U.S. Dollar against the NOK and Euro on the date of revaluation or settlement compared to the rate in effect at the beginning of the period. For 2016, foreign currency exchange loss includes realized losses of \$38.6 million (2015—\$19.0 million) and unrealized gains of \$75.0 million (2015 — losses of \$89.2 million) on our cross currency swaps, and unrealized losses of \$6.8 million (2015—\$123.2 million) on the revaluation of our NOK-denominated debt.

Other (Loss) Income. Other (loss) income was a loss of \$(39.0) million in 2016 compared to income of \$1.6 million in 2015. This decrease in results was primarily due to contingent liabilities accrued related to Teekay Offshore's cancellation of the UMS construction contracts for its two remaining UMS newbuildings in 2016 (\$25.2 million), as well as a write-down of a cost-accounted investment of \$19.0 million in 2016.

Income Tax Recovery (Expense). Income tax (expense) recovery was an expense of \$24.5 million in 2016 compared to a recovery of \$16.8 million in 2015.

The income tax expense for 2016 was mainly due to an increase in Teekay Offshore's deferred tax valuation allowance and deferred tax expense due to a decrease in the expected utilization of Norwegian tax losses against anticipated earnings, an income tax accrual for the *Voyageur Spirit* FPSO unit during 2016 due to expected taxable income and the utilization of prior year losses carried forward and an estimated tax liability relating to our Singapore and towage entities, as well as freight taxes in Teekay Tankers and Teekay Parent.

The income tax recovery for 2015 was primarily due to the acquisition of the *Petrojarl Knarr* FPSO unit by Teekay Offshore and the commencement of the East Coast of Canada contract during 2015, and the expected commencement of the *Gina Krog* FSO unit contract in early-2017. Teekay Offshore expected to utilize more of its Norwegian tax losses from the earnings anticipated from their contracts, as well as an expected increase in earnings from its existing fleet, which resulted in a decrease in Teekay Offshore's deferred tax asset valuation allowance.

## Year Ended December 31, 2015 versus Year Ended December 31, 2014

### Teekay Offshore

#### Operating Results – Teekay Offshore

The following table compares Teekay Offshore's operating results and number of calendar-ship-days for its vessels for 2015 and 2014, and compares its net revenues (which is a non-GAAP financial measure) for 2015 and 2014, to revenues, the most directly comparable GAAP financial measure, for the same periods.

(in thousands of U.S. dollars, except calendar-ship-days)	Offshore Logistics		Offshore Production		Conventional Tankers		Teekay Offshore Total	
	2015	2014	2015	2014	2015	2014	2015	2014
Revenues	667,629	631,455	531,554	354,518	30,230	33,566	1,229,413	950,977
Voyage expenses	(95,680)	(107,167)	—	—	(2,326)	(5,373)	(98,006)	(104,325)
Net revenues	571,949	524,288	531,554	354,518	27,904	28,193	1,131,407	846,652
Vessel operating expenses	(182,346)	(188,087)	(189,900)	(158,216)	(6,234)	(5,906)	(378,480)	(347,979)
Time-charter hire expense	(51,750)	(31,090)	—	—	—	—	(51,750)	(56,682)
Depreciation and amortization	(130,102)	(118,968)	(137,914)	(72,905)	(6,583)	(6,680)	(274,599)	(200,242)
General and administrative expenses <sup>(1)</sup>	(32,963)	(37,974)	(38,588)	(27,406)	(1,062)	(2,136)	(72,613)	(45,250)
Asset impairments and gain on sale of vessels	(66,101)	(1,638)	—	—	(3,897)	—	(69,998)	(94,946)
Restructuring (charges) recovery	(568)	225	—	—	—	—	(568)	(2,361)
Income from vessel operations	108,119	146,756	165,152	95,991	10,128	13,471	283,399	99,192
Equity income	—	—	7,672	10,341	—	—	7,672	6,731
Calendar-Ship-Days <sup>(2)</sup>								
Shuttle Tankers	12,319	12,672	—	—	—	—	12,319	12,672
FSO Units	2,395	2,190	—	—	—	—	2,395	2,190
FPSO Units	—	—	2,122	1,476	—	—	2,122	1,476
Conventional Tankers	—	—	—	—	1,432	1,460	1,432	1,460
UMS	318	—	—	—	—	—	318	—
Towage	1,606	—	—	—	—	—	1,606	—

(1) Includes direct general and administrative expenses and indirect general and administrative expenses allocated to offshore logistics, offshore production and conventional tankers based on estimated use of corporate resources.

(2) Calendar-ship-days presented relate to owned and in-chartered consolidated vessels.

#### Teekay Offshore – Offshore Logistics

Offshore Logistics consists of Teekay Offshore's shuttle tankers, FSO units, its *HiLoad DP* unit, towage vessels and one UMS. As at December 31, 2015, the shuttle tanker fleet consisted of 31 vessels that operate under fixed-rate contracts of affreightment, time charters and bareboat charters, three shuttle tanker newbuildings, and one shuttle tanker and one *HiLoad DP* unit in lay-up. Of these 36 shuttle tankers, six were owned through 50% owned subsidiaries, one through a 67%-owned subsidiary and three were chartered-in. The remaining vessels are owned 100% by Teekay Offshore. In January 2016, Teekay Offshore sold a 1992-built shuttle tanker, the *Navion Torinita*, which was in lay-up and classified as held for sale on our consolidated balance sheet as of December 31, 2015. All of Teekay Offshore's operating shuttle tankers, with the exception of the *HiLoad DP* unit, provide transportation services to energy companies, primarily in the North Sea, Brazil and the East Coast of Canada. These shuttle tankers occasionally service the conventional spot tanker market. Teekay Offshore sold the *Navion Norvegia* to its 50/50 joint venture with OOG in the fourth quarter of 2014 and the vessel is currently undergoing conversion into an FPSO unit for operation in the Libra oil field in Brazil. During the first quarter of 2015, Teekay Offshore sold the *Navion Svenita*. The strengthening or weakening of the U.S. Dollar relative to the Norwegian Kroner, Euro and Brazilian Real may result in significant decreases or increases, respectively, in our vessel operating expenses.



As of December 31, 2015, Teekay Offshore's FSO fleet consisted of six units that operate under fixed-rate time charters or fixed-rate bareboat charters in which Teekay Offshore's ownership interest ranged from 89% to 100%, and one shuttle tanker, the *Randgrid*, currently undergoing conversion into an FSO unit, in which Teekay Offshore's ownership interest increased from 67% to 100% during the third quarter of 2015. Teekay Offshore commenced the FSO conversion of the *Randgrid* shuttle tanker during the second quarter of 2015. FSO units provide an on-site storage solution to oil field installations that have no oil storage facilities or that require supplemental storage. Teekay Offshore's revenues and vessel operating expenses for the FSO segment are affected by fluctuations in currency exchange rates, as a significant component of revenues are earned and vessel operating expenses are incurred in Norwegian Kroner and Australian Dollars for certain vessels. The strengthening or weakening of the U.S. Dollar relative to the Norwegian Kroner or Australian Dollar may result in significant decreases or increases, respectively, in our revenues and vessel operating expenses.

As at December 31, 2015, Teekay Offshore's towage vessel fleet consisted of six long-distance towing and offshore installation vessels and four ultra-long distance towing and offshore installation vessel newbuildings, which were scheduled to deliver during 2016. Teekay Offshore owns a 100% interest in each of the vessels in its towage fleet. Long-distance towing and offshore installation vessels are used for the towage, station-keeping, installation and decommissioning of large floating objects such as exploration, production and storage units, including FPSO units, FLNG units and floating drill rigs.

As at December 31, 2015, Teekay Offshore's UMS fleet consisted of one operational unit, the *Arendal Spirit*, and two newbuildings. During the second quarter of 2015, Teekay Offshore exercised its options to defer the delivery of the second UMS newbuilding by up to one year, and the delivery and all related construction work of the third UMS by 120 days. In June 2016 Teekay Offshore canceled the UMS construction contracts for its two UMS newbuildings. Teekay Offshore owned a 100% interest in all three units. The UMS fleet is used primarily for offshore accommodation, storage and support for maintenance and modification projects on existing offshore installations, or during the installation and decommissioning of large floating exploration, production and storage units, including FPSO units, FLNG units and floating drill rigs. Teekay Offshore's UMS fleet is available for world-wide operations, excluding operations within the Norwegian Continental Shelf, and includes DP3 keeping systems that are capable of operating in deep water and harsh weather.

The average size of Teekay Offshore's owned shuttle tanker fleet decreased in 2015 compared to 2014, primarily due to the sales of the *Navion Norvegia* and the *Navion Svenita* in October 2014 and March 2015, respectively, and the commencement of the FSO conversion of the *Randgrid* in June 2015, partially offset by the delivery of the *HiLoad DP* unit in April 2014.

The average size of Teekay Offshore's chartered-in shuttle tanker fleet increased in 2015 compared to 2014 primarily due to the in-chartering of three shuttle tankers, the *Karen Knutsen*, the *Heather Knutsen*, and the *Mattea* for the East Coast of Canada contract, which commenced in June 2015, partially offset by redeliveries to their owners of the *Grena Knutsen* in June 2015 and the *Karen Knutsen* in January 2014, decreased spot in-chartering of shuttle tankers, and the replacement of the *Mattea* by one of Teekay Offshore's owned shuttle tankers in September 2015.

The average number of Teekay Offshore's FSO units increased in 2015 compared to 2014, due to the commencement of the FSO conversion of the *Randgrid* on June 9, 2015. No earnings were expected from the *Randgrid* until its conversion is completed in mid-2017, when the unit is scheduled to commence operations under a three-year time-charter contract with Statoil ASA (or *Statoil*), which includes 12 additional one-year extension options.

The *Arendal Spirit* UMS delivered to Teekay Offshore in February, 2015 and began its three-year charter contract in June, 2015.

The average number of Teekay Offshore's towing and offshore installation vessels increased in 2015 compared to 2014, due to the delivery of six towing and offshore installation vessels during 2015.

Income from vessel operations for Teekay Offshore's Offshore Logistics business decreased to \$108.1 million in 2015 compared to \$146.8 million in 2014, primarily as a result of:

- a decrease of \$61.9 million due to vessel write-downs of \$66.7 million on seven 1990s-built shuttle tankers, whose carrying values were written down to their estimated fair values using appraised values for the year ended December 31, 2015. During the first quarter of 2015, two of the vessels were written down as a result of the expected sale of a vessel and a change in the operating plan of a vessel. In the fourth quarter of 2015, five shuttle tankers, which have an average age of 17.5 years, were written down as a result of changes in Teekay Offshore's expectations regarding their future opportunities, primarily due to their advanced age. While we expect four of the five vessels that were written down due to their advanced age to continue to actively trade as shuttle tankers over the near-term and the fifth vessel to actively trade in the conventional tanker market, Teekay Offshore anticipates the vessels will have fewer opportunities for alternative usage and encounter increased age discrimination over time. The decrease due to vessel write-downs was partially offset by a vessel write-down of \$4.8 million in 2014 on the carrying value of one of Teekay Offshore's 1990s-built shuttle tanker which was written down to its estimated fair value using an appraised value, as a result of the vessel charter contract expiring in early-2015 and the expected sale of the vessel;
- a decrease of \$31.3 million relating to the expiration of a long-term contract at the *Heidrun* field serviced by Teekay Offshore's contracts of affreightment fleet;
- a decrease of \$18.4 million due to the redeliveries of two vessels to Teekay Offshore in February 2014 and April 2015 as they completed their time-charter-out agreements;
- a decrease of \$6.9 million due to the sale of a 1997-built shuttle tanker, the *Navion Svenita* in March 2015, partially offset by the gain on the sale of the vessel to a third party; and

- a decrease of \$3.0 million due to an increase in depreciation expense resulting from the dry docking of eight shuttle tankers from mid-2014 to late-2015;

partially offset by

- an increase of \$14.3 million from lower vessel operating expense in Teekay Offshore's shuttle fleet due to the strengthening of the U.S. Dollar against the Norwegian Kroner, Euro and Brazilian Real;
- an increase of \$8.7 million from lower vessel operating expenses and depreciation expense, due to the commencement of an FSO conversion of the *Randgrid* in June 2015;
- an increase of \$8.6 million due to lower time-charter hire expense due to the redelivery by Teekay Offshore to its owners of the in-chartered *Karen Knutsen* in January 2014 and the *Grena Knutsen* in June 2015, decreased spot in-chartering of shuttle tankers, lower time-charter hire rates on the *Aberdeen* and an increase in off-hire during the third quarter of 2015, partially offset by the dry docking and off-hire of the *Sallie Knutsen* during the first and second quarters of 2014, and the dry docking of the *Aberdeen* during the second quarter of 2014;
- an increase of \$8.0 million in revenues from Teekay Offshore's contract of affreightment fleet due to higher average rates, an increase in rates as provided in certain contracts in Teekay Offshore's time-chartered-out fleet, and an increase in revenues from the commencement of new contracts in mid-2015;
- an increase of \$6.5 million due to an increase in revenues from the commencement of the East Coast of Canada contract which commenced in June 2015, partially offset by additional in-chartering costs;
- an increase of \$6.2 million due to the commencement of the charter contract of the *Arendal Spirit* UMS in June 2015 partially offset by write-downs relating to the expiration during 2015 of two options to purchase two additional units;
- an increase of \$4.4 million due to the delivery of six towing and offshore installation vessels during 2015;
- an increase of \$3.9 million primarily due to the dry docking of the *Dampier Spirit* during the second quarter of 2014 and the *Navion Saga* during the third quarter of 2014, partially offset by lower crew costs in 2014 due to a pension adjustment recorded in the first quarter of 2014 and increased depreciation of dry-dock and upgrade costs;
- an increase of \$3.7 million due to higher average rates earned during 2015 when trading excess shuttle tanker capacity in the conventional tanker spot market, offset by fewer conventional spot days;
- an increase of \$2.9 million due to fewer repair off-hire days in Teekay Offshore's time-chartered-out fleet for 2015 compared to 2014;
- an increase of \$2.2 million relating to the *HiLoad DP* unit mainly due to mobilization expenses in 2014 partially offset by the commencement of depreciation expense of the *HiLoad DP* unit from January 2015;
- an increase of \$2.1 million due to the commencement of operations of the *Suksan Salamander* FSO in the third quarter of 2014;
- an increase of \$2.1 million from lower depreciation expense due to the *Navion Europa* being fully amortized during the second quarter of 2015; and
- an increase of \$2.1 million due to a decrease in repairs and maintenance expenses for 2015 compared to 2014 and a decrease in crew costs for 2015 compared to 2014 due to a change in crew composition, partially offset by an increase in crew training expenses for 2015 compared to 2014.

### **Teekay Offshore – Offshore Production**

Offshore Production consists of Teekay Offshore's FPSO units. As of December 31, 2015, Teekay Offshore's FPSO fleet consisted of the *Petrojarl Varg*, the *Cidade de Rio das Ostras* (or *Rio das Ostras*), the *Piranema Spirit*, the *Voyageur Spirit*, the *Petrojarl I*, and the *Petrojarl Knarr* FPSO units, all of which Teekay Offshore owns 100%, and the *Itajai* FPSO unit and the *Libra* FPSO unit, of which Teekay Offshore owns 50%. In October 2014, Teekay Offshore sold a 1995-built shuttle tanker, the *Navion Norvegia*, to a 50/50 joint venture with OOG and the vessel is undergoing conversion into an FPSO unit for the *Libra* field located in the Santos Basin offshore Brazil and is scheduled to commence operations in mid-2017. Teekay Offshore acquired the *Petrojarl I* FPSO unit from us in December 2014. The unit is currently undergoing upgrades at the Damen Shipyard Group's DSR Schiedam Shipyard in the Netherlands. Teekay Offshore acquired the *Petrojarl Knarr* FPSO unit from us in July 2015. The strengthening or weakening of the U.S. Dollar relative to the Norwegian Kroner, Brazilian Real, and British Pound may result in significant decreases or increases, respectively, in Teekay Offshore's revenues and vessel operating expenses.

Teekay Offshore uses the FPSO units to provide production, processing and storage services to oil companies operating offshore oil field installations. These services are typically provided under long-term, fixed-rate FPSO contracts, some of which also include certain incentive compensation or penalties based on the level of oil production and other operational measures. Historically, the utilization of FPSO units and other vessels in the North Sea, where the *Voyageur Spirit* and *Petrojarl Knarr* operate, is higher in the winter months, as favorable weather conditions in the summer months provide opportunities for repairs and maintenance to vessels and the offshore oil platforms, which generally reduces oil production.

The average number of Teekay Offshore's FPSO units increased in 2015 compared to 2014, due to the acquisitions of the *Petrojarl Knarr* on July 1, 2015 and the *Petrojarl I* on December 15, 2014.

Income from vessel operations for Teekay Offshore's Offshore Production business increased to \$165.2 million in 2015 compared to \$96.0 million in 2014, primarily as a result of:

- an increase of \$67.0 million, excluding general and administrative expenses, due to the acquisition of the *Petrojarl Knarr* FPSO unit;
- an increase of \$17.2 million, excluding general and administrative expenses, for the *Voyageur Spirit* FPSO unit during 2015, primarily due to the charterer's final acceptance of the charter contract in February 2014, a production bonus earned in 2015, a production penalty in 2014 and external consulting fees incurred during the first quarter of 2014 to achieve final acceptance for the unit;
- an increase of \$3.7 million, excluding general and administrative expenses, for the *Rio das Ostras* FPSO unit, primarily due to a decrease in operating expenses for the unit due to the strengthening of the U.S. Dollar against the Brazilian Real and Norwegian Kroner and lower repairs and maintenance expenses;
- an increase of \$2.2 million due to lower ship management costs in 2015 related to operating the FPSO units; and
- an increase of \$2.1 million, excluding general and administrative expenses, due to an increase in crew hours reimbursed by the charterer of the *Petrojarl Varg* for 2015, and due to the timing of costs related to repair and maintenance, partially offset by decreases in incentive-related compensation during 2015;

partially offset by

- a decrease of \$11.2 million due to increases in general and administrative expenses primarily related to the acquisition of the *Petrojarl Knarr*, partially offset by additional focus required for obtaining final charter contract acceptance for the *Voyageur Spirit* in the first quarter of 2014;
- a decrease of \$6.4 million, excluding general and administrative expenses, relating to the *Piranema Spirit* FPSO unit mainly due to unscheduled off-hire for repairs during the third and fourth quarter of 2015 and higher repairs and maintenance costs, partially offset by a reversal of an agency fee accrual during 2015 which Teekay Offshore no longer considers payable and the commencement of operations of a produced water treatment plan on the *Piranema Spirit* in the second quarter of 2014; and
- a decrease of \$6.2 million from increased depreciation expense for the *Petrojarl I* FPSO unit, which Teekay Offshore acquired from us in December 2014.

Equity income decreased to \$7.7 million for 2015 compared to \$10.3 million for 2014 primarily due to an increase in unrealized losses on derivative instruments relating to Teekay Offshore's investment in the *Libra* FPSO unit, partially offset by a decrease in unrealized losses on derivative instruments relating to an investment in the *Itajai* FPSO unit and a decrease in vessel operating expenses in the *Itajai* FPSO joint venture mainly due to the strengthening of the U.S. Dollar against the Brazilian Real compared to last year, and a credit received during 2015 relating to unused maintenance days in the *Itajai* FPSO joint venture.

### **Teekay Offshore – Conventional Tankers**

As at December 31, 2015, Teekay Offshore owned 100% interests in two Aframax conventional crude oil tankers, the *Kilimanjaro Spirit*, which operated under a fixed-rate time charter with Teekay Parent, and the *Fuji Spirit*, which operated in the spot conventional tanker market. Both of these vessels were classified as held for sale as at December 31, 2015. As part of the sales of *Fuji Spirit* and *Kilimanjaro Spirit* in March 2016, Teekay Offshore is in-chartering these vessels for three years each, both with an additional one-year extension option. One vessel is fixed on a two-year time-charter-out contract and the other vessel is trading in the spot conventional tanker market.

In December 2015, Teekay Offshore terminated the time-charter contract of the *Fuji Spirit* with a subsidiary of Teekay Parent and received an early termination fee of \$4.7 million from Teekay Parent.

In December 2015, Teekay Offshore terminated the long-term bareboat contracts for the *SPT Explorer* and the *Navigator Spirit* conventional tankers with Teekay Parent and paid early termination fees of \$6.5 million to Teekay Parent. Immediately following the contract terminations, Teekay Offshore sold its 100% interest in SPT Explorer L.L.C. and Navigator Spirit L.L.C., which own the *SPT Explorer* and the *Navigator Spirit* conventional tankers, respectively, to Teekay Tankers.

Income from vessel operations decreased to \$10.1 million in 2015 compared to \$13.5 million in 2014, primarily as a result of the write-downs of the *Kilimanjaro Spirit* and *Fuji Spirit* to their estimated fair values using appraised values, the net termination fees paid to Teekay Parent in relation to the early terminations of the bareboat and time-charter contracts and the sales of the *SPT Explorer* and *Navigator Spirit*, partially offset by a higher amount of reimbursed bunkers in 2015 compared to 2014 and the dry docking of the *Kilimanjaro Spirit* during the third quarter of 2014.

## Teekay LNG

### Operating Results – Teekay LNG

The following table compares Teekay LNG's operating results and number of calendar-ship-days for its vessels for 2015 and 2014, and compares its net revenues (which is a non-GAAP financial measure) for 2015 and 2014, to revenues, the most directly comparable GAAP financial measure, for the same periods.

(in thousands of U.S. dollars, except calendar-ship-days)	Liquefied Gas Carriers		Conventional Tankers		Teekay LNG Total	
	2015	2014	2015	2014	2015	2014
Revenues	305,056	307,426	92,935	95,502	397,991	402,928
Voyage expenses	203	(1,768)	(1,349)	(1,553)	(1,146)	(3,321)
Net revenues	305,259	305,658	91,586	93,949	396,845	399,607
Vessel operating expenses	(63,344)	(59,087)	(30,757)	(36,721)	(94,101)	(95,808)
Depreciation and amortization	(71,323)	(71,711)	(20,930)	(22,416)	(92,253)	(94,127)
General and administrative expenses <sup>(1)</sup>	(19,392)	(17,992)	(5,726)	(5,868)	(25,118)	(23,860)
Restructuring recovery (charges)	—	—	(4,001)	(1,989)	(4,001)	(1,989)
Income from vessel operations	151,200	156,868	30,172	26,955	181,372	183,823
Equity income	84,171	115,478	—	—	84,171	115,478
Calendar-Ship-Days <sup>(2)</sup>						
Liquefied Gas Carriers	6,935	6,619	—	—	6,935	6,619
Conventional Tankers	—	—	2,920	3,202	2,920	3,202

(1) Includes direct general and administrative expenses and indirect general and administrative expenses allocated to the liquefied gas carriers and conventional tankers based on estimated use of corporate resources.

(2) Calendar-ship-days presented relate to consolidated vessels.

### Teekay LNG – Liquefied Gas Carriers

As at December 31, 2015, Teekay LNG's liquefied gas fleet, including newbuildings, included 50 LNG carriers and 29 LPG/Multigas carriers, in which its interests ranged from 20% to 100%. The number of calendar-ship-days for Teekay LNG's liquefied gas carriers consolidated in its financial results increased to 6,935 days in 2015 from 6,619 days in 2014, as a result of the acquisition and delivery of the *Norgas Napa* on November 13, 2014. During 2015, the *Polar Spirit* was off hire for 47 days for a scheduled dry docking, compared to the *Galicia Spirit*, *Madrid Spirit* and *Polar Spirit* being off hire for 28, 24 and 6 days, respectively, for scheduled dry dockings and an in-water survey in 2014.

Income from vessel operations decreased to \$151.2 million in 2015 compared to \$156.9 million in 2014, primarily as a result of:

- a decrease of \$9.3 million due to the effect on Teekay LNG's Euro-denominated revenues from the depreciation of the Euro against the U.S. Dollar compared to 2014, partially offset by lower crew wages due to favorable foreign exchange impacts during 2015 on crew wages denominated in foreign currencies relating to certain of its LNG carriers;
- a decrease of \$1.6 million from an increase in ship management fees for Teekay LNG carriers compared to 2014; and
- a decrease of \$1.4 million from higher general and administrative expenses primarily due to a greater amount of business development, commercial activities, and legal and tax services provided to Teekay LNG by Teekay to support its growth, and higher advisory fees incurred to support its business development and commercial activities;

partially offset by

- a net increase of \$4.5 million due to less scheduled and unscheduled off-hire days in 2015 compared to the prior year; and
- an increase of \$2.0 million as a result of the acquisition and delivery of the *Norgas Napa* in November 2014.

Equity income related to Teekay LNG's liquefied gas carriers decreased to \$84.2 million in 2015 compared to \$115.5 million in 2014, as set forth in the table below:

(in thousands of U.S. Dollars)	Year Ended December 31,						Total Equity Income
	Angola LNG Carriers	Exmar LNG Carriers	Exmar LPG Carriers	MALT LNG Carriers	RasGas 3 LNG Carriers	Other	
2015	16,144	9,332	32,733	4,620	21,527	(185)	84,171
2014	3,472	10,651	44,114	36,805	20,806	(370)	115,478
Difference	12,672	(1,319)	(11,381)	(32,185)	721	185	(31,307)

The \$12.7 million increase for 2015 in Teekay LNG's 33% investment in the four Angola LNG Carriers was primarily due to unrealized gains on derivative instruments in 2015 as a result of long-term LIBOR benchmark interest rates increasing for interest rate swaps compared to unrealized losses on derivative instruments last year, and an increase in voyage revenues upon amending the charter contract in the second quarter of 2015 to allow for dry docking and operating costs to pass-through to the charterer, retroactive to the beginning of the charter contract.

The \$1.3 million decrease for 2015 in equity income from the two Exmar LNG Carriers, in which Teekay LNG has ownership interests ranging from 49% to 50%, was primarily due to higher interest expense as a result of the completion of the joint venture's debt refinancing in 2015.

The \$11.4 million decrease for 2015 in equity income from Teekay LNG's 50% ownership interest in Exmar LPG BVBA was primarily due to the gains on the sales of the *Flanders Tenacity*, *Eeklo* and *Flanders Harmony*, which were sold during the second and third quarters of 2014, a loss on sale of the *Temse* (formerly *Kemira Gas*) in 2015, redelivery of the in-chartered vessel *Odin* back to its owner in November 2015, and hedge ineffectiveness of interest rate swaps in 2015. These decreases were partially offset by higher contracted charter rates from five LPG carrier newbuildings which delivered from September 2014 to September 2015, net of four disposed of LPG carriers during 2014, and a loss on the sale of the *Temse* in the first quarter of 2014.

The \$32.2 million decrease for 2015 in Teekay LNG's 52% investment in the MALT LNG Carriers was primarily due to fewer revenue days compared to 2014 as a result of the disputed termination of the charter contract and unscheduled off-hire days relating to a grounding incident for the *Magellan Spirit* in the first quarter of 2015, the scheduled expiration of the charter contract for the *Methane Spirit* in March 2015 and the unscheduled off-hire days relating to the *Woodside Donaldson* to repair a damaged propulsion motor in January 2015.

### Teekay LNG – Conventional Tankers

As at December 31, 2015, Teekay LNG's conventional tanker fleet included seven Suezmax-class double-hulled conventional crude oil tankers and one Handymax product tanker, six of which it owned and two of which it leased under capital leases. All of Teekay LNG's conventional tankers operate under fixed-rate charters. The number of calendar-ship-days for Teekay LNG's conventional tankers decreased to 2,920 days in 2015 from 3,202 days in 2014, as a result of the sales of the *Algeciras Spirit* and *Huelva Spirit* in February 2014 and August 2014, respectively. During 2015, the *Toledo Spirit* was off hire for 22 days for a scheduled dry docking, compared to the *Bermuda Spirit*, *Hamilton Spirit* and *Teide Spirit* being off hire for 27, 24 and 31 days, respectively, for scheduled dry dockings in 2014.

Income from vessel operations increased to \$30.2 million during 2015 compared to \$27.0 million in 2014, primarily as a result of:

- an increase of \$6.6 million due to higher revenues earned by the *Teide Spirit* and *Toledo Spirit* in 2015 relating to the agreement between Teekay LNG and CEPESA which resulted in additional revenue when spot tanker rates exceeded certain thresholds, and the *Teide Spirit* being off hire for 31 days for a scheduled dry docking in 2014, partially offset by the *Toledo Spirit* being off hire for 22 days for a scheduled dry docking in 2015;

partially offset by

- a decrease of \$2.3 million due to higher revenues recognized last year by the *Bermuda Spirit* and *Hamilton Spirit* relating to an agreement between Teekay LNG and the charterer that ended in October 2014, which resulted in Teekay LNG recognizing additional revenues in 2014 when Suezmax tanker spot rates exceeded a certain amount, partially offset by the *Bermuda Spirit* being off hire for 27 days in the first quarter of 2014 and the *Hamilton Spirit* being off hire for 24 days in the second quarter of 2014 for scheduled dry dockings; and
- a decrease of \$1.1 million due to CEPESA's sales of Teekay LNG's vessels under capital lease, the *Algeciras Spirit* and *Huelva Spirit*, in February 2014 and August 2014, respectively, including the seafarer severance payments in August 2014.

## Teekay Tankers

### Operating Results – Teekay Tankers

The following table compares Teekay Tankers' operating results and number of calendar-ship-days for its vessels for 2015 and 2014, and compares its net revenues (which is a non-GAAP financial measure) for 2015 and 2014, to revenues, the most directly comparable GAAP financial measure, for the same periods.

(in thousands of U.S. dollars, except calendar-ship-days)	Year Ended December 31,	
	2015	2014
Revenues	504,347	235,593
Voyage expenses	(19,566)	(9,984)
Net revenues	484,781	225,609
Vessel operating expenses	(130,775)	(93,022)
Time-charter hire expense	(77,799)	(22,160)
Depreciation and amortization	(71,429)	(50,152)
General and administrative expenses	(16,694)	(11,959)
Net gain on sale of vessels and equipment	771	9,955
Restructuring charge	(4,772)	
Income from vessel operations	184,083	58,271
Equity income	14,411	5,228
Calendar-Ship-Days <sup>(1)</sup>		
Conventional Tankers	16,636	11,418

(1) Calendar-ship-days presented relate to owned and in-chartered consolidated vessels.

### Teekay Tankers – Conventional Tankers

As at December 31, 2015, Teekay Tankers owned 45 double-hulled conventional oil tankers, seven ship-to-ship lightering support vessels, time-chartered in ten Aframax tankers and three LR2 product tankers from third parties and owned a 50% interest in one VLCC.

Income from vessel operations increased to \$184.1 million in 2015 compared to \$58.3 million in 2014, primarily as a result of:

- an increase of \$83.0 million of revenue resulting from higher average realized TCE rates earned by Teekay Tankers' Suezmax, Aframax, LR2 and MR tankers in 2015 compared to 2014;
- a net increase of \$68.1 million resulting from the addition of 11 Suezmax tankers, three Aframax tanker and four LR2 product tankers acquired in 2015, the addition of two in-chartered Aframax tankers and one LR2 product tanker in 2015 and the addition of seven in-chartered Aframax tankers and four in-chartered LR2 product tankers in 2014 and from the recognition of in-process revenue contracts in 2015, partially offset by the addition of two VLCCs in March 2014 that were subsequently sold to TIL in May 2014 and the sale of a MR product tanker in 2015;
- a net increase of \$13.4 million for 2015 resulting from certain vessels changing employment between fixed-rate charters and voyage charters; and
- an increase of \$2.4 million from lower crewing costs during 2015 resulting from a change in the nationality of crew on a MR product tanker, favorable current year foreign currency exchange rates impacting crew wage expenditures, the timing and extent of planned vessel maintenance and repairs, and repairs on a Suezmax tanker which were incurred during 2014;

partially offset by

- a decrease of \$10.0 million resulting from the gain on sale of vessels recorded in 2014 related to the sale of two wholly-owned subsidiaries, each of which owned one VLCC, to TIL;
- a decrease of \$9.1 million resulting from the interest income recognized on Teekay Tankers' investments in term loans in 2014;
- a net decrease of \$6.6 million resulting from higher management fees, commissions, off-hire bunker expense and other expenses in 2015 compared to 2014;
- a decrease of \$6.5 million resulting from higher time-charter rates due to profit sharing components and options Teekay Tankers exercised to extend the in-chartered contracts in 2015;
- a net decrease of \$4.9 million resulting from more off-hire days in 2015 compared to 2014, primarily as a result of higher dry-docking activity;

- a decrease of \$2.8 million resulting from higher corporate expenses incurred during 2015 primarily as a result of legal expenses related to vessel acquisitions and to the STX arbitration (Please read “Note 15d - Commitments and Contingencies - Legal Proceedings and Claims - STX Offshore & Shipbuilding Co.”); and
- a decrease of \$2.1 million resulting from higher amortization of dry-docking expenditures in 2015 compared to 2014.

Equity income increased to \$14.4 million in 2015 from \$5.2 million for 2014 primarily due to:

- an increase of \$5.4 million due to higher equity earnings from TIL resulting from overall higher realized average spot rates earned in 2015 compared to 2014, the acquisition of six Suezmax vessels delivered during 2015 and one Aframax vessel delivered during 2014, partially offset by a decrease relating to a dilution gain recorded in 2014 resulting from Teekay Tankers’ reduced ownership interest in TIL from TIL’s share issuance completed as part of its initial public offering (or IPO) in 2014;
- an increase of \$3.3 million due to a full year of earnings from Teekay Tankers’ 50% interest in TTOL, which it acquired in 2014; and
- an increase of \$0.5 million due to higher equity earnings from the High-Q joint venture resulting from higher unrealized gain on derivatives recognized in 2015 compared to 2014.

## Teekay Parent

### Operating Results – Teekay Parent

The following table compares Teekay Parent’s operating results and number of calendar-ship-days for its vessels for 2015 and 2014, and compares its net revenues (which is a non-GAAP financial measure) for 2015 and 2014, to revenues, the most directly comparable GAAP financial measure, for the same periods.

(in thousands of U.S. dollars, except calendar-ship-days)	Offshore Production		Conventional Tankers		Other and Corporate G&A		Teekay Parent Total	
	2015	2014	2015	2014	2015	2014	2015	2014
Revenues	277,842	259,945	65,777	94,376	75,547	95,791	419,166	450,112
Voyage expenses	(36)	(15)	(763)	(8,855)	(808)	263	(1,607)	(8,607)
Net revenues	277,806	259,930	65,014	85,521	74,739	96,054	417,559	441,505
Vessel operating expenses	(200,338)	(212,159)	(16,051)	(29,633)	(24,294)	(26,488)	(240,683)	(268,280)
Time-charter hire expense	(29,978)	(29,623)	(38,991)	(54,720)	(44,448)	(42,426)	(113,417)	(126,769)
Depreciation and amortization	(69,508)	(78,630)	(2,852)	(2,216)	451	774	(71,909)	(80,072)
General and administrative expenses <sup>(1)</sup>	(17,261)	(21,778)	(2,136)	(3,992)	1,221	(9,321)	(18,176)	(35,091)
Loan loss provision reversal	—	2,521	—	—	—	—	—	2,521
Net (loss) gain on sale of vessels and equipment	(948)	935	—	(502)	—	—	(948)	433
Restructuring charges	—	—	—	(6,865)	(2,654)	(1,105)	(2,654)	(7,970)
(Loss) income from vessel operations	(40,227)	(78,804)	4,984	(12,407)	5,015	17,488	(30,228)	(73,723)
Equity (loss) income	(12,196)	(1,357)	16,712	3,052	(1,101)	(2,546)	3,415	(851)
Calendar-Ship-Days <sup>(2)</sup>								
FPSO Units	1,095	1,444	—	—	—	—	1,095	1,444
Conventional Tankers	—	—	2,516	3,667	—	—	2,516	3,667
Gas Carriers	—	—	—	—	730	730	730	730
FSO Units	365	365	—	—	730	503	1,095	868
Shuttle Tankers	730	730	—	—	—	—	730	730
Bunker Barges	—	—	—	—	200	—	200	—

(1) Includes direct general and administrative expenses and indirect general and administrative expenses allocated to offshore production, conventional tankers and other and corporate G&A based on estimated use of corporate resources.

(2) Apart from three FPSO units and one conventional tanker, all remaining calendar-ship-days presented relate to in-chartered days.

### **Teekay Parent – Offshore Production**

Offshore Production consists primarily of our FPSO units. As at December 31, 2015, we had a direct interest in three 100% owned FPSO units.

The charter contract for the *Petrojarl I* FPSO unit ended in April 2013 and was off hire until we sold the unit to Teekay Offshore in December 2014. The *Hummingbird Spirit* FPSO unit's current charter contract was to expire on March 31, 2017 unless terminated by the charterer upon 90 days' notice. The *Hummingbird Spirit* FPSO charter contract includes an incentive compensation component based on the oil price. In addition, the *Foinaven* FPSO unit's charter contract includes incentives based on total oil production for the year, certain operational measures, and the average annual oil price. The declines in the price of oil has negatively impacted our incentive compensation under these contracts and may negatively impact our revenues in future periods if the oil price remains at or falls below current levels. The *Banff* FPSO unit completed its repairs and upgrades following storm damage in December 2011 and resumed production on the Banff field in July 2014.

In mid-March 2015, the *Petrojarl Knarr* FPSO unit achieved first oil and commenced its charter contract with BG Norge, and during June 2015 the unit completed operational testing and commenced at the contract's full charter rate. On July 1, 2015 we completed the sale of the *Petrojarl Knarr* FPSO unit to Teekay Offshore. The Teekay Parent results for the year ended December 31, 2015 have been retrospectively adjusted to exclude the results of the *Petrojarl Knarr* FPSO from March 2015 when the unit commenced operations, and the results for Teekay Offshore have been retrospectively adjusted to include the results of the *Petrojarl Knarr* from March 2015.

The number of Teekay Parent's FPSO calendar-ship days for the year ended December 31, 2015 decreased compared to the same period last year due to the sale of the *Petrojarl I* FPSO unit to Teekay Offshore in December 2014.

Loss from vessel operations improved to \$40.2 million during 2015 compared to \$78.8 million in 2014, primarily as a result of:

- an increase of \$31.4 million related to the *Petrojarl Banff* FPSO unit, excluding general and administrative expenses, due to the unit's recommencement of operations under its time-charter contract in July 2014, partially offset by in-process contract revenue being fully amortized in 2014;
- an increase of \$21.3 million, excluding general and administrative expenses, related to lower vessel operating costs and depreciation as a result of the sale of *Petrojarl I* FPSO to Teekay Offshore in December 2014 subsequent to its contract expiration and lay-up in April 2013; and
- an increase of \$10.0 million, excluding general and administrative expenses, from the *Knarr* FPSO unit incurring pre-operating costs in 2014 prior to its mobilization to the North Sea;

partially offset by

- a decrease of \$20.2 million related to *Hummingbird Spirit* FPSO unit, excluding general and administrative expenses, primarily due to lower incentive revenue earned in 2015 as a result of lower oil prices, loss on disposal of mooring chains in 2015 and loan loss recovery in 2014 related to a front-end engineering and design (or *FEED*) study;
- a decrease of \$3.5 million as a result of higher general and administrative expenses primarily due to legal costs associated with the *Petrojarl Banff* FPSO unit and increase in external consulting fees related to the FPSO fleet; and
- a decrease of \$1.5 million primarily related to *Petrojarl Foinaven*, excluding general and administrative expenses, due to a settlement amount received in the first quarter of 2014 and lower oil price-linked revenue in 2015, partially offset by higher production in 2015 compared to the prior year due to compressor and sub-sea issues incurred in 2014.

### **Teekay Parent – Conventional Tankers**

As at December 31, 2015, Teekay Parent had a direct interest in one conventional tanker, two chartered-in conventional tankers from third parties, one chartered-in conventional tanker from Teekay Offshore and one chartered-in conventional tanker from Teekay Tankers. The average fleet size (including vessels chartered-in), as measured by calendar-ship-days, decreased in 2015 compared with 2014 due to the termination of the time-charter-in contract of one Aframax tanker, the redeliveries to their owners of two chartered-in Suezmax tankers, one chartered-in Aframax tanker and one chartered-in MR product tanker during 2014, and the sale of four Suezmax tankers during 2014, partially offset by a new time-charter arrangement for two Aframax tankers during 2014 and the addition of one VLCC during 2014. The collective impact from the noted fleet changes are referred to below as the Net Fleet Reductions.

Income from vessel operations increased to \$5.0 million during 2015 compared to a loss from vessel operations of \$12.4 million in 2014, primarily as a result of:

- a net increase of \$9.7 million due to higher average spot tanker TCE rates earned in 2015;
- a net increase of \$5.3 million due to lower vessel operating expenses from the sale of the four Suezmax tankers during 2014 and lower time-charter hire expense from redeliveries of various tankers to their owners during 2014, partially offset by the loss of revenue due to the sale and redeliveries of tankers; and



- a net increase of \$1.8 million due to net cancellation fees paid by Teekay Offshore to Teekay Parent related to the termination of time-charter contracts in 2015.

### **Teekay Parent – Other and Corporate G&A**

As at December 31, 2015, Teekay Parent had two chartered-in LNG carriers owned by Teekay LNG, two chartered-in FSO units owned by Teekay Offshore and two chartered-in bunker barges. The charterer of the *Polar Spirit* LNG carrier, which Teekay Parent has chartered-in from Teekay LNG under a time-charter contract, has not paid hire for the vessel in December 2015 or January 2016. Teekay Parent has commenced arbitration proceedings and is assessing other options. The *Arctic Spirit* and *Polar Spirit* commenced lay-up in the second quarter of 2016.

Income from vessel operations decreased to \$5.0 million during 2015 compared to \$17.5 million in 2014, primarily as a result of:

- a decrease of \$15.7 million due to the *Arctic Spirit* and *Polar Spirit* LNG carriers earning lower charter rates commencing in 2015 from new contracts with existing charterers and a provision for doubtful accounts in relation to the *Polar Spirit* LNG carrier;
- a decrease of \$6.1 million due to the interest income recognized in 2014 related to Teekay Parent's investment in a term loan which was entered into during 2011; and
- a decrease of \$1.5 million due to restructuring charges in 2015 for the reorganization of Teekay's marine operations and corporate services;

partially offset by

- an increase of \$10.5 million due to lower general and administrative expenses in 2015, primarily as a result of business development fees received from Teekay Offshore in respect of the *Petrojarl Knarr* FPSO unit, the *Arendal Spirit* UMS and the six on-the-water, long-distance towing and offshore installation vessels.

Equity income (loss) increased to \$3.4 million in 2015 compared to (\$0.9) million in 2014, primarily due to higher equity earnings from Petrotrans Holdings resulting from a gain on the sale of TMS from the joint venture to Teekay Tankers and higher equity earnings from TIL resulting from overall higher realized average spot rates in 2015 and its acquisition of six Suezmax vessels delivered during 2015, partially offset by a deferred tax asset write-down and unrealized foreign exchange losses relating to Teekay Parent's 43% investment in Sevan for the year ended December 31, 2015.

### **Other Consolidated Operating Results**

The following table compares our other consolidated operating results for 2015 and 2014:

	Year Ended December 31,		% Change
	2015	2014	
(in thousands of U.S. dollars, except percentages)			
Interest expense	(242,469)	(208,529)	16.3
Interest income	5,988	6,827	(12.3)
Realized and unrealized loss on non-designated derivative instruments	(102,200)	(231,675)	(55.9)
Foreign exchange (loss) gain	(2,195)	13,431	(116.3)
Other income (loss)	1,566	(1,152)	(235.9)
Income tax recovery (expense)	16,767	(10,173)	(264.8)

*Interest expense.* Interest expense increased to \$242.5 million in 2015, compared to \$208.5 million in 2014, primarily due to:

- an increase of \$37.6 million as a result of the *Petrojarl Knarr* FPSO unit commencing operations in March 2015;
- an increase of \$17.0 million due to Teekay Offshore's borrowings relating to the *Suksan Salamander* FSO unit (which commenced operations during the third quarter of 2014), the six towing vessels (which delivered throughout 2015), the *Arendal Spirit* UMS (which commenced operations during the second quarter of 2015) and the \$300 million senior unsecured bonds Teekay Offshore issued in May 2014; and
- an increase of \$15.0 million as a result of further borrowing under a revolving credit facility Teekay Parent entered into in December 2012 partially offset by repayments made near the end of 2015, and additional interest incurred from two term loans which were drawn in 2015 to finance the acquisition of 12 modern Suezmax tankers, one Aframax tanker and four LR2 product tankers acquired by Teekay Tankers during 2015;

partially offset by

- a decrease of \$10.3 million relating to lower interest expense on our NOK bonds as a result of the depreciation of the NOK against the U.S. Dollar and a decrease in Norwegian InterBank Offered Rate (or *NIBOR*), maturity of our NOK bond during 2015, partially offset by the issuance of Teekay LNG's NOK 1,000 million senior unsecured bonds during 2015;
- a decrease of \$5.1 million due to an increase in capitalized interest as a result of Teekay LNG exercising three newbuilding options with DSME in December 2014 and entering into an additional newbuilding agreement with Daewoo Shipbuilding & Marine Engineering Co. (or DSME) in February 2015 and two additional newbuilding agreements with HHI in June 2015;
- a decrease of \$3.6 million due to lower interest rates on debt facilities and elimination of interest on capital lease obligations relating to Teekay LNG's LNG carriers in the Teekay Nakilat Joint Venture upon debt refinancing and termination of capital lease obligations in December 2014;
- a decrease of \$3.1 million relating to accelerated amortization of Teekay Nakilat Joint Venture's deferred debt issuance cost upon completion of its debt refinancing in December 2014;
- a decrease of \$2.6 million relating to capitalized interest on the advances Teekay LNG made to the Yamal LNG Joint Venture in July 2014 to fund its proportionate share of the joint venture's newbuilding installments;
- a decrease of \$2.6 million due to lower interest expense on Teekay LNG's capital lease obligations associated with the sales of the *Algeciras Spirit* and *Huelva Spirit* conventional tankers in February 2014 and August 2014, respectively;
- a decrease of \$2.4 million due to lower interest expense on Teekay Parent's 8.5% bonds as a result of bond repurchases during 2014, partially offset by the issuance of an additional \$200 million of Teekay Parent's 8.5% bonds in November 2015;
- a decrease of \$2.0 million due to an increase in capitalized interest on Teekay Offshore's newbuildings;
- a decrease of \$1.7 million due to the impact of a decrease in EURIBOR and depreciation of the Euro against the U.S. Dollar on Teekay LNG's Euro-denominated debt facilities; and
- a decrease of \$1.5 million mainly due to the sale of four Suezmax crude oil tankers along with their related debt facilities from Teekay Parent to TIL during February 2014.

*Realized and unrealized (losses) gains on non-designated derivative instruments.* Realized and unrealized (losses) gains related to derivative instruments that are not designated as hedges for accounting purposes are included as a separate line item in the consolidated statements of income. Net realized and unrealized losses on non-designated derivatives were \$102.2 million for 2015, compared to \$231.7 million for 2014, as detailed in the table below:

(in thousands of U.S. Dollars)	Year Ended December 31,	
	2015	2014
Realized losses relating to:		
Interest rate swap agreements	(108,036)	(125,424)
Interest rate swap agreement terminations	(10,876)	(1,319)
Foreign currency forward contracts	(21,607)	(4,436)
	<u>(140,519)</u>	<u>(131,179)</u>
Unrealized gains (losses) relating to:		
Interest rate swap agreements	37,723	(86,045)
Foreign currency forward contracts	(418)	(16,926)
Stock purchase warrants	1,014	2,475
	<u>38,319</u>	<u>(100,496)</u>
Total realized and unrealized losses on derivative instruments	<u>(102,200)</u>	<u>(231,675)</u>

The realized losses relate to amounts we actually realized or paid to settle such derivative instruments and interest rate swap agreement terminations. The unrealized (losses) gains on interest rate swaps for 2015 and 2014 were primarily due to changes in the forward interest rates.

During 2015 and 2014, we had interest rate swap agreements with aggregate average net outstanding notional amounts of approximately \$3.5 billion and \$3.6 billion, respectively, with average fixed rates of approximately 3.4% and 3.6%, respectively. Short-term variable benchmark interest rates during these periods were generally less than 1.0% and, as such, we incurred realized losses of \$108.0 million and \$125.4 million during 2015 and 2014, respectively, under the interest rate swap agreements. We also incurred realized losses of \$10.9 million during 2015 from the early termination of one interest rate swap, compared to losses of \$1.3 million during 2014 from the termination of interest rate swaps relating to three capital leases, partially offset by a gain on an early termination of one interest rate swap.

Primarily as a result of significant changes in long-term benchmark interest rates during 2015 and 2014, we recognized unrealized gains of \$37.7 million for 2015 compared to unrealized losses of (\$86.0) million for 2014 under the interest rate swap agreements. Primarily as a result of changes in NOK during 2015 from 2014, we recognized unrealized losses of \$0.4 million for 2015 compared to \$16.9 million for 2014 under the foreign currency forward contracts.

In 2014, we and Teekay Tankers formed TIL. In connection with the investment by Teekay Tankers and us in a \$250 million private placement of common stock by TIL, we and Teekay Tankers received stock purchase warrants entitling us and Teekay Tankers to purchase an aggregate of up to 1.5 million shares of common stock of TIL at a fixed price of \$10 per share. Alternatively, if the shares of TIL's common stock trade on a National Stock Exchange or over-the-counter market denominated in NOK, we and Teekay Tankers may also exercise their stock purchase warrants at 61.67 NOK per share using a cashless exercise procedure. During 2015, we recognized a \$1.0 million unrealized gain on the stock purchase warrants compared to an unrealized gain of \$2.5 million for 2014, which are included in our total unrealized derivative (losses) gains. Please read "Item 18. Financial Statements: Note 14 - Derivative Instruments and Hedging Activities."

Foreign Exchange Gain (Loss). Foreign currency exchange (losses) gains were (\$2.2) million in 2015 compared to \$13.4 million in 2014. Our foreign currency exchange (losses) gains, substantially all of which are unrealized, were due primarily to the relevant period-end revaluation of our NOK-denominated debt and our Euro-denominated term loans, capital leases and restricted cash for financial reporting purposes and the realized and unrealized losses on our cross currency swaps. Gains on NOK-denominated and Euro-denominated monetary liabilities reflect a stronger U.S. Dollar against the NOK and Euro on the date of revaluation or settlement compared to the rate in effect at the beginning of the period. Losses on NOK-denominated and Euro-denominated monetary liabilities reflect a weaker U.S. Dollar against the NOK and Euro on the date of revaluation or settlement compared to the rate in effect at the beginning of the period. For 2015, foreign currency exchange loss includes realized losses of \$19.0 million (2014 - \$4.0 million) and unrealized losses of \$89.2 million (2014 - \$167.3 million) on our cross currency swaps, unrealized gains of \$123.2 million (2014 - \$156.2 million) on the revaluation of our NOK-denominated debt and realized losses on maturity of cross currency swaps of \$36.2 million offset by the realized gain on maturity of the NOK bond of \$36.2 million. For 2015, foreign currency exchange (losses) gains include the gain on revaluation of our Euro-denominated restricted cash, debt and capital leases of \$25.6 million as compared to \$34.3 million for 2014.

Income Tax (Expense) Recovery. Income tax recovery (expense) was \$16.8 million in 2015 compared to (\$10.2) million in 2014. The increase in income tax recovery for 2015 was primarily due to the acquisition of the *Petrojarl Knarr* FPSO unit by Teekay Offshore and the commencement of the East Coast of Canada contract during 2015, and the expected commencement of the *Gina Krog* FSO unit contract in mid-2017, from which Teekay Offshore expects to utilize more of its Norwegian tax losses from the earnings anticipated from their contracts, as well as an expected increase in earnings from its existing fleet, which resulted in a decrease in Teekay Offshore's deferred tax asset valuation allowance and an increase in deferred income tax recovery, and higher income tax expense in 2014 from the termination of capital lease obligations and refinancing in the Teekay LNG's Teekay Nakilat Joint Venture.

## LIQUIDITY AND CAPITAL RESOURCES

### Liquidity and Cash Needs

#### Teekay Corporation Consolidated

Overall, our consolidated operations are capital intensive. We finance the purchase of our vessels primarily through a combination of borrowings from commercial banks or our joint venture partners, the issuance of equity and debt securities (primarily by our publicly-traded subsidiaries) and cash generated from operations. In addition, we may use sale and leaseback arrangements as a source of long-term liquidity. Occasionally, we use our revolving credit facilities to temporarily finance capital expenditures until longer-term financing is obtained, at which time we typically use all or a portion of the proceeds from the longer term financings to prepay outstanding amounts under revolving credit facilities. We have pre-arranged financing of approximately \$2.4 billion, which mostly relates to our remaining 2017 capital expenditure commitments. We are in the process of seeking to obtain additional debt financing from various sources for our remaining capital commitments relating to our portion of newbuildings on order as at December 31, 2016. As at December 31, 2016, Teekay Corporation's total consolidated cash and cash equivalents was \$568.0 million, compared to \$678.4 million at December 31, 2015. Teekay Corporation's total consolidated liquidity, including cash, cash equivalents and undrawn credit facilities, was \$1.0 billion as at December 31, 2016, compared to \$860.7 million as at December 31, 2015.

Effective for the quarterly dividend and distributions of the fourth quarter of 2015, Teekay Parent reduced its quarterly cash dividend per share to \$0.055 from \$0.55, Teekay Offshore reduced its quarterly cash distribution per common unit to \$0.11 from \$0.56 and Teekay LNG reduced its quarterly cash distribution per common unit to \$0.14 from \$0.70. At the time these changes were made, there was a dislocation in the capital markets relative to the stability of our businesses. More specifically, the future equity capital requirements for our committed growth projects, coupled with the relative weakness in energy and capital markets, resulted in us concluding that it would be in the best interests of our shareholders to conserve more of our internally generated cash flows for committed growth projects and to reduce debt levels. Teekay Parent, Teekay Offshore and Teekay LNG each maintained these reduced dividend and distribution levels throughout 2016. Despite significant weakness in the global energy and capital markets, our cash flows from vessels operations remain largely stable and are supported by a large and well-diversified portfolio of fee-based contracts with high quality counterparties. In addition to using more of our internally generated cash flows for existing growth projects and to reduce our debt levels, we are also seeking alternative sources of financing such as sale and leaseback transactions, asset sales, new bank borrowings and the issuance of new debt and equity securities.

Since early 2016, Teekay Parent and the Daughter Companies have been executing on a series of financing initiatives intended to contribute to the funding of our upcoming capital expenditures and debt maturities, which are explained in the Teekay Parent and Daughter sections that follow.

Our revolving credit facilities and term loans are described in Item 18 – “Financial Statements: Note 7 – Long-Term Debt.” They contain covenants and other restrictions typical of debt financing secured by vessels that restrict the ship-owning subsidiaries from, among other things: incurring or guaranteeing indebtedness; changing ownership or structure, including mergers, consolidations, liquidations and dissolutions; making dividends or distributions if we are in default; making capital expenditures in excess of specified levels; making certain negative pledges and granting certain liens; selling, transferring, assigning or conveying assets; making certain loans and investments; or entering into a new line of business. Among other matters, our long-term debt agreements generally provide for maintenance of minimum consolidated financial covenants and 11 loan agreements require the maintenance of vessel market value to loan ratios. As at December 31, 2016, these vessel market value to loan ratios ranged from 116.6% to 433.2% compared to their minimum required ratios of 105% to 125%, respectively. Changes in the LNG/LPG, conventional tanker, FPSO, shuttle tanker, towage and UMS markets could negatively affect our compliance with these ratios. Certain loan agreements require that a minimum level of free cash be maintained and as at December 31, 2016, this amount was \$50 million for the Company, excluding Teekay Offshore and Teekay LNG. Most of the loan agreements also require that we maintain an aggregate minimum level of free liquidity and undrawn revolving credit lines with at least six months to maturity of 5.0% of total debt for either Teekay Parent, Teekay Offshore or Teekay Tankers, which as at December 31, 2016 such amounts were \$63.8 million, \$159.1 million and \$46.7 million, respectively. In addition, certain loan agreements require Teekay LNG to maintain a minimum level of tangible net worth and liquidity, and not exceed a maximum level of financial leverage. As at December 31, 2016, we were in compliance with all covenants under our credit facilities and other long-term debt.

The aggregate annual long-term debt principal repayments required to be made by us (including our Daughter Companies) subsequent to December 31, 2016, are \$1.0 billion (2017), \$1.7 billion (2018), \$1.0 billion (2019), \$1.1 billion (2020), \$0.9 billion (2021) and \$1.0 billion (thereafter).

We conduct our funding and treasury activities based on corporate policies designed to minimize borrowing costs and maximize investment returns while maintaining the safety of the funds and appropriate levels of liquidity for our purposes. We hold cash and cash equivalents primarily in U.S. Dollars, with some balances held in Australian Dollars, British Pounds, Canadian Dollars, Euros, Japanese Yen, Norwegian Kroner and Singapore Dollars.

We are exposed to market risk from foreign currency fluctuations and changes in interest rates, spot tanker market rates for vessels and bunker fuel prices. We use forward foreign currency contracts, cross currency and interest rate swaps, forward freight agreements and bunker fuel swap contracts to manage currency, interest rate, spot tanker rates and bunker fuel price risks. Please read "Item 11 - Quantitative and Qualitative Disclosures About Market Risk".

The passage of any climate control legislation or other regulatory initiatives that restrict emissions of greenhouse gases could have a significant financial and operational impact on our business, which we cannot predict with certainty at this time. Such regulatory measures could increase our costs related to operating and maintaining our vessels and require us to install new emission controls, acquire allowances or pay taxes related to our greenhouse gas emissions, or administer and manage a greenhouse gas emissions program. In addition, increased regulation of greenhouse gases may, in the long term, lead to reduced demand for oil and reduced demand for our services.

#### Teekay Parent

Teekay Parent owns three FPSO units and continues to in-charter a number of vessels. Teekay Parent's primary short-term liquidity needs are the payment of operating expenses, dry-docking expenditures, debt servicing costs, dividends on its shares of common stock and scheduled repayments of long-term debt, as well as funding its other working capital requirements. Teekay Parent's primary sources of liquidity are cash and cash equivalents, cash flows provided by operations, dividends/distributions and management fees received from the Daughter Companies and other investments, its undrawn credit facilities and proceeds from the sale of vessels to external parties or Teekay Offshore (and in the past, Teekay LNG and Teekay Tankers). As at December 31, 2016, Teekay Parent's total cash and cash equivalents was \$146.4 million, compared to \$221.0 million at December 31, 2015. Teekay Parent's total liquidity, including cash, cash equivalents and undrawn credit facilities, was \$259.6 million as at December 31, 2016, compared to \$234.5 million as at December 31, 2015.

In addition to a series of financing initiatives at Teekay Offshore (as described below), in May and June 2016, Teekay Parent completed various initiatives to increase its financial strength and flexibility, including:

- refinancing three existing debt facilities, including \$150 million relating to Teekay Parent's equity margin revolving credit facility, \$150 million of an existing revolving credit facility relating to Teekay Parent's three directly-owned FPSO units, and \$50 million of an existing debt facility relating to the *Shoshone Spirit* VLCC;
- selling Teekay Parent's 50% interest in three infield support vessel tugs for Royal Dutch Shell's Prelude FLNG unit; and
- issuing \$100 million of common shares at a price of \$8.32 per share to a group of institutional investors and two entities established by Teekay Parent's founder, including Resolute Investments, Inc. (or *Resolute*), Teekay Parent's largest shareholder.

In connection with the above initiatives, Teekay Parent sold the *Shoshone Spirit* tanker in October 2016 for \$63.0 million and the related debt was repaid. In addition, in September 2016, Teekay sold an aggregate of 1.3 million shares of common stock as part of a continuous offering program, generating gross proceeds of \$9.7 million. As of December 31, 2016, Teekay had the ability to sell additional shares of its common stock having an aggregate offering price of up to \$40.3 million under its continuous offering program.

Teekay's equity margin revolving credit facility is secured by common units of Teekay Offshore and Teekay LNG and shares of Class A common stock of Teekay Tankers that are owned by Teekay. In June 2016, Teekay amended the facility by further reducing its aggregate potential borrowings from \$300 million to \$150 million, extending its maturity date from January 2018 to December 2018 and amending the formula which further limits the amount available to borrow based on the value of the common units of Teekay Offshore and Teekay LNG and the shares of Class A common stock of Teekay Tankers which are pledged as collateral. The amendment resulted in an increase in the loan-to-value ratio which increased the availability under the facility from approximately \$34 million to \$150 million as of December 31, 2016. As of December 31, 2016, Teekay Parent had \$16.9 million drawn on this facility, and \$133.1 million undrawn. In April 2017, Teekay further amended the facility by increasing the aggregate potential borrowings from \$150 million to \$200 million.

As part of completing the financing initiatives both at Teekay Parent and Teekay Offshore, in June 2016, Teekay Parent entered into guarantee arrangements relating to Teekay Offshore up to a maximum of \$495 million of obligations. The guarantees cover amounts owing under: certain existing interest rate swaps which have put option termination rights that were extended to February 2019; a new loan for Teekay Offshore's East Coast Canada shuttle tanker project during the construction period for three newbuilding shuttle tankers scheduled for delivery in 2017 and 2018; and certain existing cross currency swaps related to two of Teekay Offshore's NOK bonds for which the maturity dates were extended to the end of 2018 (as described below). In addition, Teekay Parent extended the maturity date for obligations in the amount of \$200 million owed to Teekay Parent by Teekay Offshore from July 2016 to January 2019 and agreed with Teekay Offshore that, until Teekay Offshore's NOK bonds maturing in 2018 have been repaid, all cash distributions to be paid to Teekay Parent or its affiliates, including the general partner of Teekay Offshore, will instead be paid in common units of Teekay Offshore. In addition, Teekay Parent agreed with its lenders that, until Teekay Offshore's NOK bonds maturing 2018 have been repaid, Teekay Parent will raise equity capital in an amount equal to any cash dividends paid by Teekay Parent during that period.

We believe that Teekay Parent's existing cash and cash equivalents and undrawn long-term borrowings, in addition to all other sources of cash including cash from operations, and after considering initiatives described below that are planned by the Daughter Companies, will be sufficient to meet its existing liquidity needs for at least the next 12 months.

#### Teekay Offshore

Teekay Offshore's business model is to employ its vessels on fixed-rate contracts with major oil companies, typically with terms between three to ten years. Prior to the fourth quarter of 2015, the operating cash flow its vessels generated each quarter, excluding a reserve for maintenance capital expenditures and distributions on Teekay Offshore's preferred units, was generally paid out to its common unitholders within approximately 45 days after the end of each quarter. As discussed in the Teekay Parent section above, Teekay Offshore reduced its quarterly cash distributions to \$0.11 per common unit, a level which it has maintained throughout 2016, and its near-to-medium-term business strategy is primarily focused on funding and implementing existing growth projects and repaying or refinancing scheduled debt obligations rather than pursuing additional growth projects. Despite significant weakness in the global energy and capital markets, Teekay Offshore's operating cash flows remain largely stable and growing, supported by a large and well-diversified portfolio of fee-based contracts with high quality counterparties.

In order to manage its unfunded capital expenditures and upcoming debt maturities, in addition to reducing its quarterly cash distributions to \$0.11 per common unit, Teekay Offshore completed the following series of initiatives during the second quarter of 2016:

- obtaining additional bank financing, including a \$250 million debt facility for the three East Coast of Canada newbuilding shuttle tankers, a \$40 million debt facility for six previously un-mortgaged vessels, and a new \$35 million tranche added to an existing debt facility secured by two shuttle tankers;
- extending \$75 million of the outstanding principal amount of an existing revolving credit facility financing for the *Petrojarl Varg* FPSO unit until late-2017;
- extending the majority of the principal maturity payments to late-2018 for two of Teekay Offshore's existing NOK senior unsecured bonds, previously due in January 2017 and January 2018, and agreeing to pay a portion of the outstanding principal amount of these bonds in October 2016, October 2017 and January 2018;
- agreeing with Teekay to pay, all distributions on Teekay Offshore's common units to Teekay Parent, including distributions to Teekay Offshore's general partner, in common units, instead of cash, until Teekay Offshore's NOK bonds maturing in 2018 have been fully repaid;
- agreeing that, until Teekay Offshore's NOK bonds maturing in 2018 have been repaid, Teekay Offshore will only pay distributions in cash to third party holders of its common units if the amount of the cash distributions is matched or exceeded by the proceeds raised through the issuance of additional equity in advance of, or within six months following, the payment of such distributions;
- extending to January 2019 the maturity date of \$200 million in obligations owing to Teekay Parent under the terms of a subordinated promissory note, which bears interest at the rate of 10.0% per annum, one half of which will be paid in cash, and the other half of which will be paid in Teekay Offshore's common units or from the proceeds of the sale of equity securities;
- issuing \$200 million of equity, consisting of (i) \$100 million of Teekay Offshore's Series D Preferred Units (with a two-year option to pay quarterly distributions in common units rather than cash) plus 4.5 million common unit warrants with an exercise price of \$4.55 per common unit and 2.25 million common unit warrants with an exercise price of \$6.05 per common unit, and (ii) \$100 million of common units at a price of \$4.55 per unit;
- cancelling, by Teekay Offshore's subsidiary Logitel, the shipbuilding contracts for the two remaining UMS newbuildings; and

- amending the terms of certain interest rate swaps to defer the counterparties' early termination options and extending and increasing the threshold of existing cross currency swaps related to Teekay Offshore's two NOK bonds that have been extended as part of these initiatives.

As part of completing the above financing initiatives, Teekay Offshore agreed to convert \$46 million of face value of the \$250 million of Series C Preferred Units for approximately 8.3 million common units and the remaining approximately \$204 million of outstanding Series C Preferred Units for approximately 8.5 million of its newly-issued Series C-1 Preferred Units that also include a two-year option to pay quarterly distributions in the form of common units rather than cash. Teekay Offshore agreed that, until it repays amounts outstanding under its NOK bonds maturing in 2018, Teekay Offshore will only pay distributions to holders of Series C-1 Preferred Units and Series D Preferred Units in common units, except that, at any time with respect to the Series C-1 Preferred Units, and at any time after June 29, 2018 with respect to the Series D Preferred Units, Teekay Offshore may pay distributions to holders of Series C-1 Preferred Units and Series D Preferred Units, in cash, if the amount of such cash distributions are matched or exceeded by the proceeds of additional equity raised by Teekay Offshore in advance of, or within six months following, payment of the cash distributions. Teekay Offshore also issued \$31 million of common units during 2016 under its continuous offering program.

As part of the financing initiatives, Teekay Parent provided financial guarantees to Teekay Offshore for liabilities associated with the long-term debt financing relating to the East Coast of Canada newbuilding shuttle tankers and for certain of Teekay Offshore's interest rate swap and cross currency swap liabilities. The guarantees cover liabilities totaling up to \$495 million and have been provided at no additional cost to Teekay Offshore.

As at December 31, 2016, Teekay Offshore's total cash and cash equivalents were \$227.4 million, compared to \$258.5 million as at December 31, 2015. Teekay Offshore's total liquidity, defined as cash, cash equivalents and undrawn long-term borrowings, was \$260.7 million as at December 31, 2016, compared to \$282.7 million as at December 31, 2015. The decrease in liquidity was primarily due to: the scheduled repayments or prepayments of outstanding term loans and NOK bonds; collateral posted on the *Petrojarl I* term loan; and payments for committed newbuildings and conversions, partially offset by proceeds from the issuance and sale of Series D Preferred Units and common units as described above and as part of Teekay Offshore's continuous offering program; additional bank financings as described above; proceeds from the sale of the *Navion Europa*, *Navion Torinita*, *Fuji Spirit* and *Kilimanjaro Spirit*; and a decrease in collateral on cross currency swaps.

As at December 31, 2016, Teekay Offshore had a working capital deficit of \$398.0 million, compared to a working capital deficit of \$504.5 million as at December 31, 2015. Accounts receivable decreased mainly due to the timing of collections. Vessels held for sale decreased due to the sale of the *Navion Torinita*, *Fuji Spirit* and *Kilimanjaro Spirit* during 2016 partially offset by the classification of the *Navion Saga* as held for sale as at December 31, 2016. Accrued liabilities increased mainly due to estimated potential damages relating to the cancellation of the two UMS newbuildings. The due to affiliates balance in current liabilities decreased mainly due to the refinancing of the \$100 million convertible promissory note issued to Teekay in connection with the financing of the acquisition of the *Petrojarl Knarr* FPSO unit, and a \$100 million six-month loan made by Teekay to Teekay Offshore, with a \$200 million long-term subordinated promissory note issued to a subsidiary of Teekay by Teekay Offshore, which matures in 2019. The current portion of derivative instruments in current liabilities decreased due to the amendment of terms of certain interest rate swaps to defer the counterparties' early termination options and extend and increase the collateral threshold of existing cross currency swaps related to two of Teekay Offshore's NOK bonds as described above and an increase in long-term LIBOR benchmark rates during 2016 compared to 2015. The current portion of long-term debt increased mainly due to reclassifying one term loan maturing in the first half of 2017 to the current portion of long-term debt as at December 31, 2016, an increase in the current portion of long-term debt of an existing term loan as at December 31, 2016 compared to December 31, 2015, related to the refinancing of the existing debt facility and a portion of a NOK bond due in October 2017, the drawdown of existing term loans and revolving debt facilities to finance the installment payments on the four towing and offshore installation newbuildings, one of which delivered during September 2016, the *Petrojarl / FPSO* unit upgrades and the reclassification of a portion of the term loan relating to the *Gina Krog* FSO conversion to current portion of long-term debt, partially offset by the repayment of NOK 680 million of NOK bonds which matured and were paid in 2016 and other debt repayments and prepayments during 2016.

Teekay Offshore's primary liquidity needs for 2017 and 2018 are to pay existing, committed capital expenditures, to make scheduled repayments of debt, to pay debt service costs, quarterly distributions on its outstanding common and preferred units, operating expenses and dry docking expenditures, to fund general working capital requirements, to settle claims and potential claims against it, and manage its working capital deficit. Teekay Offshore anticipates that its primary sources of funds for 2017 and 2018 will be cash flows from operations, bank debt, equity and bond issuances, and proceeds from the sale of partial interests in certain assets. As at December 31, 2016, Teekay Offshore's total future contractual obligations for vessels and newbuildings and committed conversions, including its 50% interest in the *Libra* FPSO conversion, were estimated to be approximately \$671 million, consisting of \$600.4 million (2017) and \$70.6 million (2018). Of this \$671 million of future contractual obligations, Teekay Offshore has pre-arranged financing in place of \$436.8 million and a further \$60.0 million held in escrow as funding for the *Petrojarl / FPSO* project, with a remaining requirement of \$174.2 million, which mainly relates to 2017. Teekay Offshore expects to manage these funding requirements from existing and expected liquidity.

Primarily as a result of the working capital deficit and committed capital expenditures, over the one-year period following the issuance of its 2016 consolidated financial statements Teekay Offshore will need to obtain additional sources of financing, in addition to amounts generated from operations, to meet its minimum liquidity requirements under its financial covenants. These anticipated sources of financing include refinancing debt facilities that mature during the one-year period, raising additional capital through equity issuances, increasing amounts available under existing debt facilities and entering into new debt facilities, negotiating extensions or redeployments of existing assets and the sale of partial interests of assets. Teekay Offshore is actively pursuing the funding alternatives described above, which it considers probable of completion based on Teekay Offshore's history of being able to raise equity, refinance loan facilities for similar types of vessels, and indicative offers received from potential investors in certain assets. Teekay Offshore is in various stages of completion on these matters.

Teekay Offshore believes that its existing cash and cash equivalents and undrawn long-term borrowings, in addition to other sources of cash including cash from operations and the initiatives described above, will be sufficient to meet its existing liquidity needs for at least the next 12 months.

### Teekay LNG

Teekay LNG's business model is to employ its vessels on fixed-rate contracts primarily with large energy companies and their transportation subsidiaries. Prior to the fourth quarter of 2015, the operating cash flow generated by Teekay LNG's vessels each quarter, excluding a reserve for maintenance capital expenditures and debt repayments, was generally paid out to Teekay LNG's unitholders and general partner as cash distributions within approximately 45 days after the end of each quarter. As discussed in the Teekay Corporation section above, Teekay LNG reduced its quarterly cash distribution per common unit to \$0.14 from \$0.70.

Teekay LNG's primary liquidity needs for 2017 through 2018 include payment of its quarterly distributions, including distributions on its common units and Series A Preferred Units, operating expenses, dry-docking expenditures, debt service costs, scheduled repayments of long-term debt, bank debt maturities, committed capital expenditures and the funding of general working capital requirements. Teekay LNG anticipates that its primary sources of funds for its short-term liquidity needs will be cash flows from operations, proceeds from debt financings, proceeds from equity offerings, and dividends from its equity accounted joint ventures. For 2017 through 2018, Teekay LNG expects that its existing liquidity, combined with the cash flow it expects to generate from its operations and receive as dividends from its equity accounted joint ventures will be sufficient to finance a portion of its liquidity needs, including the equity portion of its committed capital expenditures. Teekay LNG's remaining liquidity needs include the requirement to secure debt financing for an adequate portion of its committed capital expenditures, to refinance its loan facilities maturing in 2017 to 2018 and its NOK-denominated bonds due in 2018, to possibly fund the potential exposure relating to the lease arrangements that the Teekay Nakilat Joint Venture had previously entered into (please read "Item 18 - Financial Statements: Note 15c - Commitments and Contingencies"). Teekay LNG already has committed debt financing in place for the following vessels and projects: three of its LNG carriers under construction that will be chartered to a wholly-owned subsidiary of Royal Dutch Shell PLC; the *Torben Spirit*, which was delivered to Teekay LNG on February 28, 2017 and chartered out to a major energy company; the vessels under construction in the BG Joint Venture and the Exmar LPG Joint Venture; and the assets of the Bahrain LNG Joint Venture formed for the development of an LNG receiving and regasification terminal in Bahrain. Teekay LNG is actively seeking debt financings for its other five wholly-owned LNG carriers under construction, the six LNG carriers under construction for the Yamal LNG Joint Venture and for the other requirements described above.

Teekay LNG's liquidity needs beyond 2018 are currently expected to decline compared to 2017 to 2018, as a majority of its capital expenditures commitments relate to 2017 to 2018. Teekay LNG's ability to continue to expand the size of its fleet over the long-term is dependent upon its ability to generate operating cash flow, obtain long-term bank borrowings and other debt, as well as its ability to raise debt or equity financing through public or private offerings.

As at December 31, 2016, Teekay LNG's consolidated cash and cash equivalents were \$126.1 million, compared to \$102.5 million at December 31, 2015. Teekay LNG's total liquidity, which consists of cash, cash equivalents and undrawn credit facilities, was \$369.8 million as at December 31, 2016, compared to \$232.5 million as at December 31, 2015. The increase in total consolidated liquidity was primarily due to proceeds from Teekay LNG's sale-leaseback financing transactions in February 2016 and July 2016 relating to the *Creole Spirit* and *Oak Spirit*, respectively, proceeds from the issuance of Series A Preferred Units in October 2016, proceeds from the issuance of Teekay LNG's NOK bonds net of buyback in October 2016, and reduced quarterly distributions in 2016 compared to 2015. At December 31, 2016, Teekay LNG had a working capital deficit of \$29.0 million, which is primarily the result of \$47.3 million of its NOK bonds maturing in May 2017, and \$26.0 million of current capital lease obligations relating to one Suezmax tanker, under which the owner has the option to require Teekay LNG to purchase the vessel. Teekay LNG expects to manage its working capital deficit primarily with net operating cash flow and dividends from its equity accounted joint ventures, debt refinancings and, to a lesser extent, existing undrawn revolving credit facilities. As at December 31, 2016, Teekay LNG had undrawn revolving credit facilities of \$243.7 million. In addition, in January 2017, Teekay LNG raised in the Norwegian bond market, NOK 300 million (equivalent to approximately \$35 million) in new senior unsecured bonds through an add-on to its existing NOK bonds due in October 2021 and received \$40 million in cash distributions in February 2017 from its 40% owned joint venture with Qatar Gas Transport Company Ltd. (Nakilat) (or the *RasGas 3 Joint Venture*) upon completion of its debt refinancing in December 2016, which were partially offset by Teekay LNG's additional equity investment of \$57 million in the Teekay LNG-Marubeni Joint Venture upon completion of its debt refinancing in March 2017.

Teekay LNG believes that its existing cash and cash equivalents and undrawn long-term borrowings, in addition to other sources of cash including cash from operations and the initiatives described above, will be sufficient to meet its existing liquidity needs for at least the next 12 months.

### Teekay Tankers

Teekay Tankers' primary sources of liquidity are cash and cash equivalents, cash flows provided by its operations, its undrawn credit facilities, proceeds from sales of vessels, and capital raised through financing transactions. As at December 31, 2016, Teekay Tankers' total cash and cash equivalents were \$68.1 million, compared to \$96.4 million at December 31, 2015. Teekay Tankers' cash balance at December 31, 2016 had decreased primarily as a result of repayments of its long-term debt (described below) and dividends paid on its shares of common stock which were partially offset by cash flow from Teekay Tankers' operations, proceeds received from the sale of two MR tankers and two lightering support vessels and distributions Teekay Tankers received from its equity accounted investments.

Teekay Tankers' total liquidity, including cash, cash equivalents and undrawn credit facilities, was \$102.4 million as at December 31, 2016, compared to \$111.0 million as at December 31, 2015. Teekay Tankers anticipates that its primary sources of funds for its short-term liquidity needs will be cash flows from operations, existing cash and cash equivalents and undrawn long-term borrowings, refinancing existing loans (including one revolver maturing in 2018 with an expected balance of \$65.5 million), equity issuances and other sources of financing.

Teekay Tankers' short-term liquidity requirements include the payment of operating expenses, dry-docking expenditures, debt servicing costs, dividends on its shares of common stock, scheduled repayments of long-term debt, as well as funding its other working capital requirements. Teekay Tankers' short-term charters and spot market tanker operations contribute to the volatility of its net operating cash flow, and thus its ability to generate sufficient cash flows to meet its short-term liquidity needs. Historically, the tanker industry has been cyclical, experiencing volatility in profitability and asset values resulting from changes in the supply of, and demand for, vessel capacity. In addition, tanker spot markets historically have exhibited seasonal variations in charter rates. Tanker spot markets are typically stronger in the winter months as a result of increased oil consumption in the northern hemisphere and unpredictable weather patterns that tend to disrupt vessel scheduling.

From the first quarter of 2013 through to the dividend paid in the fourth quarter of 2015, Teekay Tankers distributed a portion of its cash flow to shareholders through a fixed quarterly dividend of \$0.03 per share on its common shares. Commencing with the dividend paid in the first quarter of 2016, Teekay Tankers adopted a dividend policy under which quarterly dividends are expected to range from 30% to 50% of its quarterly adjusted net income, subject to the discretion of Teekay Tankers' Board of Directors, with a minimum quarterly dividend of \$0.03 per share. *Adjusted net income* is a non-GAAP measure which excludes specific items affecting net income that are typically excluded by securities analysts in their published estimates of Teekay Tankers' financial results. Specific items affecting net income include foreign exchange gain or losses, unrealized gains or losses on derivative instruments, asset impairments, gain or losses on sale of vessels and debt issuance costs which were written off in connection with the refinancing of Teekay Tankers' debt facilities in the first quarter of 2016.

Teekay Tankers' long-term capital needs are primarily for capital expenditures and debt repayment. Generally, Teekay Tankers expects that its long-term sources of funds will be cash balances, long-term bank borrowings and other debt or equity financings, which includes equity issuances from Teekay Tankers' continuous offering program. Teekay Tankers expects that it will rely upon external financing sources, including bank borrowings, and the issuance of debt and equity securities and other sources of financing, to fund acquisitions and expansion capital expenditures, including opportunities Teekay Tankers may pursue to purchase additional vessels from Teekay or third parties.

In January 2016, Teekay Tankers entered into a new \$894.4 million long-term debt facility, consisting of both a term loan and a revolving credit facility, which is scheduled to mature in January 2021, of which \$845.8 million was used to repay Teekay Tankers' two bridge loan facilities, which matured in late January 2016, and a portion of Teekay Tankers' main corporate revolving credit facility, which was scheduled to mature in 2017.

In October 2016, Teekay Tankers agreed to sell two Suezmax tankers for an aggregate sales price of \$33.8 million. The sale of one Suezmax tanker was completed in January 2017 and the sale of the other Suezmax tanker was completed in March 2017. Teekay Tankers used the proceeds from these sales to repay a portion of its corporate revolving credit facility, which is scheduled to mature in 2017. As at December 31, 2016, the revolving credit facility had an outstanding balance of \$55.1 million.

Teekay Tankers is exposed to market risk from changes in interest rates, foreign currency fluctuations and spot market rates. Teekay Tankers uses interest rate swaps to manage interest rate risk. Teekay Tankers does not use this financial instrument for trading or speculative purposes.

Teekay Tankers believes that its existing cash and cash equivalents and undrawn long-term borrowings, in addition to other sources of cash including cash from operations and the initiatives described above, will be sufficient to meet its existing liquidity needs for at least the next 12 months.

#### Cash Flows

The following table summarizes our consolidated cash and cash equivalents provided by (used for) operating, financing and investing activities for the periods presented:

	Year Ended December 31,		
	2016	2015	2014
Net operating cash flows	620,120	770,309	446,317
Net financing cash flows	(555,305)	924,457	726,761
Net investing cash flows	(175,213)	(1,823,278)	(980,834)



## Operating Cash Flows

Our consolidated net cash flow from operating activities fluctuates primarily as a result of changes in vessel utilization and TCE rates, changes in interest rates, fluctuations in working capital balances, the timing and amount of dry-docking expenditures, repairs and maintenance activities, vessel additions and dispositions, and foreign currency rates. Our exposure to the spot tanker market has contributed significantly to fluctuations in operating cash flows historically as a result of highly cyclical spot tanker rates, which have increased recently after a number of years of historically low rates. In addition, the production performance of certain of our FPSO units that operate under contracts with a production-based compensation component has contributed to fluctuations in operating cash flows. As the charter contracts of two of our FPSO units include incentives based on average annual oil prices, the recent reduction in global oil prices has negatively impacted our operating cash flows.

Net consolidated cash flow from operating activities decreased to \$620.1 million for the year ended December 31, 2016, from \$770.3 million for the year ended December 31, 2015. This decrease was primarily due to a \$134.5 million decrease in income from vessel operations before depreciation, amortization, asset impairments and loan loss recoveries, net gain on sale of vessels, equipment and other assets and the amortization of in-process revenue contracts of our businesses, primarily as a result of lower average spot TCE rates earned by our conventional tanker fleet in 2016 compared to 2015 and the termination of time charters and resulting lay-up of the *Polar Spirit* and *Arctic Spirit* LNG carriers. We received dividends from our joint ventures of \$38.1 million for the year ended December 31, 2016, compared to \$106.1 million in 2015. The decreases in cash flow were partially offset by an increase in changes to non-cash working capital items of \$50.6 million, and an increase in cash flow of \$22.5 million from lower expenditures for dry docking. There was also an increase in interest expense of \$18.2 million in 2016 compared to 2015.

Net consolidated cash flow from operating activities increased to \$770.3 million for the year ended December 31, 2015, from \$446.3 million for the year ended December 31, 2014. This increase was primarily due to a \$376.9 million increase in income from vessel operations before depreciation, amortization, asset impairments and loan loss recoveries, net gain on sale of vessels, equipment and other assets and the amortization of in-process revenue contracts of our businesses, primarily as a result of increased operating cash flows from our businesses due to higher average TCE rates earned by our conventional tanker fleet, increases in conventional tanker fleet size and increased operating cash flows from our FPSO fleet. We received dividends from our joint ventures of \$106.1 million for the year ended December 31, 2015, compared to \$33.4 million in 2014. The increases in cash flow was partially offset by a decrease in changes to non-cash working capital items of \$72.9 million, primarily due to the timing of deferred revenue and receivables, and a \$26.9 million increase in interest expense (net of interest income and including realized losses on interest rate swaps and interest rate swaps terminations) for the year ended December 31, 2015 compared to 2014.

For further discussion of changes in income from vessel operations before depreciation, amortization, asset impairments, net loss (gain) on sale of vessels and equipment and the amortization of in-process revenue contracts of our businesses, please read "Results of Operations."

## Financing Cash Flows

Teekay's Daughter Companies hold most of our liquefied gas carriers (Teekay LNG), offshore assets, including shuttle tankers, FPSO units and FSO and offshore support units (Teekay Offshore) and our conventional tanker assets (Teekay Tankers). From and including the respective initial public offerings of these subsidiaries, Teekay Parent has been selling assets that are a part of these business lines to the Daughter Companies. Historically, the Daughter Companies have distributed operating cash flows to their owners in the form of distributions or dividends. The Daughter Companies raised net proceeds from issuances of new equity to the public and to third-party investors of \$327.4 million in 2016, compared to \$575.4 million in 2015 and \$452.1 million in 2014. Teekay Parent raised net proceeds from issuances of new equity to the public and to third party investors and two entities established by our founder, including Resolute, our largest shareholder, of \$105.5 million in 2016, compared to \$nil in 2015 and 2014. As the sizes of the Daughter Companies have grown through acquisitions, whether from Teekay or otherwise, the amount of their operating cash flows generally increased, which resulted in larger aggregate distributions, primarily from Teekay Offshore and Teekay LNG. As described above, distributions from Teekay Offshore and Teekay LNG have been reduced commencing with the distributions relating to the fourth quarter of 2015. Distributions to non-controlling interests decreased to \$136.2 million in 2016, compared to \$360.4 million in 2015 and \$360.8 million in 2014. In addition, distributions from the Daughter Companies to Teekay Parent decreased to \$45.8 million in 2016 from \$193.2 million in 2015 and \$176.0 million in 2014. Teekay Parent has agreed with Teekay Offshore that, until Teekay Offshore's NOK bonds maturing 2018 have been repaid, all cash distributions to be paid to Teekay Parent or its affiliates, including the general partner of Teekay Offshore, will instead be paid in common units of Teekay Offshore.

We use our credit facilities to partially finance capital expenditures. Occasionally, we will use revolving credit facilities to finance these expenditures until longer-term financing is obtained, at which time we typically use all or a portion of the proceeds from the longer-term financings to prepay outstanding amounts under the revolving credit facilities. We actively manage the maturity profile of our outstanding financing arrangements. Our net proceeds from the issuance of long-term debt, which is the proceeds from the issuances of long-term debt, net of issuance costs and prepayments of long-term debt, was \$202.4 million in 2016, \$1.9 billion in 2015 and \$2.0 billion in 2014.

Dividends paid by Teekay Corporation on its common stock during 2016 were \$17.4 million, compared to \$125.9 million in 2015 and \$91.0 million in 2014, or \$0.2200 per share for 2016, \$1.7325 per share for 2015 and \$1.2650 per share for 2014. During the third and fourth quarter of 2015, after the completion of the sale of the *Knarr* FPSO to Teekay Offshore, Teekay's quarterly dividend payment increased primarily based on the cash flow contributions from our general partner and limited partner interests in Teekay Offshore and Teekay LNG, together with other dividends received, after deductions for parent company level corporate general and administrative expenses and any reserves determined to be required by our Board of Directors. Commencing with our dividend relating to the fourth quarter of 2015, we announced a reduction to our quarterly dividend to \$0.055 from \$0.55 per share.

## Investing Cash Flows

During 2016, we incurred capital expenditures for vessels and equipment of \$648.3 million, primarily for capitalized vessel modifications and shipyard construction installment payments. Teekay Offshore incurred capitalized expenditures of \$294.6 million for vessels and equipment, including conversion costs on the *Gina Krog* FSO conversion, upgrade costs on the *Petrojarl I* FPSO unit, installment payments on the newbuilding towing and offshore installation vessels, partially offset by credits received relating to the *Petrojarl Knarr* FPSO unit, Teekay LNG incurred capital expenditures of \$345.8 million, primarily for newbuilding installment payments and shipbuilding supervision costs for its LNG carrier newbuildings, contributed \$120.9 million to its equity accounted joint ventures, and received a \$5.5 million repayment of a shareholder loan from the Exmar LPG Joint Venture. In addition, Teekay Offshore made a \$54.9 million investment in its joint ventures and received proceeds of \$69.8 million from the sale of the *Navion Torinita* and *Navion Europa* shuttle tankers and the *Fuji Spirit* and *Kilimanjaro Spirit* conventional tankers. Teekay LNG received proceeds of \$355.3 million from the sale-leaseback financing transaction completed on the *Creole Spirit* and *Oak Spirit* in February 2016 and proceeds of \$94.3 million from the sales of the *Bermuda Spirit* and *Hamilton Spirit* in April 2016 and May 2016.

During 2015, we incurred capital expenditures for vessels and equipment of \$1.8 billion, primarily for capitalized vessel modifications and shipyard construction installment payments. Teekay Parent incurred \$91.0 million of capital expenditures mainly for the installment payments and conversion costs of the *Petrojarl Knarr* FPSO unit. Teekay Offshore incurred capitalized expenditures of \$664.7 million, including the six towing and offshore installation vessels delivered during 2015, the final installment on the *Arendal Spirit* UMS, FSO conversion costs, upgrade costs on the *Petrojarl I* FPSO unit, costs on the three newbuilding shuttle tankers, the four newbuilding towing and offshore installation vessels and various other vessel additions and installments. Teekay LNG incurred capital expenditures of \$192.0 million primarily relating to newbuilding installments for six of its 11 LNG carrier newbuildings. Teekay Tankers incurred capital expenditures of \$847.4 million relating to the acquisition of 12 Suezmax tankers from Principal Maritime Tankers, the acquisition of four LR2 product tankers and one Aframax tanker and other capital expenditures. In addition, we invested \$40.6 million in our equity-accounted investees, primarily related to Teekay Offshore's *Libra* FPSO joint venture and provided capital to Teekay LNG's equity accounted investment primarily to prepay debt within the Teekay LNG-Marubeni Joint Venture and we were repaid \$53.2 million from our loans to equity-accounted investees. During 2015, Teekay Offshore received proceeds of \$8.9 million from the sale of a 1997-built shuttle tanker and Teekay Tankers received proceeds of \$11.1 million from the sale of one MR tanker. In addition, Teekay Tankers invested \$47.3 million related to the acquisition of TMS during 2015.

During 2014, we incurred capital expenditures for vessels and equipment of \$994.9 million, primarily for capitalized vessel modifications and shipyard construction installment payments. This amount primarily consisted of Teekay Parent incurring \$626.8 million of capital expenditures primarily for the installment payments and conversion costs of the *Knarr* FPSO unit, which is not yet fully in service, and Teekay Offshore incurring capitalized expenditures totaling \$172.2 million related to; the four newbuilding ALP towage vessels, FSO conversion costs, installment payments on the UMS and various other vessel additions. In addition, Teekay LNG incurred capital expenditures totaling \$188.9 million which related to newbuilding installments for its eight LNG newbuildings equipped with the MEGI twin engines, the early termination fee on the termination of the leasing of the *RasGas II* LNG Carriers (which was capitalized as part of the vessels' costs), the funding of Teekay LNG's acquisition of the *Norgas Napa* in November 2014, and certain vessel upgrades. In addition, we invested \$79.6 million in our equity-accounted investees, primarily related to Teekay Tankers and Teekay Parent's \$60.0 million investment in TIL and Teekay Parent's \$25.0 million in a cost accounted investment. We also advanced \$87.1 million to our equity-accounted investees. During 2014, Teekay Parent received proceeds of \$11.1 million from the sale of four 2009-built Suezmax tankers and \$2.2 million from the sale of an office building, Teekay Offshore received proceeds of \$13.4 million from the sale of one 1995-built shutter tanker, and Teekay Tankers received proceeds of \$154.0 million from the sale of two VLCCs.

## COMMITMENTS AND CONTINGENCIES

The following table summarizes our long-term contractual obligations as at December 31, 2016:

	Total	2017	2018	2019	2020	2021	Beyond 2021
	In millions of U.S. Dollars						
<b>Teekay Offshore</b>							
Bond repayments <sup>(1) (2)</sup>	556.9	20.8	120.4	415.7	—	—	—
Scheduled repayments of long-term debt <sup>(1)</sup>	1,993.7	348.2	412.0	332.7	243.1	220.0	437.7
Repayments on maturity of long-term debt <sup>(1)</sup>	687.1	219.7	154.1	25.0	40.0	14.9	233.4
Subordinated promissory note - repayment on maturity <sup>(3)</sup>	200.0	—	—	200.0	—	—	—
Chartered-in vessels (operating leases)	122.3	69.7	35.4	17.2	—	—	—
Newbuildings installments/conversion costs <sup>(4)</sup>	671.0	600.4	70.6	—	—	—	—
	<u>4,231.0</u>	<u>1,258.8</u>	<u>792.5</u>	<u>990.6</u>	<u>283.1</u>	<u>234.9</u>	<u>671.1</u>
<b>Teekay LNG</b>							
Bond repayments <sup>(2) (5)</sup>	371.3	47.3	104.2	—	115.7	104.1	—
Scheduled repayments of long-term debt <sup>(2) (6)</sup>	539.7	117.8	97.4	62.1	62.3	41.4	158.7
Repayments on maturity of long-term debt <sup>(2) (6) (7)</sup>	893.5	25.0	518.2	20.4	—	142.9	187.0
Commitments under capital leases <sup>(8)</sup>	536.3	61.0	57.3	30.1	30.1	30.1	327.7
Commitments under operating leases <sup>(9)</sup>	295.5	24.1	24.1	24.1	24.1	24.1	175.0
Newbuildings installments/shipbuilding supervision <sup>(10)</sup>	2,876.9	1,050.0	1,067.2	561.1	198.6	—	—
	<u>5,513.2</u>	<u>1,325.2</u>	<u>1,868.4</u>	<u>697.8</u>	<u>430.8</u>	<u>342.6</u>	<u>848.4</u>
<b>Teekay Tankers</b>							
Scheduled repayments of long-term debt <sup>(11)</sup>	455.0	122.3	110.1	110.0	110.0	2.6	—
Repayments on maturity of long-term debt <sup>(11)</sup>	486.7	49.1	65.5	—	—	372.1	—
Chartered-in vessels (operating leases) <sup>(12)</sup>	53.1	26.8	8.3	8.3	8.3	1.4	—
	<u>994.8</u>	<u>198.2</u>	<u>183.9</u>	<u>118.3</u>	<u>118.3</u>	<u>376.1</u>	<u>—</u>
<b>Teekay Parent</b>							
Bond repayments <sup>(13)</sup>	592.7	—	—	—	592.7	—	—
Scheduled repayments of long-term debt <sup>(13)</sup>	106.6	53.3	53.3	—	—	—	—
Repayments on maturity of long-term debt <sup>(13)</sup>	46.9	—	46.9	—	—	—	—
Chartered-in vessels (operating leases) <sup>(14)</sup>	9.5	9.1	0.4	—	—	—	—
Asset retirement obligation	23.0	—	23.0	—	—	—	—
	<u>778.7</u>	<u>62.4</u>	<u>123.6</u>	<u>—</u>	<u>592.7</u>	<u>—</u>	<u>—</u>
<b>Total</b>	<u><u>11,517.7</u></u>	<u><u>2,844.6</u></u>	<u><u>2,968.4</u></u>	<u><u>1,806.7</u></u>	<u><u>1,424.9</u></u>	<u><u>953.6</u></u>	<u><u>1,519.5</u></u>

(1) Excludes expected interest payments of \$108.4 million (2017), \$89.6 million (2018), \$53.7 million (2019), \$32.5 million (2020), \$24.7 million (2021) and \$34.0 million (beyond 2021). Expected interest payments are based on existing interest rates (fixed-rate loans) and LIBOR or NIBOR as at December 31, 2016, plus margins which ranged between 0.30% and 5.75% (variable rate loans) as at December 31, 2016. The expected interest payments do not reflect the effect of related interest rate swaps and cross currency swaps that Teekay Offshore has used as an economic hedge of certain of its variable rate debt and NOK-denominated obligations.

(2) Euro-denominated and NOK-denominated obligations are presented in U.S. Dollars and have been converted using the prevailing exchange rate as of December 31, 2016.

(3) Consists of the repayment of the \$200.0 million subordinated promissory note, issued to a subsidiary of Teekay effective July 1, 2016. The promissory note bears interest at an annual rate of 10.00% on the outstanding principal balance, which is payable quarterly and, one half of which will be paid in cash and the other half of which will be paid in common units or from the proceeds of the sale of equity securities. Excludes maximum expected interest payments of \$20.0 million (2017) and \$20.0 million (2018).

(4) Consists of Teekay Offshore's estimated remaining payments for the three towing and offshore installation newbuildings, three shuttle tanker newbuildings, its 50% interest in an FPSO conversion for the Libra field, upgrades of the Petrojarl I FPSO unit, and the FSO conversion for the *Randgrid* shuttle tanker. Teekay Offshore has pre-arranged undrawn financing of approximately \$436.8 million relating to its capital expenditure commitments for 2017.

(5) Excludes expected interest payments of \$15.5 million (2017), \$16.8 million (2018), \$12.9 million (2019), \$10.2 million (2020), and \$3.7 million (2021). Expected interest payments are based on NIBOR at December 31, 2016, plus margins that range up to 6.00%, as well as the prevailing U.S. Dollar/NOK exchange rate as of December 31, 2016. The expected interest payments do not reflect the effect of the related cross-currency swaps that Teekay LNG has used as an economic hedge of its foreign exchange and interest rate exposure associated with its NOK-denominated long-term debt.

(6) Excludes expected interest payments of \$31.3 million (2017), \$22.1 million (2018), \$13.8 million (2019), \$12.7 million (2020), \$10.4 million (2021) and \$30.0 million (beyond 2021). Expected interest payments reflect the refinancing completed in November 2016 of one of Teekay LNG's revolving credit

facilities and are based on LIBOR or EURIBOR at December 31, 2016, plus margins on debt that has been drawn that ranges up to 2.80% (variable-rate loans), as well as the prevailing U.S. Dollar/Euro exchange rate as of December 31, 2016. The expected interest payments do not reflect the effect of related interest rate swaps or swaptions that Teekay LNG has used as an economic hedge of certain of its variable-rate debt.

- (7) Upon the completion of the Teekay-LNG Marubeni Joint Venture's debt refinancing in March 2017, Teekay LNG invested \$57.2 million of additional equity into the Teekay-LNG Marubeni Joint Venture through a \$44.2 million payment in March 2017 and a \$13.0 million payment in April 2017, which is not reflected in the table above.
- (8) Includes, in addition to lease payments, amounts Teekay LNG may be or is required to pay to purchase the leased vessels at the end of their respective lease terms. For two of Teekay LNG's four capital lease obligations, the lessor has the option to sell two Suezmax tankers under capital lease to Teekay LNG at any time during the remaining lease terms; however, in this table Teekay LNG has assumed the lessor will not exercise its right to sell the two Suezmax tankers to Teekay LNG until after the lease term expires, which is during the years 2017 and 2018. The purchase price for any Suezmax tanker Teekay LNG is required to purchase would be based on the unamortized portion of the vessel construction financing costs for the vessels, which are included in the table above. We expect Teekay LNG to satisfy any such purchase price by assuming the existing vessel financing, although it may be required to obtain separate debt or equity financing to complete any purchases if the lenders do not consent to its assuming the financing obligations.
- (9) Teekay LNG has corresponding leases whereby it is the lessor and expects to receive approximately \$260.3 million under those leases from 2017 to 2029.
- (10) As of December 31, 2016, Teekay LNG has agreements for the construction of nine wholly-owned LNG carrier newbuildings, for which the estimated remaining costs for these newbuildings totaled \$1.5 billion, including estimated interest and construction supervision fees. Teekay LNG has secured \$682.8 million of financing related to the commitments for four of the LNG carrier newbuildings included in the table above.

As part of the acquisition of an ownership interest in the BG Joint Venture, Teekay LNG agreed to assume Shell's obligation to provide shipbuilding supervision and crew training services for the four LNG carrier newbuildings and to fund its proportionate share of the remaining newbuilding installments. The estimated remaining costs for the shipbuilding supervision and crew training services and Teekay LNG's proportionate share of newbuilding installments totaled \$195.6 million as of December 31, 2016. However, as part of this agreement with Shell, Teekay LNG expects to recover \$10.9 million of the shipbuilding supervision and crew training costs from Shell between 2017 and 2019 and the BG Joint Venture has secured financing of \$137.1 million based on Teekay LNG's proportionate share of newbuilding installments as of December 31, 2016.

In July 2014, the Yamal LNG Joint Venture, in which Teekay LNG has a 50% ownership interest, entered into agreements for the construction of six LNG carrier newbuildings. As at December 31, 2016, Teekay LNG's 50% share of the estimated remaining costs for these six newbuildings totaled \$883.0 million. The Yamal LNG Joint Venture intends to secure debt financing for approximately 80% of the estimated fully built-up cost of the six newbuildings, which is estimated to be \$2.1 billion.

The Bahrain LNG Joint Venture, in which Teekay LNG has a 30% ownership interest, is developing an LNG receiving and regasification terminal in Bahrain. The project will be owned and operated under a 20-year agreement commencing in early-2019 with an estimated fully-built-up cost of approximately \$960.0 million. As at December 31, 2016, Teekay LNG's 30% share of the estimated remaining costs is \$224.1 million. The Bahrain LNG Joint Venture has secured debt financing for approximately 75% of the fully built-up cost of the LNG receiving and regasification terminal in Bahrain.

The table above includes Teekay LNG's proportionate share of the newbuilding costs for four LPG carrier newbuildings scheduled for delivery between 2017 and 2018 in the joint venture between the Exmar LPG Joint Venture and Teekay LNG. As at December 31, 2016, Teekay LNG's 50% share of the estimated remaining costs for these four newbuildings totaled \$77.5 million, including estimated interest and construction supervision fees. The Exmar LPG Joint Venture has secured financing for the four LPG carrier newbuildings.

- (11) Excludes expected interest payments of \$22.6 million (2017), \$18.7 million (2018), \$15.2 million (2019), \$12.2 million (2020) and \$5.3 million (2021). Expected interest payments are based on the existing interest rates for variable-rate loans at LIBOR plus margins that range from 0.30% to 2.00% at December 31, 2016. The expected interest payments do not reflect the effect of related interest rate swaps that Teekay Tankers has used to economically hedge certain of its floating-rate debt.
- (12) Excludes payments required if Teekay Tankers executes all options to extend the terms of in-chartered leases signed as of December 31, 2016. If Teekay Tankers exercises all options to extend the terms of these in-chartered leases, Teekay Tankers would expect total payments of, \$43.1 million (2017), \$17.7 million (2018), \$8.3 million (2019), \$8.3 million (2020) and \$1.4 million (2021).
- (13) Excludes expected interest payments of \$56.7 million (2017), \$52.9 million (2018), \$50.4 million (2019), and \$25.2 million (2020). Expected interest payments are based on the existing interest rate for a fixed-rate loan at 8.5% and existing interest rates for variable-rate loans that are based on LIBOR plus margins which ranged between 3.95% and 4.0% as at December 31, 2016. The expected interest payments do not reflect the effect of related interest rate swaps that Teekay Parent uses as an economic hedge of certain of its variable rate debt.
- (14) Excludes internal time-charter-in commitments between Teekay Parent and its subsidiaries, Teekay Offshore and Teekay LNG.

## **OFF-BALANCE SHEET ARRANGEMENTS**

We have no off-balance sheet arrangements that have or are reasonably likely to have, a current or future material effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources. Our equity-accounted investments are described in "Item 18 – Financial Statements: Note 22 – Equity-Accounted Investments."

## **CRITICAL ACCOUNTING ESTIMATES**

We prepare our consolidated financial statements in accordance with GAAP, which requires us to make estimates in the application of our accounting policies based on our best assumptions, judgments and opinions. On a regular basis, management reviews our accounting policies, assumptions, estimates and judgments to ensure that our consolidated financial statements are presented fairly and in accordance with GAAP. However, because future events and their effects cannot be determined with certainty, actual results could differ from our assumptions and estimates, and such differences could be material. Accounting estimates and assumptions discussed in this section are those that we consider to be the most critical to an understanding of our financial statements because they inherently involve significant judgments and uncertainties. For a further description of our material accounting policies, please read "Item 18. Financial Statements: Note 1. Summary of Significant Accounting Policies."

### ***Revenue Recognition***

*Description.* We recognize voyage revenue using the proportionate performance method. Under such method, voyages may be calculated on either a load-to-load or discharge-to-discharge basis. This means voyage revenues are recognized ratably either from the beginning of when product is loaded for one voyage to when it is loaded for the next voyage, or from when product is discharged (unloaded) at the end of one voyage to when it is discharged after the next voyage.

*Judgments and Uncertainties.* In applying the proportionate performance method, we believe that in most cases the discharge-to-discharge basis of calculating voyages more accurately reflects voyage results than the load-to-load basis. At the time of cargo discharge, we generally have information about the next load port and expected discharge port, whereas at the time of loading we are normally less certain what the next load port will be. We use this method of revenue recognition for all spot voyages and voyages servicing contracts of affreightment, with an exception for our shuttle tankers servicing contracts of affreightment with offshore oil fields. In this case a voyage commences with tendering of notice of readiness at a field, within the agreed lifting range, and ends with tendering of notice of readiness at a field for the next lifting. However, we do not begin recognizing revenue for any of our vessels until a charter has been agreed to by the customer and us, even if the vessel has discharged its cargo and is sailing to the anticipated load port on its next voyage.

*Effect if Actual Results Differ from Assumptions.* Our revenues could be overstated or understated for any given period to the extent actual results are not consistent with our estimates in applying the proportionate performance method.

### ***Contingencies***

*Description.* We may, from time to time, be involved in legal proceedings, claims or other situations involving uncertainty as to a possible loss that will ultimately be resolved when one or more future events occur or fail to occur. We accrue a provision for such loss contingencies if it is probable as of the reporting date, that an asset had been impaired or a liability incurred, based in information available prior to the issuance of the consolidated financial statements, and if the amount of the loss can be reasonably estimated.

*Judgments and Uncertainties.* The amount of loss contingencies recognized as a liability in our consolidated financial statements requires management to make significant estimates that may at times be inherently difficult to make given the uncertainties involved, including estimates of whether it is probable an asset had been impaired or a liability incurred, the amount of possible losses, the ability to recover some or all of the possible loss through insurance coverage, amongst others. Our loss contingencies are disclosed in more detail in Item 18 - "Financial Statements: Note 15d Commitments and Contingencies".

*Effect if Actual Results Differ from Assumptions.* Our net income (loss) could be overstated or understated for any given period to the extent actual losses incurred, following resolution of our contingencies, are different than our prior estimates of recognized loss contingencies.

### ***Vessel Lives and Impairment***

*Description.* The carrying value of each of our vessels represents its original cost at the time of delivery or purchase less depreciation and impairment charges. We depreciate the original cost, less an estimated residual value, of our vessels on a straight-line basis over each vessel's estimated useful life. The carrying values of our vessels may not represent their market value at any point in time because the market prices of second-hand vessels tend to fluctuate with changes in charter rates and the cost of newbuildings. Both charter rates and newbuilding costs tend to be cyclical in nature.

We review vessels and equipment for impairment whenever events or circumstances indicate the carrying value of an asset, including the carrying value of the charter contract, if any, under which the vessel is employed, may not be recoverable. This occurs when the asset's carrying value is greater than the future undiscounted cash flows the asset is expected to generate over its remaining useful life. If the estimated future undiscounted cash flows of an asset exceed the asset's carrying value, no impairment is recognized even though the fair value of the asset may be lower than its carrying value. If the estimated future undiscounted cash flows of an asset are less than the asset's carrying value and the fair value of the asset is less than its carrying value, the asset is written down to its fair value. Fair value is calculated as the net present value of estimated future cash flows, which, in certain circumstances, will approximate the estimated market value of the vessel. For a vessel under charter, the discounted cash flows from that vessel may exceed its market value, as market values may assume the vessel is not employed on an existing charter.

The following table presents, by type of vessel, the aggregate market values and carrying values of certain of our vessels that we have determined have a market value that is less than their carrying value as of December 31, 2016. Specifically, the table below reflects all such vessels, except those operating on contracts where the remaining term is significant and the estimated future undiscounted cash flows relating to such contracts are sufficiently greater than the carrying value of the vessels such that we consider it unlikely that an impairment would be recognized in 2017. While the market values of these vessels are below their carrying values, no impairment has been recognized on any of these vessels as the estimated future undiscounted cash flows relating to such vessels are greater than their carrying values.

The vessels included in the following table generally include those vessels employed on single-voyage, or "spot" charters, as well as those vessels near the end of existing charters. In addition, the following table also includes vessels on operational contracts with impairment indicators that are unique to those vessels. Such vessels include the *Foinaven* FPSO, the *Banff* FPSO, *Hummingbird* FPSO and the *HiLoad DP* unit.

In estimating the future undiscounted cash flows for the above-mentioned FPSO units, we made assumptions and used estimates regarding the following factors: operating costs of the units, level of oil production, average annual oil price, oil field reserves, redeployment of vessels and redeployment rates, amount of capital investments required before deployment to a new field, any idle time before redeployment. Should actual results differ significantly from our estimates and assumptions, we may be required to recognize impairments of the carrying values of the units.

We would consider the vessels reflected in the following table to be at a higher risk of future impairment than our vessels not reflected in the table. The table is disaggregated for vessels which have estimated future undiscounted cash flows that are marginally or significantly greater than their respective carrying values. Vessels with estimated future cash flows significantly greater than their respective carrying values would not necessarily represent vessels that would likely be impaired in the next 12 months. In deciding whether to dispose of a vessel, we determine whether it is economically preferable to sell the vessel or continue to operate it. This assessment includes an estimate of the net proceeds expected to be received if the vessel is sold in its existing condition compared to the present value of the vessel's estimated future revenue, net of operating costs. Such estimates are based on the terms of the existing charter, charter market outlook and estimated operating costs, given a vessel's type, condition and age. In addition, we typically do not dispose of a vessel that is servicing an existing customer contract. The recognition of an impairment in the future may be more likely for those vessels that have estimated future undiscounted cash marginally greater than their respective carrying value.

(in thousands of U.S. dollars, except number of vessels) Type of Vessel	Number of Vessels	Market Values <sup>(1)</sup> \$	Carrying Values \$
Shuttle Tankers and <i>HiLoad DP</i> Unit <sup>(2)</sup>	2	55,297	70,444
FPSO Unit <sup>(2)</sup>	1	244,000	244,188
FPSO Units <sup>(3)</sup>	2	392,000	453,701
Liquefied Natural Gas Carriers <sup>(3)</sup>	2	73,306	150,570
Liquefied Petroleum Gas Carriers <sup>(3)</sup>	6	171,156	191,281
Conventional Tankers <sup>(2)</sup>	12	160,200	278,159
Conventional Tankers <sup>(3)</sup>	32	856,476	1,403,661

(1) Market values are based on second-hand market comparable values or using a depreciated replacement cost approach as at December 31, 2016. Since vessel values can be volatile, our estimates of market value may not be indicative of either the current or future prices we could obtain if we sold any of the vessels. In addition, the determination of estimated market values for our shuttle tankers, FSO units and FPSO units may involve considerable judgment, given the illiquidity of the second-hand market for these types of vessels. The estimated market values for the *HiLoad DP* unit in the table above was based on the present value of expected future cash flows given that there are no market comparable values for this unit. The estimated market values for the FPSO units in the table above were based on second-hand market comparable values for similar vessels. Given the advanced age of these vessels, the estimated market values substantially reflect the price of steel and amount of steel in the vessel. The estimated market values for the shuttle tankers were based on second-hand market comparable values for conventional tankers of similar age and size, adjusted for shuttle tanker specific functionality.

(2) Undiscounted cash flows for these vessels are marginally greater than their carrying values.

(3) Undiscounted cash flows for these vessels are significantly greater than their carrying values.

*Judgments and Uncertainties.* Depreciation is calculated using an estimated useful life of 20 to 25 years for conventional tankers and shuttle tankers, 20 to 25 years for FPSO units, and 30 years for LPG carriers and 35 years for LNG carriers, commencing at the date the vessel was originally delivered from the shipyard. FSO units are depreciated over the term of the contract. UMS are depreciated over an estimated useful life of 35 years commencing the date the unit is delivered from the shipyard. Towage vessels are depreciated over an estimated useful life of 25 years commencing the date the vessel is delivered from the shipyard. However, the actual life of a vessel may be different than the estimated useful life, with a shorter actual useful life resulting in an increase in quarterly depreciation and potentially resulting in an impairment loss. The estimated useful life of our vessels takes into account design life, commercial considerations and regulatory restrictions. Our estimates of future cash flows involve assumptions about future charter rates, vessel utilization, operating expenses, dry-docking expenditures, vessel residual values, redeployment assumptions for vessels on long-term charter and the remaining estimated life of our vessels. Our estimated charter rates are based on rates under existing vessel contracts and market rates at which we expect we can re-charter our vessels. Our estimates of vessel utilization, including estimated off-hire time and the estimated amount of time our shuttle tankers may spend operating in the spot tanker market when not being used in their capacity as shuttle tankers, are based on historical experience and our projections of the number of future shuttle tanker voyages. Our estimates of operating expenses and dry-docking expenditures are based on historical operating and dry-docking costs and our expectations of future inflation and operating requirements. Vessel residual values are a product of a vessel's lightweight tonnage and an estimated scrap rate. The remaining estimated lives of our vessels used in our estimates of future cash flows are consistent with those used in the calculations of depreciation.

Effective January 1, 2016, Teekay Offshore changed the estimated useful life of the unique shuttle tanker component of its shuttle tankers from 25 to 20 years based on the challenges that it has faced in utilizing this unique equipment during the current adverse market conditions in the energy sector and the other long-term factors associated with the global oil industry. In addition, for eight of Teekay Offshore's older shuttle tankers, Teekay Offshore has changed the estimated useful life of the tanker component of the vessels from 25 to 20 years due to its outlook for the shuttle and conventional tanker market and based on Teekay Offshore's expected operating plans. Please read Item 18 - Financial Statements: Note 1 - Summary of Significant Accounting Policies.

In our experience, certain assumptions relating to our estimates of future cash flows are more predictable by their nature, including estimated revenue under existing contract terms, on-going operating costs and remaining vessel life. Certain assumptions relating to our estimates of future cash flows require more discretion and are inherently less predictable, such as future charter rates beyond the firm period of existing contracts and vessel residual values, due to factors such as the volatility in vessel charter rates and vessel values. We believe that the assumptions used to estimate future cash flows of our vessels are reasonable at the time they are made. We can make no assurances, however, as to whether our estimates of future cash flows, particularly future vessel charter rates or vessel values, will be accurate.

*Effect if Actual Results Differ from Assumptions.* If we conclude that a vessel or equipment is impaired, we recognize a loss in an amount equal to the excess of the carrying value of the asset over its fair value at the date of impairment. The written-down amount becomes the new lower cost basis and will result in a lower annual depreciation expense than for periods before the vessel impairment.

### **Dry docking**

*Description.* We capitalize a substantial portion of the costs we incur during dry docking and amortize those costs on a straight-line basis over the useful life of the dry dock. We expense costs related to routine repairs and maintenance incurred during dry docking that do not improve operating efficiency or extend the useful lives of the assets and for annual class survey costs on our FPSO units. When significant dry-docking expenditures occur prior to the expiration of the original amortization period, the remaining unamortized balance of the original dry-docking cost and any unamortized intermediate survey costs are expensed in the period of the subsequent dry dockings.

*Judgments and Uncertainties.* Amortization of capitalized dry-dock expenditures requires us to estimate the period of the next dry-docking and useful life of dry-dock expenditures. While we typically dry dock each vessel every two and a half to five years and have a shipping society classification intermediate survey performed on our LNG and LPG carriers between the second and third year of the five-year dry-docking period, we may dry dock the vessels at an earlier date, with a shorter life resulting in an increase in the depreciation.

*Effect if Actual Results Differ from Assumptions.* If we change our estimate of the next dry-dock date for a vessel, we will adjust our annual amortization of dry-docking expenditures.

### **Goodwill and Intangible Assets**

*Description.* We allocate the cost of acquired companies to the identifiable tangible and intangible assets and liabilities acquired, with the remaining amount being classified as goodwill. Certain intangible assets, such as time-charter contracts, are being amortized over time. Our future operating performance will be affected by the amortization of intangible assets and potential impairment charges related to goodwill or intangible assets. Accordingly, the allocation of the purchase price to intangible assets and goodwill may significantly affect our future operating results. Goodwill and indefinite-lived assets are not amortized, but reviewed for impairment annually, or more frequently if impairment indicators arise. The process of evaluating the potential impairment of goodwill and intangible assets is highly subjective and requires significant judgment at many points during the analysis.

Goodwill is not amortized, but reviewed for impairment at the reporting unit level on an annual basis or more frequently if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit to below its carrying value. When goodwill is reviewed for impairment, we may elect to assess qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount, including goodwill. Alternatively, we may bypass this step and use a fair value approach to identify potential goodwill impairment and, when necessary, measure the amount of impairment. We use a discounted cash flow model to determine the fair value of reporting units, unless there is a readily determinable fair market value. Intangible assets are assessed for impairment when and if impairment indicators exist. An impairment loss is recognized if the carrying amount of an intangible asset is not recoverable and its carrying amount exceeds its fair value.

*Judgments and Uncertainties.* The allocation of the purchase price of acquired companies requires management to make significant estimates and assumptions, including estimates of future cash flows expected to be generated by the acquired assets and the appropriate discount rate to value these cash flows. In addition, the process of evaluating the potential impairment of goodwill and intangible assets is highly subjective and requires significant judgment at many points during the analysis. The fair value of our reporting units was estimated based on discounted expected future cash flows using a weighted-average cost of capital rate. The estimates and assumptions regarding expected cash flows and the appropriate discount rates require considerable judgment and are based upon existing contracts, historical experience, financial forecasts and industry trends and conditions.

*Effect if Actual Results Differ from Assumptions.* As of December 31, 2016, we had six reporting units with goodwill attributable to them. As of the date of this Annual Report, we do not believe that there is a reasonable possibility that the goodwill attributable to our three reporting units with goodwill attributable to them might be impaired within the next year. However, certain factors that impact our goodwill impairment tests are inherently difficult to forecast and as such we cannot provide any assurances that an impairment will or will not occur in the future. An assessment for impairment involves a number of assumptions and estimates that are based on factors that are beyond our control. Please read “Part I—Forward-Looking Statements.”

#### **Valuation of Derivative Financial Instruments**

*Description.* Our risk management policies permit the use of derivative financial instruments to manage foreign currency fluctuation, interest rate, bunker fuel price and spot tanker market rate risk. In addition, we have stock purchase warrants, a type of option agreement, to acquire up to an additional 1.5 million shares of TIL’s common stock at a fixed price. See “Item 18 – Financial Statements: Note 14 – Derivative Instruments and Hedging Activities”. Changes in fair value of derivative financial instruments that are not designated as cash flow hedges for accounting purposes are recognized in earnings in the consolidated statement of income. Changes in fair value of derivative financial instruments that are designated as cash flow hedges for accounting purposes are recorded in other comprehensive income and are reclassified to earnings in the consolidated statement of income when the hedged transaction is reflected in earnings. Ineffective portions of the hedges are recognized in earnings as they occur. During the life of the hedge, we formally assess whether each derivative designated as a hedging instrument continues to be highly effective in offsetting changes in the fair value or cash flows of hedged items. If we determine that a hedge has ceased to be highly effective, we will discontinue hedge accounting prospectively.

*Judgments and Uncertainties.* A substantial majority of the fair value of our derivative instruments and the change in fair value of our derivative instruments from period to period result from our use of interest rate swap agreements and our holding of stock purchase warrants. The fair value of our derivative instruments is the estimated amount that we would receive or pay to terminate the agreements in an arm’s length transaction under normal business conditions at the reporting date, taking into account current interest rates, foreign exchange rates and the current credit worthiness of us and the swap counterparties. The estimated amount for interest rate swaps is the present value of estimated future cash flows, being equal to the difference between the benchmark interest rate and the fixed rate in the interest rate swap agreement, multiplied by the notional principal amount of the interest rate swap agreement at each interest reset date. For the stock purchase warrants, we take into account the stock price of TIL, the expected volatility of the TIL stock price and an estimate of the risk-free rate over the term of the warrants.

The fair value of our interest rate swap agreements at the end of each period is most significantly impacted by the interest rate implied by the benchmark interest rate yield curve, including its relative steepness. Interest rates have experienced significant volatility in recent years in both the short and long term. While the fair value of our interest rate swap agreements is typically more sensitive to changes in short-term rates, significant changes in the long-term benchmark interest rate also materially impact our interest rate swap agreements.

The fair value of our interest rate swap agreements is also impacted by changes in our specific credit risk included in the discount factor. We discount our interest rate swap agreements with reference to the credit default swap spreads of similarly rated global industrial companies and by considering any underlying collateral. The process of determining credit worthiness requires significant judgment in determining which source of credit risk information most closely matches our risk profile.

The benchmark interest rate yield curve and our specific credit risk are expected to vary over the life of the interest rate swap agreements. The larger the notional amount of the interest rate swap agreements outstanding and the longer the remaining duration of the interest rate swap agreements, the larger the impact of any variability in these factors will be on the fair value of our interest rate swaps. We economically hedge the interest rate exposure on a significant amount of our long-term debt and for long durations. As such, we have historically experienced, and we expect to continue to experience, material variations in the period-to-period fair value of our derivative instruments.



The fair value of our TIL stock purchase warrants at the end of each period is most significantly impacted by the stock price of TIL and the expected future volatility of the TIL stock price. TIL seeks to opportunistically acquire, operate and sell modern second hand tankers to benefit from an expected recovery in the current cyclical low of the tanker market. Pending such transactions, TIL is employing its oil tankers on the spot market. Historically, the tanker industry has been cyclical, experiencing volatility in profitability due to changes in the supply of and demand for tanker capacity and changes in the supply of and demand for oil and oil products. The cyclical nature of the tanker industry may cause significant increases or decreases in the value of TIL's vessels, TIL's stock price and the value of the stock purchase warrants we hold.

*Effect if Actual Results Differ from Assumptions.* Although we measure the fair value of our derivative instruments utilizing the inputs and assumptions described above, if we were to terminate the agreements or sell the stock purchase warrants at the reporting date, the amount we would pay or receive to terminate the derivative instruments and the amount we would receive upon sale of the stock purchase warrants may differ from our estimate of fair value. If the estimated fair value differs from the actual termination amount, an adjustment to the carrying amount of the applicable derivative asset or liability would be recognized in earnings for the current period. Such adjustments could be material. See "Item 18 – Financial Statements: Note 14 – Derivative Instruments and Hedging Activities" for the effects on the change in fair value of our derivative instruments on our consolidated statements of income.

## Item 6. Directors, Senior Management and Employees

### Directors and Senior Management

Our directors and executive officers as of the date of this Annual Report and their ages as of December 31, 2016 are listed below:

Name	Age	Position
C. Sean Day	67	Director and Chair of the Board <sup>(1)</sup>
Axel Karlshoej	76	Director and Chair Emeritus
Peter S. Janson	69	Director
Thomas Kuo-Yuen Hsu	70	Director
Eileen A. Mercier	69	Director
Bjorn Moller	59	Director
Tore I. Sandvold	69	Director
Alan Semple	57	Director
Bill Utt	59	Director <sup>(2)</sup>
Kenneth Hvid	48	President and Chief Executive Officer
Arthur Bensler	59	Executive Vice President, Secretary and General Counsel
William Hung	45	Executive Vice President, Strategic Development
Mark Kremin	46	President and Chief Executive Officer, Teekay Gas Group Ltd.
Vincent Lok	48	Executive Vice President and Chief Financial Officer
Kevin Mackay	48	President and Chief Executive Officer, Teekay Tankers Ltd.
Ingvild Saether	48	President and Chief Executive Officer, Teekay Offshore Group Ltd.

(1) Retiring as Chairman on June 15, 2017; to remain on Board of Directors.

(2) Chairman-elect effective June 15, 2017.

Certain biographical information about each of these individuals is set forth below:

**C. Sean Day** has served as a Teekay director since 1998 and as our Chairman of the Board since 1999. Mr. Day also serves as Chairman of the Board of Teekay Offshore GP L.L.C., the general partner of Teekay Offshore Partners L.P. Effective June 15, 2017, Mr. Day will resign as Chairman of Teekay and of Teekay Offshore Partners, L.P., but he intends to continue to serve as a member of each of those boards. Mr. Day was Chairman of Teekay GP L.L.C., the general partner of Teekay LNG Partners L.P., from 2004 until 2015, where he continues to serve as a director. He served as Chairman of Teekay Tankers Ltd from 2007 until 2013. From 1989 to 1999, Mr. Day was President and Chief Executive Officer of Navios Corporation, a large bulk shipping company based in Stamford, Connecticut. Prior to Navios, Mr. Day held a number of senior management positions in the shipping and finance industries. He currently serves as a director of Kirby Corporation and is Chairman of Compass Diversified Holdings. Mr. Day is engaged as a consultant to Kattegat Limited, which owns Resolute Investments, Ltd., our largest shareholder, to oversee its investments, including that in the Teekay group of companies.

**Axel Karlshoej** has served as a Teekay director since 1993, was Chairman of the Teekay Board from 1993 to 1999, and has been Chairman Emeritus since stepping down as Chairman. Mr. Karlshoej is Chairman and serves on the compensation committee of Nordic Industries, a California general construction firm with which he has served for the past 30 years. He is the older brother of Teekay's founder, the late J. Torben Karlshoej. Mr. Karlshoej is a director of Path Spirit Limited, the trust protector of a trust that indirectly owns Resolute Investments, Ltd., our largest shareholder.

**Peter S. Janson** has served as a Teekay director since 2005. From 1999 to 2002, Mr. Janson was the Chief Executive Officer of Amec Inc. (formerly Agra Inc.), a publicly traded engineering and construction company. From 1986 to 1994, he served as the President and Chief Executive Officer of Canadian operations for Asea Brown Boveri Inc., a company for which he also served as Chief Executive Officer for U.S. operations from 1996 to 1999. Mr. Janson has also served as a member of the Business Round Table in the United States, and as a member of the National Advisory Board on Sciences and Technology in Canada.

**Thomas Kuo-Yuen Hsu** has served as a Teekay director since 1993. He is presently a director of CNC Industries, an affiliate of the Expedo Group of Companies that manages a fleet of six vessels of 70,000 dwt. He has been a Committee Director of the Britannia Steam Ship Insurance Association Limited since 1988. Mr. Hsu is a director and the President of Resolute Investments, Ltd., our largest shareholder.

**Eileen A. Mercier** has served as a Teekay director since 2000. She has over 40 years of experience in a wide variety of financial and strategic planning positions, including Senior Vice President and Chief Financial Officer for Abitibi-Price Inc. from 1990 to 1995. She formed her own management consulting company, Finvoy Management Inc., and acted as President from 1995 to 2003. She currently serves as Chair of Payments Canada, trustee of University Health Network, director and Chair of the Audit Committee for Intact Financial Corporation, and director of the Royal Conservatory of Music and Chancellor of Wilfrid Laurier University. Ms. Mercier is the former Chair of the Ontario Teachers' Pension Plan.

**Bjorn Moller** has served as a Teekay director since 1998. Mr. Moller also served as Teekay's President and Chief Executive Officer from 1998 until March 2011. Also until March 2011, Mr. Moller served as Vice Chairman of Teekay GP L.L.C., Vice Chairman of Teekay Offshore GP L.L.C., and as the Chief Executive Officer of Teekay Tankers Ltd. Mr. Moller remains a director of Teekay Tankers Ltd. Mr. Moller has over 35 years of experience in the shipping industry, and served as Chairman of the International Tanker Owners Pollution Federation from 2006 to 2013. He served in senior management positions with Teekay for more than 20 years and headed our overall operations beginning in January 1997, following his promotion to the position of Chief Operating Officer. Prior to this, Mr. Moller headed our global chartering operations and business development activities. Mr. Moller is a director of Kattogat Limited, which owns Resolute Investments, Ltd., our largest shareholder.

**Tore I. Sandvold** has served as a Teekay director since 2003. He has over 30 years of experience in the oil and energy industry. From 1973 to 1987, he served in the Norwegian Ministry of Industry, Oil & Energy in a variety of positions in the areas of domestic and international energy policy. From 1987 to 1990, he served as the Counselor for Energy in the Norwegian Embassy in Washington, D.C. From 1990 to 2001, Mr. Sandvold served as Director General of the Norwegian Ministry of Oil & Energy, with overall responsibility for Norway's national and international oil and gas policy. From 2001 to 2002, he served as Chairman of the Board of Petoro, the Norwegian state-owned oil company that is the largest oil asset manager on the Norwegian continental shelf. From 2002 to the present, Mr. Sandvold, through his company, Sandvold Energy AS, has acted as advisor to companies and advisory bodies in the energy industry. Mr. Sandvold serves on other boards, including those of Schlumberger Limited, Lambert Energy Advisory Ltd., Energy Policy Foundation of Norway, Rowan Companies plc and Njord Gas Infrastructure.

**Alan Semple** joined the Teekay board on December 9, 2015. Mr. Semple brings over 30 years of finance experience primarily in the energy industry, to the Teekay Board. He was formerly Director and Chief Financial Officer at John Wood Group PLC (or *Wood Group*), a provider of engineering, production support and maintenance management services to the oil and gas and power generation industries, a role he held from 2000 until his retirement in May 2015. Prior to this, he held a number of senior finance roles in the Wood Group from 1996. Mr. Semple currently serves on the Board of Cobham PLC, where he is the Chairman of the Audit Committee.

**Bill Utt** joined the Teekay board on December 9, 2015. On March 8, 2017 it was announced that he will succeed Sean Day as Chairman of Teekay effective June 15, 2017. On June 15, 2017, Mr. Utt will join the board of directors of Teekay Offshore GP L.L.C. and be appointed Chairman. Mr. Utt brings over 31 years of engineering and energy industry experience to the Teekay Board. From 2006 until his retirement in 2014, he served as Chairman, President and Chief Executive Officer of KBR Inc., a global engineering, construction and services company. From 1995 to 2006, Mr. Utt served as the President and Chief Executive Officer of SUEZ Energy North America and President and Chief Executive Officer of Tractebel's North American energy businesses. Prior to 1995, he held non-executive senior management positions with CRSS, Inc., which was a developer and operator of independent power and industrial energy facilities prior to its merger with Tractebel in 1995. Mr. Utt also currently serves as Chairman of the board of directors at Cobalt International Energy and is a member of the board of directors for Brand Energy & Infrastructure Services, a Clayton, Dubilier & Rice, LLC portfolio company.

**Arthur Bensler** joined Teekay in 1998 as General Counsel. He was promoted to the position of Vice President in 2002 and became Corporate Secretary in 2003. He was appointed Senior Vice President in 2004 and Executive Vice President in 2006. In June 2013, Mr. Bensler was appointed Director and Chairman of Teekay Tankers Ltd., having served as Secretary from 2007 to September, 2014. Prior to joining Teekay, Mr. Bensler was a partner in a large Vancouver, Canada law firm, where he practiced corporate, commercial and maritime law from 1987 until joining Teekay.

**William Hung** joined Teekay in 1995 and since February 2016 has served as Executive Vice President, Strategic Development. Prior to this position, Mr. Hung had worked in a variety of roles at Teekay including Chartering, Business Development, Finance and Accounting, Commercial and Strategic Development. Additionally, Mr. Hung has served as Chief Executive Officer of Tanker Investments Ltd. since January 2014.

**Kenneth Hvid** was appointed President and Chief Executive Officer of Teekay on February 1, 2017, appointed as a director of Teekay Tankers Ltd. on February 22, 2017 and has served as a director of Teekay Offshore GP LLC, the general partner of Teekay Offshore Partners, L.P. since 2011. He joined Teekay in 2000 and was responsible for leading our global procurement activities until he was promoted in 2004 to Senior Vice President, Teekay Gas Services. During this time, Mr. Hvid was involved in leading Teekay through its entry and growth in the LNG business. He held this position until the beginning of 2006, when he was appointed President of our Teekay Navion Shuttle Tankers and Offshore division. In that role he was responsible for our global shuttle tanker business as well as initiatives in the floating storage and offtake business and related offshore activities. Mr. Hvid served as Chief Strategy Officer and Executive Vice President from 2011 to December 2015, as a director of Teekay GP L.L.C. from 2011 to June 2015 and as President and Chief Executive Officer of Teekay Offshore Group Ltd., from May 2015 until January 31, 2017. Mr. Hvid has 28 years of global shipping experience, 12 of which were spent with A.P. Moller in Copenhagen, San Francisco and Hong Kong. In 2007, Mr. Hvid joined the board of Gard P.& I. (Bermuda) Ltd.

**Mark Kremin** was appointed President and Chief Executive Officer of Teekay Gas Group Ltd., a company that provides services to Teekay LNG and its subsidiaries, on February 1, 2017. He was appointed President of Teekay Gas Services in 2015 having acted as its Vice President since 2006. Mr. Kremin has over 20 years of experience in shipping. In 2000, he joined Teekay as in-house counsel. He subsequently held commercial roles within Teekay Gas Services. He represents Teekay on the boards of joint ventures with partners in Asia, Europe and the Middle East. Prior to joining Teekay, he was an attorney in an admiralty law firm in Manhattan. Prior to attending law school in New York City, he worked for a leading owner and operator of container ships.

**Vincent Lok** has served as Teekay's Executive Vice President and Chief Financial Officer since 2007. He has held a number of finance and accounting positions with Teekay, including Controller from 1997 until his promotions to the positions of Vice President, Finance in 2002, Senior Vice President and Treasurer in 2004, and Senior Vice President and Chief Financial Officer in 2006. Mr. Lok was appointed director of Teekay GP L.L.C., the general partner of Teekay LNG in June 2015 and has served as the Chief Financial Officer of Teekay Tankers Ltd. since 2007. Prior to joining Teekay, Mr. Lok worked as a Chartered Accountant with Deloitte & Touche LLP. Mr. Lok is also a Chartered Financial Analyst.

**Kevin Mackay** was appointed as President and Chief Executive Officer of Teekay Tankers Ltd., a company controlled by Teekay, in June 2014. Mr. Mackay joined Teekay Tankers from Phillips 66, where he headed the global marine business unit and held a similar role as the General Manager, Commercial Marine at ConocoPhillips from 2009 to 2012 before the formation of Phillips 66. Mr. Mackay started his career working for Neptune Orient Lines in Singapore from 1991 to 1995. He then joined AET (formerly American Eagle Tankers Inc.) in Houston, becoming the Regional Director—Americas, Senior Vice President. Mr. Mackay holds a B.Sc. (Econ) Honours from the London School of Economics & Political Science and has extensive international experience.

**Ingvild Sæther** was appointed President and Chief Executive Officer of Teekay Offshore Group Ltd., a company that provides services to Teekay Offshore and its subsidiaries, on February 1, 2017. Ms. Sæther joined Teekay in 2002 as a result of Teekay's acquisition of Navion AS from Statoil ASA. Since joining Teekay, Ms. Sæther has held management positions in Teekay's conventional tanker business until 2007, when she assumed the commercial responsibility for Teekay's shuttle tanker activities in the North Sea and in 2011, Ms. Sæther assumed the position of President, Teekay Offshore Logistics. Ms. Sæther has over 25 years of experience in the shipping and offshore sector, and has been engaged in a number of boards and associations related to the industry.

## **Compensation of Directors and Senior Management**

### *Director Compensation*

During 2016, the nine non-employee directors received, in the aggregate, approximately \$1.215 million in cash fees for their service as directors, plus reimbursement of their out-of-pocket expenses. Each non-employee director, other than the Chair of the Board, receives an annual cash retainer of \$90,000. The Chair of the Board receives an annual cash retainer of \$375,000. Members of the Audit Committee, Compensation and Human Resources Committee, and Nominating and Governance Committee each receive an annual cash fee of \$10,000. The Chairs of the Audit Committee, Compensation and Human Resources Committee, and Nominating and Governance Committee each receive an annual cash fee of \$20,000, \$17,500 and \$15,000, respectively.

Each non-employee director, other than the Chair of the Board, also received a \$110,000 annual retainer to be paid by way of a grant of, at the director's election, restricted stock or stock options under our 2013 Equity Incentive Plan. Pursuant to this annual retainer, during 2016 we granted stock options to purchase an aggregate of 137,592 shares of our common stock at an exercise price of \$9.44 per share and 40,782 shares of restricted stock. During 2016, the Chair of the Board received a \$495,000 annual retainer in the form of stock options to purchase 68,796 shares of our common stock at an exercise price of \$9.44 per share and 26,218 shares of restricted stock under our 2013 Equity Incentive Plan. The stock options described in this section expire March 7, 2026, ten years after the date of their grant. The stock options and restricted stock vest as to one-third of the shares on each of the first three anniversaries of their respective grant dates.

## Annual Executive Compensation

The aggregate compensation earned for 2016 by Teekay's seven executive officers listed above (or the *Executive Officers*) and by two individuals who were officers during 2016 and are now retired, and excluding equity-based compensation described below, was \$14.3 million. This is comprised of one-time compensation costs associated with the retirement of Teekay Corporation's former Chief Executive Officer and the retirement of an Executive Committee Member of Teekay Offshore Group Ltd. (\$7.2 million), base salary (\$4.3 million), annual bonus (\$2.2 million) and pension and other benefits (\$0.6 million). These amounts were paid primarily in Canadian Dollars, but are reported here in U.S. Dollars using an average exchange rate of 1.32 Canadian Dollars for each U.S. Dollar for 2016. Teekay's annual bonus plan considers both company performance and team performance.

### Long-Term Incentive Program

Teekay's long-term incentive program focuses on the returns realized by our shareholders and is intended to acknowledge and retain those executives who can influence our long-term performance. The long-term incentive plan provides a balance against short-term decisions and encourages a longer time horizon for decisions. This program consists of stock option grants, restricted stock units and performance share units. All grants in 2016 were made under our 2013 Equity Incentive Plan.

During March 2016, we granted stock options to purchase an aggregate of 184,725 shares of our common stock at an exercise price of \$9.44, 58,427 shares of restricted stock units and 311,691 performance shares to the Executive Officers under our 2013 Equity Incentive Plan. The stock options expire March 7, 2026, ten years after the date of grant. The stock options and restricted stock units vest as to one-third of the shares on each of the first three anniversaries of their grant dates. Performance shares have a bullet vesting at the end of the three-year performance cycle if the performance conditions are met.

During March 2017, we granted stock options to purchase an aggregate of 448,669 shares of our common stock at an exercise price of \$10.18 and 83,653 shares of restricted stock units to the Executive Officers under our 2013 Equity Incentive Plan. The stock options expire March 6, 2027, ten years after the date of grant. The stock options and restricted stock units vest as to one-third of the shares on each of the first three anniversaries of their grant dates. Performance shares have a bullet vesting at the end of the three-year performance cycle if the performance conditions are met.

### Options to Purchase Securities from Registrant or Subsidiaries

In March 2013, we adopted the 2013 Equity Incentive Plan (or the *2013 Plan*) and suspended the 1995 Stock Option Plan and the 2003 Equity Incentive Plan (collectively referred to as the *Plans*). As at December 31, 2016, we had reserved pursuant to our 2013 Plan 4,780,371 shares (December 2015 – 4,527,282) of common stock.

During 2016, 2015 and 2014, we granted options under the 2013 Plan to acquire up to 916,015, 265,135 and 15,243 shares of Common Stock, respectively, to eligible officers, employees and directors. Each option under the Plans has a 10-year term and vests equally over three years from the grant date. The outstanding options under the Plans as at December 31, 2016 are exercisable at prices ranging from \$9.44 to \$56.76 per share, with a weighted-average exercise price of \$29.16 per share, and expire between March 13, 2017 and March 7, 2026.

Starting in 2013, employees who provide services to our publicly listed subsidiaries (Teekay LNG, Teekay Offshore and Teekay Tankers) received a proportion of their annual equity compensation award under the equity compensation plan of the applicable subsidiary (the Teekay Tankers Ltd. 2007 Long-Term Incentive Plan, the Teekay Offshore Partners L.P. 2006 Long-Term Incentive Plan or the Teekay LNG Partners L.P. 2005 Long-Term Incentive Plan), depending on their level of contribution towards the applicable subsidiary. These awards generally took the form of Restricted Stock Units (or *RSUs*), which are described as Phantom Units under the Teekay Offshore Partners L.P. 2006 Long-Term Incentive Plan and the Teekay LNG Partners L.P. 2005 Long-Term Incentive Plan, but we refer to all of these awards as *RSUs* for purposes of this disclosure. Teekay Tankers also granted stock options starting in 2014 to one employee. The *RSUs* vest and become payable with respect to one-third of the shares on each of the first three years following the grant date and accrue distributions or dividends from the date of the grant to the date of vesting. Stock options vest one-third on each of the first three years and expire ten years after the date of their grant.

### Board Practices

As at December 31, 2016, the Board of Directors consisted of nine members. The Board of Directors is divided into three classes, with members of each class elected to hold office for a term of three years in accordance with the classification indicated below or until his or her successor is elected and qualified.

Directors Thomas Kuo-Yuen Hsu, Axel Karlshøj, and Bjorn Møller have terms expiring in 2017. Directors Alan Semple, Bill Utt, and C. Sean Day have terms expiring in 2018. Directors Peter S. Janson, Eileen A. Mercier and Tore I. Sandvold have terms expiring in 2019.

There are no service contracts between us and any of our directors providing for benefits upon termination of their employment or service.

The Board of Directors has determined that each of the current members of the Board has no material relationship with Teekay (either directly or as a partner, shareholder or officer of an organization that has a relationship with Teekay), and is independent within the meaning of our director independence standards, which reflect the New York Stock Exchange (or NYSE) director independence standards as currently in effect and as they may be changed from time to time. In making this determination, the Board considered the relationships of Thomas Kuo-Yuen Hsu, Axel Karlshoej, C. Sean Day and Bjorn Moller with our largest shareholder and concluded these relationships do not materially affect their independence as directors. Please read "Item 7. Major Shareholders and Certain Relationships and Related Party Transactions."

The Board of Directors has three committees: Audit Committee, Compensation and Human Resources Committee, and Nominating and Governance Committee. The membership of these committees during 2016 and the function of each of the committees are described below. Each of the committees is currently comprised of independent members and operates under a written charter adopted by the Board. All of the committee charters are available under "Corporate Governance" in the Investor Centre of our website at [www.teekay.com](http://www.teekay.com). During 2016, the Board held six meetings. Each director attended all Board meetings, except for two directors who did not attend one meeting each. Each Audit Committee member, Compensation and Human Resources Committee member, and Nominating and Governance Committee member attended all applicable committee meetings with the exception of two directors who missed one meeting each.

Our Audit Committee is composed entirely of directors who satisfy applicable NYSE and SEC audit committee independence standards. Our Audit Committee is currently comprised of Eileen A. Mercier (Chairman), Peter S. Janson, and Alan Semple. All members of the committee are financially literate and the Board has determined that Ms. Mercier qualifies as an audit committee financial expert.

The Audit Committee assists the Board in fulfilling its responsibilities for general oversight of:

- the integrity of our consolidated financial statements;
- our compliance with legal and regulatory requirements;
- the independent auditors' qualifications and independence; and
- the performance of our internal audit function and independent auditors.

Our Compensation and Human Resources Committee is composed entirely of directors who satisfy applicable NYSE compensation committee independence standards. This committee is currently comprised of Peter S. Janson (Chairman), C. Sean Day, Axel Karlshoej and Bill Utt.

The Compensation and Human Resources Committee:

- reviews and approves corporate goals and objectives relevant to the Chief Executive Officer's compensation, evaluates the Chief Executive Officer's performance in light of these goals and objectives, and determines the Chief Executive Officer's compensation;
- reviews and approves the evaluation process and compensation structure for executive officers, other than the Chief Executive Officer, evaluates their performance and sets their compensation based on this evaluation;
- reviews and makes recommendations to the Board regarding compensation for directors;
- establishes and administers long-term incentive compensation and equity-based plans; and
- oversees our other compensation plans, policies and programs.

Our Nominating and Governance Committee is currently comprised of Bjorn Moller (Chairman), Tore I. Sandvold, Eileen A. Mercier and Thomas Kuo-Yuen Hsu.

The Nominating and Governance Committee:

- identifies individuals qualified to become Board members;
- selects and recommends to the Board director and committee member candidates;
- develops and recommends to the Board corporate governance principles and policies applicable to us, monitors compliance with these principles and policies and recommends to the Board appropriate changes; and
- oversees the evaluation of the Board and management.

## **Crewing and Staff**

As at December 31, 2016, we employed approximately 6,800 seagoing staff serving on our consolidated and equity-accounted vessels managed by us, and 1,100 shore-based personnel, compared to approximately 6,500 seagoing and 1,100 shore-based personnel as at December 31, 2015, and approximately 5,900 seagoing and 900 shore-based personnel as at December 31, 2014.

We regard attracting and retaining motivated seagoing personnel as a top priority. Through our global manning organization comprised of offices in Glasgow, Scotland; Manila, Philippines; Mumbai, India; Sydney, Australia; and Madrid, Spain, we offer seafarers what we believe are competitive employment packages and comprehensive benefits. We also intend to provide opportunities for personal and career development, which relate to our philosophy of promoting internally.

During fiscal 1996, we entered into a collective bargaining agreement with the Philippine Seafarers' Union, an affiliate of the International Transport Workers' Federation (or *ITF*), and an agreement with ITF London that cover substantially all of our junior officers and seamen. We are also party to collective bargaining agreements with various Australian maritime unions that cover officers and seamen employed through our Australian operations. Our officers and seamen for our Spanish-flagged vessels are covered by a collective bargaining agreement with Spain's Union General de Trabajadores and Comisiones Obreras. We believe our relationships with these labor unions are good.

We see our commitment to training as fundamental to the development of the highest caliber seafarers for our marine operations. Our cadet training program is designed to balance academic learning with hands-on training at sea. We have relationships with training institutions in Canada, Croatia, India, Norway, Philippines, Turkey and the United Kingdom. After receiving formal instruction at one of these institutions, the cadets' training continues on board a Teekay vessel. We also have an accredited Teekay-specific competence management system that is designed to ensure a continuous flow of qualified officers who are trained on our vessels and are familiar with our operational standards, systems and policies. We believe that high-quality manning and training policies will play an increasingly important role in distinguishing larger independent tanker companies that have in-house, or affiliate, capabilities from smaller companies that must rely on outside ship managers and crewing agents.

### Share Ownership

The following table sets forth certain information regarding beneficial ownership, as of December 31, 2016, of our common stock by the nine directors and seven Executive Officers as a group, described above under Directors and Senior Management. The information is not necessarily indicative of beneficial ownership for any other purpose. Under SEC rules a person or entity beneficially owns any shares that the person or entity (a) has or shares voting or investment power over or (b) has the right to acquire as of March 1, 2017 (60 days after December 31, 2016) through the exercise of any stock option or other right. Unless otherwise indicated, each person or entity has sole voting and investment power (or shares such powers with his or her spouse) with respect to the shares set forth in the following table. Information for certain holders is based on information delivered to us.

Identity of Person or Group	Shares Owned	Percent of Class
All directors and executive officers as a group (16 persons) <sup>(1)</sup>	2,409,490 <sup>(3)</sup>	2.8% <sup>(2)</sup>

- (1) Includes 1,642,330 shares of common stock subject to stock options exercisable as of March 1, 2017 under our equity incentive plans with a weighted-average exercise price of \$36.36 that expire between March 7, 2017 and March 11, 2025. Excludes 572,809 shares of common stock subject to stock options that may become exercisable after March 1, 2017 under the plans with a weighted average exercise price of \$18.14, that expire between March 12, 2024 and March 9, 2026. Excludes shares held by our largest shareholder, Resolute Investments, Ltd. (or *Resolute*), whose ultimate parent is Path Spirit Limited (or *Path*), which is the trust protector for the trust that indirectly owns all of Resolute's outstanding equity. One of our directors, Thomas Kuo-Yuen Hsu, is the President and a director of Resolute. Another of our directors, Axel Karlshoej, is among the directors of Path. Our Chairman, C. Sean Day, is engaged as a consultant to Kattegat Limited, the parent company of Resolute, to oversee its investments, including those in the Teekay group of companies. Another of our directors, Bjorn Moller, is a director of Kattegat Limited. Also excludes shares beneficially owned by our former Chief Executive Officer and an Executive Committee Member of Teekay Offshore Group Ltd., both whom retired on January 31, 2017.
- (2) Based on a total of 86.1 million outstanding shares of our common stock as of December 31, 2016. Each director and Executive Officer beneficially owns less than 1% of the outstanding shares of common stock.
- (3) Each director is expected to have acquired shares having a value of at least four times the value of the annual cash retainer paid to them for their Board service (excluding fees for Chair or Committee service) no later than March 1, 2017 or the fifth anniversary of the date on which the director joined the Board, whichever is later. In addition, each Executive Officer is expected to acquire shares of Teekay's common stock equivalent in value to one to three times their annual base salary by 2017 or, for executive officers subsequently joining Teekay or achieving a position covered by the guidelines, within five years after the guidelines become applicable to them.

## Item 7. Major Shareholders and Certain Relationships and Related Party Transactions

## Major Shareholders

The following table sets forth information regarding beneficial ownership, as of March 1, 2017, of Teekay's common stock by each person we know to beneficially own more than 5% of the common stock. Information for certain holders is based on their latest filings with the SEC or information delivered to us. The number of shares beneficially owned by each person or entity is determined under SEC rules and the information is not necessarily indicative of beneficial ownership for any other purpose. Under SEC rules, a person or entity beneficially owns any shares as to which the person or entity has or shares voting or investment power. In addition, a person or entity beneficially owns any shares that the person or entity has the right to acquire as of April 30, 2017 (60 days after March 1, 2017) through the exercise of any stock option or other right. Unless otherwise indicated, each person or entity has sole voting and investment power with respect to the shares set forth in the following table.

Identity of Person or Group	Shares Owned	Percent of Class <sup>(3)</sup>
Resolute Investments, Ltd. <sup>(1)</sup>	31,936,012	37.1%
FMR LLC <sup>(2)</sup>	8,474,791	9.8%

- (1) Includes shared voting and shared dispositive power. The ultimate controlling person of Resolute Investments, Ltd. (or *Resolute*) is Path Spirit Limited (or *Path*), which is the trust protector for the trust that indirectly owns all of Resolute's outstanding equity. This information is based in part on the Schedule 13D/A (Amendment No. 8) filed by Resolute and Path with the SEC on July 1, 2016. Resolute's beneficial ownership was 37.1% on March 1, 2017, and 39.1% on March 1, 2016. One of our directors, Thomas Kuo-Yuen Hsu, is the President and a director of Resolute. Another of our directors, Axel Karlshoej, is among the directors of Path. Our Chairman, C. Sean Day, is engaged as a consultant to Kattegat Limited, the parent company of Resolute, to oversee its investments, including those in the Teekay group of companies. Another of our directors, Bjorn Moller, is a director of Kattegat Limited.
- (2) Includes sole voting power and sole dispositive power. This information is based on the Schedule 13G filed by this investor with the SEC on February 14, 2017.
- (3) Based on a total of 86.1 million outstanding shares of our common stock as of March 1, 2017.

Our major shareholders have the same voting rights as our other shareholders. No corporation or foreign government or other natural or legal person owns more than 50% of our outstanding common stock. We are not aware of any arrangements, the operation of which may at a subsequent date result in a change in control of Teekay.

Teekay and certain of its subsidiaries have relationships or are parties to transactions with other Teekay subsidiaries, including Teekay's publicly traded subsidiaries Teekay LNG, Teekay Offshore and Teekay Tankers. Certain of these relationships and transactions are described below.

### Our Major Shareholder

As of March 1, 2017, Resolute owned approximately 37.1% of our outstanding common stock. The ultimate controlling person of Resolute is Path, which is the trust protector for the trust that indirectly owns all of Resolute's outstanding equity. One of our directors, Thomas Kuo-Yuen Hsu, is the President and a director of Resolute. Another of our directors, Axel Karlshoej, is among the directors of Path. Our Chairman, C. Sean Day, is engaged as a consultant to Kattegat Limited, the parent company of Resolute, to oversee its investments, including that in the Teekay group of companies. Another of our directors, Bjorn Moller, is a director of Kattegat Limited. Please read "Item 18. Financial Statements: Note 12—Related Party Transactions."

### Our Directors and Executive Officers

C. Sean Day, the Chairman of Teekay's board of directors, is also the Chairman of Teekay Offshore GP L.L.C. (the general partner of Teekay Offshore) and a director of Teekay GP L.L.C. (the general partner of Teekay LNG). He will be retiring as Chairman from Teekay Corporation and Teekay Offshore GP L.L.C. effective June 15, 2017, but will be continuing as a director of both entities. On June 15, 2017, Bill Utt, currently a director of Teekay, will succeed Sean Day as Chairman of Teekay and be appointed a director of Teekay Offshore GP L.L.C. and become Chairman of its board of directors. Mr. Day also served as Chairman of Teekay GP L.L.C. from 2004 until 2015. He was also the Chairman of Teekay Tankers Ltd. from 2007 until 2013. Bjorn Moller is one of Teekay's current directors and is also a director of Teekay Tankers Ltd. Arthur Bensler, Teekay's Executive Vice President, Secretary and General Counsel, has served as the Chairman of Teekay Tankers Ltd. since June 2013.

Vincent Lok, Teekay's Executive Vice President and Chief Financial Officer, is also the Chief Financial Officer of Teekay Tankers Ltd. He is also a director of Teekay GP L.L.C. Kenneth Hvid was appointed President and Chief Executive Officer of Teekay effective January 31, 2017 and was previously a director of Teekay Offshore GP L.L.C. and was Teekay's Executive Vice President and Chief Strategy Officer until December 2015. Mr. Hvid was also a director of Teekay GP L.L.C. until June 2015. Kevin Mackay is the President and Chief Executive Officer of Teekay Tankers Ltd. and Chief Executive Officer of Teekay Tanker Services, a division of Teekay. Mark Kremin is President and Chief Executive Officer of Teekay Gas Group Ltd., which provides services to Teekay LNG pursuant to a services agreement. Ingvild Saether is President and Chief Executive Officer of Teekay Offshore Group Ltd., which provides services to Teekay Offshore pursuant to a services agreement.

Because the executive officers of Teekay Tankers and of the general partners of Teekay Offshore and Teekay LNG are employees of Teekay or other of its subsidiaries, their compensation (other than any awards under the respective long-term incentive plans of Teekay Tankers, Teekay Offshore and Teekay LNG) is set and paid by Teekay or such other applicable subsidiaries.

Pursuant to agreements with Teekay, each of Teekay Tankers, Teekay Offshore and Teekay LNG have agreed to reimburse Teekay or its applicable subsidiaries for time spent by the Executive Officers on providing services to such public entities and their subsidiaries. For 2016, these reimbursement obligations totaled approximately \$0.9 million, \$3.8 million, and \$2.0 million, respectively, for Teekay Tankers, Teekay Offshore and Teekay LNG, and are included in amounts paid as strategic management fees under the management agreement for Teekay Tankers and the services agreements for Teekay Offshore and Teekay LNG. For 2016, this includes a one-time compensation cost associated with the retirement of Teekay Corporation's former Chief Executive Officer who served as an Executive Officer for each of Teekay Offshore and Teekay LNG.

## **Relationships with Our Public Entity Subsidiaries**

### **Teekay Tankers**

Teekay Tankers is a NYSE-listed, Marshall Islands corporation which we formed to acquire from us a fleet of double-hull oil tankers in connection with Teekay Tankers' initial public offering in December 2007. Teekay Tankers' business is to own oil tankers and employ a chartering strategy that seeks to capture upside opportunities in the spot market while using fixed-rate time charters to reduce downside risks. Its operations are managed by our subsidiary, Teekay Tankers Management Services Ltd.

As of March 1, 2017, we owned shares of Teekay Tankers' Class A and Class B common stock that represented an ownership interest of 25.4% and voting power of 52.5% of Teekay Tankers' outstanding common stock.

Until December 31, 2012, Teekay Tankers distributed to its shareholders on a quarterly basis all of its Cash Available for Distribution, subject to any reserves the board of directors may from time to time determine are required for the prudent conduct of the business. Cash Available for Distribution represented Teekay Tankers' net income (loss) plus depreciation and amortization, unrealized losses from derivatives, non-cash items and any write-offs or other non-recurring items less unrealized gains from derivatives and net income attributable to the historical results of vessels acquired by Teekay Tankers from us, prior to their acquisition by Teekay Tankers, for the period when these vessels were owned and operated by us. Effective January 1, 2013, Teekay Tankers changed to a fixed dividend policy of \$0.12 per share per annum. Effective December 14, 2015, Teekay Tankers changed its dividend policy, under which Teekay Tankers intends to pay out 30 to 50 percent of its quarterly adjusted net income, with a minimum quarterly dividend of \$0.03 per share, subject to any reserves determined to be required by its Board of Directors. Adjusted net income is a non-GAAP measure which excludes specific items affecting net income that are typically excluded by securities analysts in their published estimates of our financial results. We received distributions from Teekay Tankers of \$12.1 million, \$3.9 million and \$2.6 million in 2016, 2015, and 2014, respectively.

Please see "Item 5. Operating and Financial Review and Prospects—Management's Discussion and Analysis of Financial Condition and Results of Operations—Recent Developments and Results of Operations—Recent Developments in Teekay Tankers" for additional information.

Please see "Item 4. Information on the Company—A. Overview, History and Development—Recent Equity Offerings and Transactions by Subsidiaries—Equity Offerings and Transactions by Teekay Tankers" for information about Class A and Class B common stock issuances by Teekay Tankers to Teekay in 2014, 2015 and 2017.

### **Teekay Offshore and Teekay LNG**

Teekay Offshore is a NYSE-listed, Marshall Islands limited partnership which we formed to further develop our operations in the offshore market. Teekay Offshore is an international provider of marine transportation and storage services to the offshore oil industry. We own and control Teekay Offshore's general partner, and as of March 1, 2017, we owned a 27% limited partner and a 2% general partner interest in Teekay Offshore.

Please see "Item 4. Information on the Company—A. Overview, History and Development—Recent Equity Offerings and Transactions by Subsidiaries—Equity Offerings, Unit Issuances and Transactions by Teekay Offshore" for information about common stock, Series D Preferred Unit and common unit warrant issuances by Teekay Offshore to Teekay in 2015 and 2016.

Teekay LNG is a NYSE-listed, Marshall Islands limited partnership which we formed to expand our operations in the LNG shipping sector. Teekay LNG is an international provider of marine transportation services for LNG, LPG and crude oil. We own and control Teekay LNG's general partner, and as of March 1, 2017, we owned a 31.7% limited partner interest and a 2% general partner interest in Teekay LNG.



### Quarterly Cash Distributions

We are entitled to distributions on our general and limited partner interests in each of Teekay Offshore and Teekay LNG. The general partner of each of Teekay Offshore and Teekay LNG is also entitled to distributions payable with respect to incentive distribution rights. Incentive distribution rights represent the right to receive an increasing percentage of quarterly distributions of available cash from operating surplus after the minimum quarterly distribution and the target distribution levels have been achieved. In general, if for any quarter Teekay Offshore or Teekay LNG, as applicable, has distributed available cash from operating surplus to its common unitholders in an amount equal to the applicable minimum quarterly distribution for the common units, then Teekay Offshore or Teekay LNG will distribute any additional available cash from operating surplus for that quarter among the common unitholders and its general partner in the following manner:

- first, 98% to all unitholders, pro rata, and 2% to the general partner, until each unitholder has received a total of \$0.4025 (Teekay Offshore) or \$0.4625 (Teekay LNG) per unit for that quarter;
- second, 85% to all unitholders, and 15% to the general partner, until each unitholder has received a total of \$0.4375 (Teekay Offshore) or \$0.5375 (Teekay LNG) per unit for that quarter;
- third, 75% to all unitholders, and 25% to the general partner, until each unitholder has received a total of \$0.525 (Teekay Offshore) or \$0.65 (Teekay LNG) per unit for that quarter; and
- thereafter, 50% to all unitholders and 50% to the general partner.

Teekay received total distributions, including incentive distributions, from Teekay Offshore of \$18.0 million, \$84.1 million, and \$70.8 million, respectively, with respect to 2016, 2015, and 2014.

In June 2016, Teekay Offshore agreed with Teekay that, until Teekay Offshore's NOK bonds maturing in 2018 have been repaid, all cash distributions (other than with respect to any incentive distribution rights) to be paid by Teekay Offshore to Teekay or its affiliates, including Teekay Offshore's general partner, will instead be paid in Teekay Offshore common units or from the proceeds of the sale of Teekay Offshore common units. During the second half of 2016, Teekay Offshore issued Teekay 2.5 million common units (including the general partner's 2% proportionate capital contribution) in lieu of cash for the distributions on Teekay Offshore's Series D Preferred Units, common units and general partner interest held by Teekay and its subsidiaries.

Teekay received total distributions, including incentive distributions, from Teekay LNG of \$15.0 million, \$105.3 million, and \$100.7 million, respectively, with respect to 2016, 2015, and 2014.

### Competition with Teekay Tankers, Teekay Offshore and Teekay LNG

We have entered into an omnibus agreement with Teekay LNG, Teekay Offshore and related parties governing, among other things, when Teekay, Teekay LNG, and Teekay Offshore may compete with each other and providing for rights of first offer on the transfer or rechartering of certain LNG carriers, oil tankers, shuttle tankers, FSO units and FPSO units. Subject to applicable exceptions, the omnibus agreement generally provides that (a) neither Teekay nor Teekay LNG will own or operate offshore vessels (i.e. dynamically positioned shuttle tankers, FSO units and FPSO units) that are subject to contracts with a duration of three years or more, excluding extension options, (b) neither Teekay nor Teekay Offshore will own or operate LNG carriers and (c) neither Teekay LNG nor Teekay Offshore will own or operate crude oil tankers, other than crude oil tankers included in their respective fleets as of the dates of their respective initial public offerings.

In addition, Teekay Tankers' organization documents provide that Teekay may pursue business opportunities attractive to both parties and of which either party becomes aware. These business opportunities may include, among other things, opportunities to charter out, charter in or acquire oil tankers or to acquire tanker businesses.

### Sales of Vessels and Project Interests by Teekay to Teekay Tankers, Teekay Offshore and Teekay LNG

From time to time Teekay has sold to Teekay Tankers, Teekay Offshore and Teekay LNG vessels or interests in vessel owning subsidiaries or joint ventures. These transactions include those described under "Item 5. Operating and Financial Review and Prospects—Management's Discussion and Analysis of Financial Condition and Results of Operations."

Teekay currently has committed to the following vessel transactions with its public company subsidiaries:

- Teekay Parent is obligated to offer to sell the *Petrojarl Foinaven* FPSO unit to Teekay Offshore, subject to approvals required from the charterer. The purchase price for the *Foinaven* FPSO unit would be its fair market value plus any additional tax or other similar costs to Teekay Petrojarl that would be required to transfer the FPSO unit to Teekay Offshore.
- Teekay Parent owns two additional FPSO units and the *Hummingbird Spirit* FPSO unit, which we will be obligated to offer to Teekay Offshore in the future under the omnibus agreement following the commencement of a charter contract with a firm period of greater than three years' duration (which is not currently the case), and the *Petrojarl Banff*, which in January 2015 had a charter rate reset which caused the unit to qualify to be offered to Teekay Offshore under the omnibus agreement.

## Time Chartering and Bareboat Chartering Arrangements

Teekay charters in from or out to its public company subsidiaries certain vessels, including the following charter arrangements:

- During 2016, one (four in 2015 and 2014) of Teekay Offshore's conventional tankers were chartered out to Teekay subsidiaries under long-term time charters. Two of Teekay Offshore's shuttle tankers are chartered out to Teekay subsidiaries under long-term bareboat charters. Pursuant to these charter contracts, Teekay Offshore earned voyage revenues of \$30.6 million, \$53.8 million, and \$56.5 million, respectively, for 2016, 2015, and 2014.
- During 2016, three (three in 2015 and 2014) of Teekay Offshore's FSO units were chartered out to Teekay subsidiaries under long-term bareboat charters. Pursuant to these charter contracts, Teekay Offshore earned voyage revenues of \$15.1 million, \$13.6 million, and \$10.5 million, respectively, for 2016, 2015, and 2014.
- Since April 2008, Teekay has chartered in from Teekay LNG the LNG carriers *Arctic Spirit* and *Polar Spirit* under a fixed-rate time charter for a period of ten years, plus options exercisable by Teekay to extend up to an additional 15 years. During 2016, 2015, and 2014, Teekay LNG earned revenues of \$37.3 million, \$35.9 million, and \$37.6 million, respectively, under these time-charter contracts.

## Services, Management and Pooling Arrangements

*Services Agreements.* In connection with their initial public offerings in May 2005 and December 2006, respectively, and subsequent thereto, Teekay LNG and Teekay Offshore and certain of their subsidiaries have entered into services agreements with certain other subsidiaries of Teekay, pursuant to which the other Teekay subsidiaries provide to Teekay LNG, Teekay Offshore and their operating subsidiaries administrative, crew training, strategic consulting services, business development, advisory, technical and ship management services. These services are provided in a commercially reasonable manner and upon the reasonable request of the general partner or subsidiaries of Teekay LNG or Teekay Offshore, as applicable. The other Teekay subsidiaries that are parties to the services agreements provide these services directly or subcontract for certain of these services with other entities, including other Teekay subsidiaries. Teekay LNG and Teekay Offshore pay arm's-length fees for the services that include reimbursement of any direct and indirect expenses the other Teekay subsidiaries incur in providing these services. During 2016, 2015, and 2014, Teekay LNG and Teekay Offshore incurred expenses of \$32.9 million, \$34.4 million, and \$26.4 million; and \$65.6 million, \$92.0 million, and \$81.6 million, respectively, for these services.

*Management Agreement.* In connection with its initial public offering, Teekay Tankers entered into the long-term management agreement with Teekay Tankers Management Services Ltd., a subsidiary of Teekay (the *Manager*). Subject to certain limited termination rights, the initial term of the management agreement will expire on December 31, 2022. If not terminated, the agreement will automatically renew for five-year periods. Termination fees are required for early termination by Teekay Tankers under certain circumstances. Pursuant to the management agreement, the Manager provides to Teekay Tankers the following types of services: commercial (primarily vessel chartering), technical (primarily vessel maintenance and crewing), administrative (primarily accounting, legal and financial) and strategic (primarily advising on acquisitions, strategic planning and general management of the business). The Manager has agreed to use its best efforts to provide these services upon Teekay Tankers' request in a commercially reasonable manner and may provide these services directly to Teekay Tankers or subcontract for certain of these services with other entities, primarily other Teekay subsidiaries.

In return for services under the management agreement, Teekay Tankers pays the Manager an agreed-upon fee for commercial services (other than for Teekay Tankers vessels participating in pooling arrangements), a technical services fee equal to the average rate Teekay charges third parties to technically manage their vessels of a similar size, and fees for administrative and strategic services that reimburse the Manager for its related direct and indirect expenses in providing such services and which includes a profit margin. During 2016, 2015, and 2014, Teekay Tankers incurred \$19.3 million, \$15.4 million, and \$14.3 million, respectively, for these services.

The management agreement also provides for the payment of a performance fee in order to provide the Manager an incentive to increase cash available for distribution to Teekay Tankers' shareholders. Teekay Tankers did not incur any performance fees for 2016, 2015, or 2014.

*Pooling Arrangements.* Certain Aframax tankers, Suezmax tankers and LR2 product tankers of Teekay Tankers participate in vessel pooling arrangements managed by other Teekay subsidiaries. The pool managers provide commercial services to the pool participants and administer the pools in exchange for a fee currently equal to 1.25% of the gross revenues attributable to each pool participant's vessels and a fixed amount per vessel per day which ranges from \$275 (for the LR2 product tanker pool) to \$325 (for the Suezmax tanker pool) to \$350 (for the Aframax tanker pool). Voyage revenues and voyage expenses of Teekay Tankers' vessels operating in these pool arrangements are pooled with the voyage revenues and voyage expenses of other pool participants. The resulting net pool revenues, calculated on a time-charter equivalent basis, are allocated to the pool participants according to an agreed formula. Teekay Tankers incurred pool management fees during 2016, 2015, and 2014 of \$9.8 million, \$10.4 million, and \$5.3 million, respectively.

## Teekay Tanker Operations Ltd. (or *TTOL*)

During August 2014, Teekay Tankers purchased from Teekay a 50% interest in TTOL, which owns conventional tanker commercial management and technical management operations, including the direct ownership in three commercially managed tanker pools, for an aggregate price of approximately \$23.5 million, including net working capital. As consideration for this acquisition, Teekay Tankers issued to Teekay 4.2 million Class B common shares. The 4.2 million Class B common shares had an approximate value of \$15.6 million, or \$3.70 per share, when the purchase price was agreed to between the parties and a value of \$17.0 million, or \$4.03 per share, on the acquisition closing date. The purchase price, for accounting purposes, is based upon the value of the Class B common shares on the acquisition closing date.

### **Teekay Tankers Acquisition of Ship-to-Ship Transfer Business**

In July 2015, Teekay Tankers acquired TMS from a company jointly owned by Teekay and Skaugen, for an aggregate purchase price of approximately \$47.3 million (including \$1.8 million for working capital). TMS provides a full suite of ship-to-ship transfer services in the oil, gas and dry bulk industries. In addition to full service lightering and lightering support, it also provides consultancy, terminal management and project development services. TMS owns a fleet of four STS support vessels and has two in-chartered Aframax tankers. In connection with the TMS acquisition, in July 2015, Teekay Tankers issued approximately 6.5 million shares of Class B common stock to Teekay for net proceeds of \$45.5 million. These shares of Class B common stock were priced at \$6.99 per share.

### **Relationship with Tanker Investments Ltd. (or *TIL*)**

In January 2014, Teekay and Teekay Tankers formed TIL. For information about our relationship with TIL, please read “Item 18. Financial Statements: Note 3(e)–Investments.”

## **Item 8. Financial Information**

### **Consolidated Financial Statements and Notes**

Please see Item 18 below for additional information required to be disclosed under this Item.

### **Legal Proceedings**

From time to time we have been, and we expect to continue to be, subject to legal proceedings and claims in the ordinary course of our business, principally personal injury and property casualty claims. Such claims, even if lacking merit, could result in the expenditure of significant financial and managerial resources. We believe that any adverse outcome of existing claims, other than with respect to the items noted in "Item 18. Financial Statements: Note 15 (d)—Legal Proceedings and Claims", individually or in the aggregate, would not have a material effect on our financial position, results of operations or cash flows, when taking into account our insurance coverage and rights to see indemnification from charterers. For information about recent legal proceedings, please read "Item 18. Financial Statements: Note 15 (d)—Legal Proceedings and Claims."

### **Dividend Policy**

Since our initial public offering in 1995, we have declared and paid a regular cash dividend. The amount of the quarterly dividend increased from the quarter ended September 30, 1995 to the quarter ended September 30, 2015. Effective for the quarterly distribution for the fourth quarter of 2015, we decreased our quarterly cash distribution from \$0.55 per common share to \$0.055 per common share.

Our quarterly dividend payment is primarily based on the cash flow contributions from our general partner and limited partner interests in Teekay Offshore and Teekay LNG, together with other dividends received, after deductions for parent company level corporate general and administrative expenses and any reserves determined to be required by our Board of Directors. Based on the upcoming equity capital requirements for our committed growth projects, coupled with the uncertainty regarding how long it will take for the energy and capital markets to normalize, we believe that it is in the best interests of our shareholders to conserve more of our internally generated cash flows to fund future growth projects and to reduce debt levels. Consequently, effective for the quarterly distribution for the fourth quarter of 2015, Teekay Offshore reduced its quarterly cash distribution per common unit to \$0.11 from \$0.56. Teekay LNG reduced its quarterly cash distribution per common unit to \$0.14 from \$0.70, and we reduced our quarterly cash distribution per common share to \$0.055 from \$0.55.

Pursuant to our dividend reinvestment program, holders of common stock are permitted to choose, in lieu of receiving cash dividends, to reinvest any dividends in additional shares of common stock at then-prevailing market prices, but without brokerage commissions or service charges.

The timing and amount of dividends, if any, will depend, among other things, on our results of operations, financial condition, cash requirements, restrictions in financing agreements and other factors deemed relevant by our Board of Directors. Because we are a holding company with no material assets other than the stock of our subsidiaries and investments in joint ventures, our ability to pay dividends on the common stock depends on the earnings and cash flow of our subsidiaries and distributions from the joint ventures.

### **Significant Changes**

Please read "Item 18. Financial Statements: Note 23—Subsequent Events."

## Item 9. The Offer and Listing

Our common stock is traded on the NYSE under the symbol "TK". The following table sets forth the high and low prices for our common stock on the NYSE for each of the periods indicated.

<b>Years Ended</b>	Dec. 31, 2016	Dec. 31, 2015	Dec. 31, 2014	Dec. 31, 2013	Dec. 31, 2012				
High	\$11.85	\$51.39	\$67.98	\$48.13	\$36.60				
Low	\$4.37	\$6.65	\$44.01	\$32.49	\$24.89				
<b>Quarters Ended</b>	Mar. 31, 2017	Dec. 31, 2016	Sept. 30, 2016	Jun. 30, 2016	Mar. 31, 2016	Dec. 31, 2015	Sept. 30, 2015	Jun. 30, 2015	Mar. 31, 2015
High	\$11.77	\$8.95	\$8.22	\$11.85	\$10.23	\$35.93	\$44.58	\$51.39	\$51.20
Low	\$8.21	\$5.76	\$5.45	\$6.69	\$4.37	\$6.65	\$28.36	\$42.22	\$41.12
<b>Months Ended</b>	Mar. 31, 2017	Feb. 28, 2017	Jan. 31, 2017	Dec. 31, 2016	Nov. 30, 2016	Oct. 31, 2016			
High	\$10.26	\$11.15	\$11.77	\$8.95	\$8.38	\$8.84			
Low	\$8.70	\$8.82	\$8.21	\$7.74	\$5.76	\$6.50			

## Item 10. Additional Information

### Memorandum and Articles of Association

Our Amended and Restated Articles of Incorporation, as amended, have been filed as exhibits 1.1 and 1.2 to our Annual Report on Form 20-F (File No. 1-12874), filed with the SEC on April 7, 2009, and are hereby incorporated by reference into this Annual Report. Our Bylaws have previously been filed as exhibit 1.3 to our Report on Form 6-K (File No. 1-12874), filed with the SEC on August 31, 2011, and are hereby incorporated by reference into this Annual Report.

The rights, preferences and restrictions attaching to each class of our capital stock are described in the section entitled "Description of Capital Stock" of our Rule 424(b) prospectus (Registration No. 333-52513), filed with the SEC on June 10, 1998, and hereby incorporated by reference into this Annual Report, provided that since the date of such prospectus (1) the par value of our capital stock has been changed to \$0.001 per share, (2) our authorized capital stock has been increased to 725,000,000 shares of common stock and 25,000,000 shares of Preferred Stock, (3) we have been domesticated in the Republic of The Marshall Islands and (4) we have adopted a staggered Board of Directors, with directors serving three-year terms.

The necessary actions required to change the rights of holders of our capital stock and the conditions governing the manner in which annual and special meetings of shareholders are convened are described in our Bylaws filed as exhibit 1.3 to our Report on Form 6-K (File No. 1-12874), filed with the SEC on August 31, 2011, and hereby incorporated by reference into this Annual Report.

We have in place a rights agreement that would have the effect of delaying, deferring or preventing a change in control of Teekay. The amended and restated rights agreement has been filed as part of our Form 8-A/A (File No. 1-12874), filed with the SEC on July 2, 2010, and hereby incorporated by reference into this Annual Report.

There are no limitations on the rights to own securities, including the rights of non-resident or foreign shareholders to hold or exercise voting rights on the securities imposed by the laws of the Republic of The Marshall Islands or by our Articles of Incorporation or Bylaws.

### Material Contracts

The following is a summary of each material contract, other than material contracts entered into in the ordinary course of business, to which we or any of our subsidiaries is a party, for the two years immediately preceding the date of this Annual Report:

- Agreement, dated June 26, 2003, for a \$550,000,000 Secured Reducing Revolving Loan Facility among Norsk Teekay Holdings Ltd., Den Norske Bank ASA and various other banks.
- Agreement, dated September 1, 2004 for a \$500,000,000 Credit Facility Agreement to be made available to Teekay Nordic Holdings Incorporated by Nordea Bank Finland PLC, New York Branch.
- Supplemental Agreement dated September 30, 2004 to Agreement, dated June 26, 2003, for a \$550,000,000 Secured Reducing Revolving Loan Facility among Norsk Teekay Holdings Ltd., Den Norske Bank ASA and various other banks.
- Agreement, dated May 26, 2005 for a \$550,000,000 Credit Facility Agreement to be made available to Avalon Spirit LLC et al by Nordea Bank Finland PLC and others.

- (e) Agreement, dated October 2, 2006 for a \$940,000,000 Secured Reducing Revolving Loan Facility among Teekay Offshore Operating L.P., Den Norske Bank ASA and various other banks. Please read Note 7 to the Consolidated Financial Statements of Teekay Corporation included herein for a summary of certain contract terms relating to our loan facilities.
- (f) Agreement, dated August 23, 2006 for a \$330,000,000 Secured Reducing Revolving Loan Facility among Teekay LNG Partners L.P., ING Bank N.V. and various other banks. Please read Note 7 to the Consolidated Financial Statements of Teekay Corporation included herein for a summary of certain contract terms relating to our loan facilities.
- (g) Agreement, dated November 28, 2007 for a \$845,000,000 Secured Reducing Revolving Loan Facility among Teekay Corporation, Teekay Tankers Ltd., Nordea Bank Finland PLC and various other banks.
- (h) Agreement dated May 16, 2007 for a \$700,000,000 Credit Facility Agreement to be made available to Teekay Acquisition Holdings LLC et al by HSH NordBank AG and others.
- (i) Annual Executive Bonus Plan.
- (j) Amended 2003 Equity Incentive Plan.
- (k) Amended 1995 Stock Option Plan.
- (l) Amended and Restated Rights Agreement, dated as of July 2, 2010, between Teekay Corporation and The Bank of New York, as Rights Agent.
- (m) Amended and Restated Omnibus Agreement dated as of December 19, 2006, among Teekay Corporation, Teekay GP L.L.C., Teekay LNG Partners L.P., Teekay LNG Operating L.L.C., Teekay Offshore GP L.L.C., Teekay Offshore Partners L.P., Teekay Offshore Operating GP. L.L.C. and Teekay Offshore Operating L.P. govern, among other things, when Teekay Corporation, Teekay LNG L.P. and Teekay Offshore L.P. may compete with each other and to provide the applicable parties certain rights of first offer on LNG carriers, oil tankers, shuttle tankers, FSO units and FPSO units.
- (n) Indenture dated January 27, 2010 among Teekay Corporation and The Bank of New York Mellon Trust Company, N.A. for \$450,000,000 8.5% Senior Unsecured Notes due 2020.
- (o) Agreement, dated October 5, 2012, for NOK 700,000,000 Senior Unsecured Bonds due October 2015, among us and Norsk Tillitsmann ASA. All payments are at NIBOR plus 4.75% per annum.
- (p) 2013 Equity Incentive Plan.
- (q) Agreement, dated December 21, 2012 for a \$200,000,000 Margin Loan Agreement among Teekay Finance Limited, Citibank, N.A. and others.
- (r) Amendment Agreement, dated December 18, 2013 for a \$300,000,000 Margin Loan Agreement among Teekay Finance Limited, Citibank, N.A. and others.
- (s) Agreement, dated February 24, 2014 for a \$815,000,000 Secure Term Loan Facility Agreement among Knarr L.L.C., Citibank, N.A. and others.
- (t) Agreement dated July 7, 2014; between Teekay LNG Operating L.L.C. and China LNG Shipping (Holdings) Limited to form TC LNG Shipping L.L.C. in connection with the Yamal LNG Project.
- (u) Agreement dated December 17, 2014, for a \$450,000,000 secured loan facility between Nakilat Holdco L.L.C. and Qatar National Bank SAQ. The loan bears interest at LIBOR plus a margin of 1.85%. The facility requires quarterly repayments, with a bullet payment in 2026.
- (v) Amendment Agreement No. 2, dated December 19, 2014 for a \$500,000,000 Margin Loan Agreement among Teekay Finance Limited, Citibank, N.A. and others.
- (w) Amendment Agreement No. 3, dated October 5, 2015 for a \$500,000,000 Margin Loan Agreement among Teekay Finance Limited, Citibank, N.A. and others.
- (x) Amendment Agreement No. 4, dated December 17, 2015 for a \$300,000,000 Margin Loan Agreement among Teekay Finance Limited, Citibank, N.A. and others.
- (y) First Supplemental Indenture dated November 16, 2015 among Teekay Corporation and The Bank of New York Mellon Trust Company, N.A. for \$200,000,000 8.5% Senior Unsecured Notes due 2021.
- (z) Agreement, dated July 31, 2015, among OOGTK Libra GmbH & Co KG, ABN AMRO Bank N.V. and various other banks for a \$803,711,786.92 term loan due 2027.
- (aa) Purchase Agreement, dated as of November 10, 2015, between Teekay Corporation and J.P. Morgan Securities LLC, for itself and on behalf of the several initial purchasers listed in Schedule 1 thereto.
- (ab) Registration Rights Agreement, dated November 16, 2015 by and among Teekay Corporation and J.P. Morgan Securities LLC, for itself and as representative of the several initial purchasers listed in Schedule 1 thereto.
- (ac) Secured Term Loan and Revolving Credit Facility Agreement dated January 8, 2016 between Teekay Tankers Ltd., Nordea Bank Finland PLC and various other banks, for a \$894.4 million long-term debt facility, consisting of both a term loan and a revolving credit facility, which is scheduled to mature in January 2021.

- (ad) Share Purchase Agreement, dated May 18, 2016, by and among Teekay Corporation and the purchasers named therein.
- (ae) Registration Rights Agreement, dated June 29, 2016, by and among Teekay Corporation and the investors named therein.
- (af) Equity Distribution Agreement, dated September 9, 2016, between Teekay Corporation and Citigroup Global Markets Inc.

### **Exchange Controls and Other Limitations Affecting Security Holders**

We are not aware of any governmental laws, decrees or regulations, including foreign exchange controls, in the Republic of The Marshall Islands that restrict the export or import of capital or that affect the remittance of dividends, interest or other payments to holders of our securities that are non-resident and not citizens.

We are not aware of any limitations on the right of non-resident or foreign owners to hold or vote our securities imposed by the laws of the Republic of The Marshall Islands or our Articles of Incorporation and Bylaws.

### **Taxation**

Teekay Corporation was incorporated in the Republic of Liberia on February 9, 1979 and was domesticated in the Republic of The Marshall Islands on December 20, 1999. Its principal executive offices located in Bermuda. The following provides information regarding taxes to which a U.S. Holder of our common stock may be subject.

### **Material U.S. Federal Income Tax Considerations**

The following is a discussion of certain material U.S. federal income tax considerations that may be relevant to shareholders. This discussion is based upon the provisions of the Internal Revenue Code of 1986, as amended (or the Code), legislative history, applicable U.S. Treasury Regulations (or Treasury Regulations), judicial authority and administrative interpretations, all as in effect on the date of this Annual Report and which are subject to change, possibly with retroactive effect, or are subject to different interpretations. Changes in these authorities may cause the tax consequences to vary substantially from the consequences described below. Unless the context otherwise requires, references in this section to “we,” “our” or “us” are references to Teekay Corporation.

This discussion is limited to shareholders who hold their common stock as a capital asset for tax purposes. This discussion does not address all tax considerations that may be important to a particular shareholder in light of the shareholder’s circumstances, or to certain categories of shareholders that may be subject to special tax rules, such as:

- dealers in securities or currencies,
- traders in securities that have elected the mark-to-market method of accounting for their securities,
- persons whose functional currency is not the U.S. dollar,
- persons holding our common stock as part of a hedge, straddle, conversion or other “synthetic security” or integrated transaction,
- certain U.S. expatriates,
- financial institutions,
- insurance companies,
- persons subject to the alternative minimum tax,
- persons that actually or under applicable constructive ownership rules own 10% or more of our common stock; and
- entities that are tax-exempt for U.S. federal income tax purposes.

If a partnership (including any entity or arrangement treated as a partnership for U.S. federal income tax purposes) holds our common stock, the tax treatment of a partner generally will depend upon the status of the partner and the activities of the partnership. Partners in partnerships holding our common stock should consult their tax advisors to determine the appropriate tax treatment of the partnership’s ownership of our common stock.

This discussion does not address any U.S. estate tax considerations or tax considerations arising under the laws of any state, local or non-U.S. jurisdiction. Each shareholder is urged to consult its tax advisor regarding the U.S. federal, state, local, non-U.S. and other tax consequences of the ownership or disposition of our common stock.

## ***United States Federal Income Taxation of U.S. Holders***

As used herein, the term U.S. Holder means a beneficial owner of our common stock that is, for U.S. federal income tax purposes: (i) a U.S. citizen or U.S. resident alien (or a U.S. Individual Holder), (ii) a corporation or other entity taxable as a corporation, that was created or organized under the laws of the United States, any state thereof or the District of Columbia, (iii) an estate whose income is subject to U.S. federal income taxation regardless of its source, or (iv) a trust that either is subject to the supervision of a court within the United States and has one or more U.S. persons with authority to control all of its substantial decisions or has a valid election in effect under applicable Treasury Regulations to be treated as a U.S. person.

### ***Distributions***

Subject to the discussion of passive foreign investment companies (or PFICs) below, any distributions made by us with respect to our common stock to a U.S. Holder generally will constitute dividends, which may be taxable as ordinary income or “qualified dividend income” as described in more detail below, to the extent of our current and accumulated earnings and profits, as determined under U.S. federal income tax principles. Distributions in excess of our current and accumulated earnings and profits will be treated first as a nontaxable return of capital to the extent of the U.S. Holder’s tax basis in our common stock and thereafter as capital gain, which will be either long term or short term capital gain depending upon whether the U.S. Holder has held the common stock for more than one year. U.S. Holders that are corporations for U.S. federal income tax purposes generally will not be entitled to claim a dividends received deduction with respect to any distributions they receive from us. For purposes of computing allowable foreign tax credits for U.S. federal income tax purposes, dividends received with respect to our common stock will be treated as foreign source income and generally will be treated as “passive category income”.

Subject to holding period requirements and certain other limitations, dividends received with respect to our common stock by a U.S. Holder who is an individual, trust or estate (or a *Non-Corporate U.S. Holder*) will be treated as “qualified dividend income” that is taxable to such Non-Corporate U.S. Holder at preferential capital gain tax rates provided that we are not classified as a PFIC for the taxable year during which the dividend is paid or the immediately preceding taxable year (we intend to take the position that we are not now and have never been classified as a PFIC, as discussed below). Any dividends received with respect to our common stock not eligible for these preferential rates will be taxed as ordinary income to a Non-Corporate U.S. Holder.

Special rules may apply to any “extraordinary dividend” paid by us. Generally, an extraordinary dividend is, a dividend with respect to a share of common stock if the amount of the dividend is equal to or in excess of 10% of a common shareholder’s adjusted tax basis (or fair market value in certain circumstances) in such common stock. In addition, extraordinary dividends include dividends received within a one-year period that, in the aggregate, equal or exceed 20% of a shareholder’s adjusted tax basis (or fair market value in certain circumstances). If we pay an “extraordinary dividend” on our common stock that is treated as “qualified dividend income,” then any loss recognized by a Non-Corporate U.S. Holder from the sale or exchange of such common stock will be treated as long-term capital loss to the extent of the amount of such dividend.

Certain Non-Corporate U.S. Holders currently are subject to a 3.8% tax on certain investment income, including dividends. Non-Corporate U.S. Holders should consult their tax advisors regarding the effect, if any, of this tax on their ownership of our common stock.

### ***Sale, Exchange or Other Disposition of Common Stock***

Subject to the discussion of PFICs below, a U.S. Holder generally will recognize capital gain or loss upon a sale, exchange or other disposition of our common stock in an amount equal to the difference between the amount realized by the U.S. Holder from such sale, exchange or other disposition and the U.S. Holder’s tax basis in such stock. Subject to the discussion of extraordinary dividends above, such gain or loss generally will be treated as (a) long-term capital gain or loss if the U.S. Holder’s holding period is greater than one year at the time of the sale, exchange or other disposition, or short-term capital gain or loss otherwise and (b) U.S.-source gain or loss, as applicable, for foreign tax credit purposes. Non-Corporate U.S. Holders may be eligible for preferential rates of U.S. federal income tax in respect of long-term capital gains. A U.S. Holder’s ability to deduct capital losses is subject to certain limitations.

Certain Non-Corporate U.S. Holders currently are subject to a 3.8% tax on certain investment income, including capital gains from the sale or other disposition of stock. Non-Corporate U.S. Holders should consult their tax advisors regarding the effect, if any, of this tax on their disposition of our common stock.

### ***Consequences of Possible PFIC Classification***

A non-U.S. entity treated as a corporation for U.S. federal income tax purposes will be treated as a PFIC in any taxable year in which, after taking into account the income and assets of the corporation and certain subsidiaries pursuant to a “look through” rule, either: (i) at least 75% of its gross income is “passive” income; or (ii) at least 50% of the average value of its assets is attributable to assets that produce, or are held for the production of, passive income. For purposes of these tests, “passive income” includes dividends, interest, gains from the sale or exchange of investment property and rents and royalties other than rents and royalties that are received from unrelated parties in connection with the active conduct of a trade or business. By contrast, income derived from the performance of services does not constitute “passive income.”



There are legal uncertainties involved in determining whether the income derived from our time-chartering activities constitutes rental income or income derived from the performance of services, including legal uncertainties arising from the decision in *Tidewater Inc. v. United States*, 565 F.3d 299 (5th Cir. 2009), which held that income derived from certain time-chartering activities should be treated as rental income rather than services income for purposes of a foreign sales corporation provision of the Code. However, the Internal Revenue Service (or IRS) stated in an Action on Decision (AOD 2010-01) that it disagrees with, and will not acquiesce to, the way that the rental versus services framework was applied to the facts in the *Tidewater* decision, and in its discussion stated that the time charters at issue in *Tidewater* would be treated as producing services income for PFIC purposes. The IRS's statement with respect to *Tidewater* cannot be relied upon or otherwise cited as precedent by taxpayers. Consequently, in the absence of any binding legal authority specifically relating to the statutory provisions governing PFICs, there can be no assurance that the IRS or a court would not follow the *Tidewater* decision in interpreting the PFIC provisions of the Code. Moreover, the market value of our common stock and our publicly traded subsidiaries may be treated as reflecting the value of our assets, and our publicly traded subsidiaries' assets, respectively, at any given time. Therefore, a decline in the market value of our common stock, or our publicly traded subsidiaries (which is not within our control) may impact the determination of whether we are a PFIC. Nevertheless, based on our and our subsidiaries' current assets and operations, we intend to take the position that we are not now and have never been a PFIC. No assurance can be given, however, that the IRS, or a court of law, will accept our position or that we would not constitute a PFIC for any future taxable year if there were to be changes in our or our subsidiaries assets, income or operations.

As discussed more fully below, if we were to be treated as a PFIC for any taxable year, a U.S. Holder generally would be subject to different taxation rules depending on whether the U.S. Holder makes a timely and effective election to treat us as a "Qualified Electing Fund" (a QEF election). As an alternative to making a QEF election, a U.S. Holder should be able to make a "mark-to-market" election with respect to our common stock, as discussed below.

Taxation of U.S. Holders Making a Timely QEF Election. A U.S. Holder who makes a timely QEF election (an Electing Holder) must report the Electing Holder's pro rata share of our ordinary earnings and net capital gain, if any, for each taxable year for which we are a PFIC that ends with or within the Electing Holder's taxable year, regardless of whether or not the Electing Holder received distributions from us in that year. Such income inclusions would not be eligible for the preferential tax rates applicable to qualified dividend income. The Electing Holder's adjusted tax basis in our common stock will be increased to reflect taxed but undistributed earnings and profits. Distributions of earnings and profits that were previously taxed will result in a corresponding reduction in the Electing Holder's adjusted tax basis in our common stock and will not be taxed again once distributed. An Electing Holder generally will recognize capital gain or loss on the sale, exchange or other disposition of our common stock. A U.S. Holder makes a QEF election with respect to any year that we are a PFIC by filing IRS Form 8621 with the U.S. Holder's timely filed U.S. federal income tax return (including extensions).

If a U.S. Holder has not made a timely QEF election with respect to the first year in the U.S. Holder's holding period of our common stock during which we qualified as a PFIC, the U.S. Holder may be treated as having made a timely QEF election by filing a QEF election with the U.S. Holder's timely filed U.S. federal income tax return (including extensions) and, under the rules of Section 1291 of the Code, a "deemed sale election" to include in income as an "excess distribution" (described below) the amount of any gain that the U.S. Holder would otherwise recognize if the U.S. Holder sold the U.S. Holder's common stock on the "qualification date." The qualification date is the first day of our taxable year in which we qualified as a "qualified electing fund" with respect to such U.S. Holder. In addition to the above rules, under very limited circumstances, a U.S. Holder may make a retroactive QEF election if the U.S. Holder failed to file the QEF election documents in a timely manner. If a U.S. Holder makes a timely QEF election for one of our taxable years, but did not make such election with respect to the first year in the U.S. Holder's holding period of our common stock during which we qualified as a PFIC and the U.S. Holder did not make the deemed sale election described above, the U.S. Holder also will be subject to the more adverse rules described below.

A U.S. Holder's QEF election will not be effective unless we annually provide the U.S. Holder with certain information concerning our income and gain, calculated in accordance with the Code, to be included with the U.S. Holder's U.S. federal income tax return. We have not provided our U.S. Holders with such information in prior taxable years and do not intend to provide such information in the current taxable year. Accordingly, U.S. Holders will not be able to make an effective QEF election at this time. If, contrary to our expectations, we determine that we are or will be a PFIC for any taxable year, we will provide U.S. Holders with the information necessary to make an effective QEF election with respect to our common stock.

Taxation of U.S. Holders Making a Mark-to-Market Election. If we were to be treated as a PFIC for any taxable year and, as we anticipate, our stock were treated as "marketable stock", then, as an alternative to making a QEF election, a U.S. Holder would be allowed to make a "mark-to-market" election with respect to our common stock, provided the U.S. Holder completes and files IRS Form 8621 in accordance with the relevant instructions and related Treasury Regulations. If that election is made for the first year a U.S. Holder holds or is deemed to hold our common stock and for which we are a PFIC, the U.S. Holder generally would include as ordinary income in each taxable year that we are a PFIC the excess, if any, of the fair market value of the U.S. Holder's common stock at the end of the taxable year over the U.S. Holder's adjusted tax basis in the common stock. The U.S. Holder also would be permitted an ordinary loss in respect of the excess, if any, of the U.S. Holder's adjusted tax basis in the common stock over the fair market value thereof at the end of the taxable year that we are a PFIC, but only to the extent of the net amount previously included in income as a result of the mark-to-market election. A U.S. Holder's tax basis in our common stock would be adjusted to reflect any such income or loss recognized. Gain recognized on the sale, exchange or other disposition of our common stock in taxable years that we are a PFIC would be treated as ordinary income, and any loss recognized on the sale, exchange or other disposition of our common stock in taxable years that we are a PFIC would be treated as ordinary loss to the extent that such loss does not exceed the net mark-to-market gains previously included in income by the U.S. Holder. Because the mark-to-market election only applies to marketable stock, however, it would not apply to a U.S. Holder's indirect interest in any of our subsidiaries that were also determined to be PFICs.

If a U.S. Holder makes a mark-to-market election for one of our taxable years and we were a PFIC for a prior taxable year during which such U.S. Holder held our common stock and for which (i) we were not a QEF with respect to such U.S. Holder and (ii) such U.S. Holder did not make a timely mark-to-market election, such U.S. Holder would also be subject to the more adverse rules described below in the first taxable year for which the mark-to-market election is in effect and also to the extent the fair market value of the U.S. Holder's common stock exceeds the U.S. Holder's adjusted tax basis in the common stock at the end of the first taxable year for which the mark-to-market election is in effect.

Taxation of U.S. Holders Not Making a Timely QEF or Mark-to-Market Election. If we were to be treated as a PFIC for any taxable year, a U.S. Holder who does not make either a QEF election or a "mark-to-market" election for that year (a Non-Electing Holder) would be subject to special rules resulting in increased tax liability with respect to (i) any excess distribution (i.e., the portion of any distribution received by the Non-Electing Holder on our common stock in a taxable year in excess of 125% of the average annual distributions received by the Non-Electing Holder in the three preceding taxable years, or, if shorter, the Non-Electing Holder's holding period for our common stock), and (ii) any gain realized on the sale, exchange or other disposition of our common stock. Under these special rules:

- the excess distribution or gain would be allocated ratably over the Non-Electing Holder's aggregate holding period for our common stock;
- the amount allocated to the current taxable year and any taxable year prior to the taxable year we were first treated as a PFIC with respect to the Non-Electing Holder would be taxed as ordinary income in the current taxable year;
- the amount allocated to each of the other taxable years would be subject to U.S. federal income tax at the highest rate of tax in effect for the applicable class of taxpayer for that year; and
- an interest charge for the deemed deferral benefit would be imposed with respect to the resulting tax attributable to each such other taxable year.

Additionally, for each year during which a U.S. Holder owns our common stock, we are a PFIC, and the total value of all PFIC stock that such U.S. Holder directly or indirectly owns exceeds certain thresholds, such U.S. Holder will be required to file IRS Form 8621 with its annual U.S. federal income tax return to report its ownership of our common stock. In addition, if a Non-Electing Holder who is an individual dies while owning our common stock, such Non-Electing Holder's successor generally would not receive a step-up in tax basis with respect to such common stock.

**U.S. Holders are urged to consult their tax advisors regarding the PFIC rules, including the PFIC annual reporting requirements, as well as the applicability, availability and advisability of, and procedure for, making QEF, Mark-to-Market and other available elections with respect to us and our subsidiaries, and the U.S. federal income tax consequences of making such elections.**

#### *Consequences of Possible Controlled Foreign Corporation Classification*

If CFC Shareholders (generally, U.S. Holders who each own, directly, indirectly or constructively, 10% or more of the total combined voting power of our outstanding common stock entitled to vote) own directly, indirectly or constructively more than 50% of either the total combined voting power of our outstanding common stock entitled to vote or the total value of all of our outstanding common stock, we generally would be treated as a controlled foreign corporation (or a CFC).

CFC Shareholders are treated as receiving current distributions of their respective share of certain income of the CFC without regard to any actual distributions and are subject to other burdensome U.S. federal income tax and administrative requirements but generally are not also subject to the requirements generally applicable to shareholders of a PFIC. In addition, a person who is or has been a CFC Shareholder may recognize ordinary income on the disposition of shares of the CFC. Although we do not believe we are or will become a CFC, U.S. persons owning a substantial interest in us should consider the potential implications of being treated as a CFC Shareholder in the event we become a CFC in the future.

The U.S. federal income tax consequences to U.S. Holders who are not CFC Shareholders would not change in the event we become a CFC in the future.

#### *U.S. Return Disclosure Requirements for U.S. Individual Holders*

U.S. Individual Holders who hold certain specified foreign financial assets, including stock in a foreign corporation that is not held in an account maintained by a financial institution, with an aggregate value in excess of \$50,000 on the last day of a taxable year, or \$75,000 at any time during that taxable year, may be required to report such assets on IRS Form 8938 with their U.S. federal income tax return for that taxable year. This reporting requirement does not apply to U.S. Individual Holders who report their ownership of our common stock under the PFIC annual reporting rules described above. Penalties apply for failure to properly complete and file IRS Form 8938. U.S. Individual Holders are encouraged to consult with their tax advisors regarding the possible application of this disclosure requirement.

#### **United States Federal Income Taxation of Non-U.S. Holders**

A beneficial owner of our common stock (other than a partnership, including any entity or arrangement treated as a partnership for U.S. federal income tax purposes) that is not a U.S. Holder is a Non-U.S. Holder.

## *Distributions*

In general, a Non-U.S. Holder will not be subject to U.S. federal income tax on distributions received from us with respect to our common stock unless the distributions are effectively connected with the Non-U.S. Holder's conduct of a trade or business within the United States (and, if required by an applicable income tax treaty, are attributable to a permanent establishment that the Non-U.S. Holder maintains in the United States). If a Non-U.S. Holder is engaged in a U.S. trade or business and the distributions are deemed to be effectively connected to that trade or business, the Non-U.S. Holder generally will be subject to U.S. federal income tax on those distributions in the same manner as if it were a U.S. Holder.

## *Sale, Exchange or Other Disposition of Common Stock*

In general, a Non-U.S. Holder is not subject to U.S. federal income tax on any gain resulting from the disposition of our common stock unless (a) such gain is effectively connected with the Non-U.S. Holder's conduct of a trade or business in the United States (and, if required by an applicable income tax treaty, is attributable to a permanent establishment that the Non-U.S. Holder maintains in the United States) or (b) the Non-U.S. Holder is an individual who is present in the United States for 183 days or more during the taxable year in which such disposition occurs and meets certain other requirements. If a Non-U.S. Holder is engaged in a U.S. trade or business and the disposition of our common stock is deemed to be effectively connected to that trade or business, the Non-U.S. Holder generally will be subject to U.S. federal income tax on the resulting gain in the same manner as if it were a U.S. Holder.

## **Information Reporting and Backup Withholding**

In general, payments of distributions with respect to, or the proceeds of a disposition of, our common stock to a Non-Corporate U.S. Holder will be subject to information reporting requirements. These payments to a Non-Corporate U.S. Holder also may be subject to backup withholding if the Non-Corporate U.S. Holder:

- fails to timely provide an accurate taxpayer identification number;
- is notified by the IRS that it has failed to report all interest or distributions required to be shown on its U.S. federal income tax returns; or
- in certain circumstances, fails to comply with applicable certification requirements.

Non-U.S. Holders may be required to establish their exemption from information reporting and backup withholding on payments made to them within the United States, or through a U.S. payor by certifying their status on IRS Form W-8BEN, W-8BEN-E, W-8ECI or W-8IMY, as applicable.

Backup withholding is not an additional tax. Rather, a shareholder generally may obtain a credit for any amount withheld against its liability for U.S. federal income tax (and obtain a refund of any amounts withheld in excess of such liability) by accurately completing and timely filing a U.S. federal income tax return with the IRS.

## **Non-United States Tax Considerations**

**Marshall Islands Tax Considerations.** Because Teekay and our subsidiaries do not, and do not expect that we or they will, conduct business or operations in the Republic of The Marshall Islands, and because all documentation related to issuances of shares of our common stock was executed outside of the Republic of The Marshall Islands, under current Marshall Islands law, no taxes or withholdings will be imposed by the Republic of The Marshall Islands on distributions made to holders of shares of our common stock, so long as such persons are not citizens of and do not reside in, maintain offices in, or engage in business or transactions in the Republic of The Marshall Islands. Furthermore, no stamp, capital gains or other taxes will be imposed by the Republic of The Marshall Islands on the purchase, ownership or disposition by such persons of shares of our common stock.

## **Documents on Display**

Documents concerning us that are referred to herein may be inspected at our principal executive offices at 4th Floor, Belvedere Building, 69 Pitts Bay Road, Hamilton, HM 08, Bermuda. Those documents electronically filed via the Electronic Data Gathering, Analysis, and Retrieval (or *EDGAR*) system may also be obtained from the SEC's website at [www.sec.gov](http://www.sec.gov), free of charge, or from the Public Reference Section of the SEC at 100 F Street, NE, Washington, D.C. 20549, at prescribed rates. Further information on the operation of the SEC public reference rooms may be obtained by calling the SEC at 1-800-SEC-0330.

## **Item 11. Quantitative and Qualitative Disclosures About Market Risk**

We, as in Teekay Corporation and its subsidiaries, are exposed to market risk from foreign currency fluctuations and changes in interest rates, bunker fuel prices and spot tanker market rates for vessels. We use foreign currency forward contracts, cross currency and interest rate swaps, bunker fuel swap contracts and forward freight agreements to manage currency, interest rate, bunker fuel price and spot tanker market rate risks but we do not use these financial instruments for trading or speculative purposes. Please read "Item 18. Financial Statements: Note 14—Derivative Instruments and Hedging Activities."

## Foreign Currency Fluctuation Risk

Our primary economic environment is the international shipping market. Transactions in this market generally utilize the U.S. Dollar. Consequently, a substantial majority of our revenues and most of our operating costs are in U.S. Dollars. We incur certain voyage expenses, vessel operating expenses, dry docking and overhead costs in foreign currencies, the most significant of which are the Australian Dollar, Brazilian Real, British Pound, Canadian Dollar, Euro, Norwegian Kroner and Singapore Dollar. There is a risk that currency fluctuations will have a negative effect on the value of cash flows.

We reduce our exposure by entering into foreign currency forward contracts. In most cases, we hedge a portion of our net foreign currency exposure for the following nine to 12 months. We generally do not hedge our net foreign currency exposure beyond three years forward.

As at December 31, 2016, we had the following foreign currency forward contracts:

	Contract Amount in Foreign Currency <sup>(1)</sup>	Average Forward Rate <sup>(2)</sup>	Fair Value / Carrying Amount of Asset (Liability) <sup>(3)</sup> \$	Expected Maturity	
				2016 <sup>(3)</sup> \$	2017 <sup>(3)</sup> \$
Euro	13,750	0.92	(304)	14,879	—
Norwegian Kroner	610,000	8.31	(2,689)	60,677	12,719
			(2,993)	75,556	12,719

(1) Foreign currency contract amounts in thousands.

(2) Average forward rate represents the contractual amount of foreign currency one U.S. Dollar will buy.

(3) Contract amounts and fair value amounts in thousands of U.S. Dollars.

Although the majority of our transactions, assets and liabilities are denominated in U.S. Dollars, certain of our subsidiaries have foreign currency-denominated liabilities. There is a risk that currency fluctuations will have a negative effect on the value of our cash flows. We have not entered into any forward contracts to protect against the translation risk of our foreign currency-denominated liabilities. As at December 31, 2016, we had Euro-denominated term loans of 208.9 million Euros (\$219.7 million). We receive Euro-denominated revenue from certain of our time charters. These Euro cash receipts generally are sufficient to pay the principal and interest payments on our Euro-denominated term loans. Consequently, we have not entered into any foreign currency forward contracts with respect to our Euro-denominated term loans, although there is no assurance that our net exposure to fluctuations in the Euro will not increase in the future.

We enter into cross currency swaps in connection with our NOK bond issuances, and pursuant to these swaps we receive the principal amount in NOK on the maturity date of the swap, in exchange for payment of a fixed U.S. Dollar amount. In addition, the cross currency swaps exchange a receipt of floating interest in NOK based on NIBOR plus a margin for a payment of U.S. Dollar fixed interest. The purpose of the cross currency swaps is to economically hedge the foreign currency exposure on the payment of interest and principal of our NOK-denominated bonds due in 2017 through 2021. In addition, the cross currency swaps economically hedge the interest rate exposure on the NOK bonds due in 2017 through 2021. We have not designated, for accounting purposes, these cross currency swaps as cash flow hedges of our NOK-denominated bonds due in 2017 through 2021. As at December 31, 2016, we were committed to the following cross currency swaps:

Notional Amount NOK <sup>(1)</sup>	Notional Amount USD <sup>(1)</sup>	Floating Rate Receivable		Fixed Rate Payable	Fair Value <sup>(1)</sup> \$	Remaining Term (years)
		Reference Rate	Margin			
408,500	72,946	NIBOR	5.25%	6.88%	(26,417)	0.3
420,000 <sup>(2) (3)</sup>	70,946	NIBOR	5.75%	8.84%	(25,821)	1.9
800,000 <sup>(2) (4)</sup>	143,536	NIBOR	5.75%	7.58%	(56,272)	2.0
900,000	110,400	NIBOR	6.00%	7.72%	(3,814)	4.8
900,000	150,000	NIBOR	4.35%	6.43%	(49,655)	1.7
1,000,000	162,200	NIBOR	4.25%	7.45%	(55,286)	2.1
1,000,000	134,000	NIBOR	3.70%	5.92%	(19,900)	3.4
					<u>(237,165)</u>	

(1) In thousands of Norwegian Kroner and U.S. Dollars.

(2) Notional amount reduces equally with NOK bond repayments.

(3) Excludes an economic hedge on the foreign currency exposure for a three percent premium upon maturity of the NOK bonds which exchanges NOK 7.2 million for 1.2 million.

(4) Excludes an economic hedge on the foreign currency exposure for a three percent premium upon maturity of the NOK bonds which exchanges NOK 19.2 million for 3.4 million.

### Interest Rate Risk

We are exposed to the impact of interest rate changes primarily through our borrowings that require us to make interest payments based on LIBOR, NIBOR or EURIBOR. Significant increases in interest rates could adversely affect our operating margins, results of operations and our ability to service our debt. We use interest rate swaps to reduce our exposure to market risk from changes in interest rates. Generally, our approach is to economically hedge a substantial majority of floating-rate debt associated with our vessels that are operating on long-term fixed-rate contracts. We manage the rest of our debt based on our outlook for interest rates and other factors.

We are exposed to credit loss in the event of non-performance by the counterparties to the interest rate swap agreements. In order to minimize counterparty risk, we only enter into derivative transactions with counterparties that are rated A- or better by Standard & Poor's or A3 or better by Moody's at the time of the transaction. In addition, to the extent possible and practical, interest rate swaps are entered into with different counterparties to reduce concentration risk.

The table below provides information about our financial instruments at December 31, 2016, that are sensitive to changes in interest rates, including our debt and capital lease obligations and interest rate swaps. For long-term debt and capital lease obligations, the table presents principal cash flows and related weighted-average interest rates by expected maturity dates. For interest rate swaps, the table presents notional amounts and weighted-average interest rates by expected contractual maturity dates.

	Expected Maturity Date						Total	Fair Value Asset / (Liability)	Rate <sup>(1)</sup>
	2017	2018	2019	2020	2021	Thereafter			
(in millions of U.S. dollars)									
<b>Long-Term Debt:</b>									
Variable Rate (\$U.S.) <sup>(2)</sup>	907.0	1,307.5	513.9	420.0	754.1	862.0	4,764.5	(4,577.0)	2.8%
Variable Rate (Euro) <sup>(3)(4)</sup>	15.6	124.8	8.9	9.6	10.3	50.5	219.7	(209.8)	1.2%
Variable Rate (NOK) <sup>(4)(5)</sup>	68.1	224.5	115.7	115.7	104.2	—	628.3	(594.5)	6.0%
Fixed-Rate Debt (\$U.S.)	12.7	25.3	327.3	618.5	29.5	104.3	1,117.7	(1,038.6)	7.0%
Average Interest Rate	4.1%	4.2%	5.9%	8.3%	4.3%	4.5%	7.0%		
<b>Capital Lease Obligations</b>									
Variable-Rate (\$U.S.) <sup>(6)</sup>	40.3	39.1	13.5	14.3	14.9	270.7	392.8	(392.8)	5.5%
Average Interest Rate <sup>(7)</sup>	4.9%	6.1%	5.5%	5.5%	5.5%	5.5%	5.5%		
<b>Interest Rate Swaps:</b>									
Contract Amount (\$U.S.) <sup>(8)</sup>	611.5	528.6	623.3	551.5	313.3	863.7	3,491.9	(259.7)	3.2%
Average Fixed Pay Rate <sup>(2)</sup>	3.1%	2.6%	3.7%	2.8%	2.1%	4.0%	3.2%		
Contract Amount (Euro) <sup>(4)(9)</sup>	15.6	124.8	8.9	9.6	10.3	50.5	219.7	(34.3)	3.1%
Average Fixed Pay Rate <sup>(3)</sup>	3.1%	2.6%	3.7%	3.7%	3.7%	3.9%	3.1%		

- (1) Rate refers to the weighted-average effective interest rate for our long-term debt and capital lease obligations, including the margin we pay on our floating-rate, which, as of December 31, 2016, ranged from 0.3% to 4.0% for U.S. Dollar denominated debt. The average interest rate for our capital lease obligations is the weighted-average interest rate implicit in our lease obligations at the inception of the leases.
- (2) Interest payments on U.S. Dollar-denominated debt and interest rate swaps are based on LIBOR. The average fixed pay rate for our interest rate swaps excludes the margin we pay on our floating-rate debt.
- (3) Interest payments on Euro-denominated debt and interest rate swaps are based on EURIBOR.
- (4) Euro-denominated and NOK-denominated amounts have been converted to U.S. Dollars using the prevailing exchange rate as of December 31, 2016.
- (5) Interest payments on our NOK-denominated debt and on our cross currency swaps are based on NIBOR. Our NOK-denominated debt has been economically hedged with cross currency swaps, to swap all interest and principal payments at maturity into U.S. Dollars, with the interest payments fixed at rates between 5.92% to 8.84% and interest rate payments swapped from NIBOR plus margins between 3.70% to 6.00% and the transfer of principal fixed between \$70.9 million to \$162.2 million upon maturity in exchange for NOK 409 million to NOK 1 billion.
- (6) The amount of capital lease obligations represents the present value of minimum lease payments together with our purchase obligation, as applicable.
- (7) The average interest rate is the weighted-average interest rate implicit in the capital lease obligations at the inception of the leases. Interest rate adjustments on these leases have corresponding adjustments in charter receipts under the terms of the charter contracts to which these leases relate.
- (8) The average variable receive rate for our interest rate swaps is set quarterly at the 3-month LIBOR or semi-annually at the 6-month LIBOR. The table above does not reflect Teekay LNG's interest rate swaption agreements, whereby Teekay LNG has a one-time option to enter into an interest rate swap at a fixed rate with a third party, and the third party has a one-time option to require Teekay LNG to enter into an interest rate swap at a fixed rate. If Teekay LNG or the third party exercises its option, there will be cash settlements for the fair value of the interest rate swap in lieu of taking delivery of the actual interest rate swap. The net fair value of the interest rate swaption agreements as at December 31, 2016 was a liability of \$0.9 million. Includes Teekay Offshore's six interest rate swaps, which as at December 31, 2016, had a total notional amount of \$759.5 million and a total fair value liability of \$181.8 million. In the second quarter of 2016, the early termination provisions of Teekay Offshore's interest rate swaps were extended from the second half of 2016 through the second half of 2017 to early-to-mid-2019. Please read "Item 18 – Financial Statements: Note 14 – Derivative Instruments and Hedging Activities".
- (9) The average variable receive rate for our Euro-denominated interest rate swaps is set at 1-month EURIBOR.

### Equity Price Risk

We and Teekay Tankers are exposed to the changes in the stock price of TIL. We and Teekay Tankers have stock purchase warrants entitling us and Teekay Tankers to purchase an aggregate of up to 1.5 million shares of common stock of TIL at a fixed price of \$10 per share. The stock purchase warrants vest in four equally sized tranches. Each tranche will vest and become exercisable when and if the fair market value of a share of TIL's Common Stock equals or exceeds 77.08 NOK, 92.50 NOK, 107.91 NOK and 123.33 NOK, respectively, for such tranche for any ten consecutive trading days. As at December 31, 2016, the first two tranches had vested. The stock purchase warrants expire on January 23, 2019.

### **Commodity Price Risk**

From time to time we may use bunker fuel swap contracts relating to a portion of our bunker fuel expenditures. As at December 31, 2016, we were not committed to any bunker fuel swap contracts.

### **Spot Tanker Market Rate Risk**

We are exposed to fluctuations in spot tanker market rates which can adversely affect our revenues. To reduce our exposure, in the second quarter of 2016 Teekay Tankers entered into a time-charter swap agreement for 55% of two Aframax equivalent vessels for a period of 11 months plus an additional two months at the counterparty's option. The fair value of this derivative agreement is the estimated amount that Teekay Tankers would receive or pay to terminate the agreement at the reporting date, based on the present value of its projection of future Aframax spot market tanker rates, which have been derived from current Aframax spot market tanker rates and estimated future rates. As at December 31, 2016, the fair value of the time-charter swap agreement was positive \$0.2 million.

### **Item 12. Description of Securities Other than Equity Securities**

Not applicable.

## **PART II**

### **Item 13. Defaults, Dividend Arrearages and Delinquencies**

None.

### **Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds**

Not applicable.

### **Item 15. Controls and Procedures**

We maintain disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act that are designed to ensure that (i) information required to be disclosed in our reports that are filed or submitted under the Exchange Act, are recorded, processed, summarized, and reported within the time periods specified in the U.S. Securities and Exchange Commission's rules and forms, and (ii) information required to be disclosed by us in the reports we file or submit under the Exchange Act is accumulated and communicated to our management, including the principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

We conducted an evaluation of our disclosure controls and procedures under the supervision and with the participation of the Chief Executive Officer and Chief Financial Officer. Based on the evaluation, the Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures are effective as of December 31, 2016.

The Chief Executive Officer and Chief Financial Officer do not expect that our disclosure controls or internal controls will prevent all errors and all fraud. Although our disclosure controls and procedures were designed to provide reasonable assurance of achieving their objectives, a control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within us have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the control. The design of any system of controls also is based partly on certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions.

## **Management's Report on Internal Control over Financial Reporting**

Our management is responsible for establishing and maintaining for us adequate internal controls over financial reporting.

Our internal controls are designed to provide reasonable assurance as to the reliability of our financial reporting and the preparation and presentation of the consolidated financial statements for external purposes in accordance with accounting principles generally accepted in the United States. Our internal controls over financial reporting includes those policies and procedures that: (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of the financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made in accordance with authorizations of management and the directors; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on the financial statements.

We conducted an evaluation of the effectiveness of our internal control over financial reporting based upon the framework in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. This evaluation included review of the documentation of controls, evaluation of the design effectiveness of controls, testing of the operating effectiveness of controls and a conclusion on this evaluation.

Because of its inherent limitations, internal controls over financial reporting may not prevent or detect misstatements even when determined to be effective and can only provide reasonable assurance with respect to financial statement preparation and presentation. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies and procedures may deteriorate. However, based on the evaluation, management believes that we maintained effective internal control over financial reporting as of December 31, 2016.

Our independent auditors, KPMG LLP, an independent registered public accounting firm has audited the accompanying consolidated financial statements and our internal control over financial reporting. Their attestation report on the effectiveness of our internal control over financial reporting can be found on page F-2 of this Annual Report.

There were no changes in our internal controls that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting (as defined in Rule 13a – 15 (f) under the Exchange Act) that occurred during the year ended December 31, 2016.

### **Item 16A. Audit Committee Financial Expert**

The Board has determined that director and Chair of the Audit Committee, Eileen A. Mercier, qualifies as an audit committee financial expert and is independent under applicable NYSE and SEC standards.

### **Item 16B. Code of Ethics**

We have adopted a Standards of Business Conduct that applies to all employees and directors. This document is available under "Investors – Teekay Corporation – Governance" from the home page of our website ([www.teekay.com](http://www.teekay.com)). We also intend to disclose under "Investors – Teekay Corporation – Governance" in the Investors section of our web site any waivers to or amendments of our Standards of Business Conduct for the benefit of our directors and executive officers.



**Item 16C. Principal Accountant Fees and Services**

Our principal accountant for 2016 and 2015 was KPMG LLP, Chartered Professional Accountants. The following table shows the fees Teekay and our subsidiaries paid or accrued for audit and other services provided by KPMG LLP for 2016 and 2015.

Fees (in thousands of U.S. dollars)	2016	2015
Audit Fees <sup>(1)</sup>	\$ 3,542	\$ 3,654
Audit-Related Fees <sup>(2)</sup>	20	24
Tax Fees <sup>(3)</sup>	61	43
Total	<u>\$ 3,623</u>	<u>\$ 3,721</u>

- (1) Audit fees represent fees for professional services provided in connection with the audits of our consolidated financial statements, reviews of our quarterly consolidated financial statements and audit services provided in connection with other statutory or regulatory filings for Teekay or our subsidiaries including professional services in connection with the review of our regulatory filings for public offerings of our subsidiaries. Audit fees for 2016 and 2015 include approximately \$745,000 and \$736,000, respectively, of fees paid to KPMG LLP by Teekay LNG that were approved by the Audit Committee of the Board of Directors of the general partner of Teekay LNG. Audit fees for 2016 and 2015 include approximately \$1,136,000 and \$1,033,000, respectively, of fees paid to KPMG LLP by our subsidiary Teekay Offshore that were approved by the Audit Committee of the Board of Directors of the general partner of Teekay Offshore. Audit fees for 2016 and 2015 include approximately \$408,000 and \$294,000, respectively, of fees paid to KPMG LLP by our subsidiary Teekay Tankers that were approved by the Audit Committee of the Board of Directors of Teekay Tankers.
- (2) Audit-related fees consisted primarily of accounting consultations, employee benefit plan audits, services related to business acquisitions, divestitures and other attestation services.
- (3) For 2016 and 2015, tax fees principally included corporate tax compliance fees.

The Audit Committee has the authority to pre-approve audit-related and non-audit services not prohibited by law to be performed by our independent auditors and associated fees. Engagements for proposed services either may be separately pre-approved by the Audit Committee or entered into pursuant to detailed pre-approval policies and procedures established by the Audit Committee, as long as the Audit Committee is informed on a timely basis of any engagement entered into on that basis. The Audit Committee separately pre-approved all engagements and fees paid to our principal accountants in 2016 and 2015.

**Item 16D. Exemptions from the Listing Standards for Audit Committees**

Not applicable.

**Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers**

In October 2008, we announced that our Board of Directors had authorized the repurchase of up to \$200 million of shares of our common stock. As at December 31, 2016, Teekay had repurchased 5.2 million shares of Common Stock for \$162.3 million pursuant to such authorizations. The total remaining share repurchase authorization at December 31, 2016, was \$37.7 million. Neither Teekay nor any "affiliated purchaser," as defined in Rule 10b-18(a)(3) of the Exchange Act, purchased any shares of our common stock during 2016.

**Item 16F. Change in Registrant's Certifying Accountant**

Not applicable.

## Item 16G. Corporate Governance

The following are the significant ways in which our corporate governance practices differ from those followed by domestic companies:

- In lieu of obtaining shareholder approval prior to the adoption of equity compensation plans, the board of directors approves such adoption, as permitted by New York Stock Exchange rules for foreign private issuers.

There are no other significant ways in which our corporate governance practices differ from those followed by U.S. domestic companies under the listing requirements of the New York Stock Exchange.

## Item 16H. Mine Safety Disclosure

Not applicable

## PART III

## Item 17. Financial Statements

Not applicable.

## Item 18. Financial Statements

The following consolidated financial statements and schedule, together with the related reports of KPMG LLP, Independent Registered Public Accounting Firm thereon, are filed as part of this Annual Report:

	<u>Page</u>
<a href="#">Reports of Independent Registered Public Accounting Firm</a>	F - 1 to F - 2
<b>Consolidated Financial Statements</b>	
<a href="#">Consolidated Statements of Income</a>	F - 3
<a href="#">Consolidated Statements of Comprehensive Income</a>	F - 4
<a href="#">Consolidated Balance Sheets</a>	F - 5
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<a href="#">Consolidated Statements of Changes in Total Equity</a>	F - 7
<a href="#">Notes to the Consolidated Financial Statements</a>	F - 8

All other schedules for which provision is made in the applicable accounting regulations of the SEC are not required, are inapplicable or have been disclosed in the Notes to the Consolidated Financial Statements and therefore have been omitted.

## Item 19. Exhibits

The following exhibits are filed as part of this Annual Report:

- 1.1 Amended and Restated Articles of Incorporation of Teekay Corporation. <sup>(13)</sup>
- 1.2 Articles of Amendment of Articles of Incorporation of Teekay Corporation. <sup>(13)</sup>
- 1.3 Amended and Restated Bylaws of Teekay Corporation. <sup>(1)</sup>
- 2.1 Registration Rights Agreement among Teekay Corporation, Tradewinds Trust Co. Ltd., as Trustee for the Cirrus Trust, and Worldwide Trust Services Ltd., as Trustee for the JTK Trust. <sup>(2)</sup>
- 2.2 Specimen of Teekay Corporation Common Stock Certificate. <sup>(2)</sup>
- 2.8 Indenture dated as of January 27, 2010 among Teekay Corporation and The Bank of New York Mellon Trust Company, N.A. for \$450,000,000 8.5% Senior Notes due 2020. <sup>(14)</sup>
- 2.9 Agreement, dated October 5, 2012, for NOK 700,000,000 Senior Unsecured Bonds due October 2015, among us and Norsk Tillitsmann ASA. <sup>(18)</sup>
- 2.10 First Supplemental Indenture dated November 16, 2015 among Teekay Corporation and The Bank of New York Mellon Trust Company, N.A. for \$200,000,000 8.5% Senior Unsecured Notes due 2021. <sup>(22)</sup>
- 4.1 1995 Stock Option Plan. <sup>(2)</sup>
- 4.2 Amendment to 1995 Stock Option Plan. <sup>(3)</sup>
- 4.3 Amended 1995 Stock Option Plan. <sup>(4)</sup>
- 4.4 Amended 2003 Equity Incentive Plan. <sup>(16)</sup>

- 4.5 Annual Executive Bonus Plan. <sup>(5)</sup>
- 4.7 Form of Indemnification Agreement between Teekay and each of its officers and directors. <sup>(2)</sup>
- 4.8 Amended Rights Agreement, dated as of July 2, 2010 between Teekay Corporation and The Bank of New York, as Rights Agent. <sup>(7)</sup>
- 4.9 Agreement dated June 26, 2003 for a \$550,000,000 Secured Reducing Revolving Loan Facility among Norsk Teekay Holdings Ltd., Den Norske Bank ASA and various other banks. <sup>(8)</sup>
- 4.10 Agreement dated September 1, 2004 for a \$500,000,000 Credit Facility Agreement to be made available to Teekay Nordic Holdings Incorporated by Nordea Bank Finland PLC. <sup>(5)</sup>
- 4.11 Supplemental Agreement dated September 30, 2004 to Agreement dated June 26, 2003, for a \$550,000,000 Secured Reducing Revolving Loan Facility among Norsk Teekay Holdings Ltd., Den Norske Bank ASA and various other banks. <sup>(5)</sup>
- 4.12 Agreement dated May 26, 2005 for a \$550,000,000 Credit Facility Agreement to be made available to Avalon Spirit LLC et al by Nordea Bank Finland PLC and others. <sup>(6)</sup>
- 4.13 Agreement dated October 2, 2006, for a \$940,000,000 Secured Reducing Revolving Loan Facility among Teekay Offshore Operating L.P., Den Norske Bank ASA and various other banks. <sup>(9)</sup>
- 4.14 Agreement dated August 23, 2006, for a \$330,000,000 Secured Reducing Revolving Loan Facility among Teekay LNG Partners L.P., ING Bank N.V. and various other banks. <sup>(9)</sup>
- 4.15 Agreement, dated November 28, 2007 for a \$845,000,000 Secured Reducing Revolving Loan Facility among Teekay Corporation, Teekay Tankers Ltd., Nordea Bank Finland PLC and various other banks. <sup>(10)</sup>
- 4.16 Agreement dated May 16, 2007 for a \$700,000,000 Credit Facility Agreement to be made available to Teekay Acquisition Holdings L.L.C. et al by HSH NordBank AG and others. <sup>(11)</sup>
- 4.17 Amended and Restated Omnibus Agreement dated as of December 19, 2006, among Teekay Corporation, Teekay GP L.L.C., Teekay LNG Partners L.P., Teekay LNG Operating L.L.C., Teekay Offshore GP L.L.C., Teekay Offshore Partners L.P., Teekay Offshore Operating GP. L.L.C. and Teekay Offshore Operating L.P. <sup>(12)</sup>
- 4.18 2013 Equity Incentive Plan. <sup>(15)</sup>
- 4.19 Agreement, dated December 21, 2012 for a \$200,000,000 Margin Loan Agreement among Teekay Finance Limited, Citibank, N.A. and others. <sup>(17)</sup>
- 4.20 Amendment Agreement, dated December 18, 2013 for a \$300,000,000 Margin Loan Agreement among Teekay Finance Limited, Citibank, N.A. and others. <sup>(19)</sup>
- 4.21 Agreement, dated February 24, 2014 for a \$815,000,000 Secure Term Loan Facility Agreement among Knarr L.L.C., Citibank, N.A. and others. <sup>(20)</sup>
- 4.22 Agreement dated July 7, 2014; Teekay LNG Operating L.L.C. entered into a shareholder agreement with China LNG Shipping (Holdings) Limited to form TC LNG Shipping L.L.C in connection with the Yamal LNG Project. <sup>(21)</sup>
- 4.23 Agreement dated December 17, 2014, for a \$450,000,000 secured loan facility between Nakilat Holdco L.L.C. and Qatar National Bank SAQ. <sup>(21)</sup>
- 4.24 Amendment Agreement No. 2, dated December 19, 2014 for a \$200,000,000 Margin Loan Agreement among Teekay Finance Limited, Citibank, N.A. and others. <sup>(21)</sup>
- 4.25 Amendment Agreement No. 3, dated October 5, 2015 for a \$500,000,000 Margin Loan Agreement among Teekay Finance Limited, Citibank, N.A. and others. <sup>(22)</sup>
- 4.26 Amendment Agreement No. 4, dated December 17, 2015 for a \$500,000,000 Margin Loan Agreement among Teekay Finance Limited, Citibank, N.A. and others. <sup>(22)</sup>
- 4.27 Agreement, dated July 31, 2015, among OOGTK Libra GmbH & Co KG, ABN AMRO Bank N.V. and various other banks for a \$803,711,786.92 term loan due 2027. <sup>(22)</sup>
- 4.28 Purchase Agreement, dated as of November 10, 2015, between Teekay Corporation and J.P. Morgan Securities LLC, for itself and on behalf of the several initial purchasers listed in Schedule 1 thereto. <sup>(22)</sup>
- 4.29 Registration Rights Agreement, dated November 16, 2015 by and among Teekay Corporation and J.P. Morgan Securities LLC, for itself and as representative of the several initial purchasers listed in Schedule 1 thereto. <sup>(22)</sup>
- 4.30 Secured Term Loan and Revolving Credit Facility Agreement dated January 8, 2016 between Teekay Tankers Ltd., Nordea Bank Finland PLC and various other banks, for a \$894.4 million long-term debt facility. <sup>(22)</sup>
- 4.31 Share Purchase Agreement, dated May 18, 2016, by and among Teekay Corporation and the purchasers named therein. <sup>(23)</sup>
- 4.32 Registration Rights Agreement, dated June 29, 2016, by and among Teekay Corporation and the investors named therein. <sup>(23)</sup>
- 4.33 Equity Distribution Agreement, dated September 9, 2016, between Teekay Corporation and Citigroup Global Markets Inc. <sup>(24)</sup>
- 8.1 List of Subsidiaries.
- 12.1 Rule 13a-14(a)/15d-14(a) Certification of Teekay's Chief Executive Officer.
- 12.2 Rule 13a-14(a)/15d-14(a) Certification of Teekay's Chief Financial Officer.
- 13.1 Teekay Corporation Certification of Kenneth Hvid, Chief Executive Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
- 13.2 Teekay Corporation Certification of Vincent Lok, Chief Financial Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
- 23.1 Consent of KPMG LLP, as independent registered public accounting firm.
- 23.2 Consolidated Financial Statements of Exmar LPG BVBA.

101.INS XBRL Instance Document  
101.SCH XBRL Taxonomy Extension Schema  
101.CAL XBRL Taxonomy Extension Calculation Linkbase  
101.DEF XBRL Taxonomy Extension Definition Linkbase  
101.LAB XBRL Taxonomy Extension Label Linkbase  
101.PRE XBRL Taxonomy Extension Presentation Linkbase

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- (1) Previously filed as an exhibit to the Company's Report on Form 6-K (File No.1-12874), filed with the SEC on August 31, 2011, and hereby incorporated by reference to such Report.
  - (2) Previously filed as an exhibit to the Company's Registration Statement on Form F-1 (Registration No. 33-7573-4), filed with the SEC on July 14, 1995, and hereby incorporated by reference to such Registration Statement.
  - (3) Previously filed as an exhibit to the Company's Form 6-K (File No.1-12874), filed with the SEC on May 2, 2000, and hereby incorporated by reference to such Report.
  - (4) Previously filed as an exhibit to the Company's Annual Report on Form 20-F (File No.1-12874), filed with the SEC on April 2, 2001, and hereby incorporated by reference to such Report.
  - (5) Previously filed as an exhibit to the Company's Report on Form 20-F (File No. 1-12874), filed with the SEC on April 8, 2005, and hereby incorporated by reference to such Report.
  - (6) Previously filed as an exhibit to the Company's Report on Form 20-F (File No. 1-12874), filed with the SEC on April 10, 2006, and hereby incorporated by reference to such Report.
  - (7) Previously filed as an exhibit to the Company's Form 8-A/A (File No.1-12874), filed with the SEC on July 2, 2010, and hereby incorporated by reference to such Report.
  - (8) Previously filed as an exhibit to the Company's Report on Form 6-K (File No. 1-12874), filed with the SEC on August 14, 2003, and hereby incorporated by reference to such Report.
  - (9) Previously filed as an exhibit to the Company's Report on Form 6-K (File No. 1-12874), filed with the SEC on December 21, 2006, and hereby incorporated by reference to such Report.
  - (10) Previously filed as an exhibit to the Company's Report on Form 20-F (File No. 1-12874), filed with the SEC on April 11, 2008, and hereby incorporated by reference to such Report.
  - (11) Previously filed as an exhibit to the Company's Schedule TO – T/A, filed with the SEC on May 18, 2007, and hereby incorporated by reference to such schedule.
  - (12) Previously filed as an exhibit to the Company's Report on Form 20-F (File No. 1-12874), filed with the SEC on April 19, 2007, and hereby incorporated by reference to such Report.
  - (13) Previously filed as an exhibit to the Company's Report on Form 20-F (File No. 1-12874), filed with the SEC on April 7, 2009, and hereby incorporated by reference to such Report.
  - (14) Previously filed as an exhibit to the Company's Report on Form 6-K (File No. 1-12874), filed with the SEC on January 27, 2010, and hereby incorporated by reference to such Report.
  - (15) Previously filed as an exhibit to the Company's Registration Statement on Form S-8 (Registration No. 333-187142), filed with the SEC on March 8, 2013, and hereby incorporated by reference to such Registration Statement.
  - (16) Previously filed as an exhibit to the Company's Report on Form 20-F (File No. 1-12874), filed with the SEC on April 25, 2012, and hereby incorporated by reference to such Report.
  - (17) Previously filed as an exhibit to the Company's Report on Form 20-F (File No. 1-12874), filed with the SEC on April 29, 2013, and hereby incorporated by reference to such Report.
  - (18) Previously filed as an exhibit to the Company's Report on Form 20-F (File No. 1-12874), filed with the SEC on April 28, 2014, and hereby incorporated by reference to such Report.
  - (19) Previously filed as an exhibit to the Company's Report on Form 20-F (File No. 1-12874), filed with the SEC on April 28, 2014, and hereby incorporated by reference to such Report.
  - (20) Previously filed as an exhibit to the Company's Report on Form 6-K (File No. 1-12874), filed with the SEC on September 2, 2014, and hereby incorporated by reference to such Report.
  - (21) Previously filed as an exhibit to the Company's Report on Form 20-F (File No. 1-12874), filed with the SEC on April 29, 2015, and hereby incorporated by reference to such Report.
  - (22) Previously filed as an exhibit to the Company's Report on Form 20-F (File No. 1-12874), filed with the SEC on April 26, 2016, and hereby incorporated by reference to such Report.
  - (23) Previously filed as an exhibit to the Company's Report on Form 6-K (File No. 1-12874), filed with the SEC on June 30, 2016, and hereby incorporated by reference to such Report.
  - (24) Previously filed as an exhibit to the Company's Report on Form 6-K (File No. 1-12874), filed with the SEC on September 9, 2016, and hereby incorporated by reference to such Report.



## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Shareholders

### TEEKAY CORPORATION

We have audited the accompanying consolidated balance sheets of Teekay Corporation and subsidiaries (the "Company") as of December 31, 2016 and 2015, and the related consolidated statements of income, comprehensive income, cash flows and changes in total equity for each of the years in the three-year period ended December 31, 2016. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2016 and 2015, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2016, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2016, based on criteria established in Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) and our report dated April 12, 2017, expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

/s/ KPMG LLP

Chartered Professional Accountants

Vancouver, Canada

April 12, 2017

## REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Shareholders

### TEEKAY CORPORATION

We have audited Teekay Corporation and subsidiaries (the "Company") internal control over financial reporting as of December 31, 2016, based on the criteria established in Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting in the accompanying Form 20-F. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on the criteria established in Internal Control-Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of the Company as of December 31, 2016 and 2015, and the related consolidated statements of income, comprehensive income, cash flows and changes in total equity for each of the years in the three-year period ended December 31, 2016, and our report dated April 12, 2017 expressed an unqualified opinion on those consolidated financial statements.

/s/ KPMG LLP

Chartered Professional Accountants

Vancouver, Canada

April 12, 2017

**TEEKAY CORPORATION AND SUBSIDIARIES (NOTE 1)**  
**CONSOLIDATED STATEMENTS OF INCOME**  
(in thousands of U.S. dollars, except share and per share amounts)

	Year Ended December 31, 2016 \$	Year Ended December 31, 2015 \$	Year Ended December 31, 2014 \$
Revenues	2,328,569	2,450,382	1,993,920
Voyage expenses	(138,339)	(115,787)	(127,847)
Vessel operating expenses	(825,024)	(844,039)	(809,319)
Time-charter hire expense	(150,145)	(138,548)	(67,219)
Depreciation and amortization	(571,825)	(509,500)	(422,904)
General and administrative expenses	(119,889)	(133,184)	(140,917)
Asset impairments (note 17a)	(45,796)	(67,744)	—
Loan loss recoveries (note 17b)	—	—	2,521
Net (loss) gain on sale of vessels, equipment and other operating assets (note 17c)	(66,450)	(2,431)	8,750
Restructuring charges (note 19)	(26,811)	(14,017)	(9,826)
<b>Income from vessel operations</b>	<b>384,290</b>	<b>625,132</b>	<b>427,159</b>
Interest expense	(282,966)	(242,469)	(208,529)
Interest income	4,821	5,988	6,827
Realized and unrealized loss on non-designated derivative instruments (note 14)	(35,091)	(102,200)	(231,675)
Equity income (note 22)	85,639	102,871	128,114
Foreign exchange (loss) gain (notes 7 and 14)	(6,548)	(2,195)	13,431
Other (loss) income (note 13)	(39,013)	1,566	(1,152)
Net income before income taxes	111,132	388,693	134,175
Income tax (expense) recovery (note 20)	(24,468)	16,767	(10,173)
<b>Net income</b>	<b>86,664</b>	<b>405,460</b>	<b>124,002</b>
Less: Net income attributable to non-controlling interests (note 1)	(209,846)	(323,309)	(178,759)
<b>Net (loss) income attributable to shareholders of Teekay Corporation</b>	<b>(123,182)</b>	<b>82,151</b>	<b>(54,757)</b>
<b>Per common share of Teekay Corporation (note 18)</b>			
• Basic (loss) earnings attributable to shareholders of Teekay Corporation	(1.62)	1.13	(0.76)
• Diluted (loss) earnings attributable to shareholders of Teekay Corporation	(1.62)	1.12	(0.76)
• Cash dividends declared	0.2200	1.7325	1.265
<b>Weighted average number of common shares outstanding (note 18)</b>			
• Basic	79,211,154	72,665,783	72,066,008
• Diluted	79,211,154	73,190,564	72,066,008

The accompanying notes are an integral part of the consolidated financial statements.



**TEEKAY CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME**  
(in thousands of U.S. dollars)

	Year Ended December 31, 2016 \$	Year Ended December 31, 2015 \$	Year Ended December 31, 2014 \$
<b>Net income</b>	86,664	405,460	124,002
<b>Other comprehensive income (loss):</b>			
<b>Other comprehensive income (loss) before reclassifications</b>			
Unrealized gain (loss) on marketable securities	47	(463)	(1,151)
Unrealized loss on qualifying cash flow hedging instruments	(2,183)	(2,564)	(3,082)
Pension adjustments, net of taxes	7,594	14,178	(7,637)
Foreign exchange gain (loss) on currency translation	179	(217)	174
<b>Amounts reclassified from accumulated other comprehensive loss</b>			
To other income:			
Impairment of marketable securities	—	—	1,322
To general and administrative expenses:			
Settlement of defined benefit pension plan	(3,905)	(140)	(3,332)
To equity income:			
Realized loss on qualifying cash flow hedging instruments	3,486	2,613	1,551
<b>Other comprehensive income (loss)</b>	5,218	13,407	(12,155)
Comprehensive income	91,882	418,867	111,847
Less: Comprehensive income attributable to non-controlling interests	(211,823)	(323,309)	(177,713)
<b>Comprehensive (loss) income attributable to shareholders of Teekay Corporation</b>	<u>(119,941)</u>	<u>95,558</u>	<u>(65,866)</u>

*The accompanying notes are an integral part of the consolidated financial statements.*

**TEEKAY CORPORATION AND SUBSIDIARIES (NOTE 1)**  
**CONSOLIDATED BALANCE SHEETS**  
(in thousands of U.S. dollars)

	As at December 31, 2016 \$	As at December 31, 2015 \$
<b>ASSETS</b>		
<b>Current</b>		
Cash and cash equivalents (note 7)	567,994	678,392
Restricted cash	107,672	61,818
Accounts receivable, including non-trade of \$33,924 (2015 - \$15,623) and related party balances of \$26,471 (2015 - \$65,936)	295,357	395,013
Assets held for sale (notes 10 and 17)	61,282	55,450
Net investment in direct financing leases (note 8)	154,759	26,542
Prepaid expenses and other (note 14)	94,370	102,429
<b>Total current assets</b>	<b>1,281,434</b>	<b>1,319,644</b>
Restricted cash - non-current	129,576	114,619
<b>Vessels and equipment (note 7)</b>		
At cost, less accumulated depreciation of \$3,294,021 (2015 - \$2,894,097)	7,666,975	8,460,500
Vessels under capital leases, at cost, less accumulated amortization of \$69,072 (2015 - \$56,316) (note 9)	484,253	88,215
Advances on newbuilding contracts and conversion costs (note 15a)	987,658	817,878
<b>Total vessels and equipment</b>	<b>9,138,886</b>	<b>9,366,593</b>
Net investment in direct financing leases - non-current (note 8)	505,835	657,587
Loans to equity-accounted investees and joint venture partners, bearing interest between nil and LIBOR plus margins up to 3% (note 22)	292,209	184,390
Equity-accounted investments (notes 15b and 22)	1,010,308	905,159
Other non-current assets	190,699	232,776
Intangible assets – net (note 5)	89,175	111,909
Goodwill (note 5)	176,630	168,571
<b>Total assets</b>	<b>12,814,752</b>	<b>13,061,248</b>
<b>LIABILITIES AND EQUITY</b>		
<b>Current</b>		
Accounts payable	53,507	64,212
Accrued liabilities and other (notes 6 and 14)	403,685	412,278
Current portion of derivative liabilities (note 14)	115,813	267,539
Current portion of long-term debt (note 7)	998,591	1,106,104
Current obligation under capital leases (note 9)	40,353	4,546
Current portion of in-process revenue contracts (note 5)	34,511	32,109
<b>Total current liabilities</b>	<b>1,646,460</b>	<b>1,886,788</b>
Long-term debt (note 7)	5,640,955	6,277,982
Long-term obligation under capital leases (note 9)	352,486	54,581
Derivative liabilities (note 14)	415,041	414,084
In-process revenue contracts (note 5)	88,179	118,690
Other long-term liabilities (note 6)	333,236	352,378
<b>Total liabilities</b>	<b>8,476,357</b>	<b>9,104,503</b>
Commitments and contingencies (notes 3, 7, 8, 9, 14 and 15)		
<b>Redeemable non-controlling interest (note 15e)</b>	<b>249,102</b>	<b>255,671</b>
<b>Equity</b>		
Common stock and additional paid-in capital (\$0.001 par value; 725,000,000 shares authorized; 86,149,975 shares outstanding (2015 – 72,711,371); 86,149,975 shares issued (2015 – 72,711,371)) (note 11)	887,075	775,018
Retained earnings	22,893	158,898
Non-controlling interest	3,189,928	2,782,049
Accumulated other comprehensive loss (note 1)	(10,603)	(14,891)
<b>Total equity</b>	<b>4,089,293</b>	<b>3,701,074</b>
<b>Total liabilities and equity</b>	<b>12,814,752</b>	<b>13,061,248</b>

The accompanying notes are an integral part of the consolidated financial statements.

**TEEKAY CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
(in thousands of U.S. dollars)

	Year Ended December 31, 2016 \$	Year Ended December 31, 2015 \$	Year Ended December 31, 2014 \$
Cash and cash equivalents provided by (used for)			
<b>OPERATING ACTIVITIES</b>			
Net income	86,664	405,460	124,002
Non-cash items:			
Depreciation and amortization	571,825	509,500	422,904
Amortization of in-process revenue contracts	(28,109)	(30,085)	(40,939)
Unrealized (gain) loss on derivative instruments	(145,116)	51,910	267,830
Loss (gain) on sale of vessels and equipment	66,450	2,431	(8,750)
Asset impairments and loan loss provisions	45,796	67,744	(2,521)
Equity income, net of dividends received	(47,563)	3,203	(94,726)
Income tax expense (recovery)	24,468	(16,767)	10,173
Unrealized foreign exchange gain and other	53,336	(142,416)	(217,908)
Change in operating assets and liabilities ( <i>note 16</i> )	38,333	(12,291)	60,631
Expenditures for dry docking	(45,964)	(68,380)	(74,379)
<b>Net operating cash flow</b>	<b>620,120</b>	<b>770,309</b>	<b>446,317</b>
<b>FINANCING ACTIVITIES</b>			
Proceeds from issuance of long-term debt, net of issuance costs	2,075,014	2,452,878	3,365,045
Prepayments of long-term debt	(1,872,573)	(554,831)	(1,331,469)
Scheduled repayments of long-term debt	(967,146)	(1,040,292)	(1,291,322)
Repayments of capital lease obligations	(21,595)	(4,423)	(479,115)
(Increase) decrease in restricted cash	(49,079)	(21,005)	380,953
Net proceeds from equity issuances of subsidiaries ( <i>note 4</i> )	327,419	575,368	452,061
Net proceeds from equity issuance of Teekay Corporation	105,462	—	—
Equity contribution by joint venture partner	750	5,500	27,267
Issuance of Common Stock upon exercise of stock options	—	1,217	55,165
Distribution from subsidiaries to non-controlling interests	(136,151)	(360,392)	(360,820)
Cash dividends paid	(17,406)	(125,881)	(91,004)
Other financing activities	—	(3,682)	—
<b>Net financing cash flow</b>	<b>(555,305)</b>	<b>924,457</b>	<b>726,761</b>
<b>INVESTING ACTIVITIES</b>			
Expenditures for vessels and equipment	(648,326)	(1,795,901)	(994,931)
Proceeds from sale of vessels and equipment	252,656	20,472	180,638
Proceeds from sale-lease back of vessels	355,306	—	—
Purchase of SPT (net of cash acquired of \$377)	—	(46,961)	—
Purchase of ALP (net of cash acquired of \$294)	—	—	(2,322)
Purchase of Logitel (net of cash acquired of \$8,089)	—	—	4,090
Increase in restricted cash	—	(34,290)	—
Recovery in term loans	—	—	4,814
Investment in equity-accounted investees	(61,885)	(40,595)	(79,602)
(Advances to) loan repayments from equity-accounted investees	(96,823)	53,173	(87,130)
Direct financing lease payments received	23,535	20,824	22,856
Investment in cost accounted investment	—	—	(25,000)
Other investing activities	324	—	(4,247)
<b>Net investing cash flow</b>	<b>(175,213)</b>	<b>(1,823,278)</b>	<b>(980,834)</b>
<b>(Decrease) increase in cash and cash equivalents</b>	<b>(110,398)</b>	<b>(128,512)</b>	<b>192,244</b>
Cash and cash equivalents, beginning of the year	678,392	806,904	614,660
<b>Cash and cash equivalents, end of the year</b>	<b>567,994</b>	<b>678,392</b>	<b>806,904</b>
Supplemental cash flow information ( <i>note 16</i> )			

The accompanying notes are an integral part of the consolidated financial statements.

**TEEKAY CORPORATION AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF CHANGES IN TOTAL EQUITY**  
(in thousands of U.S. dollars and shares)

**TOTAL EQUITY**

	Thousands of Shares of Common Stock Outstanding #	Common Stock and Additional Paid-in Capital \$	Retained Earnings \$	Accumul- ated Other Compre- hensive Income (Loss) \$	Non- controlling Interest \$	Total \$	Redeemable Non- controlling Interest \$
Balance at December 31, 2013	70,729	713,760	435,217	(17,189)	2,071,262	3,203,050	16,564
Net (loss) income			(54,757)		178,759	124,002	
Reclassification of redeemable non-controlling interest in net income					(7,777)	(7,777)	7,777
Other comprehensive loss				(11,109)	(1,046)	(12,155)	
Dividends declared			(93,021)		(363,685)	(456,706)	(11,499)
Reinvested dividends	1	6				6	
Exercise of stock options and other (note 11)	1,771	55,165				55,165	
Employee stock compensation (note 11)		1,828				1,828	
Dilution gains on public offerings of Teekay LNG, Teekay Offshore, Teekay Tankers (note 4)			68,428			68,428	
Additions to non-controlling interest from share and unit issuances of subsidiaries and other					412,792	412,792	
Balance at December 31, 2014	72,501	770,759	355,867	(28,298)	2,290,305	3,388,633	12,842
Net income			82,151		323,309	405,460	
Reclassification of redeemable non-controlling interest in net income					(13,280)	(13,280)	13,280
Other comprehensive income				13,407	—	13,407	
Dividends declared			(126,391)		(354,069)	(480,460)	(20,201)
Reinvested dividends	1	10				10	
Exercise of stock options and other (note 11)	209	1,217				1,217	
Employee stock compensation (note 11)		3,032				3,032	
Dilution gains on public offerings of Teekay LNG, Teekay Offshore and Teekay Tankers (note 4)			(152,729)			(152,729)	
Additions to non-controlling interest from share and unit issuances of subsidiaries and other					535,784	535,784	249,750
Balance at December 31, 2015	72,711	775,018	158,898	(14,891)	2,782,049	3,701,074	255,671
Net (loss) income			(123,182)		209,846	86,664	
Reclassification of redeemable non-controlling interest in net income					(25,342)	(25,342)	25,342
Other comprehensive income				3,241	1,977	5,218	
Dividends declared			(17,562)		(120,801)	(138,363)	(27,058)
Reinvested dividends	1	4				4	
Employee stock compensation and other (note 11)	102	6,591				6,591	
Equity offerings (note 11)	13,336	105,462				105,462	
Dilution losses on public offerings of Teekay Offshore and Teekay Tankers (note 4)			9,732			9,732	
Additions to non-controlling interest from share and unit issuances of subsidiaries and other			(4,993)	1,047	342,199	338,253	(4,853)
Balance at December 31, 2016	86,150	887,075	22,893	(10,603)	3,189,928	4,089,293	249,102

The accompanying notes are an integral part of the consolidated financial statements.

**TEEKAY CORPORATION AND SUBSIDIARIES**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
(all tabular amounts stated in thousands of U.S. dollars, other than share data and unless otherwise indicated)

**1. Summary of Significant Accounting Policies**

**Basis of presentation**

These consolidated financial statements have been prepared in conformity with U.S. generally accepted accounting principles (or *GAAP*). They include the accounts of Teekay Corporation (or *Teekay*), which is incorporated under the laws of the Republic of The Marshall Islands, and its wholly-owned or controlled subsidiaries (collectively, the *Company*). Certain of Teekay's significant non-wholly owned subsidiaries are consolidated in these financial statements even though Teekay owns less than a 50% ownership interest in the subsidiaries. These significant subsidiaries include the following publicly traded subsidiaries (collectively, the *Public Subsidiaries*): Teekay LNG Partners L.P. (or *Teekay LNG*); Teekay Offshore Partners L.P. (or *Teekay Offshore*); and Teekay Tankers Ltd. (or *Teekay Tankers*). As of December 31, 2016, Teekay owned a 33.1% interest in Teekay LNG (33.1% - December 31, 2015), including common units and its 2% general partner interest, and a 29.0% interest in Teekay Offshore (37.0% - December 31, 2015), including common units and its 2% general partner interest, and a 26% interest in Teekay Offshore's 10.50% Series D Cumulative Convertible Perpetual Preferred Units (the *Series D Preferred Units*), and 25.4% of the capital stock of Teekay Tankers (25.9% - December 31, 2015), including Teekay Tankers' outstanding shares of Class B common stock, which entitle the holders to five votes per share, subject to a 49% aggregate Class B Common Stock voting power maximum. While Teekay owns less than 50% of each of the Public Subsidiaries, Teekay maintains control of Teekay LNG and Teekay Offshore by virtue of its 100% ownership interest in the general partners of Teekay LNG and Teekay Offshore, which are both master limited partnerships, and maintains control of Teekay Tankers through its ownership of a sufficient number of Class A common shares and Class B common shares, which provide increased voting rights, to maintain a majority voting interest in Teekay Tankers and thus consolidates these subsidiaries. Significant intercompany balances and transactions have been eliminated upon consolidation. Teekay has entered into an omnibus agreement with Teekay LNG and Teekay Offshore to govern, among other things, when Teekay, Teekay LNG and Teekay Offshore may compete with each other and to provide the applicable parties certain rights of first offer on liquefied natural gas (or *LNG*) carriers, oil tankers, shuttle tankers, floating storage and off-take (or *FSO*) units and floating, production, storage and offloading (or *FPSO*) units.

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results may differ from those estimates. Given the current condition of the credit markets, it is possible that the amounts recorded as derivative assets and liabilities could vary by material amounts prior to their settlement.

Significant intercompany balances and transactions have been eliminated upon consolidation. In addition, certain of the comparative figures have been reclassified to conform to the presentation adopted in the current period relating to certain operating activities in the Company's consolidated statements of cash flows.

**Non-Controlling Interests**

Where Teekay's ownership interest in a consolidated subsidiary is less than 100%, the non-controlling interests' share of these non-wholly owned subsidiaries are reported in the Company's consolidated balance sheets as a separate component of equity. The non-controlling interests' share of the net income of these non-wholly owned subsidiaries is reported in the Company's consolidated statements of income as a deduction from the Company's net income to arrive at net (loss) income attributable to shareholders of Teekay.

The basis for attributing net income of each non-wholly owned subsidiary to the controlling interest and the non-controlling interests, with the exception of Teekay LNG and Teekay Offshore, is based on the relative ownership interests of the non-controlling interests compared to the controlling interest, which is consistent with how dividends and distributions are paid or are payable for these non-wholly owned subsidiaries.

Teekay LNG and Teekay Offshore each have limited partners and one general partner. Both general partners are owned by Teekay. For both Teekay LNG and Teekay Offshore, the limited partners hold common units and preferred units. For each quarterly period, the method of attributing Teekay LNG's and Teekay Offshore's net income (loss) of that period to the non-controlling interests of Teekay LNG and Teekay Offshore begins by attributing net income (loss) of Teekay Offshore and Teekay LNG to the non-controlling interests which hold 100% of the preferred units of Teekay Offshore, except for Series D Preferred Units, of which they hold 74%, and 100% of the preferred units of Teekay LNG based on the amount of preferred unit distributions declared for the quarterly period. The remaining net income (loss) to be attributed to the controlling interest and the non-controlling interests of Teekay LNG and Teekay Offshore is divided into two components. The first component consists of the cash distribution that Teekay LNG or Teekay Offshore will declare and pay to limited and general partners for that quarterly period (or the *Distributed Earnings*). The second component consists of the difference between the net income (loss) of Teekay LNG or Teekay Offshore that is available to be allocated to the common unitholders and the general partner of such entity and the amount of the first component cash distribution (or the *Undistributed Earnings*). The portion of the Distributed Earnings that is allocated to the non-controlling interests is the amount of the cash distribution that Teekay LNG or Teekay Offshore will declare and pay to the non-controlling interests for that quarterly period. The portion of the Undistributed Earnings that is allocated to the non-controlling interests is based on the relative ownership percentages of the non-controlling interests of Teekay LNG and Teekay Offshore compared to the controlling interest. The controlling interests include both limited partner common units and the general partner interests.

**TEEKAY CORPORATION AND SUBSIDIARIES**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
(all tabular amounts stated in thousands of U.S. dollars, other than share data and unless otherwise indicated)

The total net income of Teekay's consolidated partially-owned entities and the attribution of that net income to controlling and non-controlling interests is as follows:

	Net income (loss) attributable to non-controlling interests				Controlling Interest				
	Non-public partially-owned subsidiaries	Preferred unit holders	Distributed Earnings <sup>(2)</sup>	Undistributed Earnings	Total Net income (loss) attributable	Distributed Earnings	Undistributed Earnings	Total Controlling Interest (Teekay)	Net income (loss) of consolidated partially-owned entities <sup>(1)</sup>
Teekay Offshore	11,858	45,835	41,688	(46,155)	53,226	18,378	(27,129)	(8,751)	44,475
Teekay LNG	17,514	2,719	30,444	60,545	111,222	15,026	31,717	46,743	157,965
Teekay Tankers	—	—	—	47,459	47,459	—	14,820	14,820	62,279
Other entities and eliminations	—	—	—	—	(2,061)				
<b>For the Year Ended December 31, 2016</b>	<b>29,372</b>	<b>48,554</b>	<b>72,132</b>	<b>61,849</b>	<b>209,846</b>				
Teekay Offshore	13,911	28,609	119,971	(103,949)	58,542	70,414	(38,913)	31,501	90,043
Teekay LNG	16,627	—	120,482	(1,510)	135,599	82,791	(880)	81,911	217,510
Teekay Tankers	—	—	—	129,725	129,725	—	47,202	47,202	176,927
Other entities and eliminations	—	—	—	—	(557)				
<b>For the Year Ended December 31, 2015</b>	<b>30,538</b>	<b>28,609</b>	<b>240,453</b>	<b>24,266</b>	<b>323,309</b>				
Teekay Offshore	10,503	10,875	136,743	(150,724)	7,397	71,166	(60,907)	10,259	17,656
Teekay LNG	13,489	—	143,292	(26,116)	130,665	101,946	(13,684)	88,262	218,927
Teekay Tankers	—	—	—	41,048	41,048	—	16,094	16,094	57,142
Other entities and eliminations	—	—	—	—	(351)				
<b>For the Year Ended December 31, 2014</b>	<b>23,992</b>	<b>10,875</b>	<b>280,035</b>	<b>(135,792)</b>	<b>178,759</b>				

(1) Includes earnings from common shares and preferred shares.

(2) Excludes the results of the acquisition of interests in vessels between Teekay Corporation, Teekay Offshore and Teekay Tankers during the periods the vessels were under common control and had begun operations.

When Teekay's non-wholly owned subsidiaries declare dividends or distributions to their owners, or require all of their owners to contribute capital to the non-wholly owned subsidiaries, such amounts are paid to, or received from, each of the owners of the non-wholly owned subsidiaries based on the relative ownership interests in the non-wholly owned subsidiary. As such, any dividends or distributions paid to, or capital contributions received from, the non-controlling interests are reflected as a reduction (dividends or distributions) or an increase (capital contributions) in non-controlling interest in the Company's consolidated balance sheets.

When Teekay's non-wholly owned subsidiaries issue additional equity interests to non-controlling interests, Teekay is effectively selling a portion of the non-wholly owned subsidiaries. Consequently, the proceeds received by the subsidiaries from their issuance of additional equity interests are allocated between non-controlling interest and retained earnings in the Company's consolidated balance sheets. The portion allocated to non-controlling interest on the Company's consolidated balance sheets consists of the carrying value of the portion of the non-wholly owned subsidiary that is effectively disposed of, with the remaining amount attributable to the controlling interest, which consists of the Company's dilution gain or loss that is allocated to retained earnings.

### Reporting currency

The consolidated financial statements are stated in U.S. Dollars. The functional currency of the Company is the U.S. Dollar because the Company operates in the international shipping market, which typically utilizes the U.S. Dollar as the functional currency. Transactions involving other currencies during the year are converted into U.S. Dollars using the exchange rates in effect at the time of the transactions. At the balance sheet date, monetary assets and liabilities that are denominated in currencies other than the U.S. Dollar are translated to reflect the year-end exchange rates. Resulting gains or losses are reflected separately in the accompanying consolidated statements of income.

**TEEKAY CORPORATION AND SUBSIDIARIES**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
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## **Operating revenues and expenses**

### *Contracts of Affreightment and Voyage Charters*

Revenues from contracts of affreightment and voyage charters are recognized on a proportionate performance method. The Company uses a discharge-to-discharge basis in determining proportionate performance for all voyage charters, whereby it recognizes revenue ratably from when product is discharged (unloaded) at the end of one voyage to when it is discharged after the next voyage. Shuttle tanker voyages servicing contracts of affreightment with offshore oil fields commence with tendering of notice of readiness at a field, within the agreed lifting range, and ends with tendering of notice of readiness at a field for the next lifting. The Company does not begin recognizing revenue until a charter has been agreed to by the customer and the Company, even if the vessel has discharged its cargo and is sailing to the anticipated load port on its next voyage.

### *Time Charters, Bareboat Charters and FPSO Contracts*

*Operating Leases* - The Company recognizes revenues from time charters, bareboat charters and FPSO contracts accounted for as operating leases on a straight-line basis daily over the term of the charter as the applicable vessel operates under the charter. Receipt of incentive-based revenue from the Company's FPSO units is dependent upon its operating performance and such revenue is recognized when earned by fulfillment of the applicable performance criteria. The Company does not recognize revenue during days that the vessel is off hire unless the contract provides for compensation while off hire.

*Direct Financing Leases* - Charter contracts that are accounted for as direct financing leases are reflected on the consolidated balance sheets as net investments in direct financing leases. The lease revenue is recognized on an effective interest rate method over the lease term so as to produce a constant periodic rate of return over the lease terms and is included in revenues. Revenue from rendering of services is recognized as the service is performed. Revenues are not recognized during days that the vessel is off hire unless the contract provides for compensation while off hire.

The Company employs four LNG carriers, a FSO unit, and volatile organic compound emissions (or VOC) equipment on long-term time charters which are accounted for as direct financing leases. The lease payments received by the Company under these lease arrangements are allocated between the net investments in the leases and revenues or other income using the effective interest method so as to produce a constant periodic rate of return over the lease terms.

### *Pooling Arrangements*

Revenues and voyage expenses of the vessels operating in pool arrangements are pooled and the resulting net pool revenues, calculated on a time-charter equivalent basis, are allocated to the pool participants according to an agreed formula. The agreed formula used to allocate net pool revenues varies between pools; however, the formula generally allocates revenues to pool participants on the basis of the number of days a vessel operates in the pool with weighting adjustments made to reflect vessels' differing capacities and performance capabilities. The same revenue and expense recognition principles stated above for voyage charters are applied in determining the net pool revenues of the pool. The pools are responsible for paying voyage expenses and distributing net pool revenues to the participants. The Company accounts for the net allocation from the pool as revenues and amounts due from the pool are included in accounts receivable.

### *Other Revenue*

Other revenues are earned from the offshore ship-to-ship transfer of commodities, primarily crude oil and refined oil products, but also liquid gases and various other products which are referred to as support operations. In addition, other revenues are also earned from other technical activities such as terminal management, consultancy, procurement and equipment rental. Other revenues from short-term contracts are recognized as services are completed based on percentage of completion or in the case of long-term contracts, are recognized over the duration of the contract period.

### *Operating Expenses*

Voyage expenses are all expenses unique to a particular voyage, including bunker fuel expenses, port fees, cargo loading and unloading expenses, canal tolls, agency fees and commissions. Vessel operating expenses include crewing, ship management services, repairs and maintenance, insurance, stores, lube oils and communication expenses. Voyage expenses and vessel operating expenses are recognized when incurred.

## **Cash and cash equivalents**

The Company classifies all highly liquid investments with a maturity date of three months or less at their inception as cash equivalents.

## **Restricted Cash**

The Company maintains restricted cash deposits relating to certain term loans, collateral for derivatives, project tenders, leasing arrangements, amounts received from charterers to be used only for dry-docking expenditures and emergency repairs and other obligations.

**TEEKAY CORPORATION AND SUBSIDIARIES**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
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**Accounts receivable and allowance for doubtful accounts**

Accounts receivable are recorded at the invoiced amount and do not bear interest. The allowance for doubtful accounts is the Company's best estimate of the amount of probable credit losses in existing accounts receivable. The Company determines the allowance based on historical write-off experience and customer economic data. The Company reviews the allowance for doubtful accounts regularly and past due balances are reviewed for collectability. Account balances are charged off against the allowance when the Company believes that the receivable will not be recovered. There were no significant amounts recorded as allowance for doubtful accounts as at December 31, 2016, 2015, and 2014.

**Vessels and equipment**

All pre-delivery costs incurred during the construction of newbuildings, including interest, supervision and technical costs, are capitalized. The acquisition cost and all costs incurred to restore used vessels purchased by the Company to the standard required to properly service the Company's customers are capitalized.

Depreciation is calculated on a straight-line basis over a vessel's estimated useful life, less an estimated residual value. Depreciation is calculated using an estimated useful life of 25 years for tankers carrying crude oil and refined product, 20 to 25 years for FPSO units, 35 years for LNG carriers and 30 years for liquefied petroleum gas (or *LPG*) carriers, commencing the date the vessel is delivered from the shipyard, or a shorter period if regulations prevent the Company from operating the vessels for those periods of time. FSO units are depreciated over the term of the contract. Units for maintenance and safety (or *UMS*) are depreciated over an estimated useful life of 35 years commencing the date the unit arrives at the oil field and is in a condition that is ready to operate. Long-distance towing and offshore installation vessels are depreciated over an estimated useful life of 25 years commencing the date the vessel is delivered from the shipyard. Depreciation includes depreciation on all owned vessels and amortization of vessels accounted for as capital leases. Depreciation of vessels and equipment, excluding amortization of dry-docking expenditures, for the years ended December 31, 2016, 2015, and 2014 aggregated \$492.0 million, \$445.2 million and \$341.5 million, respectively. Amortization of vessels accounted for as capital leases was \$12.8 million, \$5.4 million and \$21.6 million for the years ended December 31, 2016, 2015, and 2014, respectively.

Teekay Offshore considers its shuttle tankers to be comprised of two components: (i) a conventional tanker (or the *tanker component*) and (ii) specialized shuttle equipment (or the *shuttle component*). Teekay Offshore differentiates these two components on the principle that a shuttle tanker can also operate as a conventional tanker without the use of the shuttle component. The economics of this alternate use depend on the supply and demand fundamentals in the two segments. Historically, the useful life of both components was assessed as 25 years commencing from the date the vessel is delivered from the shipyard. In early 2016, Teekay Offshore considered factors related to the ongoing use of the shuttle component and reassessed the useful life as being 20 years based on the challenges associated with adverse market conditions in the energy sector and other long term factors associated with the global oil industry. This change in estimate, commencing January 1, 2016, impacts the entire fleet of Teekay Offshore's shuttle tanker vessels. Separately, Teekay Offshore reviewed the depreciation of the tanker component for eight shuttle tankers in its fleet that are 17 years of age or older. Based on Teekay Offshore's expected operating plan for these vessels, commencing January 1, 2016, it has reassessed the estimated useful life of the tanker component for these vessels as 20 years. As market conditions evolve, Teekay Offshore will continue to monitor the useful life of the tanker component for other vessels within the shuttle tanker fleet.

The effect of these changes for Teekay Offshore in estimates on the Company's consolidated statements of income, was an increase in depreciation and amortization expense and a decrease in net income of \$29.3 million in the year ended December 31, 2016, and a decrease in net income and an increase in net loss attributable to shareholders of the Company of \$8.6 million, or \$0.10 per basic and diluted common share, for the year ended December 31, 2016.

Vessel capital modifications include the addition of new equipment or can encompass various modifications to the vessel that are aimed at improving or increasing the operational efficiency and functionality of the asset. This type of expenditure is amortized over the estimated useful life of the modification. Expenditures covering recurring routine repairs and maintenance are expensed as incurred.

Interest costs capitalized to vessels and equipment for the years ended December 31, 2016, 2015, and 2014, aggregated \$36.9 million, \$22.0 million and \$51.3 million, respectively.

Generally, the Company dry docks each shuttle tanker, conventional oil tanker, long-distance towing and offshore installation vessel and gas carrier every two and a half to five years. UMS, FSO and FPSO units are generally not dry docked. The Company capitalizes a substantial portion of the costs incurred during dry docking and amortizes those costs on a straight-line basis over their estimated useful life, which typically is from the completion of a dry docking or intermediate survey to the estimated completion of the next dry docking. The Company includes in capitalized dry-docking costs those costs incurred as part of the dry docking to meet classification and regulatory requirements. The Company expenses costs related to routine repairs and maintenance performed during dry docking, and for annual class survey costs on the Company's FPSO units.



**TEEKAY CORPORATION AND SUBSIDIARIES**  
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The continuity of capitalized dry-docking costs for the years ended December 31, 2016, 2015, and 2014, is summarized as follows:

	Year Ended December 31,		
	2016 \$	2015 \$	2014 \$
Balance at the beginning of the year	150,702	135,331	118,194
Costs incurred for dry dockings	47,980	69,927	74,018
Dry-dock amortization	(55,026)	(47,271)	(50,926)
Write-down / sales of vessels	(7,956)	(7,285)	(5,955)
Balance at the end of the year	135,700	150,702	135,331

Vessels and equipment that are intended to be held and used in the Company's business are assessed for impairment when events or circumstances indicate the carrying amount of the asset may not be recoverable. If the asset's net carrying value exceeds the net undiscounted cash flows expected to be generated over its remaining useful life, the carrying amount of the asset is reduced to its estimated fair value. The estimated fair value for the Company's impaired vessels is determined using discounted cash flows or appraised values. In cases where an active second hand sale and purchase market does not exist, the Company uses a discounted cash flow approach to estimate the fair value of an impaired vessel. In cases where an active second hand sale and purchase market exists, an appraised value is used to estimate the fair value of an impaired vessel. An appraised value is generally the amount the Company would expect to receive if it were to sell the vessel. Such appraisal is normally completed by the Company and is based on second-hand sale and purchase data.

Vessels and equipment that are "held for sale" are measured at the lower of their carrying amount or fair value less costs to sell and are not depreciated while classified as held for sale. Interest and other expenses attributable to vessels and equipment classified as held for sale, or to their related liabilities, continue to be recognized as incurred.

Gains on vessels sold and leased back under capital leases are deferred and amortized over the remaining term of the capital lease. Losses on vessels sold and leased back under capital leases are recognized immediately when the fair value of the vessel at the time of sale and lease-back is less than its book value. In such case, the Company would recognize a loss in the amount by which book value exceeds fair value.

#### Other loan receivables

The Company's investments in loan receivables are recorded at cost. The Company analyzes its loans for collectability during each reporting period. A loan is impaired when, based on current information and events, it is probable that the Company will be unable to collect all amounts due according to the contractual terms of the loan agreement. Factors the Company considers in determining that a loan is impaired include, among other things, an assessment of the financial condition of the debtor, payment history of the debtor, general economic conditions, the credit rating of the debtor (when available) any information provided by the debtor regarding their ability to repay the loan and the fair value of the underlying collateral. When a loan is impaired, the Company measures the amount of the impairment based on the present value of expected future cash flows discounted at the loan's effective interest rate and recognizes the resulting impairment in the consolidated statements of income. The carrying value of the loans will be adjusted each subsequent reporting period to reflect any changes in the present value of estimated future cash flows.

The following table contains a summary of the Company's financing receivables by type of borrower, the method by which the Company monitors the credit quality of its financing receivables on a quarterly basis, and the grade as of December 31, 2016.

Class of Financing Receivable	Credit Quality Indicator	Grade	December 31,	
			2016 \$	2015 \$
Direct financing leases	Payment activity	Performing	660,594	684,129
Other loan receivables				
Loans to equity-accounted investees and joint venture partners	Other internal metrics	Performing	304,030	191,517
Long-term receivable included in other assets	Payment activity	Performing	17,712	37,032
			982,336	912,678

#### Joint ventures

The Company's investments in joint ventures are accounted for using the equity method of accounting. Under the equity method of accounting, investments are stated at initial cost and are adjusted for subsequent additional investments and the Company's proportionate share of earnings or losses and distributions. The Company evaluates its investments in joint ventures for impairment when events or circumstances indicate that the carrying value of such investments may have experienced an other than temporary decline in value below their carrying value. If the estimated fair value is less than the carrying value and is considered an other than temporary decline, the carrying value is written down to its estimated fair value and the resulting impairment is recorded in the consolidated statements of income.

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**Debt issuance costs**

Debt issuance costs, including fees, commissions and legal expenses, are deferred and presented as a direct reduction from the carrying amount of the debt liability. Debt issuance costs related to loan facilities without a recognized debt liability will continue to be presented as non-current assets in the consolidated balance sheets. Debt issuance costs of revolving credit facilities are amortized on a straight-line basis over the term of the relevant facility. Debt issuance costs of term loans are amortized using the effective interest rate method over the term of the relevant loan. Amortization of debt issuance costs is included in interest expense.

**Derivative instruments**

All derivative instruments are initially recorded at fair value as either assets or liabilities in the accompanying consolidated balance sheets and subsequently remeasured to fair value, regardless of the purpose or intent for holding the derivative. The method of recognizing the resulting gain or loss is dependent on whether the derivative contract is designed to hedge a specific risk and whether the contract qualifies for hedge accounting. The Company does not apply hedge accounting to its derivative instruments, except for certain types of interest rate swaps (See Note 14).

When a derivative is designated as a cash flow hedge, the Company formally documents the relationship between the derivative and the hedged item. This documentation includes the strategy and risk management objective for undertaking the hedge and the method that will be used to assess the effectiveness of the hedge. Any hedge ineffectiveness is recognized immediately in earnings, as are any gains and losses on the derivative that are excluded from the assessment of hedge effectiveness. The Company does not apply hedge accounting if it is determined that the hedge was not effective or will no longer be effective, the derivative was sold or exercised, or the hedged item was sold, or repaid.

For derivative financial instruments designated and qualifying as cash flow hedges, changes in the fair value of the effective portion of the derivative financial instruments are initially recorded as a component of accumulated other comprehensive loss in total equity. In the periods when the hedged items affect earnings, the associated fair value changes on the hedging derivatives are transferred from total equity to the corresponding earnings line item in the consolidated statements of income. The ineffective portion of the change in fair value of the derivative financial instruments is immediately recognized in earnings in the consolidated statements of income. If a cash flow hedge is terminated and the originally hedged item is still considered possible of occurring, the gains and losses initially recognized in total equity remain there until the hedged item impacts earnings, at which point they are transferred to the corresponding earnings line item (e.g. general and administrative expense) item in the consolidated statements of income. If the hedged items are no longer possible of occurring, amounts recognized in total equity are immediately transferred to the earnings item in the consolidated statements of income.

For derivative financial instruments that are not designated or that do not qualify as hedges under Financial Accounting Standards Board (or FASB) Accounting Standards Codification (or ASC) 815, *Derivatives and Hedging*, the changes in the fair value of the derivative financial instruments are recognized in earnings. Gains and losses from the Company's non-designated interest rate swaps related to long-term debt, capital lease obligations, restricted cash deposits, non-designated bunker fuel swap contracts and forward freight agreements, and non-designated foreign exchange currency forward contracts are recorded in realized and unrealized loss on non-designated derivative instruments. Gains and losses from the Company's hedge accounted foreign currency forward contracts are recorded primarily in vessel operating expenses and general and administrative expense. Gains and losses from the Company's non-designated cross currency swap are recorded in foreign currency exchange (loss) gain in the consolidated statements of income.

**Goodwill and intangible assets**

Goodwill is not amortized, but reviewed for impairment at the reporting unit level on an annual basis or more frequently if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying value. When goodwill is reviewed for impairment, the Company may elect to assess qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount, including goodwill. Alternatively, the Company may bypass this step and use a fair value approach to identify potential goodwill impairment and, when necessary, measure the amount of impairment. The Company uses a discounted cash flow model to determine the fair value of reporting units, unless there is a readily determinable fair market value. Intangible assets are assessed for impairment when and if impairment indicators exist. An impairment loss is recognized if the carrying amount of an intangible asset is not recoverable and its carrying amount exceeds its fair value.

The Company's intangible assets consist primarily of acquired time-charter contracts, contracts of affreightment, and customer relationships. The value ascribed to the acquired time-charter contracts and contracts of affreightment are being amortized over the life of the associated contract, with the amount amortized each year being weighted based on the projected revenue to be earned under the contracts. The value ascribed to customer relationships intangible assets are amortized over the expected life of a customer contract or the expected duration that the customer relationships are estimated to contribute to the cash flows of the Company. The amount amortized each year is weighted based on the projected revenue to be earned under the contracts or projected revenue to be earned as a result of the customer relationships.

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**Asset retirement obligation**

The Company has an asset retirement obligation (or ARO) relating to the sub-sea production facility associated with the *Petrojarl Banff* FPSO unit operating in the North Sea. This obligation generally involves the costs associated with the restoration of the environment surrounding the facility and removal and disposal of all production equipment. This obligation is expected to be settled at the end of the contract under which the FPSO unit currently operates. The ARO will be covered in part by contractual payments to be received from FPSO contract counterparties.

Teekay Offshore has an ARO relating to the sub-sea mooring and riser system associated with the *Gina Krog* FSO unit expected to commence operations in the North Sea in early-2017. This obligation involves the costs associated with the restoration of the environment surrounding the facility and removal of all equipment, which are subsequently required to be reimbursed by the charterer under the terms of the contract. This obligation is expected to be settled at the end of the contract under which the FSO unit is expected to operate, which is a three-year time-charter contract which includes 12 additional one-year extension options.

The Company records the fair value of an ARO as a liability in the period when the obligation arises. The fair value of the ARO is measured using expected future cash outflows discounted at the Company's credit-adjusted risk-free interest rate. When the liability is recorded, the Company capitalizes the cost by increasing the carrying amount of the related equipment. Each period, the liability is increased for the change in its present value, and the capitalized cost is depreciated over the useful life of the related asset. Changes in the amount or timing of the estimated ARO are recorded as an adjustment to the related asset and liability. As at December 31, 2016, the ARO and associated receivable, which is recorded in other non-current assets, were \$44.7 million and \$27.9 million, respectively (2015 - \$25.5 million and \$6.9 million, respectively).

**Repurchase of common stock**

The Company accounts for repurchases of common stock by decreasing common stock by the par value of the stock repurchased. In addition, the excess of the repurchase price over the par value is allocated between additional paid in capital and retained earnings. The amount allocated to additional paid in capital is the pro-rata share of the capital paid in and the balance is allocated to retained earnings.

**Share-based compensation**

The Company grants stock options, restricted stock units, performance share units and restricted stock awards as incentive-based compensation to certain employees and directors. The Company measures the cost of such awards using the grant date fair value of the award and recognizes that cost, net of estimated forfeitures, over the requisite service period, which generally equals the vesting period. For stock-based compensation awards subject to graded vesting, the Company calculates the value for the award as if it was one single award with one expected life and amortizes the calculated expense for the entire award on a straight-line basis over the vesting period of the award.

Compensation cost for awards with performance conditions is recognized when it is probable that the performance condition will be achieved. The compensation cost of the Company's stock-based compensation awards is substantially reflected in general and administrative expense.

**Income taxes**

The Company accounts for income taxes using the liability method. Under the liability method, deferred tax assets and liabilities are recognized for the anticipated future tax effects of temporary differences between the financial statement basis and the tax basis of the Company's assets and liabilities using the applicable jurisdictional tax rates. A valuation allowance for deferred tax assets is recorded when it is more likely than not that some or all of the benefit from the deferred tax asset will not be realized.

Recognition of uncertain tax positions is dependent upon whether it is more-likely-than-not that a tax position taken or expected to be taken in a tax return will be sustained upon examination, including resolution of any related appeals or litigation processes, based on the technical merits of the position. If a tax position meets the more-likely-than-not recognition threshold, it is measured to determine the amount of benefit to recognize in the financial statements. The Company recognizes interest and penalties related to uncertain tax positions in income tax (expense) recovery.

The Company believes that it and its subsidiaries are not subject to income taxation under the laws of the Republic of The Marshall Islands or Bermuda, or that distributions by its subsidiaries to the Company will be subject to any income taxes under the laws of such countries, and that it qualifies for the Section 883 exemption under U.S. federal income tax purposes.

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**Accumulated other comprehensive income (loss)**

The following table contains the changes in the balances of each component of accumulated other comprehensive income (loss) attributable to shareholders of Teekay for the periods presented.

	Qualifying Cash Flow Hedging Instruments \$	Pension Adjustments \$	Unrealized (Loss) Gain on Available for Sale Marketable Securities \$	Foreign Exchange Gain (Loss) on Currency Translation \$	Total \$
Balance as of December 31, 2013	17	(18,919)	(171)	1,884	(17,189)
Other comprehensive (loss) income	(485)	(10,969)	171	174	(11,109)
Balance as of December 31, 2014	(468)	(29,888)	—	2,058	(28,298)
Other comprehensive income (loss)	49	14,038	(463)	(217)	13,407
Balance as of December 31, 2015	(419)	(15,850)	(463)	1,841	(14,891)
Other comprehensive income	378	3,690	47	173	4,288
Balance as of December 31, 2016	(41)	(12,160)	(416)	2,014	(10,603)

**Employee pension plans**

The Company has defined contribution pension plans covering the majority of its employees. Pension costs associated with the Company's required contributions under its defined contribution pension plans are based on a percentage of employees' salaries and are charged to earnings in the year incurred. The Company also has defined benefit pension plans covering certain of its employees. The Company accrues the costs and related obligations associated with its defined benefit pension plans based on actuarial computations using the projected benefits obligation method and management's best estimates of expected plan investment performance, salary escalation, and other relevant factors. For the purpose of calculating the expected return on plan assets, those assets are valued at fair value. The overfunded or underfunded status of the defined benefit pension plans are recognized as assets or liabilities in the consolidated balance sheets. The Company recognizes as a component of other comprehensive loss, the gains or losses that arise during a period but that are not recognized as part of net periodic benefit costs.

**(Loss) earnings per common share**

The computation of basic earnings (loss) per share is based on the weighted average number of common shares outstanding during the period. The computation of diluted earnings per share assumes the exercise of all dilutive stock options and restricted stock awards using the treasury stock method. The computation of diluted loss per share does not assume such exercises.

**Accounting pronouncements not yet adopted**

In May 2014, the Financial Accounting Standards Board (or *FASB*) issued Accounting Standards Update 2014-09, *Revenue from Contracts with Customers* (or *ASU 2014-09*). ASU 2014-09 will require an entity to recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. This update creates a five-step model that requires entities to exercise judgment when considering the terms of the contract(s) which include (i) identifying the contract(s) with the customer, (ii) identifying the separate performance obligations in the contract, (iii) determining the transaction price, (iv) allocating the transaction price to the separate performance obligations, and (v) recognizing revenue as each performance obligation is satisfied. ASU 2014-09 is effective for the Company January 1, 2018 and shall be applied, at the Company's option, retrospectively to each period presented or as a cumulative-effect adjustment as of the date of adoption. The Company expects that the adoption of ASU 2014-09 may result in a change in the method of recognizing revenue from contracts of affreightment whereby revenue will be recognized over the voyage until discharge is complete, instead of over the voyage until tendering notice for the next voyage. This will result in all revenue being fully recognized upon discharge of cargo whereas currently revenue recognition extends into the period the vessel returns to the oil field. This change may result in revenue being recognized earlier which may cause additional volatility in revenue and earnings between periods. In addition, the Company expects that the adoption of ASU 2014-09 may result in a change in the method of recognizing revenue for voyage charters, whereby the Company's method of determining proportional performance will change from discharge-to-discharge to load-to-discharge. This will result in no revenue being recognized from discharge of the prior voyage to loading of the current voyage and all revenue being recognized from loading of the current voyage to discharge of the current voyage. This change will result in revenue being recognized later in the voyage which may cause additional volatility in revenue and earnings between periods. The Company is in the process of validating aspects of its preliminary assessment of ASU 2014-09, determining the transitional impact and completing other items required for the adoption of ASU 2014-09.

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In February 2016, the FASB issued Accounting Standards Update 2016-02, *Leases* (or *ASU 2016-02*). ASU 2016-02 establishes a right-of-use model that requires a lessee to record a right of use asset and a lease liability on the balance sheet for all leases with terms longer than 12 months. Leases will be classified as either finance or operating, with classification affecting the pattern of expense recognition in the income statement. The Company expects to adopt ASU 2016-02 on January 1, 2018. A modified retrospective transition approach is required for lessees for capital and operating leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements, with certain practical expedients available. The Company expects that the adoption of ASU 2016-02 will result in a change in accounting method for the lease portion of the daily charter hire for the Company's chartered-in vessels accounted for as operating leases and office leases with firm periods of greater than one year. Under ASU 2016-02, the Company will recognize a right of use asset and a lease liability on the balance sheet for these charters and office leases, whereas currently no right of use asset or lease liability is recognized. This will have the result of increasing the Company's assets and liabilities. The pattern of expense recognition of chartered-in vessels and office leases are expected to remain substantially unchanged, unless the right of use asset becomes impaired. The Company is in the process of validating aspects of its preliminary assessment of ASU 2016-02, determining the transitional impact and completing other items required for the adoption of ASU 2016-02.

In March 2016, the FASB issued Accounting Standards Update 2016-09, *Improvements to Employee Share-Based Payment Accounting* (or *ASU 2016-09*). ASU 2016-09 simplifies aspects of accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities and classification on the statement of cash flows. ASU 2016-09 became effective for the Company January 1, 2017. The Company expects the impact of adopting this new accounting guidance will be a change in presentation of cash payments for tax withholdings on share-settled equity awards from an operating cash outflow to financing cash outflow on the Company's statement of cash flows.

In June 2016, the FASB issued Accounting Standards Update 2016-13, *Financial Instruments - Credit Losses: Measurement of Credit Losses on Financial Instruments*. This update replaces the incurred loss impairment methodology with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. This update is effective for the Company on January 1, 2020, with a modified-retrospective approach. The Company is currently evaluating the effect of adopting this new guidance.

In August 2016, the FASB issued Accounting Standards Update 2016-15, *Statement of Cash Flows: Classification of Certain Cash Receipts and Cash Payments*, which, among other things, provides guidance on two acceptable approaches of classifying distributions received from equity method investees in the statement of cash flows. This update is effective for the Company on January 1, 2018, with a retrospective approach. The Company is currently evaluating the effect of adopting this new guidance.

## **2. Segment Reporting**

The Company has four primary lines of business: offshore logistics (shuttle tankers, the *HiLoad DP* unit, FSO units, UMS and long-distance towing and offshore installation vessels), offshore production (FPSO units), liquefied gas carriers (LNG and LPG carriers) and conventional tankers. The Company manages these businesses for the benefit of all stakeholders. The Company allocates capital and assesses performance both from the separate perspectives of its three publicly-traded subsidiaries Teekay Offshore, Teekay LNG, and Teekay Tankers (together, *the Daughter Companies*) and Teekay and its remaining subsidiaries (or *Teekay Parent*), as well as from the perspective of the Company's lines of business. The primary focus of the Company's organizational structure, internal reporting and allocation of resources by the chief operating decision maker, is on the Daughter Companies and Teekay Parent and its segments are presented accordingly. The Company incorporates the primary lines of business within its segments, as in certain cases there is more than one line of business in each Daughter Company and the Company believes this information allows a better understanding of the Company's performance and prospects for future net cash flows.

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The following table includes results for the Company's revenue and income from vessel operations by segment for the periods presented in these financial statements.

	Revenues <sup>(1)</sup>			Income from Vessel Operations <sup>(2)</sup>		
	Year Ended December 31,			Year Ended December 31,		
	2016	2015	2014	2016	2015	2014
<b>Teekay Offshore</b>						
Offshore Logistics	636,421	667,629	631,455	86,099	108,119	146,756
Offshore Production	495,223	531,554	354,518	140,264	165,152	95,991
Conventional Tankers	20,746	30,230	33,566	4,490	10,128	13,471
	<u>1,152,390</u>	<u>1,229,413</u>	<u>1,019,539</u>	<u>230,853</u>	<u>283,399</u>	<u>256,218</u>
<b>Teekay LNG</b>						
Liquefied Gas Carriers	336,530	305,056	307,426	174,600	151,200	156,868
Conventional Tankers	59,914	92,935	95,502	(21,419)	30,172	26,955
	<u>396,444</u>	<u>397,991</u>	<u>402,928</u>	<u>153,181</u>	<u>181,372</u>	<u>183,823</u>
<b>Teekay Tankers <sup>(3)</sup></b>						
Conventional Tankers	526,896	504,347	235,593	86,456	184,083	58,271
<b>Teekay Parent</b>						
Offshore Production	231,435	277,842	259,945	(48,310)	(40,227)	(78,804)
Conventional Tankers	32,967	65,777	94,376	(15,967)	4,984	(12,407)
Other	76,111	75,547	95,791	(32,219)	5,015	17,488
	<u>340,513</u>	<u>419,166</u>	<u>450,112</u>	<u>(96,496)</u>	<u>(30,228)</u>	<u>(73,723)</u>
<b>Eliminations and other</b>	<u>(87,674)</u>	<u>(100,535)</u>	<u>(114,252)</u>	<u>10,296</u>	<u>6,506</u>	<u>2,570</u>
	<u>2,328,569</u>	<u>2,450,382</u>	<u>1,993,920</u>	<u>384,290</u>	<u>625,132</u>	<u>427,159</u>

(1) Certain vessels are chartered between the Daughter Companies and Teekay Parent. The amounts in the table below represent revenue earned by each segment from other segments within the group. Such intersegment revenue for the year ended 2016, 2015 and 2014 is as follows:

	Year Ended December 31,		
	2016	2015	2014
Teekay Offshore - Offshore Logistics	43,104	38,734	34,603
Teekay Offshore - Conventional Tankers	6,410	29,259	32,411
Teekay LNG - Liquefied Gas Carriers	37,336	35,887	37,596
Teekay Tankers - Conventional Tankers	5,404	1,380	13,707
Teekay Parent - Conventional Tankers	—	3,080	—
	<u>92,254</u>	<u>108,340</u>	<u>118,317</u>

(2) Includes direct general and administrative expenses and indirect general and administrative expenses (allocated to each segment based on estimated use of corporate resources).

(3) Financial information for Teekay Tankers includes operations of the *Explorer Spirit*, formerly known as the *SPT Explorer*, and *Navigator Spirit* from December 18, 2015, the date Teekay Tankers acquired the vessels from Teekay Offshore.

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The following table presents revenues and percentage of consolidated revenues for customers that accounted for more than 10% of the Company's consolidated revenues during the periods presented. All of these customers are international oil companies.

(U.S. dollars in millions)	Year Ended December 31, 2016	Year Ended December 31, 2015	Year Ended December 31, 2014
Royal Dutch Shell Plc <sup>(1)(2)</sup>	\$429.9 or 19%	(5)	(5)
BG Group <sup>(1)(2)</sup>	(2)	\$263.4 or 11%	(5)
Petroleo Brasileiro SA <sup>(3)</sup>	\$223.7 or 10%	\$231.8 or 10%	\$248.2 or 12%
Statoil ASA <sup>(4)</sup>	(5)	(5)	\$239.8 or 12%

(1) Teekay Offshore - Offshore Logistics and Offshore Production.

(2) In February 2016, Royal Dutch Shell Plc acquired BG Group Plc and therefore includes revenues from both Royal Dutch Shell Plc and BG Group Plc for 2016.

(3) Teekay Offshore - Offshore Logistics and Offshore Production, Teekay Tankers - Conventional Tankers and Teekay Parent - Conventional Tankers

(4) Teekay Offshore - Offshore Logistics, Teekay Tankers—Conventional Tankers, Teekay Parent - Offshore Production and Teekay Parent - Conventional Tankers

(5) Less than 10%

The following table includes other income statement items by segment for the periods presented in these financial statements.

	Depreciation and Amortization			Asset Impairments, Loan Loss Recoveries, and Net (Loss) Gain on Sale of Vessels, Equipment and Other Operating Assets			Equity Income (Loss)		
	Year Ended December 31,			Year Ended December 31,			Year Ended December 31,		
	2016	2015	2014	2016	2015	2014	2016	2015	2014
<b>Teekay Offshore</b>									
Offshore Logistics	(150,813)	(130,102)	(118,968)	(40,079)	(66,101)	(1,638)	—	—	—
Offshore Production	(149,198)	(137,914)	(72,905)	—	—	—	17,933	7,672	10,341
Conventional Tankers	—	(6,583)	(6,680)	—	(3,897)	—	—	—	—
	<u>(300,011)</u>	<u>(274,599)</u>	<u>(198,553)</u>	<u>(40,079)</u>	<u>(69,998)</u>	<u>(1,638)</u>	<u>17,933</u>	<u>7,672</u>	<u>10,341</u>
<b>Teekay LNG</b>									
Liquefied Gas Carriers	(80,084)	(71,323)	(71,711)	—	—	—	62,307	84,171	115,478
Conventional Tankers	(15,458)	(20,930)	(22,416)	(38,976)	—	—	—	—	—
	<u>(95,542)</u>	<u>(92,253)</u>	<u>(94,127)</u>	<u>(38,976)</u>	<u>—</u>	<u>—</u>	<u>62,307</u>	<u>84,171</u>	<u>115,478</u>
<b>Teekay Tankers <sup>(1)</sup></b>									
Conventional Tankers	(104,149)	(71,429)	(50,152)	(20,594)	771	9,955	13,101	14,411	5,228
<b>Teekay Parent</b>									
Offshore Production	(70,855)	(69,508)	(78,630)	(110)	(948)	3,456	(575)	(12,196)	(1,357)
Conventional Tankers	(1,717)	(2,852)	(2,216)	(12,487)	—	(502)	5,089	16,712	3,052
Other	449	451	774	—	—	—	(1,838)	(1,101)	(2,546)
	<u>(72,123)</u>	<u>(71,909)</u>	<u>(80,072)</u>	<u>(12,597)</u>	<u>(948)</u>	<u>2,954</u>	<u>2,676</u>	<u>3,415</u>	<u>(851)</u>
<b>Eliminations and other</b>	—	690	—	—	—	—	(10,378)	(6,798)	(2,082)
	<u>(571,825)</u>	<u>(509,500)</u>	<u>(422,904)</u>	<u>(112,246)</u>	<u>(70,175)</u>	<u>11,271</u>	<u>85,639</u>	<u>102,871</u>	<u>128,114</u>

(1) Financial information for Teekay Tankers includes operations of the *Explorer Spirit*, formerly known as the *SPT Explorer* and *Navigator Spirit* from December 18, 2015, the date Teekay Tankers acquired the vessels from Teekay Offshore.

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A reconciliation of total segment assets to total assets presented in the accompanying consolidated balance sheets is as follows:

	December 31, 2016	December 31, 2015
	\$	\$
Teekay Offshore - Offshore Logistics	2,677,784	2,591,489
Teekay Offshore - Offshore Production	2,672,100	2,717,193
Teekay Offshore - Conventional Tankers	4,818	63,900
Teekay LNG - Liquefied Gas Carriers	3,957,088	3,550,396
Teekay LNG - Conventional Tankers	193,553	360,527
Teekay Tankers - Conventional Tankers	1,864,317	2,073,059
Teekay Parent - Offshore Production	635,364	710,533
Teekay Parent - Conventional Tankers	55,937	142,236
Teekay Parent - Other	13,208	17,256
Cash and cash equivalents	567,994	678,392
Other assets not allocated	287,138	301,586
Eliminations	(114,549)	(145,319)
Consolidated total assets	<u>12,814,752</u>	<u>13,061,248</u>

The following table includes capital expenditures by segment for the periods presented in these financial statements.

	December 31, 2016	December 31, 2015
	\$	\$
Teekay Offshore - Offshore Logistics	228,347	552,219
Teekay Offshore - Offshore Production	66,234	120,160
Teekay Offshore - Conventional Tankers	—	97
Teekay LNG - Liquefied Gas Carriers	344,924	191,642
Teekay LNG - Conventional Tankers	63	327
Teekay Tankers - Conventional Tankers	9,226	848,250
Teekay Parent - Offshore Production	—	57,778
Teekay Parent - Conventional Tankers	—	92
Teekay Parent - Other	88	199
	<u>648,882</u>	<u>1,770,764</u>

### 3. Investments

#### a) Teekay LNG – Bahrain LNG Joint Venture

In December 2015, Teekay LNG entered into an agreement with National Oil & Gas Authority (or *Nogaholding*), Samsung C&T (or *Samsung*) and Gulf Investment Corporation (or *GIC*) to form a joint venture, Bahrain LNG W.L.L. (or the *Bahrain LNG Joint Venture*), for the development of an LNG receiving and regasification terminal in Bahrain. The Bahrain LNG Joint Venture is a joint venture between Nogaholding (30%), Teekay LNG (30%), Samsung (16%) and GIC (24%). The project will include an offshore LNG receiving jetty and breakwater, an adjacent regasification platform, subsea gas pipelines from the platform to shore, an onshore gas receiving facility, and an onshore nitrogen production facility with a total LNG terminal capacity of 800 million standard cubic feet per day and will be owned and operated under a 20-year agreement commencing in early-2019 with an estimated fully-built up cost of approximately \$960.0 million, which is expected to be funded by the Bahrain LNG Joint Venture through a combination of equity capital and project-level debt through a consortium of regional and international banks. In addition, Teekay LNG will supply a floating storage unit (or *FSU*) in connection with this project, which will be modified specifically from one of the Teekay LNG's nine M-type, Electronically Controlled, Gas Injection (or *MEGI*) LNG carrier newbuildings ordered from Daewoo Shipbuilding & Marine Engineering Co. (or *DSME*), through a 20-year time-charter contract with the Bahrain LNG Joint Venture.



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**b) Teekay Tankers – Principal Maritime**

In August 2015, Teekay Tankers agreed to acquire 12 modern Suezmax tankers from Principal Maritime Tankers Corporation (or *Principal Maritime*). All 12 of the vessels were delivered in 2015 for a total purchase price of \$661.3 million, consisting of \$612.0 million in cash and approximately 7.2 million shares of Teekay Tankers' Class A common stock with a value of \$49.3 million. To finance the cash portion of the acquisition price, Teekay Tankers secured a \$397.2 million loan facility which matured in January 2016, and which was refinanced as part of a comprehensive Teekay Tankers refinancing in January 2016 (see Note 7). In addition, in August 2015 Teekay Tankers issued in a public offering and concurrent private placement approximately 13.6 million shares of its Class A common stock for net proceeds of \$90.6 million, including approximately 4.5 million shares which were issued to Teekay Parent. Teekay Tankers financed the remainder of the cash purchase price with existing liquidity.

**c) Teekay Tankers – Ship-to-Ship Transfer Business**

In July 2015, Teekay Tankers acquired a ship-to-ship transfer business (or *SPT*) from a company jointly-owned by Teekay and a Norway-based marine transportation company, I.M. Skaugen SE (or *Skaugen*), for a cash purchase price of \$47.3 million (including \$1.8 million for working capital). To finance this acquisition, Teekay subscribed for approximately 6.5 million shares of Teekay Tankers' Class B common stock at a subscription price of approximately \$6.99 per share. SPT provides a full suite of ship-to-ship transfer services in the oil, gas and dry bulk industries. In addition to full service lightering and lightering support, it also provides consultancy and terminal management services. This acquisition established Teekay Tankers as a global company in the ship-to-ship (or *STS*) transfer business, which is expected to increase Teekay Tankers' fee-based revenue and its overall fleet utilization. On the transaction closing date of July 31, 2015, SPT owned and operated a fleet of six STS support vessels and one chartered-in Aframax Tanker.

The acquisition of SPT was accounted for using the acquisition method of accounting, based upon preliminary estimates of fair value.

The following table summarizes the final estimates of fair values of the SPT assets acquired and liabilities assumed by Teekay Tankers on the acquisition date. Such estimates of fair value were finalized in the first quarter of 2016 and resulted in an increase in goodwill of \$8.1 million and a decrease in intangible assets by \$8.4 million from preliminary estimates. Such changes did not have a material impact to the Company's consolidated statement of income for 2016.

	<b>As at July 31, 2015 \$</b>
<b>ASSETS</b>	
Cash, cash equivalents and short-term restricted cash	1,292
Accounts receivable	10,332
Prepaid expenses and other current assets	3,763
Vessels and equipment	6,475
Other assets	143
Intangible assets subject to amortization	
Customer relationships <sup>(1)</sup>	17,901
Customer contracts <sup>(1)</sup>	4,599
Goodwill <sup>(2)</sup>	8,059
<b>Total assets acquired</b>	<b>52,564</b>
<b>LIABILITIES</b>	
Accounts payable	(3,650)
Accrued liabilities	(3,276)
<b>Total liabilities assumed</b>	<b>(6,926)</b>
<b>Net assets acquired <sup>(3)</sup></b>	<b>45,638</b>

(1) The customer relationships and customer contracts are being amortized over weighted average amortization periods of 10 years and 7.6 years, respectively. As at December 31, 2016, the gross carrying amount, accumulated amortization and net carrying amount were \$22.5 million, \$4.8 million and \$17.7 million, respectively.

(2) Goodwill recognized from this acquisition was attributed to the Company's Teekay Tankers Segment - Conventional tankers.

(3) Prior to the SPT acquisition date, SPT had in-chartered the *Explorer Spirit* from the Company. Of the SPT acquisition price, \$1.4 million was allocated to the settlement of this pre-existing relationship. Such amount has been accounted for as a reduction to revenue on the SPT acquisition date.

Operating results of SPT are reflected in the Company's consolidated financial statements commencing July 31, 2015, the effective date of acquisition. Pro forma revenues and net income as if the acquisition of SPT had occurred at the beginning of 2015 would not be materially different than actual operating results reported. The Company's prior 50% interest in SPT was remeasured to its estimated fair value on the acquisition date and the resulting gain of \$8.7 million was recognized in equity income in 2015.

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**d) Teekay Offshore – Logitel Offshore Holding AS**

In August 2014, Teekay Offshore acquired 100% of the outstanding shares of Logitel Offshore Holding AS (or *Logitel*). The purchase price for the shares of Logitel consisted of \$4.0 million in cash paid at closing and a potential additional cash amount of \$27.6 million, subject to reductions of some or all of this potential additional amount if certain performance criteria were not met, primarily relating to the construction of the three UMS ordered from the COSCO (Nantong) Shipyard (or COSCO) in China (see Note 10).

Prior to the acquisition, Logitel secured a three-year fixed-rate charter contract, with Petroleo Brasileiro S.A. (or *Petrobras*) in Brazil for the first UMS, the *Arendal Spirit*, which delivered in February 2015 and commenced its contract with Petrobras in June 2015. During 2016 Teekay Offshore canceled the UMS construction contracts for its two remaining UMS newbuildings (see Note 10).

The acquisition of Logitel was accounted for using the acquisition method of accounting, based upon finalized estimates of fair value.

The following table summarizes the preliminary and final valuations of the Logitel assets and liabilities on the acquisition date. The estimates of fair values of the Logitel assets acquired and liabilities assumed by Teekay Offshore were finalized during the second quarter of 2015.

<i>(in thousands of U.S. Dollars)</i>	Preliminary Valuation August 11, 2014 \$	Adjustments \$	Final Valuation August 11, 2014 \$
<b>ASSETS</b>			
Cash and cash equivalents	8,089	—	8,089
Prepaid expenses	640	—	640
Advances on newbuilding contracts	46,809	(2,239)	44,570
Intangible assets	—	1,000	1,000
<b>Total assets acquired</b>	<b>55,538</b>	<b>(1,239)</b>	<b>54,299</b>
<b>LIABILITIES</b>			
Accrued liabilities	4,098	—	4,098
Long-term debt	26,270	1,330	27,600
<b>Total liabilities assumed</b>	<b>30,368</b>	<b>1,330</b>	<b>31,698</b>
<b>Net assets acquired</b>	<b>25,170</b>	<b>(2,569)</b>	<b>22,601</b>
<b>Cash consideration</b>	<b>4,000</b>	<b>—</b>	<b>4,000</b>
<b>Contingent consideration</b>	<b>21,170</b>	<b>(2,569)</b>	<b>18,601</b>

Operating results of Logitel are reflected in the Company's consolidated financial statements commencing August 11, 2014, the effective date of acquisition. Pro forma revenues and net income if the acquisition of Logitel had occurred at the beginning of 2014 would not be materially different than actual operating results reported.

**e) Teekay LNG - Yamal LNG Joint Venture**

In July 2014, Teekay LNG, through a new 50/50 joint venture (or the *Yamal LNG Joint Venture*) with China LNG Shipping (Holdings) Limited (or *China LNG*), ordered six internationally-flagged icebreaker LNG carriers for a project located on the Yamal Peninsula in Northern Russia (or the *Yamal LNG Project*).

As of December 31, 2016, Teekay LNG had advanced \$146.7 million (December 31, 2015 - \$96.9 million). The advances bear interest at LIBOR plus 3.00% compounded semi-annually. As at December 31, 2016, the interest accrued on these advances was \$9.4 million (December 31, 2015 - \$4.8 million).

**f) Teekay LNG - BG International Limited Joint Venture**

In June 2014, Teekay LNG acquired from BG International Limited (or *BG*) (which was subsequently acquired by Shell) its ownership interests in four 174,000-cubic meter Tri-Fuel Diesel Electric LNG carrier newbuildings, which will be constructed by Hudong-Zhonghua Shipbuilding (Group) Co., Ltd. in China for an estimated total fully built-up cost to the joint venture of approximately \$1.0 billion. Through this transaction, Teekay LNG has a 30% ownership interest in two LNG carrier newbuildings and a 20% ownership interest in the remaining two LNG carrier newbuildings (or collectively the *BG Joint Venture*). As compensation for Shell's ownership interest in these four LNG carrier newbuildings, Teekay LNG assumed Shell's obligation to provide the shipbuilding supervision and crew training services for the four LNG carrier newbuildings up to their delivery date pursuant to a ship construction support agreement. Teekay LNG estimates it will incur approximately \$36.9 million of costs to provide these services, of which Shell has agreed to pay a fixed amount of \$20.3 million. Teekay LNG estimated that the fair value of the service obligation was \$33.3 million and the fair value of the amount due from Shell was \$16.5 million. As at December 31, 2016, the carrying value of the service obligation of \$22.6 million (December 31, 2015 - \$29.7 million) is included in both the current portion of in-process revenue contracts and in-process contracts and the carrying value of the receivable from Shell of \$10.9 million (December 31, 2015 - \$16.5 million) is included in both accounts receivable and other non-current assets in the Company's consolidated balance sheets.

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**g) Teekay Offshore - ALP Maritime Services B.V.**

In March 2014, Teekay Offshore acquired 100% of the shares of ALP Maritime Services B.V. (or *ALP*), a Netherlands-based provider of long-distance ocean towage and offshore installation services to the global offshore oil and gas industry. Concurrently with this transaction, Teekay Offshore and ALP entered into an agreement with Niigata Shipbuilding & Repair of Japan for the construction of four state-of-the-art SX-157 Ulstein Design ultra-long-distance towing and anchor handling vessel newbuildings.

Teekay Offshore acquired ALP for a purchase price of \$2.6 million, which was paid in cash, and also entered into an arrangement to pay additional compensation to three former shareholders of ALP if certain requirements are satisfied. This contingent compensation consists of \$2.4 million, which is payable upon the delivery and employment of ALP's four newbuildings and a further amount of up to \$2.6 million, which is payable if ALP's annual operating results from 2017 to 2021 meet certain targets. Teekay Offshore has the option to pay up to 50% of this compensation through the issuance of common units of Teekay Offshore. Each of the contingent compensation amounts are payable only if the three shareholders are employed by ALP at the time the performance conditions are met. For the year ended December 31, 2016, compensation cost was \$0.7 million and was recorded in general and administrative expenses in the Company's consolidated statements of income (December 31, 2015 - \$0.7 million, December 31, 2014 - \$0.5 million). Teekay Offshore also incurred a \$1.0 million fee to a third party associated with the acquisition of ALP in 2014 for assistance with the acquisition, which has been recognized in general and administrative expenses during 2014.

The acquisition of ALP was accounted for using the purchase method of accounting, based upon finalized estimates of fair value.

The following table summarizes the finalized estimates of fair values of the ALP assets acquired and liabilities assumed by Teekay Offshore on the acquisition date.

<i>(in thousands of U.S. Dollars)</i>	<b>As at March 14, 2014</b>
	<b>\$</b>
<b>ASSETS</b>	
Cash and cash equivalents	294
Other current assets	404
Advances on newbuilding contracts	164
Other assets - long-term	395
Goodwill	2,032
<b>Total assets acquired</b>	<b>3,289</b>
<b>LIABILITIES</b>	
Current liabilities	387
Other long-term liabilities	286
<b>Total liabilities assumed</b>	<b>673</b>
<b>Net assets acquired</b>	<b>2,616</b>
<b>Consideration</b>	<b>2,616</b>

The goodwill recognized in connection with the ALP acquisition is attributable primarily to the assembled workforce of ALP, including their experience, skills and abilities. Operating results of ALP are reflected in the Company's consolidated financial statements commencing March 14, 2014, the effective date of the acquisition. On a pro forma basis for the Company for the years ended December 31, 2014 and 2013, there would be no material changes to revenues and net income giving effect to Teekay Offshore's acquisition of ALP as if it had taken place on January 1, 2014.

**h) Tanker Investments Ltd.**

In January 2014, Teekay and Teekay Tankers formed Tanker Investments Ltd. (or *TIL*), which seeks to opportunistically acquire, operate and sell modern second-hand tankers to benefit from an expected recovery in the tanker market. In connection with TIL's formation, Teekay and Teekay Tankers received stock purchase warrants entitling them to purchase in the aggregate up to 1.5 million shares of common stock of TIL (see Note 14). The stock purchase warrants are derivative assets for accounting purposes which had an aggregate value of \$0.6 million as at December 31, 2016 (2015 - \$10.3 million). Teekay also received one Series A-1 preferred share and Teekay Tankers received one Series A-2 preferred share, each of which entitles the holder to elect one board member of TIL. The preferred shares do not give the holder a right to any dividends or distributions of TIL. The Company accounts for its investment in TIL using the equity method. As of December 31, 2016, Teekay and Teekay Tankers ownership interest in TIL totaled 19.55% (2015 - 17.62%).

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**4. Equity Financing Transactions of the Daughter Companies**

During the years ended December 31, 2016, 2015, and 2014, the Company's publicly traded subsidiaries, Teekay Tankers, Teekay Offshore and Teekay LNG, completed the following public offerings and private placements of equity securities:

	Total Proceeds Received \$	Less: Teekay Corporation Portion \$	Offering Expenses \$	Net Proceeds Received \$
<b>2016</b>				
Teekay Offshore Preferred D Units Offering <sup>(1)</sup>	100,000	(26,000)	(2,750)	71,250
Teekay Offshore Common Units Offering	102,041	(2,041)	(2,550)	97,450
Teekay Offshore Continuous Offering Program	31,819	(636)	(792)	30,391
Teekay Offshore Private Placement <sup>(2)</sup>	24,874	(13,167)	—	11,707
Teekay LNG Preferred A Units Offering	125,000	—	(4,293)	120,707
Teekay Tankers Continuous Offering Program	7,747	—	(189)	7,558
<b>2015 <sup>(3)</sup></b>				
Teekay Offshore Preferred B Units Offering	125,000	—	(4,210)	120,790
Teekay Offshore Preferred C Units Offering	250,000	—	(250)	249,750
Teekay Offshore Continuous Offering Program	3,551	(71)	(66)	3,414
Teekay LNG Continuous Offering Program	36,274	(725)	(900)	34,649
Teekay Tankers Public Offering	13,716	—	(31)	13,685
Teekay Tankers Continuous Offering Program	94,595	—	(2,155)	92,440
Teekay Tankers Private Placement	109,907	—	—	109,907
<b>2014 <sup>(4)</sup></b>				
Teekay Offshore Continuous Offering Program	7,784	(156)	(153)	7,475
Teekay Offshore Direct Equity Placement	178,569	(3,571)	(75)	174,923
Teekay LNG Public Offering	140,784	(2,816)	(299)	137,669
Teekay LNG Continuous Offering Program	42,556	(851)	(901)	40,804
Teekay Tankers Public Offering	116,000	(20,000)	(4,810)	91,190

(1) In June 2016, Teekay Offshore issued 4,000,000 of its 10.50% Series D Preferred Units and 4,500,000 warrants exercisable to acquire up to 4,500,000 common units at an exercise price equal to the closing price of Teekay Offshore's common units on June 16, 2016, or \$4.55 per unit (or the \$4.55 Warrants) and 2,250,000 warrants exercisable to acquire up to 2,250,000 common units with an exercise price at a 33% premium to the closing price of Teekay Offshore's common units on June 16, 2016, or \$6.05 per unit (or the \$6.05 Warrants) (together, the Warrants). The Warrants have a seven-year term and are exercisable any time after six months following their issuance date. The Warrants are to be net settled in either cash or common units at Teekay Offshore's option. The gross proceeds from the sale of these securities was \$100.0 million (\$97.2 million net of offering costs).

Teekay purchased for \$26.0 million a total of 1,040,000 of Teekay Offshore's Series D Preferred Units. Teekay also received 1,170,000 of the \$4.55 Warrants and 585,000 of the \$6.05 Warrants. The purchase of Teekay Offshore Series D Preferred Units has been accounted for as an equity transaction. Therefore, no gains or losses were recognized in the Company's consolidated statements of income (loss) as a result of this purchase.

Net cash proceeds from the sale of these securities of \$71.3 million, which excludes Teekay's investment, was allocated on a relative fair value basis to the Series D Preferred Units (\$61.1 million), to the \$4.55 Warrants (\$7.0 million) and to the \$6.05 Warrants (\$3.1 million). The Warrants qualify as freestanding financial instruments and are accounted for separately from the Series D Preferred Units. The Series D Preferred Units are presented in the Company's consolidated balance sheets as redeemable non-controlling interest in temporary equity which is above the equity section but below the liabilities section as they are not mandatorily redeemable and the prospect of a forced redemption paid with cash due to a change of control event is not presently probable. The Warrants are recorded as non-controlling interests in the Company's consolidated balance sheets.

(2) In 2016, Teekay Offshore issued 4.7 million common units for a total value of \$24.9 million (including the general partner's 2% proportionate capital contribution of \$0.5 million) as a payment-in-kind for the distributions on Teekay Offshore's Series C-1 Cumulative Convertible Perpetual Preferred Units (or the Series C-1 Preferred Units) and Series D Preferred Units and Teekay Offshore's common units and general partner interest held by subsidiaries of Teekay. In June 2016, Teekay Offshore agreed with Teekay that, until the Teekay Offshore's Norwegian Kroner bonds maturing in 2018 have been repaid, all cash distributions (other than with respect to incentive distribution rights) to be paid by Teekay Offshore to Teekay or its affiliates, including Teekay Offshore's general partner, will instead be paid in Teekay Offshore common units or from the proceeds of the sale of common units. Teekay Offshore issued Teekay 2.5 million common units (including the general partner's 2% proportionate capital contribution) as a payment-in-kind for the distribution on Teekay Offshore's Series D Preferred Units, common units and general partner interest held by Teekay and its subsidiaries.

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- (3) In 2015, in addition to the issuances of equity to third parties noted in the table above, Teekay purchased \$30.0 million or 4.5 million shares of Class A common stock of Teekay Tankers for Teekay Tankers to partially finance the acquisition of 12 modern Suezmax tankers from Principal Maritime (see Note 3b), \$300.0 million or 14.4 million common units of Teekay Offshore for Teekay Offshore to partially finance the July 1, 2015 acquisition of the Petrojarl Knarr FPSO from Teekay, and \$45.5 million or 6.5 million shares of Class B common stock of Teekay Tankers to finance the acquisition of SPT (see Note 3c). These increases in Teekay's ownership interests in Teekay Tankers and Teekay Offshore have been accounted for as equity transactions. Therefore, no gains or losses were recognized in the Company's consolidated statements of income as a result of these purchases. However, the carrying amount of the non-controlling interests' share of Teekay Offshore and Teekay Tankers increased by an aggregate of \$168.1 million and retained earnings decreased by \$168.1 million to reflect the increase in Teekay's ownership interest in Teekay Offshore and Teekay Tankers and the increase in the carrying value of Teekay Offshore's and Teekay Tankers' total equity. This adjustment to non-controlling interest and retained earnings was primarily the result of Teekay Offshore's 14.4 million common units being issued to Teekay at fair value, which was significantly greater than the carrying value.
- (4) In August 2014, Teekay Tankers purchased from Teekay a 50% interest in Teekay Tanker Operations Ltd. (or *TTOL*), which owns conventional tanker commercial management and technical management operations, including the direct ownership in three commercially managed tanker pools, for an aggregate price of approximately \$23.5 million, including net working capital. As consideration for this acquisition, Teekay Tankers issued to Teekay 4.2 million Class B common shares. The 4.2 million Class B common shares had an approximate aggregate value of \$15.6 million, or \$3.70 per share, when the purchase price was agreed to between the parties and an aggregate value of \$17.0 million, or \$4.03 per share, on the acquisition closing date. The purchase price, for accounting purposes, is based upon the value of the Class B common shares on the acquisition closing date. In addition, Teekay Tankers reimbursed Teekay for \$6.5 million of working capital it assumed from Teekay in connection with the purchase. The book value of the assets acquired, including working capital, was \$16.9 million on the date of acquisition.

As a result of the public offerings and equity placements of Teekay Tankers, Teekay Offshore and Teekay LNG, the Company recorded increases (decreases) to retained earnings of \$9.7 million (2016), \$(152.7) million (2015) and \$68.4 million (2014). These amounts represent Teekay's dilution gains (losses) from the issuance of units and shares by these consolidated subsidiaries.

**5. Goodwill, Intangible Assets and In-Process Revenue Contracts**

**Goodwill**

The carrying amount of goodwill for the years ended December 31, 2016 and 2015, for the Company's reportable segments are as follows:

	Teekay Offshore - Offshore Logistics Segment \$	Teekay LNG - Liquefied Gas Segment \$	Conventional Tanker Segment \$	Total \$
Balance as of December 31, 2015 and 2014	132,940	35,631	—	168,571
Goodwill acquired	—	—	8,059	8,059
Balance as of December 31, 2016	132,940	35,631	8,059	176,630

In July 2015, Teekay Tankers acquired SPT. The estimates of fair value were finalized in the first quarter of 2016 and resulted in an increase in goodwill of \$8.1 million from preliminary estimates (see Note 3c).

**Intangible Assets**

As at December 31, 2016, the Company's intangible assets consisted of:

	Gross Carrying Amount \$	Accumulated Amortization \$	Net Carrying Amount \$
Customer contracts	317,222	(245,705)	71,517
Customer relationships	22,500	(4,842)	17,658
Other intangible assets	1,000	(1,000)	—
	340,722	(251,547)	89,175

As at December 31, 2015, the Company's intangible assets consisted of:

	Gross Carrying Amount \$	Accumulated Amortization \$	Net Carrying Amount \$
Customer contracts	316,684	(234,894)	81,790
Customer relationships	30,879	(1,260)	29,619
Other intangible assets	1,000	(500)	500
	348,563	(236,654)	111,909

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In July 2015, as part of Teekay Tankers' acquisition of SPT (see Note 3c), Teekay Tankers ascribed a value of \$30.9 million to the customer relationships assumed as part of the acquisition of the STS transfer business. The Company is amortizing the customer relationships over a period of 10 years. The estimates of fair value were finalized in the first quarter of 2016 and resulted in a decrease in intangible assets by \$8.4 million from preliminary estimates. This change did not have a material impact to the Company's consolidated statement of income for the year ended December 31, 2016. Amortization expense relating to this acquisition for the years ended December 31, 2016 and 2015 were \$3.6 million and 1.3 million, respectively, which is included in depreciation and amortization.

Aggregate amortization expense of intangible assets for the year ended December 31, 2016, was \$14.9 million (2015 - \$13.6 million, 2014 - \$13.2 million), which is included in depreciation and amortization. Amortization of intangible assets following 2016 is expected to be \$13.2 million (2017), \$12.0 million (2018), \$11.2 million (2019), \$10.9 million (2020), \$10.7 million (2021) and \$31.3 million (thereafter).

**In-Process Revenue Contracts**

As part of the Company's acquisition of FPSO units from Sevan Marine ASA (or *Sevan*) and its previous acquisition of Petrojarl ASA (subsequently renamed Teekay Petrojarl AS, or *Teekay Petrojarl*), and Teekay LNG's acquisition of BG's ownership interests in four LNG carrier newbuildings, the Company assumed certain FPSO contracts and time-charter-out contracts with terms that were less favorable than the then prevailing market terms, and a service obligation for shipbuilding supervision and crew training services for the four LNG carrier newbuildings. At the time of the acquisitions, the Company recognized liabilities based on the estimated fair value of these contracts and service obligations. The Company is amortizing these liabilities over the estimated remaining terms of their associated contracts on a weighted basis, based on the projected revenue to be earned under the contracts.

Amortization of in-process revenue contracts for the year ended December 31, 2016 was \$28.1 million (2015 - \$30.1 million, 2014 - \$40.9 million), which is included in revenues on the consolidated statements of income. Amortization of in-process revenue contracts following 2016 is expected to be \$34.5 million (2017), \$22.7 million (2018), \$14.3 million (2019), \$13.8 million (2020), \$13.8 million (2021) and \$23.6 million (thereafter).

**6. Accrued Liabilities and Other and Other Long-Term Liabilities**

**Accrued Liabilities and Other**

	December 31, 2016 \$	December 31, 2015 \$
Voyage and vessel expenses	177,868	168,120
Interest	64,362	66,110
Payroll and benefits and other	70,904	88,239
Deferred revenues and gains - current	78,766	76,883
Loans from affiliates	11,785	12,426
Liabilities associated with assets held for sale	—	500
	403,685	412,278

**Other Long-Term Liabilities**

	December 31, 2016 \$	December 31, 2015 \$
Deferred revenues and gains	210,434	248,984
Guarantee liability	24,373	26,467
Asset retirement obligation	44,675	25,484
Pension liabilities	8,599	14,953
Contingent consideration liability	—	6,225
Unrecognized tax benefits and deferred income tax	24,340	21,967
Other	20,815	8,298
	333,236	352,378



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**7. Long-Term Debt**

	December 31, 2016 \$	December 31, 2015 \$
Revolving Credit Facilities	1,119,808	1,500,848
Senior Notes (8.5%) due January 15, 2020	592,657	592,657
Norwegian Kroner-denominated Bonds due through May 2021	628,257	621,957
U.S. Dollar-denominated Term Loans due through 2028	3,702,997	4,020,665
U.S. Dollar Bonds due through 2024	466,680	502,449
Euro-denominated Term Loans due through 2023	219,733	241,798
<b>Total principal</b>	<b>6,730,132</b>	<b>7,480,374</b>
Less unamortized discount and debt issuance costs	(90,586)	(96,288)
<b>Total debt</b>	<b>6,639,546</b>	<b>7,384,086</b>
Less current portion	(998,591)	(1,106,104)
<b>Long-term portion</b>	<b>5,640,955</b>	<b>6,277,982</b>

As of December 31, 2016, the Company had 13 revolving credit facilities (or the *Revolvers*) available, which, as at such date, provided for aggregate borrowings of up to \$1.6 billion, of which \$0.5 billion was undrawn. Interest payments are based on LIBOR plus margins; at December 31, 2016 and December 31, 2015, the margins ranged between 0.45% and 4.00% and between 0.45% and 3.95%, respectively. The aggregate amount available under the Revolvers is scheduled to decrease by \$482.4 million (2017), \$669.7 million (2018), \$43.0 million (2019), \$0 million (2020), and \$369.1 million (thereafter). The Revolvers are collateralized by first-priority mortgages granted on 68 of the Company's vessels, together with other related security, and include a guarantee from Teekay or its subsidiaries for all outstanding amounts. Included in other related security are 38.2 million common units in Teekay Offshore, 25.2 million common units in Teekay LNG and 16.8 million Class A common shares in Teekay Tankers, which secure a \$150 million credit facility.

The Company's 8.5% senior unsecured notes are due January 15, 2020 with an original aggregate principal amount of \$450 million (or the *Original Notes*). The Original Notes issued on January 27, 2010 were sold at a price equal to 99.181% of par. In November 2015, the Company issued an aggregate principal amount of \$200 million of the Company's 8.5% senior unsecured notes due on January 15, 2020 (or the *Notes*) at 99.01% of face value, plus accrued interest from July 15, 2015. The Notes are an additional issuance of the Company's Original Notes (cumulatively referred to as the *8.5% Notes*). The Notes were issued under the same indenture governing the Original Notes, and are fungible with the Original Notes. The discount on the 8.5% Notes is accreted through the maturity date of the notes using the effective interest rate of 8.67% per year.

The Company capitalized aggregate issuance costs of \$13.3 million which are amortized to interest expense over the term of the 8.5% Notes. As of December 31, 2016, the unamortized balance of the capitalized issuance cost was \$5.7 million which is recorded in long-term debt in the consolidated balance sheet. The 8.5% Notes rank equally in right of payment with all of Teekay's existing and future senior unsecured debt and senior to any future subordinated debt of Teekay. The 8.5% Notes are not guaranteed by any of Teekay's subsidiaries and effectively rank behind all existing and future secured debt of Teekay and other liabilities of its subsidiaries.

The Company may redeem the 8.5% Notes in whole or in part at any time before their maturity date at a redemption price equal to the greater of (i) 100% of the principal amount of the 8.5% Notes to be redeemed and (ii) the sum of the present values of the remaining scheduled payments of principal and interest on the 8.5% Notes to be redeemed (excluding accrued interest), discounted to the redemption date on a semi-annual basis, at the treasury yield plus 50 basis points, plus accrued and unpaid interest to the redemption date.

Teekay Offshore and Teekay LNG have a total of NOK 5.4 billion in senior unsecured bonds in the Norwegian bond market at December 31, 2016 that mature through October 2021. As at December 31, 2016, the total carrying amount of the senior unsecured bonds was \$628.3 million. The bonds are listed on the Oslo Stock Exchange. The interest payments on the bonds are based on NIBOR plus a margin, which ranges from 3.70% to 6.00%. The Company entered into cross currency rate swaps to swap all interest and principal payments of the bonds into U.S. Dollars, with the interest payments fixed at rates ranging from 5.92% to 8.84%, and the transfer of principal amount fixed at \$844.0 million upon maturity in exchange for NOK 5.4 billion (see Note 14).

In June 2016 Teekay Offshore amended certain of the bond agreements to extend the maturity dates of the senior unsecured bonds. The maturity date for bonds in an aggregate principal amount of NOK 600 million was extended to November 2018, with two interim installments of NOK 180 million. One installment was paid in October 2016 and the other is due in October 2017. The maturity date for bonds in an aggregate principal amount of NOK 800 million was extended to December 2018, with one interim installment of NOK 160 million due in January 2018 and the remaining balance of NOK 640 million repayable in December 2018 at 103% of the principal amount. In October 2016, Teekay LNG issued NOK 900 million unsecured bonds that mature in October 2021 which amount is equivalent to approximately \$110 million. In connection with the new bond issuance, Teekay LNG repurchased a portion of its NOK bonds maturing in May 2017, at a price equal to 101.50% of the principal amount of the repurchased bond of NOK 292 million (\$36.5 million) for a total purchase price of NOK 296 million.

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As of December 31, 2016, the Company had 23 U.S. Dollar-denominated term loans outstanding, which totaled \$3.7 billion in aggregate principal amount (December 31, 2015 – \$4.0 billion). Certain of the term loans with a total outstanding principal balance of \$58.3 million as at December 31, 2016 (December 31, 2015 – \$48.6 million) bear interest at a weighted-average fixed rate of 2.9% (December 31, 2015 – 4.0%). Interest payments on the remaining term loans are based on LIBOR plus a margin. At December 31, 2016 and December 31, 2015, the margins ranged between 0.30% and 3.5%. The term loan payments are made in quarterly or semi-annual payments commencing three or six months after delivery of each newbuilding vessel financed thereby, and 20 of the term loans have balloon or bullet repayments due at maturity. The term loans are collateralized by first-priority mortgages on 46 (December 31, 2015 – 67) of the Company's vessels, together with certain other security. In addition, at December 31, 2016, all but \$56.2 million (December 31, 2015 – \$64.6 million) of the outstanding term loans were guaranteed by Teekay or one of its subsidiaries.

During May 2014, Teekay Offshore issued \$300 million in five-year senior unsecured bonds that mature in July 2019 in the U.S. bond market. As of December 31, 2016, the carrying amount of the bonds was \$300 million. The bonds are listed on the New York Stock Exchange. The interest payments on the bonds are fixed at a rate of 6.0%.

In September 2013 and November 2013, Teekay Offshore issued \$174.2 million in aggregate of ten-year senior bonds that mature in December 2023 and that were issued in a U.S. private placement to finance the *Bossa Nova Spirit* and the *Sertanejo Spirit* shuttle tankers. The bonds accrue interest at a fixed combined rate of 4.96%. The bonds are collateralized by first-priority mortgages on the two vessels to which the bonds relate, together with other related security. Teekay Offshore makes semi-annual repayments on the bonds and as of December 31, 2016, the carrying amount of the bonds was \$143.3 million.

In February 2015, Teekay Offshore issued \$30.0 million in senior bonds that mature in June 2024 in a U.S. private placement. As of December 31, 2016, the carrying amount of the bonds was \$23.4 million. The interest payments on the bonds are fixed at a rate of 4.27%. The bonds are collateralized by a first-priority mortgage on the *Dampier Spirit* FSO unit to which the bonds relate, together with other related security and are guaranteed by two subsidiaries of Teekay Offshore.

Teekay LNG has two Euro-denominated term loans outstanding, which, as at December 31, 2016, totaled 208.9 million Euros (\$219.7 million) (December 31, 2015 – 222.7 million Euros (\$241.8 million)). Teekay LNG is repaying the loans with funds generated by two Euro-denominated, long-term time-charter contracts. Interest payments on the loans are based on EURIBOR plus a margin. At December 31, 2016 and December 31, 2015, the margins ranged between 0.6% and 2.25%. The Euro-denominated term loans reduce in monthly payments with varying maturities through 2023, are collateralized by first-priority mortgages on two of Teekay LNG's vessels, together with certain other security, and are guaranteed by Teekay LNG and one of its subsidiaries.

Both Euro-denominated term loans and NOK-denominated bonds are revalued at the end of each period using the then-prevailing U.S. Dollar exchange rate. Due primarily to the revaluation of the Company's NOK-denominated bonds, the Company's Euro-denominated term loans, capital leases and restricted cash, and the change in the valuation of the Company's cross currency swaps, the Company recognized a foreign exchange loss during 2016 of \$6.5 million (2015 – \$2.2 million loss, 2014 – \$13.4 million gain).

The weighted-average effective interest rate on the Company's aggregate long-term debt as at December 31, 2016 was 4.0% (December 31, 2015 – 3.4%). This rate does not include the effect of the Company's interest rate swap agreements (see Note 14).

Teekay Corporation has guaranteed obligations pursuant to credit facilities of Teekay Tankers and Teekay Offshore. As at December 31, 2016, the aggregate outstanding balance on such credit facilities was \$150.0 million and \$364.0 million, respectively.

The aggregate annual long-term debt principal repayments required to be made by the Company subsequent to December 31, 2016, including the impact of the debt refinancing by Teekay Offshore in March 2017, are \$1.0 billion (2017), \$1.7 billion (2018), \$1.0 billion (2019), \$1.1 billion (2020), \$0.9 billion (2021) and \$1.0 billion (thereafter). The Company and its consolidated subsidiaries are actively pursuing financing and refinancing alternatives for amounts due in 2017 (see Note 15).

Among other matters, the Company's long-term debt agreements generally provide for maintenance of minimum consolidated financial covenants and 11 loan agreements require the maintenance of vessel market value to loan ratios. As at December 31, 2016, these ratios ranged from 116.6% to 433.2% compared to their minimum required ratios of 105% to 125%. The vessel values used in these ratios are the appraised values prepared by the Company based on second hand sale and purchase market data. Changes in the LNG/LPG, conventional tanker, FPSO, shuttle tanker, towage and UMS markets could negatively affect the Company's compliance with these ratios. Certain loan agreements require that a minimum level of free cash be maintained and as at December 31, 2016 and December 31, 2015, this amount was \$50 million for the Company, excluding Teekay Offshore and Teekay LNG. Most of the loan agreements also require that the Company maintain an aggregate minimum level of free liquidity and undrawn revolving credit lines with at least six months to maturity of 5.0% of total debt for either Teekay Parent, Teekay Offshore or Teekay Tankers, which as at December 31, 2016, such amounts were \$63.8 million, \$159.1 million and \$46.7 million, respectively. In addition, certain loan agreements require Teekay LNG to maintain a minimum level of tangible net worth and liquidity, and not exceed a maximum level of financial leverage. As at December 31, 2016, the Company was in compliance with all covenants under its credit facilities and other long-term debt. Certain loan agreements that have been entered into by subsidiaries of the Company require these subsidiaries to maintain an aggregate minimum level of free liquidity and undrawn revolving credit lines with at least six months to maturity and/or a minimum net debt to capitalization ratio. The effect of such agreements is that these subsidiaries are restricted in their ability to transfer a certain amount of their net assets to Teekay, either through loans or dividends/distributions. As at December 31, 2016, Teekay Parent's proportionate share of the restricted net assets of the Company's subsidiaries amounted to \$209.0 million.



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**8. Operating and Direct Financing Leases**

**Charters-in**

As at December 31, 2016, minimum commitments to be incurred by the Company under vessel operating leases by which the Company charters-in vessels were approximately \$185.0 million, comprised of \$105.7 million (2017), \$44.1 million (2018), \$25.5 million (2019), \$8.3 million (2020), and \$1.4 million (2021). The Company recognizes the expense from these charters, which is included in time-charter hire expense, on a straight-line basis over the firm period of the charters.

**Charters-out**

Time charters and bareboat charters of the Company's vessels to third parties (except as noted below) are accounted for as operating leases. Certain of these charters provide the charterer with the option to acquire the vessel or the option to extend the charter. As at December 31, 2016, minimum scheduled future revenues to be received by the Company on time charters and bareboat charters then in place were approximately \$8.0 billion, comprised of \$1.3 billion (2017), \$1.2 billion (2018), \$1.1 billion (2019), \$1.0 billion (2020), \$0.7 billion (2021) and \$2.7 billion (thereafter). The minimum scheduled future revenues should not be construed to reflect total charter hire revenues for any of the years. Minimum scheduled future revenues do not include revenue generated from new contracts entered into after December 31, 2016, revenue from unexercised option periods of contracts that existed on December 31, 2016, revenue from vessels in the Company's equity accounted investments, or variable or contingent revenues. In addition, minimum scheduled future operating lease revenues presented in this paragraph have been reduced by estimated off-hire time for any periodic maintenance. The amounts may vary given unscheduled future events such as vessel maintenance.

The carrying amount of the vessels accounted for as operating leases at December 31, 2016, was \$6.6 billion (2015 - \$7.1 billion). The cost and accumulated depreciation of the vessels employed on operating leases as at December 31, 2016 were \$9.1 billion (2015 - \$9.6 billion) and \$2.5 billion (2015 - \$2.5 billion), respectively.

**Operating Lease Obligations**

*Teekay Tangguh Joint Venture*

As at December 31, 2016, the Teekay BLT Corporation (or the *Teekay Tangguh Joint Venture*) was a party to operating leases (or *Head Leases*) whereby it is leasing its two LNG carriers (or the *Tangguh LNG Carriers*) to a third party company. The Teekay Tangguh Joint Venture is then leasing back the LNG carriers from the same third party company (or the *Subleases*). Under the terms of these leases, the third party company claims tax depreciation on the capital expenditures it incurred to lease the vessels. As is typical in these leasing arrangements, tax and change of law risks are assumed by the Teekay Tangguh Joint Venture. Lease payments under the Subleases are based on certain tax and financial assumptions at the commencement of the leases. If an assumption proves to be incorrect, the lease payments are increased or decreased under the Sublease to maintain the agreed after-tax margin. The Teekay Tangguh Joint Venture's carrying amounts of this tax indemnification guarantee as at December 31, 2016 and December 31, 2015 were \$7.5 million and \$8.0 million, respectively, and are included as part of other long-term liabilities in the consolidated balance sheets of the Company. The tax indemnification is for the duration of the lease contract with the third party plus the years it would take for the lease payments to be statute barred, and ends in 2033. Although there is no maximum potential amount of future payments, the Teekay Tangguh Joint Venture may terminate the lease arrangements on a voluntary basis at any time. If the lease arrangements terminate, the Teekay Tangguh Joint Venture will be required to make termination payments to the third party company sufficient to repay the third party company's investment in the vessels and to compensate it for the tax effect of the terminations, including recapture of any tax depreciation. The Head Leases and the Subleases have 20 year terms and are classified as operating leases. The Head Lease and the Sublease for the two Tangguh LNG Carriers commenced in November 2008 and March 2009, respectively.

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As at December 31, 2016, the total estimated future minimum rental payments to be received and paid under the lease contracts are as follows:

Year	Head Lease Receipts <sup>(1)</sup> \$	Sublease Payments <sup>(1)(2)</sup> \$
2017	21,242	24,113
2018	21,242	24,113
2019	21,242	24,113
2020	21,242	24,113
2021	21,242	24,113
Thereafter	154,095	174,959
<b>Total</b>	<b>260,305</b>	<b>295,524</b>

(1) The Head Leases are fixed-rate operating leases while the Subleases have a small variable-rate component. As at December 31, 2016, the Teekay Tangguh Joint Venture had received \$250.0 million of aggregate Head Lease receipts and had paid \$187.9 million of aggregate Sublease payments. The portion of the Head Lease receipts that has not been recognized into earnings, is deferred and amortized on a straight line basis over the lease terms and, as at December 31, 2016, \$3.7 million and \$36.7 million of Head Lease receipts had been deferred and included in unearned revenue and other long-term liabilities, respectively, in the Company's consolidated balance sheets.

(2) The amount of payments under the Subleases is updated annually to reflect any changes in the lease payments due to changes in tax law.

### Net Investment in Direct Financing Leases

The time charters for the two Tangguh LNG carriers, one FSO unit of Teekay Offshore and certain VOC equipment are accounted for as direct financing leases. In addition, in September and November 2013, Teekay LNG acquired two 155,900-cubic meter LNG carriers (or *Awilco LNG Carriers*) from Norway-based Awilco LNG ASA (or *Awilco*) and chartered them back to Awilco on a five- and four-year fixed-rate bareboat charter contract (plus a one-year extension option), respectively, with Awilco holding a fixed-price purchase obligation at the end of the charter. The bareboat charters with Awilco are accounted for as direct financing leases. The purchase price of each vessel was \$205.0 million less a \$51.0 million upfront prepayment of charter hire by Awilco (inclusive of a \$1.0 million upfront fee), which is in addition to the daily bareboat charter rate. The following table lists the components of the net investments in direct financing leases for the five vessels and VOC equipment:

	December 31, 2016 \$	December 31, 2015 \$
Total minimum lease payments to be received	777,334	855,655
Estimated unguaranteed residual value of leased properties	203,465	203,465
Initial direct costs and other	393	428
Less unearned revenue	(320,598)	(375,419)
<b>Total</b>	<b>660,594</b>	<b>684,129</b>
Less current portion	(154,759)	(26,542)
<b>Long-term portion</b>	<b>505,835</b>	<b>657,587</b>

As at December 31, 2016, minimum lease payments to be received by the Company in each of the next five years following 2016 were \$206.2 million (2017), \$175.0 million (2018), \$40.4 million (2019), \$40.4 million (2020), \$40.4 million (2021) and \$1.9 million (thereafter). The FSO contract is scheduled to expire in 2017, the LNG time charters are both scheduled to expire in 2029 and the two LNG carriers under the Awilco LNG carrier leases expire in 2017 and 2018.

## 9. Capital Lease Obligations

### Capital Lease Obligations

	December 31, 2016 \$	December 31, 2015 \$
LNG Carriers	338,257	—
Suezmax Tankers	54,582	59,127
Less current portion	(40,353)	(4,546)
<b>Long-term obligations under capital lease</b>	<b>352,486</b>	<b>54,581</b>

*LNG Carriers.* As at December 31, 2016, Teekay LNG was a party to capital leases on two LNG carriers, the *Creole Spirit* and *Oak Spirit*. Upon delivery of the *Creole Spirit* in February 2016 and the *Oak Spirit* in July 2016, Teekay LNG sold these vessels to a third party and leased them back under 10-year bareboat charter contracts ending in 2026. The bareboat charter contracts are fixed-rate capital leases with a fixed-

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price purchase obligation at the end of the lease terms. At inception of these leases, the weighted-average interest rate implicit in these leases was 5.5%. Teekay LNG guarantees the obligations of the bareboat charter contracts. In addition, the guarantee agreements require Teekay LNG to maintain minimum levels of tangible net worth and aggregate liquidity, and not to exceed a maximum amount of leverage. In December 2016, Teekay LNG entered into a \$682.8 million sale-leaseback agreement with ICBC Leasing for four of Teekay LNG's LNG carrier newbuildings equipped with MEGI twin engines, delivering in 2017 and 2018, and at such dates, ICBC Financial Leasing Co., Ltd. will take delivery and charter each respective vessel back to Teekay LNG.

As at December 31, 2016, the remaining commitments under the two capital leases for the *Creole Spirit* and the *Oak Spirit*, including the related purchase obligations, approximated \$478.1 million, including imputed interest of \$139.8 million, repayable from 2017 through 2026, as indicated below:

Year	Commitment
2017	\$ 30,065
2018	\$ 30,065
2019	\$ 30,065
2020	\$ 30,147
2021	\$ 30,065
Thereafter	\$ 327,686

*Suezmax Tankers.* As at December 31, 2016, Teekay LNG was a party to capital leases on two Suezmax tankers. Under these capital leases, the owner has the option to require Teekay LNG to purchase the two vessels. The charterer, who is also the owner, also has the option to cancel the charter contracts and the cancellation options are first exercisable in October 2017 and July 2018, respectively.

The amounts in the table below assume the owner will not exercise its options to require Teekay LNG to purchase either of the two remaining vessels, but rather it assumes the owner will cancel the charter contracts when the cancellation right is first exercisable (in October 2017 and July 2018, respectively), and sell the vessels to a third party, upon which the lease obligations will be extinguished. At the inception of these leases, the weighted-average interest rate implicit in these leases was 5.5%. These capital leases are variable-rate capital leases. However, any change in the lease payments resulting from changes in interest rates is offset by a corresponding change in the charter hire payments received by Teekay LNG.

As at December 31, 2016, the remaining commitments under the two capital leases for Suezmax Tankers, including the related purchase obligations, approximated \$58.2 million, including imputed interest of \$3.6 million, repayable from 2017 through 2018, as indicated below:

Year	Commitment
2017	\$ 30,953
2018	\$ 27,296

The Company's capital leases do not contain financial or restrictive covenants other than those relating to operation and maintenance of the vessels.

## 10. Fair Value Measurements

The following methods and assumptions were used to estimate the fair value of each class of financial instruments and other non-financial assets.

**Cash and cash equivalents, restricted cash and marketable securities** - The fair value of the Company's cash and cash equivalents, restricted cash, and marketable securities approximates their carrying amounts reported in the accompanying consolidated balance sheets.

**Vessels and equipment and assets held for sale** - The estimated fair value of the Company's vessels and equipment and assets held for sale was determined based on discounted cash flows or appraised values. In cases where an active second hand sale and purchase market does not exist, the Company uses a discounted cash flow approach to estimate the fair value of an impaired vessel. In cases where an active second hand sale and purchase market exists, an appraised value is generally the amount the Company would expect to receive if it were to sell the vessel. Such appraisal is normally completed by the Company. Other assets held for sale include working capital balances and the fair value of such amounts generally approximate their carrying value.

**Long-term investments** - The estimated fair value of the Company's long-term investments was determined based on discounted cash flows or appraised values. As an active second hand sale and purchase market exists, the appraised value is the amount the Company would expect to receive if it were to sell the vessel. Such appraisal is normally completed by the Company. Long-term investments include variable-rate long-term debt balances and the fair value of such amounts is estimated using discounted cash flow analyses, based on rates currently available for debt with similar terms and remaining maturities and the current credit worthiness of the Company. Long-term investments also include working capital balances and the fair value of such amounts generally approximate their carrying value.

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**Loans to equity-accounted investees and joint venture partners** – The fair value of the Company's loans to joint ventures and joint venture partners approximates their carrying amounts reported in the accompanying consolidated balance sheets.

**Long-term receivable included in accounts receivable and other assets** – The fair values of the Company's long-term loan receivable is estimated using discounted cash flow analysis based on rates currently available for debt with similar terms and remaining maturities and the current credit worthiness of the counterparty.

**Long-term debt** – The fair value of the Company's fixed-rate and variable-rate long-term debt is either based on quoted market prices or estimated using discounted cash flow analyses, based on rates currently available for debt with similar terms and remaining maturities and the current credit worthiness of the Company. Alternatively, if the fixed-rate and variable-rate long-term debt is held for sale the fair value is based on the estimated sales price.

**Derivative instruments** – The fair value of the Company's derivative instruments is the estimated amount that the Company would receive or pay to terminate the agreements at the reporting date, taking into account, as applicable, fixed interest rates on interest rate swaps, current interest rates, foreign exchange rates, and the current credit worthiness of both the Company and the derivative counterparties. The estimated amount is the present value of future cash flows. The Company transacts all of its derivative instruments through investment-grade rated financial institutions at the time of the transaction and requires no collateral from these institutions. Given the current volatility in the credit markets, it is reasonably possible that the amounts recorded as derivative assets and liabilities could vary by material amounts in the near term.

The Company categorizes its fair value estimates using a fair value hierarchy based on the inputs used to measure fair value. The fair value hierarchy has three levels based on the reliability of the inputs used to determine fair value as follows:

- Level 1.       Observable inputs such as quoted prices in active markets;
- Level 2.       Inputs, other than the quoted prices in active markets, that are observable either directly or indirectly; and
- Level 3.       Unobservable inputs in which there is little or no market data, which require the reporting entity to develop its own assumptions.

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The following table includes the estimated fair value and carrying value of those assets and liabilities that are measured at fair value on a recurring and non-recurring basis, as well as the estimated fair value of the Company's financial instruments that are not accounted for at a fair value on a recurring basis.

	Fair Value Hierarchy Level	December 31, 2016		December 31, 2015	
		Carrying Amount Asset (Liability) \$	Fair Value Asset (Liability) \$	Carrying Amount Asset (Liability) \$	Fair Value Asset (Liability) \$
<b>Recurring</b>					
Cash and cash equivalents, restricted cash, and marketable securities	Level 1	805,567	805,567	855,107	855,107
Derivative instruments (note 14)					
Interest rate swap agreements - assets <sup>(1)</sup>	Level 2	7,943	7,943	6,136	6,136
Interest rate swap agreements - liabilities <sup>(1)</sup>	Level 2	(302,935)	(302,935)	(370,952)	(370,952)
Cross currency interest swap agreement <sup>(1)</sup>	Level 2	(237,165)	(237,165)	(312,110)	(312,110)
Foreign currency contracts	Level 2	(2,993)	(2,993)	(18,826)	(18,826)
Stock purchase warrants (note 14)	Level 3	575	575	10,328	10,328
Time-charter swap agreement	Level 3	208	208	—	—
Logitel contingent consideration (see below)	Level 3	—	—	(14,830)	(14,830)
<b>Non-recurring</b>					
Vessels and equipment (note 17c)	Level 2	11,300	11,300	100,600	100,600
Vessels held for sale (note 17c)	Level 2	61,282	61,282	55,450	55,450
Long-term investments (note 13)	Level 2	6,000	6,000	25,000	25,000
<b>Other</b>					
Loans to equity-accounted investees and joint venture partners - Current	(2)	11,821	(2)	7,127	(2)
Loans to equity-accounted investees and joint venture partners - Long-term	(2)	292,209	(2)	184,390	(2)
Long-term receivable included in accounts receivable and other assets <sup>(3)</sup>	Level 3	10,985	10,944	16,453	16,427
Long-term debt - public (note 7)	Level 1	(1,503,472)	(1,409,996)	(1,493,915)	(1,161,729)
Long-term debt - non-public (note 7)	Level 2	(5,136,074)	(5,009,900)	(5,890,171)	(5,881,483)

(1) The fair value of the Company's interest rate swap agreements at December 31, 2016 includes \$15.8 million (December 31, 2015 - \$21.7 million) accrued interest expense which is recorded in accrued liabilities on the consolidated balance sheets.

(2) In the consolidated financial statements, the Company's loans to and equity investments in equity-accounted investees constitute the aggregate carrying value of the Company's interests in entities accounted for by the equity method. The fair value of the individual components of such aggregate interests is not determinable.

(3) As at December 31, 2016, the estimated fair value of the non-interest bearing receivable is based on the remaining future fixed payments of \$10.9 million to be received from Royal Dutch Shell Plc (or Shell) (formerly BG International Limited (or BG)), as part of the ship construction support agreement, as well as an estimated discount rate of 8.0%. As there is no market rate for the equivalent of an unsecured non-interest bearing receivable from BG, the discount rate was based on unsecured debt instruments of similar maturity held, adjusted for a liquidity premium. A higher or lower discount rate would result in a lower or higher fair value asset.

**Time-charter swap agreement** - Changes in fair value during the years ended December 31, 2016 and 2015 for Teekay Tankers' time-charter swap agreement, which is described in Note 14 below and is measured at fair value on the recurring basis using significant unobservable inputs (Level 3), are as follows:

	Year Ended December 31, 2016 \$	Year Ended December 31, 2015 \$
Fair value asset - beginning of the year	—	—
Settlements	(2,154)	—
Realized and unrealized gain	2,362	—
Fair value asset - at the end of the year	208	—

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The estimated fair value of the time-charter swap agreement is based in part upon the Company's projection of future Aframax spot market tanker rates, which has been derived from current Aframax spot market tanker rates and estimated future rates, as well as an estimated discount rate. The estimated fair value of the time-charter swap agreement as of December 31, 2016 is based upon an estimated average daily tanker rate of approximately \$18,000 over the remaining duration of the contract. In developing and evaluating this estimate, the Company considers the current tanker market fundamentals as well as the short and long-term outlook. A higher or lower average daily tanker rate would result in a higher or lower fair value liability or a lower or higher fair value asset. A higher or lower discount rate would result in a lower or higher fair value asset or liability.

**Stock purchase warrants** – During January 2014, the Company received from TIL stock purchase warrants entitling it to purchase up to 1.5 million shares of the common stock of TIL (see Note 14). The estimated fair value of the stock purchase warrants was determined using a Monte-Carlo simulation and is based, in part, on the historical price of common shares of TIL, the risk-free rate, vesting conditions and the historical volatility of comparable companies. The estimated fair value of these stock purchase warrants as of December 31, 2016 was based on the historical volatility of the comparable companies of 47.8%. A higher or lower volatility would result in a higher or lower fair value of this derivative asset.

Changes in fair value during the years ended December 31, 2016 and 2015 for one of the Company's derivative instruments, the TIL stock purchase warrants, which are described above and are measured at fair value on the recurring basis using significant unobservable inputs (Level 3), are as follows:

	Year Ended December 31,	
	2016 \$	2015 \$
Fair value at the beginning of the year	10,328	9,314
Unrealized (loss) gain included in earnings	(9,753)	1,014
Fair value at the end of the year	575	10,328

**Contingent consideration liability** – In August 2014, Teekay Offshore acquired 100% of the outstanding shares of Logitel, a Norway-based company focused on high-end UMS, from CeFront Technology AS (or *CeFront*) for \$4.0 million, which was paid in cash at closing, plus a commitment to pay an additional amount of up to \$27.6 million, depending upon certain performance criteria.

During the second quarter of 2016, Teekay Offshore canceled the UMS construction contracts for its two remaining UMS newbuildings. This is expected to eliminate any future purchase price contingent consideration payments. Consequently, the contingent liability was reversed in the second quarter of 2016. The gain associated with this reversal is included in Other (loss) income on the Company's consolidated statement of income for the year ended December 31, 2016.

Changes in the estimated fair value of Teekay Offshore's contingent consideration liability relating to the acquisition of Logitel, which is measured at fair value on a recurring basis using significant unobservable inputs (Level 3), during the years ended December 31, 2016 and 2015 is as follows:

	Year Ended December 31,	
	2016 \$	2015 \$
Balance at beginning of year	(14,830)	(21,448)
Adjustment to liability	—	2,569
Settlement of liability	—	3,540
Gain included in Other (loss) income - net ( <i>note 13</i> )	14,830	509
Balance at end of year	—	(14,830)

## 11. Capital Stock

The authorized capital stock of Teekay at December 31, 2016 and 2015, was 25,000,000 shares of Preferred Stock, with a par value of \$1 per share, and 725,000,000 shares of Common Stock, with a par value of \$0.001 per share. As at December 31, 2016, 86,149,975 shares of Common Stock (2015 – 72,711,371) were issued and outstanding and no shares of Preferred Stock issued.

During 2016, Teekay issued 0.1 million shares of common stock upon the exercise or issuance of stock options, restricted stock units and restricted stock awards and issued approximately 12.0 million shares of common stock in a private placement for net proceeds of approximately \$96.2 million.

In 2016, Teekay implemented a continuous offering program (or *COP*) under which Teekay may issue new common stock, at market prices up to a maximum aggregate amount of \$50.0 million. During 2016, Teekay sold an aggregate of 1.3 million shares of common stock under the COP, generating net proceeds of approximately \$9.3 million (net of approximately \$0.4 million of offering costs). Teekay used the net proceeds from the issuance of these shares of common stock for general corporate purposes.

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During 2015, the Company issued 0.2 million common shares upon the exercise of stock options and restricted stock units and awards, and had no share repurchases of common shares. During 2014, the Company issued 1.8 million common shares upon the exercise of stock options and restricted stock units and awards, and had no share repurchases of common shares.

Dividends may be declared and paid out of surplus, but if there is no surplus, dividends may be declared or paid out of the net profits for the fiscal year in which the dividend is declared and for the preceding fiscal year. Surplus is the excess of the net assets of the Company over the aggregated par value of the issued shares of the Teekay. Subject to preferences that may apply to any shares of preferred stock outstanding at the time, the holders of common stock are entitled to share equally in any dividends that the Board of Directors may declare from time to time out of funds legally available for dividends.

During 2008, Teekay announced that its Board of Directors had authorized the repurchase of up to \$200 million of shares of its Common Stock in the open market, subject to cancellation upon approval by the Board of Directors. As at December 31, 2016, Teekay had repurchased approximately 5.2 million shares of Common Stock for \$162.3 million pursuant to such authorization. The total remaining share repurchase authorization at December 31, 2016, was \$37.7 million.

On July 2, 2010, the Company amended and restated its Shareholder Rights Agreement (the *Rights Agreement*), which was originally adopted by the Board of Directors in September 2000. In September 2000, the Board of Directors declared a dividend of one common share purchase right (or a *Right*) for each outstanding share of the Company's common stock. These Rights continue to remain outstanding and will not be exercisable and will trade with the shares of the Company's common stock until after such time, if any, as a person or group becomes an "acquiring person" as set forth in the amended Rights Agreement. A person or group will be deemed to be an "acquiring person," and the Rights generally will become exercisable, if a person or group acquires 20% or more of the Company's common stock, or if a person or group commences a tender offer that could result in that person or group owning more than 20% of the Company's common stock, subject to certain higher thresholds for existing shareholders that owned in excess of 15% of the Company's common stock when the Rights Agreement was amended. Once exercisable, each Right held by a person other than the "acquiring person" would entitle the holder to purchase, at the then-current exercise price, a number of shares of common stock of the Company having a value of twice the exercise price of the Right. In addition, if the Company is acquired in a merger or other business combination transaction after any such event, each holder of a Right would then be entitled to purchase, at the then-current exercise price, shares of the acquiring company's common stock having a value of twice the exercise price of the Right. The amended Rights Agreement will expire on July 1, 2020, unless the expiry date is extended or the Rights are earlier redeemed or exchanged by the Company.

**Stock-based compensation**

In March 2013, the Company adopted the 2013 Equity Incentive Plan (or the *2013 Plan*) and suspended the 1995 Stock Option Plan and the 2003 Equity Incentive Plan (collectively referred to as the *Plans*). As at December 31, 2016, the Company had reserved 4,780,371 (2015 - 4,527,282) shares of Common Stock pursuant to the 2013 Plan, for issuance upon the exercise of options or equity awards granted or to be granted.

During the years ended December 31, 2016, 2015 and 2014, the Company granted options under the 2013 Plan to acquire up to 916,015, 265,135 and 15,243 shares of Common Stock, respectively, to certain eligible officers, employees and directors of the Company. The options under the Plans have ten-year terms and vest equally over three years from the grant date. All options outstanding as of December 31, 2016, expire between March 13, 2017 and March 7, 2026, ten years after the date of each respective grant.

A summary of the Company's stock option activity and related information for the years ended December 31, 2016, 2015, and 2014, are as follows:

	December 31, 2016		December 31, 2015		December 31, 2014	
	Options (000's) #	Weighted- Average Exercise Price \$	Options (000's) #	Weighted- Average Exercise Price \$	Options (000's) #	Weighted- Average Exercise Price \$
Outstanding - beginning of year	2,800	36.84	2,710	36.61	4,237	36.33
Granted	916	9.44	265	43.99	15	56.76
Exercised	—	—	(36)	33.79	(1,528)	36.10
Forfeited / expired	(349)	38.97	(139)	46.80	(14)	28.51
Outstanding - end of year	3,367	29.16	2,800	36.84	2,710	36.61
Exercisable - end of year	2,271	35.89	2,500	36.03	2,508	37.03



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A summary of the Company's non-vested stock option activity and related information for the years ended December 31, 2016, 2015 and 2014, are as follows:

	December 31, 2016		December 31, 2015		December 31, 2014	
	Options (000's) #	Weighted- Average Grant Date Fair Value \$	Options (000's) #	Weighted- Average Grant Date Fair Value \$	Options (000's) #	Weighted- Average Grant Date Fair Value \$
Outstanding non-vested stock options - beginning of year	300	8.09	202	9.37	389	9.24
Granted	916	3.60	265	7.74	15	11.50
Vested	(118)	8.48	(167)	9.07	(188)	9.30
Forfeited	(2)	3.60	—	—	(14)	9.01
Outstanding non-vested stock options - end of year	<u>1,096</u>	<u>4.30</u>	<u>300</u>	<u>8.09</u>	<u>202</u>	<u>9.37</u>

The weighted average grant date fair value for non-vested options forfeited in 2016 was \$0.0 million (2015 - \$0.0 million, 2014 - \$0.1 million).

As of December 31, 2016, there was \$1.2 million of total unrecognized compensation cost related to non-vested stock options granted under the Plans. Recognition of this compensation is expected to be \$0.6 million (2017), \$0.5 million (2018) and \$0.1 million (2019). During the years ended December 31, 2016, 2015, and 2014, the Company recognized \$1.5 million, \$1.7 million and \$1.0 million, respectively, of compensation cost relating to stock options granted under the Plans. There were no options in-the-money during 2016. The intrinsic value of options exercised during 2015 was \$0.5 million and during 2014 was \$22.6 million.

As at December 31, 2016 and 2015, there was no intrinsic value in the outstanding and exercisable stock options. As at December 31, 2016, the weighted-average remaining life of options vested and expected to vest was 4.5 years (2015 – 3.4 years).

Further details regarding the Company's outstanding and exercisable stock options at December 31, 2016 are as follows:

Range of Exercise Prices	Outstanding Options			Exercisable Options		
	Options (000's) #	Weighted- Average Remaining Life (Years)	Weighted- Average Exercise Price \$	Options (000's) #	Weighted- Average Remaining Life (Years)	Weighted- Average Exercise Price \$
\$5.00 – \$9.99	914	9.2	9.44	—	0	—
\$10.00 – \$19.99	188	2.2	11.84	188	2.2	11.84
\$20.00 – \$24.99	293	3.2	24.42	293	3.2	24.42
\$25.00 – \$29.99	364	5.2	27.69	364	5.2	27.69
\$30.00 – \$34.99	117	5.3	34.44	117	5.3	34.44
\$35.00 – \$39.99	25	1.6	39.99	25	1.6	39.99
\$40.00 – \$44.99	1,029	3.0	41.33	852	1.9	40.78
\$50.00 – \$54.99	422	0.2	51.40	422	0.2	51.40
\$55.00 – \$59.99	15	7.2	56.76	10	7.2	56.76
	<u>3,367</u>	<u>4.61</u>	<u>29.16</u>	<u>2,271</u>	<u>2.49</u>	<u>35.89</u>

The weighted-average grant-date fair value of options granted during 2016 was \$3.60 per option (2015 - \$7.74, 2014 - \$11.50). The fair value of each option granted was estimated on the date of the grant using the Black-Scholes option pricing model. The following weighted-average assumptions were used in computing the fair value of the options granted: expected volatility of 55.1% in 2016, 31.1% in 2015 and 34.7% in 2014; expected life of 6 years in 2016 and 5 years in 2015 and 2014; dividend yield of 3.2% in 2016 and 4.4% in 2015 and 2014; risk-free interest rate of 1.3% in 2016, 1.4% in 2015, and 1.6% in 2014; and estimated forfeiture rate of 7% in 2016, 8% in 2015 and 12% 2014. The expected life of the options granted was estimated using the historical exercise behavior of employees. The expected volatility was generally based on historical volatility as calculated using historical data during the five years prior to the grant date.

The Company grants restricted stock units and performance share units to certain eligible officers and employees of the Company. Each restricted stock unit and performance share unit is equivalent in value to one share of the Company's common stock plus reinvested dividends from the grant date to the vesting date. The restricted stock units vest equally over three years from the grant date and the performance share units vest two or three years from the grant date. Upon vesting, the value of the restricted stock units, restricted stock awards and performance shares are paid to each grantee in the form of shares or cash. The number of performance share units that vest will range from zero to a multiple of the original number granted, based on certain performance and market conditions.



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During 2016, the Company granted 238,609 restricted stock units with a fair value of \$2.3 million and 311,691 performance share units with a fair value of \$3.6 million, based on the quoted market price and a Monte Carlo valuation model, to certain of the Company's employees. During 2016, a total of 98,844 restricted stock units with a market value of \$4.3 million vested and that amount, net of withholding taxes, was paid to grantees by issuing 59,518 shares of common stock. During 2015, the Company granted 63,912 restricted stock units with a fair value of \$2.8 million and 61,774 performance share units with a fair value of \$3.4 million, based on the quoted market price and a Monte Carlo valuation model, to certain of the Company's employees. During 2015, a total of 101,419 restricted stock units with a market value of \$4.3 million vested and that amount, net of withholding taxes, was paid to grantees by issuing 98,381 shares of common stock. During 2014, the Company granted 81,388 restricted stock units with a fair value of \$4.6 million and 50,689 performance share units with a fair value of \$3.4 million, based on the quoted market price and a Monte Carlo valuation model, to certain of the Company's employees. During 2014, a total of 261,911 restricted stock units with a market value of \$8.5 million vested and that amount, net of withholding taxes, was paid to grantees by issuing 149,082 shares of common stock. For the year ended December 31, 2016, the Company recorded an expense of \$4.2 million (2015 - \$4.5 million, 2014 - \$7.5 million) related to the restricted stock units and performance share units.

During 2016, the Company also granted 67,000 (2015 - 22,502 and 2014 - 18,230) shares as restricted stock awards with a fair value of \$0.6 million (2015 - \$1.0 million and 2014 - \$1.0 million), based on the quoted market price, to certain of the Company's directors. The shares of restricted stock are issued when granted.

*Share-based Compensation of Subsidiaries*

During the years ended December 31, 2016, 2015 and 2014, 76,084, 14,603 and 9,482 common units of Teekay Offshore, 32,723, 10,447 and 9,521 common units of Teekay LNG and 9,358, 51,948 and 17,073 shares of Class A common stock of Teekay Tankers, with aggregate values of \$0.7 million, \$1.0 million, and \$0.8 million, respectively, were granted and issued to the non-management directors of the general partners of Teekay Offshore and Teekay LNG and the non-management directors of Teekay Tankers as part of their annual compensation for 2016, 2015 and 2014.

Teekay Offshore, Teekay LNG and Teekay Tankers grant equity-based compensation awards as incentive-based compensation to certain employees of Teekay's subsidiaries that provide services to Teekay Offshore, Teekay LNG and Teekay Tankers. During March 2016, 2015 and 2014, Teekay Offshore and Teekay LNG granted phantom unit awards and Teekay Tankers granted restricted stock-based compensation awards with respect to 601,368, 102,843 and 67,569 units of Teekay Offshore, 132,582, 32,054 and 31,961 units of Teekay LNG and 279,980, 192,387 and 586,014 Class A common shares of Teekay Tankers, respectively, with aggregate grant date fair values of \$4.9 million, \$4.2 million and \$5.7 million, respectively, based on Teekay Offshore, Teekay LNG and Teekay Tankers' closing unit or stock prices on the grant dates. Each phantom unit or restricted stock unit is equal in value to one of Teekay Offshore's, Teekay LNG's or Teekay Tankers' common units or common shares plus reinvested distributions or dividends from the grant date to the vesting date. The awards vest equally over three years from the grant date. Any portion of an award that is not vested on the date of a recipient's termination of service is cancelled, unless their termination arises as a result of the recipient's retirement, in which case the award will continue to vest in accordance with the vesting schedule. Upon vesting, the awards are paid to a substantial majority of the grantees in the form of common units or common shares, net of withholding tax.

During March 2016, Teekay Tankers granted 216,043 stock options with an exercise price of \$3.74 per share that have a ten-year term and vest equally over three years from the grant date to an officer of Teekay Tankers. During March 2015, Teekay Tankers granted 58,434 stock options with an exercise price of \$5.39 per share that have a ten-year term and vest equally over three years from the grant date to an officer of Teekay Tankers. During June 2014, Teekay Tankers granted 110,829 stock options with an exercise price of \$4.25 per share that have a ten-year term and vest equally over three years from the grant date to an officer of Teekay Tankers. During March 2016, Teekay Tankers granted 284,693 stock options with an exercise price of \$3.74 per share that have a ten-year term and vest immediately to non-management directors of Teekay Tankers. During March 2014, Teekay Tankers granted 152,346 stock options with an exercise price of \$4.10 per share that have a ten-year term and vest immediately to non-management directors of Teekay Tankers.

## **12. Related Party Transactions**

As at December 31, 2016, Resolute Investments, Ltd. (or *Resolute*) owned 37.1% (2015 - 39.1%, 2014 - 34.8%) of the Company's outstanding Common Stock. One of the Company's directors, Thomas Kuo-Yuen Hsu, is the President and a director of Resolute. Another of the Company's directors, Axel Karlshøj, is among the directors of Path Spirit Limited, which is the trust protector for the trust that indirectly owns all of Resolute's outstanding equity. The Company's Chairman, C. Sean Day, is engaged as a consultant to Kattegat Limited, the parent company of Resolute, to oversee its investments, including those in the Teekay group of companies. Another of the Company's directors, Bjorn Moller, is a director of Kattegat Limited.

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**13. Other (Loss) Income**

	Year Ended December 31, 2016 \$	Year Ended December 31, 2015 \$	Year Ended December 31, 2014 \$
Write-off of contingent consideration (note 15d)	36,630	—	—
Accrual of contingent liability (note 15d)	(61,862)	—	—
Write-down of cost-accounted investment <sup>(1)</sup>	(19,000)	—	—
TIL stock purchase warrants received (note 14)	—	—	6,839
Miscellaneous income (loss)	5,219	1,566	(292)
Loss on bond repurchases	—	—	(7,699)
Other (loss) income	(39,013)	1,566	(1,152)

(1) The company holds investments at cost. During the year ended December 31, 2016 the Company recorded a write-down of these investments of \$19.0 million.

**14. Derivative Instruments and Hedging Activities**

The Company uses derivatives to manage certain risks in accordance with its overall risk management policies.

Foreign Exchange Risk

The Company economically hedges portions of its forecasted expenditures denominated in foreign currencies with foreign currency forward contracts.

As at December 31, 2016, the Company was committed to the following foreign currency forward contracts:

	Contract Amount in Foreign Currency	Average Forward Rate <sup>(1)</sup>	Fair Value / Carrying Amount Of Asset (Liability) \$	Expected Maturity	
				2017 \$	2018 \$
Euro	13,750	0.92	(304)	14,879	—
Norwegian Kroner	610,000	8.31	(2,689)	60,677	12,719
			(2,993)	75,556	12,719

(1) Average contractual exchange rate represents the contracted amount of foreign currency one U.S. Dollar will buy.

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The Company enters into cross currency swaps and pursuant to these swaps the Company receives the principal amount in NOK on the maturity date of the swap, in exchange for payment of a fixed U.S. Dollar amount. In addition, the cross currency swaps exchange a receipt of floating interest in NOK based on NIBOR plus a margin for a payment of U.S. Dollar fixed interest. The purpose of the cross currency swaps is to economically hedge the foreign currency exposure on the payment of interest and principal at maturity of the Company's NOK-denominated bonds due in 2017 through 2021. In addition, the cross currency swaps economically hedge the interest rate exposure on the NOK bonds due in 2017 through 2021. The Company has not designated, for accounting purposes, these cross currency swaps as cash flow hedges of its NOK-denominated bonds due in 2017 through 2021. As at December 31, 2016, the Company was committed to the following cross currency swaps:

Notional Amount NOK	Notional Amount USD	Floating Rate Receivable		Fixed Rate Payable	Fair Value / Carrying Amount of Asset / (Liability)	Remaining Term (years)
		Reference Rate	Margin			
408,500	72,946	NIBOR	5.25%	6.88%	(26,417)	0.3
420,000 <sup>(1)(2)</sup>	70,946	NIBOR	5.75%	8.84%	(25,821)	1.9
800,000 <sup>(1)(3)</sup>	143,536	NIBOR	5.75%	7.58%	(56,272)	2.0
900,000	110,400	NIBOR	6.00%	7.72%	(3,814)	4.8
900,000	150,000	NIBOR	4.35%	6.43%	(49,655)	1.7
1,000,000	162,200	NIBOR	4.25%	7.45%	(55,286)	2.1
1,000,000	134,000	NIBOR	3.70%	5.92%	(19,900)	3.4
					(237,165)	

(1) Notional amount reduces equally with NOK bond repayments (see Note 7).

(2) Excludes an economic hedge on the foreign currency exposure for a three percent premium upon maturity of the NOK bonds which exchanges NOK 7.2 million for \$1.2 million (see Note 7).

(3) Excludes an economic hedge on the foreign currency exposure for a three percent premium upon maturity of the NOK bonds which exchanges NOK 19.2 million for \$3.4 million (see Note 7).

Interest Rate Risk

The Company enters into interest rate swap agreements, which exchange a receipt of floating interest for a payment of fixed interest, to reduce the Company's exposure to interest rate variability on its outstanding floating-rate debt. The Company designates certain of its interest rate swap agreements as cash flow hedges for accounting purposes.

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As at December 31, 2016, the Company was committed to the following interest rate swap agreements related to its LIBOR-based debt and EURIBOR-based debt, whereby certain of the Company's floating-rate debt obligations were swapped with fixed-rate obligations:

	Interest Rate Index	Principal Amount \$	Fair Value / Carrying Amount of Asset / (Liability) \$	Weighted-Average Remaining Term (years)	Fixed Interest Rate (%) <sup>(1)</sup>
<b>LIBOR-Based Debt:</b>					
U.S. Dollar-denominated interest rate swaps	LIBOR	2,974,274	(243,261)	5.4	3.3
U.S. Dollar-denominated interest rate swaps <sup>(2)</sup>	LIBOR	517,629	(16,489)	4.2	3.0
U.S. Dollar-denominated interest rate swaption <sup>(3)</sup>	LIBOR	155,000	(1,525)	0.3	2.2
U.S. Dollar-denominated interest rate swaption <sup>(3)</sup>	LIBOR	155,000	31	0.3	3.3
U.S. Dollar-denominated interest rate swaption <sup>(4)</sup>	LIBOR	160,000	(1,457)	1.1	2.0
U.S. Dollar-denominated interest rate swaption <sup>(4)</sup>	LIBOR	160,000	1,140	1.1	3.1
U.S. Dollar-denominated interest rate swaption <sup>(5)</sup>	LIBOR	160,000	(1,248)	1.5	1.8
U.S. Dollar-denominated interest rate swaption <sup>(5)</sup>	LIBOR	160,000	2,112	1.5	2.9
<b>EURIBOR-Based Debt:</b>					
Euro-denominated interest rate swaps <sup>(6) (7)</sup>	EURIBOR	219,733	(34,295)	4.0	3.1
			<u>(294,992)</u>		

- (1) Excludes the margins the Company pays on its variable-rate debt, which, as of December 31, 2016, ranged from 0.3% to 4.0%.
- (2) Inception dates range from September 2017 to April 2018. Interest rate swaps with an aggregate principal amount of \$320 million are being used to economically hedge expected interest payments on new debt that is planned to be outstanding from 2017 to 2024. These interest rate swaps are subject to mandatory early termination in 2017 and 2018 whereby the swaps will be settled based on their fair value at that time.
- (3) During June 2015, as part of its hedging program, Teekay LNG entered into interest rate swaption agreements whereby it has a one-time option in April 2017 to enter into an interest rate swap at a fixed rate of 3.34% with a third party, and the third party has a one-time option in April 2017 to require Teekay LNG to enter into an interest swap at a fixed rate of 2.15%. If Teekay LNG or the third party exercises its option, there will be a cash settlement in April 2017 for the fair value of the interest rate swap, in lieu of taking delivery of the actual interest rate swap.
- (4) During August 2015, as part of its hedging program, Teekay LNG entered into interest rate swaption agreements whereby it has a one-time option in January 2018 to enter into an interest rate swap at a fixed rate of 3.10% with a third party, and the third party has a one-time option in January 2018 to require Teekay LNG to enter into an interest swap at a fixed rate of 1.97%. If Teekay LNG or the third party exercises its option, there will be a cash settlement in January 2018 for the fair value of the interest rate swap, in lieu of taking delivery of the actual interest rate swap.
- (5) During October 2015, as part of its hedging program, Teekay LNG entered into interest rate swaption agreements whereby it has a one-time option in July 2018 to enter into an interest rate swap at a fixed rate of 2.935% with a third party, and the third party has a one-time option in July 2018 to require Teekay LNG to enter into an interest swap at a fixed rate of 1.83%. If Teekay LNG or the third party exercises its option, there will be a cash settlement in July 2018 for the fair value of the interest rate swap, in lieu of taking delivery of the actual interest rate swap.
- (6) Principal amount reduces monthly to 70.1 million Euros (\$73.7 million) by the maturity dates of the swap agreements.
- (7) Principal amount is the U.S. Dollar equivalent of 208.9 million Euros.

Teekay Corporation has guaranteed obligations, up to a maximum of \$387.0 million, pursuant to certain interest rate swaps and cross currency swaps of Teekay Offshore. As at December 31, 2016, the estimated fair value of these interest rate swaps and cross currency swaps, capped at the maximum guarantee obligation, was a liability of \$241.3 million.

Stock Purchase Warrants

In January 2014, Teekay and Teekay Tankers formed TIL. Teekay and Teekay Tankers purchased an aggregate of 5.0 million shares of TIL's common stock, representing an initial 20% interest in TIL, as part of a \$250 million private placement by TIL, which represents a total investment by Teekay and Teekay Tankers of \$50.0 million. In addition, Teekay and Teekay Tankers received stock purchase warrants entitling them to purchase an aggregate of up to 1.5 million shares of common stock of TIL at a fixed price of \$10 per share. Alternatively, if the shares of TIL's common stock trade on a national securities exchange or over-the-counter market denominated in NOK, Teekay and Teekay Tankers may also exercise their stock purchase warrants at 61.67 NOK per share. The estimated fair value of the warrants on issuance was \$6.8 million and was included in other (loss) income in the consolidated statements of income. The stock purchase warrants vest in four equally sized tranches and as at December 31, 2016, two tranches had vested. If the shares of TIL's common stock trade on a national securities exchange or over-the-counter market denominated in NOK, each tranche will vest and become exercisable when and if the fair market value of a share of TIL's common stock equals or exceeds 77.08 NOK, 92.50 NOK, 107.91 NOK and 123.33 NOK, respectively, for such tranche for any ten consecutive trading days. The stock purchase warrants expire on January 23, 2019. The fair value of the stock purchase warrants at December 31, 2016 was \$0.6 million. The Company reports the unrealized gains from the stock purchase warrants in realized and unrealized losses on non-designated derivatives in the consolidated statements of income.

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*Time-charter Swap*

Effective June 1, 2016, Teekay Tankers entered into a time-charter swap agreement for 55% of two Aframax-equivalent vessels. Under such agreement, Teekay Tankers will receive \$27,776 per day, net of a 1.25% brokerage commission, and pay 55% of the net revenue distribution of two Aframax-equivalent vessels employed in Teekay Tankers' Aframax revenue sharing pooling arrangement, less \$500 per day, for a period of 11 months plus an additional two months at the counterparty's option. The purpose of the agreement is to reduce Teekay Tankers' exposure to spot tanker market rate variability for certain of its vessels that are employed in the Aframax revenue sharing pooling arrangement. Teekay Tankers has not designated, for accounting purposes, the time-charter swap as a cash flow hedge. The fair value of the time-charter swap agreement at December 31, 2016 was an asset of \$0.2 million.

*Tabular Disclosure*

The following table presents the location and fair value amounts of derivative instruments, segregated by type of contract, on the Company's consolidated balance sheets.

	Prepaid Expenses and Other	Other Non- Current Assets	Accrued Liabilities	Current Portion of Derivative Liabilities	Derivative Liabilities
<b>As at December 31, 2016</b>					
Derivatives designated as a cash flow hedge:					
Interest rate swap agreements	—	1,340	(363)	(1,033)	(52)
Derivatives not designated as a cash flow hedge:					
Foreign currency contracts	119	—	—	(2,601)	(511)
Interest rate swap agreements	212	9,841	(11,979)	(59,055)	(233,903)
Cross currency swap agreements	—	—	(3,464)	(53,124)	(180,577)
Stock purchase warrants	—	575	—	—	—
Time-charter swap agreement	875	—	(667)	—	—
	<u>1,206</u>	<u>11,756</u>	<u>(16,473)</u>	<u>(115,813)</u>	<u>(415,043)</u>
<b>As at December 31, 2015</b>					
Derivatives designated as a cash flow hedge:					
Interest rate swap agreements	—	—	—	(338)	(777)
Derivatives not designated as a cash flow hedge:					
Foreign currency contracts	80	—	—	(16,372)	(2,534)
Interest rate swap agreements	—	7,516	(18,348)	(198,196)	(154,673)
Cross currency swap agreements	—	—	(3,377)	(52,633)	(256,100)
Stock purchase warrants	—	10,328	—	—	—
	<u>80</u>	<u>17,844</u>	<u>(21,725)</u>	<u>(267,539)</u>	<u>(414,084)</u>

As at December 31, 2016, the Company had multiple interest rate swaps, cross currency swaps and foreign currency forward contracts with the same counterparty that are subject to the same master agreements. Each of these master agreements provides for the net settlement of all derivatives subject to that master agreement through a single payment in the event of default or termination of any one derivative. The fair value of these derivatives is presented on a gross basis in the Company's consolidated balance sheets. As at December 31, 2016, these derivatives had an aggregate fair value asset amount of \$7.2 million (December 31, 2015 - \$nil) and an aggregate fair value liability amount of \$398.7 million (December 31, 2015 - \$588.1 million). As at December 31, 2016, the Company had \$68.0 million on deposit with the relevant counterparties as security for swap liabilities under certain master agreements (December 31, 2015 - \$105.3 million). The deposit is presented in restricted cash on the consolidated balance sheets.

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For the periods indicated, the following table presents the effective portion of gains (losses) on interest rate swap agreements designated and qualifying as cash flow hedges:

<b>Year Ended December 31, 2016</b>			
Effective Portion Recognized in AOCI <sup>(1)</sup>	Effective Portion Reclassified from AOCI <sup>(2)</sup>	Ineffective Portion	
\$	\$	\$	
691	(68)	682	Interest expense
691	(68)	682	

<b>Year Ended December 31, 2015</b>			
Effective Portion Recognized in AOCI <sup>(1)</sup>	Effective Portion Reclassified from AOCI <sup>(2)</sup>	Ineffective Portion	
\$	\$	\$	
(65)	—	(1,050)	Interest expense
(65)	—	(1,050)	

(1) Recognized in accumulated other comprehensive loss (or AOCI).

(2) Recorded in AOCI during the term of the hedging relationship and reclassified to earnings.

(3) Recognized in the ineffective portion of gains (losses) on derivative instruments designated and qualifying as cash flow hedges.

As at December 31, 2016, the Company estimated, based on then current interest rates, that it would reclassify approximately \$0.7 million of net losses on interest rate swaps from accumulated other comprehensive loss to earnings during the next 12 months.

Realized and unrealized gains and (losses) from derivative instruments that are not designated for accounting purposes as cash flow hedges, are recognized in earnings and reported in realized and unrealized losses on non-designated derivatives in the consolidated statements of income. The effect of the gains and losses on derivatives not designated as hedging instruments in the consolidated statements of income are as follows:

	<b>Year Ended December 31, 2016 \$</b>	<b>Year Ended December 31, 2015 \$</b>	<b>Year Ended December 31, 2014 \$</b>
Realized (losses) gains relating to:			
Interest rate swap agreements	(87,320)	(108,036)	(125,424)
Interest rate swap agreement terminations	(8,140)	(10,876)	(1,319)
Foreign currency forward contracts	(11,186)	(21,607)	(4,436)
Time charter swap agreement	2,154	—	—
	(104,492)	(140,519)	(131,179)
Unrealized gains (losses) relating to:			
Interest rate swap agreements	62,446	37,723	(86,045)
Foreign currency forward contracts	15,833	(418)	(16,926)
Stock purchase warrants	(9,753)	1,014	2,475
Time-charter swap agreement	875	—	—
	69,401	38,319	(100,496)
Total realized and unrealized (losses) gains on derivative instruments	(35,091)	(102,200)	(231,675)

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Realized and unrealized losses of the cross currency swaps are recognized in earnings and reported in foreign exchange (loss) gain in the consolidated statements of income. The effect of the loss on cross currency swaps on the consolidated statements of income is as follows:

	Year Ended December 31,		
	2016 \$	2015 \$	2014 \$
Realized losses on maturity and partial termination of cross currency swap	(41,707)	(36,155)	—
Realized losses	(38,564)	(18,973)	(3,955)
Unrealized gains (losses)	75,033	(89,178)	(167,334)
Total realized and unrealized losses on cross currency swaps	<u>(5,238)</u>	<u>(144,306)</u>	<u>(171,289)</u>

The Company is exposed to credit loss to the extent the fair value represents an asset in the event of non-performance by the counterparties to the foreign currency forward contracts, and cross currency and interest rate swap agreements; however, the Company does not anticipate non-performance by any of the counterparties. In order to minimize counterparty risk, the Company only enters into derivative transactions with counterparties that are rated A- or better by Standard & Poor's or A3 or better by Moody's at the time of the transaction. In addition, to the extent possible and practical, interest rate swaps are entered into with different counterparties to reduce concentration risk.

**15. Commitments and Contingencies**

**a) Vessels under Construction**

As at December 31, 2016, the Company was committed to the construction of nine LNG carriers, three long-haul towage vessels, three shuttle tankers, one FSO conversion and one FPSO upgrade for a total cost of approximately \$3.0 billion, including capitalized interest and other miscellaneous construction costs. Vessels in which the Company holds an interest through non-consolidated joint ventures are excluded from the above amounts and are described in Note 15b. Three LNG carriers are scheduled for delivery in 2017, four LNG carriers are scheduled for delivery in 2018 and two LNG carriers are scheduled for delivery in 2019. Three long-distance towing and offshore installation vessels are scheduled for delivery during 2017, three shuttle tankers are expected to be delivered in late-2017 through the first half of 2018, the one FSO conversion is scheduled for completion in mid-2017 and the one FPSO upgrade is scheduled for completion in 2017. As at December 31, 2016, payments made towards these commitments totaled \$1.0 billion. As at December 31, 2016, the remaining payments required to be made under these newbuilding and conversion capital commitments were \$1.1 billion (2017), \$607.3 million (2018), \$250.3 million (2019).

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**b) Joint Ventures**

Teekay LNG's share of commitments to fund newbuilding and other construction contract costs of its non-consolidated joint ventures as at December 31, 2016 are as follows:

	Total \$	2017 \$	2018 \$	2019 \$	2020 \$
Yamal LNG Joint Venture <sup>(i)</sup>	883,030	91,800	344,850	247,800	198,580
BG Joint Venture <sup>(ii)</sup>	195,565	80,010	86,154	29,401	—
Bahrain LNG Joint Venture <sup>(iii)</sup>	224,080	110,364	80,097	33,619	—
Exmar LPG Joint Venture <sup>(iv)</sup>	77,504	58,096	19,408	—	—
	1,380,179	340,270	530,509	310,820	198,580

- (i) Teekay LNG, through the Yamal LNG Joint Venture, has a 50% ownership interest in six 172,000-cubic meter ARC7 LNG carrier newbuildings that have an estimated total fully built-up cost of \$2.1 billion. As at December 31, 2016, Teekay LNG's proportionate costs incurred under these newbuilding contracts totaled \$153.3 million. The Yamal LNG Joint Venture intends to secure debt financing for the six LNG carrier newbuildings prior to their scheduled deliveries.
- (ii) Teekay LNG acquired an ownership interest in the BG Joint Venture and, as part of the acquisition, agreed to assume Shell's obligation to provide shipbuilding supervision and crew training services for the four LNG carrier newbuildings up to their delivery dates pursuant to a ship construction support agreement. The BG Joint Venture has secured financing of \$137.1 million related to the commitments included in the table above and Teekay LNG is scheduled to receive \$10.9 million of reimbursement directly from Shell.
- (iii) Teekay LNG has a 30% ownership interest in the Bahrain LNG Joint Venture for the development of an LNG receiving and regasification terminal in Bahrain. The project will include a FSU, which will be modified from one of the Teekay LNG's existing MEG1 LNG carrier newbuildings, an offshore gas receiving facility, and an onshore nitrogen production facility. The terminal will have a capacity of 800 million standard cubic feet per day and will be owned and operated under a 20-year agreement commencing early-2019. The receiving and regasification terminal is expected to have a fully-built up cost of approximately \$960.0 million. The Bahrain LNG Joint Venture has secured debt financing for approximately 75% of the estimated fully built-up cost of the LNG receiving and regasification terminal in Bahrain.
- (iv) Teekay LNG has a 50% ownership interest in the Exmar LPG Joint Venture which has four LPG newbuilding vessels scheduled for delivery between 2017 and 2018 and has secured financing for the four LPG carrier newbuildings.

In October 2014, Teekay Offshore sold a 1995-built shuttle tanker, the *Navion Norvegia*, to a 50/50 joint venture with Brazilian-based Odebrecht Oil & Gas S.A. (or OOG). The vessel is committed to a new FPSO conversion for the Libra field located in the Santos Basin offshore Brazil. The conversion project has been completed at Sembcorp Marine's Jurong Shipyard in Singapore and the FPSO unit is scheduled to commence operations in mid-2017 under a 12-year fixed-rate contract with Petrobras. The FPSO conversion is expected to cost approximately \$1.0 billion. As at December 31, 2016, payments made by the joint venture towards these commitments totaled \$700.6 million and the estimated remaining payments required to be made are \$302.3 million (2017). The joint venture secured a long-term debt facility providing total borrowings of up to \$804.0 million for the FPSO conversion, of which \$266.7 million was undrawn as at December 31, 2016. During 2016, as a result of certain defaults on interest payments by an OOG affiliate which OOG had guaranteed, the Libra Joint Venture was required to obtain cross default waivers from the lenders of the construction period loan facility. The current waiver is due to expire on June 16, 2017. Although the Libra Joint Venture expects to obtain further cross default waivers from the facility lenders, a failure to do so could adversely affect its ability to fund and complete the Libra FPSO conversion.

**c) Liquidity**

As of December 31, 2016, the Company adopted the new accounting standard ASC-205-40, *Presentation of Financial Statements - Going Concern*, which requires management to assess if the Company will have sufficient liquidity to continue as a going concern for the one-year period following the issuance of its financial statements. Despite generating \$87 million of consolidated net income and \$620 million of consolidated cash flows from operating activities during 2016, the Company ended the year with a working capital deficit of \$365 million. This working capital deficit is driven primarily from scheduled 2017 maturities and repayments of outstanding consolidated debt of approximately \$1.0 billion, which were classified as current liabilities as at December 31, 2016. In addition to these obligations, the Company also anticipates that Teekay LNG and Teekay Offshore will be required to make payments related to commitments to fund vessels under construction or undergoing conversions/upgrades. (see Notes 15a and 15b).



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Based on these factors, over the one-year period following the issuance of its consolidated financial statements, the Company's consolidated subsidiaries Teekay Tankers, Teekay LNG and Teekay Offshore will need to obtain additional sources of financing, in addition to amounts generated from operations, to meet the minimum liquidity requirements under the financial covenants related to these subsidiaries. These anticipated sources of financing include: raising additional capital through equity issuances; refinancing and increasing amounts available under various loan facilities of Teekay Tankers, Teekay LNG and Teekay Offshore; negotiating new secured debt financings related to vessels under construction or other unencumbered operating vessels for Teekay Tankers, Teekay LNG and Teekay Offshore; and, for Teekay Offshore, negotiating extensions or redeployments of existing assets and the sale of partial interests in certain assets. The success of these initiatives of the Daughter Companies may impact the liquidity of Teekay Parent as a result of certain guarantees provided by Teekay Parent and through the payment of dividends/distributions by the Daughter Companies to Teekay Parent.

The Company is actively pursuing the alternatives described above, which it considers probable of completion based on the Company's history of being able to raise equity, refinance similar loan facilities and to obtain new debt financing for its vessels under construction, as well as the progress it has made on the financing process to date and indicative offers received from potential investors in certain assets. The Company is in various stages of completion on these matters.

Based on the Company's liquidity at the date these consolidated financial statements were issued, the liquidity it expects to generate from operations over the following year, and by incorporating the Company's plans to raise additional liquidity that it considers probable of completion, the Company estimates that it will have sufficient liquidity to continue as a going concern for at least the one-year period following the issuance of these consolidated financial statements.

**d) Legal Proceedings and Claims**

The Company may, from time to time, be involved in legal proceedings and claims that arise in the ordinary course of business. The Company believes that any adverse outcome of existing claims, other than with respect to the items noted below, individually or in the aggregate, would not have a material effect on its financial position, results of operations or cash flows, when taking into account its insurance coverage and indemnifications from charterers.

*Polar Spirit contract termination*

In December 2016, Teekay was awarded \$42.4 million plus interest by an arbitrator for unpaid hire and damages for termination of a time-charter contract relating to the *Polar Spirit*. The charterers have not responded and Teekay is looking to enforce the award. As the collectability of the award is uncertain, no amounts have been accrued.

*Cancellation of two UMS newbuilding contracts*

In August 2014, Teekay Offshore acquired 100% of the outstanding shares of Logitel, a Norway-based company focused on high-end UMS. As part of this transaction, Teekay Offshore assumed three UMS newbuilding contracts ordered from COSCO. Teekay Offshore took delivery of one of the UMS newbuildings, the *Arendal Spirit*, in February 2015.

In June 2016, Teekay Offshore canceled the UMS construction contracts for the two remaining UMS newbuildings, the *Stavanger Spirit* and *Nantong Spirit*. As a result of this cancellation, during the second quarter of 2016, Teekay Offshore wrote-off \$43.7 million of the assets related to these newbuildings and reversed contingent liabilities of \$14.5 million associated with the delivery of these assets. The estimate of potential damages for the cancellation of the *Stavanger Spirit* newbuilding contract is based on the amount due for the final yard installment of approximately \$170 million less the estimated fair value of the *Stavanger Spirit*. Given the unique design of the vessel as well as the lack of recent sale and purchase transactions for this type of asset, the value of this vessel, and thus ultimately the amount of potential damages that may result from the cancellation, is uncertain. Pursuant to the *Stavanger Spirit* newbuilding contract and related agreements, Teekay Offshore believes COSCO only has recourse to the single purpose subsidiary that was a party to the *Stavanger Spirit* newbuilding contract and its immediate parent company, Logitel Offshore Pte. Ltd., for damages incurred.

The estimate of potential damages for the cancellation of the *Nantong Spirit* newbuilding contract is based upon estimates of a number of factors, including accumulated costs incurred by COSCO, sub-supplier contract cancellation costs, as well as how such costs are treated under the termination provisions in the contract. Teekay Offshore estimates that the amount of potential damages related to the cancellation of the *Nantong Spirit* contract could range between \$10 million and \$40 million. Pursuant to the *Nantong Spirit* newbuilding contract, Teekay Offshore believes COSCO only has recourse to the single purpose subsidiary that was a party to the *Nantong Spirit* newbuilding contract.

During September 2016, Sevan commenced an action against Logitel, which Teekay Offshore acquired in 2014, in the Oslo District Court. The action relates to the agreements between Sevan and CeFront, related to the 2013 transfer to Logitel Offshore Pte. Ltd. or its wholly-owned subsidiaries (collectively *Logitel Offshore*) of two hulls to be converted into UMS, including the \$60 million bond loan (of which \$41 million was a vendor credit and \$19 million was a cash loan) granted by a Sevan affiliate to Logitel (or the *2013 Transaction*). The action also relates to agreements between Sevan and Teekay Offshore entered into in connection with Teekay Offshore's acquisition of Logitel from CeFront in 2014 (or the *2014 Transaction*). Sevan has claimed that the \$60 million bond loan to Logitel contravened certain provisions of the Norwegian Corporate Law and that Sevan is entitled to the remaining payment of \$50 million plus interest set at the court's discretion. Logitel intends to dispute these claims. In addition, Sevan has presented Teekay Offshore with a formal notice of claim and request for arbitration seeking \$10 million for license and services fees, which Sevan claims is payable in connection with the delivery of the *Arendal Spirit*. The parties are in the process of selecting an arbitration tribunal and exchanging information on their respective calculations of the amount of license and service fees that may be due.

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In addition, in September 2016, CeFront commenced an action against Logitel in the Oslo District Court, claiming that \$2.8 million is due under a management agreement and an additional \$3.6 million will fall due by May 2017 under that agreement. CeFront also claims that \$3.3 million is due under the earn-out provisions of the contracts related to the *Arendal Spirit* and that \$20.2 million is due or will become due related to the earn-out provisions of the contracts for the *Stavanger Spirit* and *Nantong Spirit*. Teekay Offshore is defending these claims based on its interpretation of the agreement. Teekay Offshore is uncertain as to the ultimate resolution of these claims.

As at December 31, 2016, Teekay Offshore has accrued \$61.9 million in the aggregate related to the above claims and potential claims related to Logitel from Sevan, COSCO and CeFront.

*Petrojarl Knarr FPSO*

In October 2016 Teekay Offshore received a claim from Royal Dutch Shell Plc (or *Shell*) for liquidated damages of \$23.6 million. This claim is based on Shell's allegation that the *Petrojarl Knarr* FPSO did not meet the conditions for achieving the Offshore Completion milestone on time. Shell is also claiming that the inability of Teekay Offshore to meet the Offshore Completion milestone date in excess of the grace period has in effect resulted in a 20% reduction in the purchase price for which Shell may purchase the *Petrojarl Knarr* FPSO from Teekay Offshore pursuant to an option granted in the Purchase Option Agreement. In the counterclaim, Teekay Offshore has alleged that Offshore Completion was achieved after the milestone but within the grace period and that Shell had caused delays due to certain defaults in Shell's specifications, as well as other events. It is Teekay Offshore's position that, due to delays caused by Shell, Teekay Offshore is entitled to the daily lease rate for the unit for a period of time prior to when Shell actually started paying such rate and that Shell is not entitled to a reduction in the Purchase Option Price. The duration of any such period that Teekay Offshore claims to be entitled to receive additional daily lease payments is in dispute. However, Teekay Offshore expects that the amount of its claim relating to the counterclaim will exceed Shell's claim of liquidated damages. Nevertheless, uncertainty exists as to the resolution of the claims.

*Arendal Spirit UMS*

In early-November 2016, the *Arendal Spirit* UMS experienced an operational incident relating to its dynamic positioning system. As a result of this operational incident, and a gangway incident that occurred in April 2016, the charterer, Petrobras, initiated an operational review. Until the results of the review are available, Petrobras has suspended its charter hire payments since November 2016. Teekay Offshore completed an investigation to identify the cause of such incidents and has implemented corrective actions. There is a risk that Petrobras may seek to cancel the charter contract resulting from their operational review. If this occurs, the term loan outstanding for the *Arendal Spirit* UMS, which as at December 31, 2016 had a balance of \$127.5 million, could become payable within 180 days of a cancellation. Teekay Offshore is working to address Petrobras' concerns to bring the unit back into operation as soon as possible. Should the contract be cancelled, it could result in a reclassification of \$112.5 million of long-term debt to the current portion of long-term debt unless Teekay Offshore is able to obtain an extension from the lenders.

*Piranema Spirit FPSO Contract*

In March 2016, Petrobras claimed that Teekay Offshore's November 2011 cessation of paying certain agency fees with respect to the *Piranema Spirit* FPSO unit's employment should have resulted in a corresponding 2.0% rate reduction on the FPSO contract with Petrobras. Teekay Offshore has estimated the maximum amount of the claim at \$7.5 million, consisting of \$5.4 million (which is the amount accrued by Teekay Offshore as at December 31, 2016) from a return of 2.0% of the charter hire previously paid by Petrobras to Teekay Offshore for the period from November 2011 up to December 31, 2016, and \$2.1 million from a 2.0% reduction of future charter hire to the end of the term of the FPSO contract with Petrobras.

*Towage of the Ocean Winner*

In February 2017, Teekay Offshore received a notice from Transocean Offshore International Ventures Limited (or *Transocean*) that it intends to file a claim against Teekay Offshore arising from the towage of the Transocean Winner oil rig by one of its towage vessels, the *ALP Forward*. Transocean intends to file a claim to recover losses it incurred relating to the grounding of the Transocean Winner in August 2016, including the costs associated with the salvage, replacement tow and other costs payable by Transocean as a result of this incident. Teekay Offshore intends to dispute these claims and believes that such claims would be covered by insurance. As at December 31, 2016, Teekay Offshore had not accrued for any potential liability relating to these claims. An estimate of the possible loss or range of loss cannot be made at this time.

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*Damen Shipyard Group*

In December 2014, Teekay Offshore acquired the *Petrojarl I* FPSO unit from Teekay Corporation for \$57.0 million. The *Petrojarl I* is undergoing upgrades at the Damen Shipyard Group's DSR Schiedam Shipyard (or *Damen*) in the Netherlands with an estimated total cost of approximately \$350 million, which includes the cost of acquiring the *Petrojarl I*. The FPSO is expected to commence operations in the late-2017 under a five-year charter contract with Queiroz Galvão Exploração e Produção SA (or *QGEP*). As at December 31, 2016, payments made towards these commitments, including the acquisition of the *Petrojarl I* FPSO unit from Teekay Corporation, totaled \$252.5 million and the remaining payments required to be made are estimated to be \$97.5 million in 2017. Teekay Offshore is currently in negotiations with the yard regarding the valuation of certain variation orders relating to the upgrades. The outcome of these negotiations may impact the total estimated cost of the *Petrojarl I* FPSO unit. Teekay Offshore has financed \$171.2 million of the *Petrojarl I* FPSO upgrade cost through a fully-drawn long-term loan. Due to project delays in the delivery of the unit resulting from shipyard delays, an increased scope of work relating to field-specific requirements and the age of the unit, Teekay Offshore is currently in discussions with *QGEP*, Damen and its lenders in the *Petrojarl I* loan facility to agree on revised delivery and charterer acceptance dates for the unit and other terms associated with the charter, shipyard contract and loan facility. In October 2016, December 2016, February 2017, and April 2017 the lenders agreed to extend the availability date of the loan for successive periods of two months, as the loan was subject to a mandatory prepayment provision, initially in early October 2016, if the unit was not accepted at that time by *QGEP*. These interim extensions provide additional time for Teekay Offshore to negotiate a revised schedule for the delivery of the unit and thereafter, amend the loan facility to reflect the revised delivery schedule. As at December 31, 2016, Teekay Offshore had \$60 million held in escrow to fund the final upgrade costs (December 31, 2015 - nil). This amount is presented in restricted cash on the consolidated balance sheet.

*STX Offshore & Shipbuilding Co.*

In April 2013, four special purpose subsidiary companies of Teekay Tankers entered into agreements with STX Offshore & Shipbuilding Co., Ltd (or *STX*) of South Korea to construct four, fuel-efficient 113,000 dead-weight tonne Long Range 2 (or *LR2*) product tanker newbuildings. At the same time, Teekay Tankers entered an Option Agreement with STX allowing Teekay Tankers to order up to 12 additional vessels. The payment of Teekay Tankers' first shipyard installment was contingent on Teekay Tankers receiving acceptable refund guarantees for the shipyard installment payments. At around the same time, however, STX commenced a voluntary financial restructuring with its lenders, and as a result, STX's ability to obtain the necessary refund guarantees in respect of the four firm shipbuilding contracts was severely affected. In October and November 2013, Teekay Tankers went on to exercise its rights under the Option Agreement to order eight additional newbuildings. The further required shipbuilding contracts were not entered into by STX within the timeframe specified in the Option Agreement. By December 2013, Teekay Tankers had determined that there was no prospect of the refund guarantees being provided under any of the firm shipbuilding contracts and then by February 2014 that there was no prospect of the same in respect of the further contracts to be entered pursuant to the Option Agreement or of that agreement being otherwise performed by STX. In December 2013, therefore, the subsidiaries of Teekay Tankers gave STX notice that it was treating STX as having repudiated the four firm shipbuilding contracts. Then in February 2014, Teekay Tankers gave STX notice that it was treating STX as having repudiated the Option Agreements. In February and March 2014, Teekay Tankers and its subsidiaries commenced legal proceedings against STX for damages. This involved arbitration proceedings in London in respect of the four firm shipbuilding contracts and English High Court proceedings in respect of the Option Agreement. In November 2014, Teekay Tankers, on behalf of the subsidiaries, placed \$0.6 million in an escrow account as cash security in respect of STX's legal costs relating to the arbitration proceedings. These funds were classified as cash and cash equivalents in Teekay Tankers' consolidated balance sheets as of December 31, 2015.

On February 15, 2016, Teekay Tankers' subsidiaries had successfully obtained an English Court Order requiring STX to pay a total of \$32.4 million in respect of the four firm shipbuilding contracts. As a result, Teekay Tankers' subsidiaries have exercised their rights under English law to seek the assistance of the English court in the enforcement of the arbitration awards. Teekay Tankers and its subsidiaries are also pursuing other routes to enforce the awards against STX. Additionally, the \$0.6 million cash deposit was refunded in March 2016.

STX has filed for bankruptcy protection and as of December 31, 2016, all Korean enforcement actions are stayed. STX has had that protection recognized in England and Wales. Teekay Tankers will not be in a position to take any further action on enforcement and recognition of its award in the UK or Korea while the bankruptcy protection remains in place. No amounts have been recorded as receivable in respect of these awards due to uncertainty of their collection.

The option agreement case has gone through trial and despite finding that Teekay Tankers had valid option agreements, the judgment was ruled against Teekay Tankers due to uncertainty of delivery dates. Teekay Tankers is considering whether to appeal this ruling.

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*Class Action Complaint*

Following the Company's announcement in December 2015 that its Board of Directors had reduced the Company's quarterly dividend to \$0.055 per share, down from a dividend of \$0.55 per share in the fourth quarter of 2015 dividend payable in February 2016 and the subsequent decline of the price of the Company's common stock, a class action complaint was filed on March 1, 2016 in the U.S. District Court for the District of Connecticut against the Company and certain of its officers. As a result of the Company's motion to transfer the action, the case was transferred to the U.S. District Court for the Western District of Washington on November 18, 2016. The lead plaintiff in the action filed an Amended Class Action Complaint on January 13, 2017. The Amended Complaint includes claims that the Company and certain of its officers violated Section 10(b) of the Exchange Act and Rule 10b-5 promulgated thereunder. The Amended Complaint alleges that the Company and certain of its officers violated federal securities laws by making materially false and misleading statements regarding the Company's ability and intention to increase its future dividends beyond the initial dividend increase to \$0.55 per share that the Company announced in September 2014 and first declared in the second quarter of 2015, thereby artificially inflating the price of its common stock. The lead plaintiff is seeking unspecified monetary damages, including reasonable costs and expenses incurred in this action. The Company is vigorously defending against the claims. The Company filed a motion to dismiss the Amended Complaint on March 14, 2017. The motion to dismiss will be fully briefed and ready for consideration by the Court on June 14, 2017. Based on the current stage of this action and the Company's evaluation of the facts available at this time, the amount or range of reasonably possible losses to which the Company is exposed cannot be estimated and the ultimate resolution of this matter and the associated financial impact to the Company, if any, remains uncertain at this time. The Company maintains a Directors and Officers insurance policy that provides a fixed amount of coverage for such claims, subject to coverage defenses, and a deductible to be paid by the Company.

*Teekay Nakilat Capital Lease*

Teekay LNG owns a 70% interest in Teekay Nakilat Corporation (or *Teekay Nakilat Joint Venture*), which was the lessee under three separate 30-year capital lease arrangements with a third party for three LNG carriers (or the *RasGas II LNG Carriers*). Under the terms of the leasing arrangements in respect of the RasGas II LNG Carriers, the lessor claimed tax depreciation on the capital expenditures it incurred to acquire these vessels. As is typical in these leasing arrangements, tax and change of law risks were assumed by the lessee, in this case the Teekay Nakilat Joint Venture. Lease payments under the lease arrangements were based on certain tax and financial assumptions at the commencement of the leases and subsequently adjusted to maintain its agreed after-tax margin. On December 22, 2014, the Teekay Nakilat Joint Venture terminated the leasing of the RasGas II LNG Carriers. However, the Teekay Nakilat Joint Venture remains obligated to the lessor to maintain the lessor's agreed after-tax margin from the commencement of the lease to the lease termination date and placed \$6.8 million on deposit with the lessor as security against any future claims and recorded as part of restricted cash - long term in the Company's consolidated balance sheets.

The UK taxing authority (or *HMRC*) has been challenging the use of similar lease structures in the UK courts. One of those challenges was eventually decided in favor of HMRC (Lloyds Bank Equipment Leasing No. 1 or *LEL1*), with the lessor and lessee choosing not to appeal further. The LEL1 tax case concluded that capital allowances were not available to the lessor. On the basis of this conclusion, HMRC is now asking lessees on other leases, including the Teekay Nakilat Joint Venture, to accept that capital allowances are not available to their lessor. The Teekay Nakilat Joint Venture does not accept this contention and has informed HMRC of this position. It is not known at this time whether the Teekay Nakilat Joint Venture would eventually prevail in court. If the former lessor of the RasGas II LNG Carriers were to lose on a similar claim from HMRC, Teekay LNG's 70% share of the Teekay Nakilat Joint Venture's potential exposure is estimated to be approximately \$60 million. Such estimate is primarily based on information received from the lessor.

**e) Redeemable Non-Controlling Interest**

During 2010, an unrelated party contributed a shuttle tanker with a value of \$35.0 million to a subsidiary of Teekay Offshore for a 33% equity interest in the subsidiary. The non-controlling interest owner of Teekay Offshore's 67%-owned subsidiary holds a put option which, if exercised, would obligate Teekay Offshore to purchase the non-controlling interest owner's 33% share in the entity for cash in accordance with a defined formula. The redeemable non-controlling interest is subject to remeasurement if the formulaic redemption amount exceeds the carrying value. No remeasurement was required as at December 31, 2016.

In July 2015, Teekay Offshore issued 10.4 million of its 8.60% Series C Cumulative Convertible Perpetual Preferred Units (or *Series C Preferred Units*) in a private placement for net proceeds of approximately \$249.8 million. The terms of the Series C Preferred Units provided that at any time after the 18-month anniversary of the closing date, at the election of each holder, the Series C Preferred Units could be converted on a one-for-one basis into common units of Teekay Offshore. In addition, if after the three-year anniversary of the closing date, the volume weighted average price of the common units exceeded \$35.925, Teekay Offshore had the option to convert the Series C Preferred Units into common units. Distributions on the Series C Preferred Units were cumulative from the date of original issue and are payable quarterly in arrears, when, as and if declared by the board of directors of the general partner. The Series C Preferred Units could be redeemed in cash if a change of control occurred in Teekay Offshore.

In June 2016, Teekay Offshore and the holders of the Series C Preferred Units exchanged approximately 1.9 million of the Series C Preferred Units for approximately 8.3 million common units of Teekay Offshore. The number of common units issued consists of the approximately 1.9 million common units that would have been issuable under the original conversion terms of the Series C Preferred Units plus an additional approximately 6.4 million common units to induce the exchange (the *Inducement Premium*). The value of the additional 6.4 million common units on the date of conversion was approximately \$37.7 million, of which \$26.7 million has been charged to non-controlling interest and \$11.0 million has been charged to retained earnings on the Company's consolidated balance sheet as at December 31, 2016.

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In June 2016, Teekay Offshore and the holders of the Series C Preferred Units also exchanged the remaining approximately 8.5 million Series C Preferred Units for approximately 8.5 million Cumulative Convertible Perpetual Preferred Units (or the *Series C-1 Preferred Units*). The terms of the Series C-1 Preferred Units are equivalent to the terms of the Series C Preferred Units, with the exception that at any time after the 18-month anniversary of the original Series C Preferred Units closing date, at the election of each holder, each Series C-1 Preferred Unit is convertible into 1.474 common units of Teekay Offshore. In addition, if a unitholder of the Series C-1 Preferred Units elects to convert their Series C-1 Preferred Units into common units of Teekay Offshore, Teekay Offshore now has the option to redeem these Series C-1 Preferred Units for cash based on the closing market price of the common units of Teekay Offshore instead of common units. Furthermore, if after the three-year anniversary of the closing date, the volume weighted average price of the common units exceeds 150% of \$16.25 per unit, Teekay Offshore has the option to convert the Series C-1 Preferred Units into common units. In addition, unlike the Series C Preferred Units, for which distributions were to be paid in cash, quarterly distributions on the Series C-1 Preferred Units for the eight consecutive quarters ending March 31, 2018 may be paid in Teekay Offshore's sole discretion, in cash, common units (at a discount of 2% to the 10-trading day volume weighted average price ending on the distribution declaration date) or a combination of cash and common units (at the same discount), and thereafter, the distributions will be paid in cash. Consistent with the terms of the Series C Preferred Units, the Series C-1 Preferred Units may be redeemed in cash if a change of control occurs in Teekay Offshore. As a result, the Series C-1 Preferred Units are included on the Company's consolidated balance sheet as part of temporary equity which is above the equity section but below the liabilities section. The exchange of the Series C Preferred Units for Series C-1 Preferred Units has been accounted for as an extinguishment of the Series C Preferred Units and the issuance of the Series C-1 Preferred Units. As a result, the excess of the carrying value of the Series C Preferred Units over the fair value of the Series C-1 Preferred Units was approximately \$20.6 million, of which \$14.6 million was accounted for as an increase to non-controlling interest and \$6.0 million as an increase to retained earnings on the Company's consolidated balance sheet (the *Exchange Contribution*) as at December 31, 2016.

In June 2016, Teekay Offshore issued 4.0 million of its 10.50% Series D Preferred Units, of which 1,040,000 of the Series D Preferred Units were purchased by Teekay. Teekay Offshore pays to holders of the Series D Preferred Units a cumulative, quarterly cash distribution in arrears at an annual rate of 10.50%. However, Teekay Offshore may elect, in its sole discretion, to pay the quarterly distributions for the first eight consecutive quarters following issuance in cash, common units (at a discount of 4% to the 10-trading day volume weighted average price ending on the distribution declaration date) or a combination of cash and common units (at the same discount), and thereafter the distributions will be paid in cash. The Series D Preferred Units have no mandatory redemption date, but they are redeemable at Teekay Offshore's option after June 29, 2021 for a 10% premium to the liquidation value and for a 5% premium to the liquidation value any time after June 29, 2022. The Series D Preferred Units are exchangeable into common units of Teekay Offshore at the option of the holder at any time after June 29, 2021, based on the greater of the 10-trading day volume weighted average price at the time of the notice of exchange or \$4.00. A change of control event involving the purchase of at least 90% of the common units would result in the Series D Preferred Units being redeemable for cash. As a result, the Series D Preferred Units, net of Teekay's units, are included on the Company's consolidated balance sheet as part of temporary equity which is above the equity section but below the liabilities section.

**f) Other**

The Company enters into indemnification agreements with certain Officers and Directors. In addition, the Company enters into other indemnification agreements in the ordinary course of business. The maximum potential amount of future payments required under these indemnification agreements is unlimited. However, the Company maintains what it believes is appropriate liability insurance that reduces its exposure and enables the Company to recover future amounts paid up to the maximum amount of the insurance coverage, less any deductible amounts pursuant to the terms of the respective policies, the amounts of which are not considered material.

**16. Supplemental Cash Flow Information**

a) The changes in operating assets and liabilities for the years ended December 31, 2016, 2015, and 2014, are as follows:

	Year Ended December 31,		
	2016	2015	2014
Accounts receivable	96,497	(6,488)	136,660
Prepaid expenses and other	9,690	(10,607)	(1,618)
Accounts payable	(10,705)	(24,727)	(17,643)
Accrued liabilities and other	(57,149)	29,531	(56,768)
	<u>38,333</u>	<u>(12,291)</u>	<u>60,631</u>

b) Cash interest paid, including realized interest rate swap settlements, during the years ended December 31, 2016, 2015, and 2014, totaled \$341.0 million, \$318.1 million and \$328.2 million, respectively. In addition, during the years ended December 31, 2016, 2015, and 2014, cash interest paid relating to interest rate swap amendments and terminations totaled \$8.1 million, \$10.9 million and \$1.3 million, respectively.

c) In 2016, the portion of the distributions paid in kind by Teekay Offshore to the unit holders of Series C-1 Preferred Units and Series D Preferred Units, of \$11.7 million was treated as a non-cash transaction in the consolidated statements of cash flows.

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- d) As described in Note 3b, in August 2015, Teekay Tankers agreed to acquire 12 modern Suezmax tankers from Principal Maritime. As of December 31, 2015, all 12 of the vessels had been delivered for a total purchase price of \$661.3 million, consisting of \$612.0 million in cash and approximately 7.2 million shares of Teekay Tankers' Class A common stock or \$49.3 million, which was treated as a non-cash transaction in the consolidated statement of cash flows.
- e) During 2014, the Company had several transactions treated as non-cash transactions in the consolidated statements of cash flows. The Company took ownership of three VLCCs with a fair value of \$222.0 million, which were collateral for all amounts owing under the investment in term loans, which was concurrently discharged. As described in Note 3f, Teekay LNG acquired BG's ownership interest in the BG Joint Venture. As compensation, Teekay LNG assumed BG's obligation to provide services for the four LNG carrier newbuildings up to their delivery dates. The estimated fair value of the assumed obligation of approximately \$33.3 million was used to offset the purchase price. The sales of the *Huelva Spirit*, and *Algeciras Spirit* conventional tankers resulted in the vessels under capital leases being returned to the owner and the capital lease obligations being concurrently extinguished. The portion of dividends declared by the Teekay Tangguh Joint Venture that was used to settle the advances made to BLT LNG Tangguh Corporation and P.T. Berlian Laju Tanker of \$14.4 million was treated as a non-cash transaction.

**17. Vessel Sales, Asset Impairments and Provisions**

**a) Asset Impairments**

During the fourth quarter of 2016, the carrying value of the *Navion Marita* was written down to its estimated fair value, using an appraised value, as a result of fewer opportunities to trade the vessel in the spot conventional tanker market. The Company's consolidated statement of income for the year ended December 31, 2016, includes a \$2.1 million write-down related to this vessel. The write-down is included in the Company's Teekay Offshore Segment - Offshore Logistics.

In 2016, Teekay Offshore canceled the UMS construction contracts for its two UMS newbuildings. As a result, the carrying values of these two UMS newbuildings were written down to \$nil. The Company's consolidated statement of income for the year ended December 31, 2016 includes a \$43.7 million write-down related to these two UMS newbuildings. The write-down is included in the Company's Teekay Offshore Segment - Offshore Logistics.

During 2015, seven of Teekay Offshore's 1990s-built shuttle tankers were written down to their estimated fair value, using appraised values. Of the seven shuttle tankers, during the first quarter of 2015, one shuttle tanker was written down as a result of the expected sale of the vessel and the vessel was classified as held for sale on the Company's consolidated balance sheet as at December 31, 2015. An additional shuttle tanker was written down during the first quarter of 2015 as a result of a change in the operating plan of the vessel. In the fourth quarter of 2015, the write-down of five shuttle tankers, which had an average age of 17.5 years, was the result of changes in Teekay Offshore's expectations of their future opportunities, primarily due to their advanced age. The Company's consolidated statement of income for the year ended December 31, 2015, includes total write-downs of \$66.7 million related to these seven shuttle tankers. The write-downs are included in the Company's Teekay Offshore Segment - Offshore Logistics.

**b) Loan Loss Recoveries**

During 2014, the Company reversed a \$2.5 million loss provision for an amount receivable related to an FPSO front-end engineering and design study completed in 2013, as this receivable was recovered in 2014.

**c) Net (Loss) Gain on Sale of Vessels, Equipment and Other Operating Assets**

The Company's sale of vessels generally consists of those vessels approaching the end of their useful lives as well as other vessels it strategically sells to reduce exposure to a certain vessel class.

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The following table shows the net (loss) gain on sale of vessels, equipment and other operating assets for the years ended December 31, 2016, 2015, and 2014:

Segment	Asset Type	Completion of Sale Date	Net (Loss) Gain on Sale of Vessels, Equipment and Other Operating Assets		
			Year Ended December 31,		
			2016 \$	2015 \$	2014 \$
Teekay Offshore Segment - Offshore Logistics	FSO unit	(1)	(983)	—	—
Teekay Offshore Segment - Offshore Logistics	Shuttle tanker	Nov-16	6,817	—	—
Teekay Offshore Segment - Offshore Logistics	Shuttle tanker	Mar-15	—	1,643	(4,759)
Teekay Offshore Segment - Offshore Logistics	Shuttle tanker	Oct-14	—	—	3,121
Teekay Offshore Segment - Conventional Tankers	2 Conventional Tankers	Mar-16	65	(3,897)	—
Teekay LNG Segment - Conventional Tankers	Suezmax	Mar-17	(11,537)	—	—
Teekay LNG Segment - Conventional Tankers	2 Suezmaxes	Apr/May-2016	(27,439)	—	—
Teekay Tankers Segment - Conventional Tankers	2 Suezmaxes	Jan-17	(6,276)	—	—
Teekay Tankers Segment - Conventional Tankers	MR Tanker	Nov-16	(8,094)	—	—
Teekay Tankers Segment - Conventional Tankers	MR Tanker	Aug-16	(6,556)	—	—
Teekay Tankers Segment - Conventional Tankers	2 VLCCs	May-14	—	—	9,955
Teekay Parent Segment - Conventional Tankers	VLCC	Oct-16	(12,495)	—	—
Other			48	(177)	433
Total			<u>(66,450)</u>	<u>(2,431)</u>	<u>8,750</u>

(1) This vessel is expected to be sold in 2017.

See Note 2 – Segment Reporting for the asset impairments, loan loss recoveries, and net (loss) gain on sale of vessels, equipment and other operating assets, by segment for 2016, 2015 and 2014.

**18. (Loss) Earnings Per Share**

	Year Ended December 31,		
	2016 \$	2015 \$	2014 \$
Net (loss) income attributable to shareholders of Teekay Corporation	(123,182)	82,151	(54,757)
The Company's portion of the Inducement Premium and Exchange Contribution charged to retained earnings by Teekay Offshore (note 15e)	(4,993)	—	—
Net (loss) income attributable to shareholders of Teekay Corporation for basic income (loss) per share	(128,175)	82,151	(54,757)
Reduction in net earnings due to dilutive impact of stock-based compensation in Teekay LNG, Teekay Offshore and Teekay Tankers and Series C-1 Preferred Units in Teekay Offshore	(25)	(227)	—
Net (loss) income attributable to shareholders of Teekay Corporation for diluted income (loss) per share	(128,200)	81,924	(54,757)
Weighted average number of common shares	79,211,154	72,665,783	72,066,008
Dilutive effect of stock-based compensation	—	524,781	—
Common stock and common stock equivalents	<u>79,211,154</u>	<u>73,190,564</u>	<u>72,066,008</u>
(Loss) Earnings per common share:			
- Basic	(1.62)	1.13	(0.76)
- Diluted	(1.62)	1.12	(0.76)

Stock-based awards, which have an anti-dilutive effect on the calculation of diluted loss per common share, are excluded from this calculation. For the years ended December 31, 2016 and 2015, options to acquire 3.8 million shares and 1.4 million shares of Common Stock, respectively, had an anti-dilutive effect on the calculation of diluted earnings per common share. In periods where a loss attributable to shareholders has been incurred all stock-based awards are anti-dilutive.

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**19. Restructuring Charges**

During 2016, the Company recorded restructuring charges of \$26.8 million (\$14.0 million – 2015, \$9.8 million - 2014).

The restructuring charges in 2016 primarily relate to the closure of two offices and seafarers' severance amounts related to the tug business in Western Australia, reorganization of the Company's FPSO business to create better alignment with the Company's offshore operations, and reductions to charges previously accrued. The charges related to the seafarers' severance were partly recovered from customers and the recovery is included in revenues on the consolidated statements of income.

The restructuring charges in 2015 relate to the termination of the employment of certain seafarers upon the expiration of a time-charter-out contract, the reorganization of the Company's marine operations and corporate services, and the change in crew on a vessel as requested by a charterer. The actual restructuring charges relating to the termination of the employment of certain seafarers upon the expiration of a time-charter-out contract and the change in crew on a vessel as requested by a charterer in the amount of \$8.4 million were fully reimbursed to the Company by the charterers and the net reimbursement is included in voyage revenues.

The restructuring charges in 2014 relate to the termination of the employment of certain seafarers upon the re-delivery of an in-chartered conventional tanker in December 2014 and upon the sale of a vessel under capital lease to a third party in August 2014, and the reflagging of one shuttle tanker which commenced in January 2014 and was completed in March 2014, partially offset by an adjustment to the accrual for costs related to the reorganization of the Company's marine operations.

At December 31, 2016 and 2015 \$5.6 million and \$3.2 million, respectively, of restructuring liabilities were recorded in accrued liabilities on the consolidated balance sheets.

**20. Income Taxes**

Teekay and a majority of its subsidiaries are not subject to income tax in the jurisdictions in which they are incorporated because they do not conduct business or operate in those jurisdictions. However, among others, the Company's U.K. and Norwegian subsidiaries are subject to income taxes.

The significant components of the Company's deferred tax assets and liabilities are as follows:

	December 31, 2016 \$	December 31, 2015 \$
<b>Deferred tax assets:</b>		
Vessels and equipment	40,928	43,289
Tax losses carried forward <sup>(1)</sup>	276,291	321,648
Other	17,075	22,141
<b>Total deferred tax assets</b>	<b>334,294</b>	<b>387,078</b>
<b>Deferred tax liabilities:</b>		
Vessels and equipment	5,974	10,577
Long-term debt	1,691	3,218
Other	11,626	15,090
<b>Total deferred tax liabilities</b>	<b>19,291</b>	<b>28,885</b>
<b>Net deferred tax assets</b>	<b>315,003</b>	<b>358,193</b>
Valuation allowance	(290,015)	(322,491)
<b>Net deferred tax assets</b>	<b>24,988</b>	<b>35,702</b>

Net deferred tax assets are presented in other non-current assets and other long term liabilities in the accompanying consolidated balance sheets. Certain of the balances in the comparative columns above have been adjusted with no impact on the amount of the net deferred tax assets.

(1) Substantially all of the Company's net operating loss carryforwards of \$1.26 billion relate primarily to its Norwegian, U.K., Spanish, and Luxembourg subsidiaries and, to a lesser extent, to its Australian ship-owning subsidiaries. These net operating loss carryforwards are available to offset future taxable income in the respective jurisdictions, and can be carried forward indefinitely. The Company also has \$36.4 million in disallowed finance costs that relate to its Spanish subsidiaries and are available to offset future taxable income in Spain and can also be carried forward indefinitely.



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The components of the provision for income taxes are as follows:

	Year Ended December 31, 2016 \$	Year Ended December 31, 2015 \$	Year Ended December 31, 2014 \$
Current	(14,424)	(10,440)	(6,460)
Deferred	(10,044)	27,207	(3,713)
Income tax (expense) recovery	<u>(24,468)</u>	<u>16,767</u>	<u>(10,173)</u>

The Company operates in countries that have differing tax laws and rates. Consequently, a consolidated weighted average tax rate will vary from year to year according to the source of earnings or losses by country and the change in applicable tax rates. Reconciliations of the tax charge related to the relevant year at the applicable statutory income tax rates and the actual tax charge related to the relevant year are as follows:

	Year Ended December 31, 2016 \$	Year Ended December 31, 2015 \$	Year Ended December 31, 2014 \$
Net income before taxes	111,132	388,693	134,175
Net income (loss) not subject to taxes	57,862	252,604	(80,454)
<b>Net income subject to taxes</b>	<u>53,270</u>	<u>136,089</u>	<u>214,629</u>
<b>At applicable statutory tax rates</b>	5,996	32,750	39,382
Permanent and currency differences, adjustments to valuation allowances and uncertain tax positions	18,198	(49,789)	(28,027)
Other	274	272	(1,182)
<b>Tax expense (recovery) related to the current year</b>	<u>24,468</u>	<u>(16,767)</u>	<u>10,173</u>

The following is a roll-forward of the Company's unrecognized tax benefits, recorded in other long-term liabilities, from January 1, 2014 to December 31, 2016:

	Year Ended December 31, 2016 \$	Year Ended December 31, 2015 \$	Year Ended December 31, 2014 \$
Balance of unrecognized tax benefits as at January 1	18,390	20,335	20,304
Increases for positions related to the current year	6,422	4,578	3,643
Changes for positions taken in prior years	(3,729)	(2,965)	1,015
Decreases related to statute of limitations	(1,591)	(3,558)	(4,627)
Balance of unrecognized tax benefits as at December 31	<u>19,492</u>	<u>18,390</u>	<u>20,335</u>

The majority of the net increase for positions relates to the potential tax on freight income on an increased number of voyages for the year ended December 31, 2016.

The Company does not presently anticipate such uncertain tax positions will significantly increase or decrease in the next 12 months; however, actual developments could differ from those currently expected. The tax years 2007 through 2016 remain open to examination by some of the major jurisdictions in which the Company is subject to tax.

The Company recognizes interest and penalties related to uncertain tax positions in income tax expense. The interest and penalties on unrecognized tax benefits are included in the roll-forward schedule above and are approximately an increase of \$1.2 million in 2016, net of statute barred liabilities, and a reduction of \$0.3 million in 2015 and \$1.6 million in 2014.

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**21. Pension Benefits**

**a) Defined Contribution Pension Plans**

With the exception of certain of the Company's employees in Australia and Norway, the Company's employees are generally eligible to participate in defined contribution plans. These plans allow for the employees to contribute a certain percentage of their base salaries into the plans. The Company matches all or a portion of the employees' contributions, depending on how much each employee contributes. During the years ended December 31, 2016, 2015, and 2014, the amount of cost recognized for the Company's defined contribution pension plans was \$13.5 million, \$15.2 million and \$13.9 million, respectively.

**b) Defined Benefit Pension Plans**

The Company has a number of defined benefit pension plans (or the *Benefit Plans*) which primarily cover certain employees in Norway and Australia. As at December 31, 2016, approximately 65% of the defined benefit pension assets were held by the Norwegian plans and approximately 35% were held by the Australian plan. The pension assets in the Norwegian plans have been guaranteed a minimum rate of return by the provider, thus reducing potential exposure to the Company to the extent the provider honors its obligations.

The following table provides information about changes in the benefit obligation and the fair value of the Benefit Plans assets, a statement of the funded status, and amounts recognized on the Company's balance sheets:

	Year Ended December 31, 2016 \$	Year Ended December 31, 2015 \$
Change in benefit obligation:		
Beginning balance	82,415	121,604
Service cost	5,372	7,726
Interest cost	2,270	2,532
Contributions by plan participants	99	365
Actuarial (gain) loss	(2,943)	(9,165)
Benefits paid	(7,979)	(9,651)
Plan settlements and amendments	(34,725)	(14,891)
Foreign currency exchange rate changes	893	(16,001)
Other	(95)	(104)
Ending balance	45,307	82,415
Change in fair value of plan assets:		
Beginning balance	73,075	97,158
Actual return on plan assets	664	2,221
Contributions by the employer	5,517	7,858
Contributions by plan participants	99	365
Benefits paid	(7,974)	(9,646)
Plan settlements and amendments	(28,887)	(11,420)
Plan assets assumed on acquisition	—	203
Foreign currency exchange rate changes	726	(13,096)
Other	(445)	(568)
Ending balance	42,775	73,075
Funded status deficiency	(2,532)	(9,340)
Amounts recognized in the balance sheets:		
Other long-term liabilities	2,532	9,340
Accumulated other comprehensive loss:		
Net actuarial losses <sup>(1)</sup>	(13,775)	(17,374)

(1) As at December 31, 2016, the estimated amount that will be amortized from accumulated other comprehensive (loss) income into net periodic benefit cost in 2016 is \$0.5 million.

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As of December 31, 2016 and 2015, the accumulated benefit obligations for the Benefit Plans were \$38.9 million and \$67.1 million, respectively. The following table provides information for those pension plans with a benefit obligation in excess of plan assets and those pension plans with an accumulated benefit obligation in excess of plan assets:

	December 31, 2016 \$	December 31, 2015 \$
Benefit obligation	29,737	61,124
Fair value of plan assets	26,296	50,517
Accumulated benefit obligation	828	1,821
Fair value of plan assets	—	925

The components of net periodic pension cost relating to the Benefit Plans for the years ended December 31, 2016, 2015 and 2014 consisted of the following:

	Year Ended December 31, 2016 \$	Year Ended December 31, 2015 \$	Year Ended December 31, 2014 \$
Net periodic pension cost:			
Service cost	5,372	7,726	8,800
Interest cost	2,270	2,532	4,975
Expected return on plan assets	(2,718)	(2,895)	(5,333)
Amortization of net actuarial loss	469	1,538	7,148
Plan settlement	(3,899)	(140)	(3,332)
Other	445	568	557
Net cost	<u>1,939</u>	<u>9,329</u>	<u>12,815</u>

The components of other comprehensive income (loss) relating to the Plans for the years ended December 31, 2016, 2015 and 2014 consisted of the following:

	Year Ended December 31, 2016 \$	Year Ended December 31, 2015 \$	Year Ended December 31, 2014 \$
Other comprehensive income (loss):			
Net gain (loss) arising during the period	7,035	13,288	(14,954)
Amortization of net actuarial loss	469	1,538	7,148
Plan settlement	(3,905)	(140)	(3,332)
Total income (loss)	<u>3,599</u>	<u>14,686</u>	<u>(11,138)</u>

The Company estimates that it will make contributions into the Benefit Plans of \$2.4 million during 2017. The following table provides the estimated future benefit payments, which reflect expected future service, to be paid by the Benefit Plans:

Year	Pension Benefit Payments \$
2017	2,497
2018	2,156
2019	2,098
2020	2,123
2021	2,129
2021 – 2025	11,908
Total	<u>22,911</u>

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The fair value of the plan assets, by category, as of December 31, 2016 and 2015 were as follows:

	Year Ended December 31, 2016 \$	Year Ended December 31, 2015 \$
Pooled Funds	28,012	52,150
Mutual Funds		
Equity investments	7,972	11,089
Debt securities	1,772	2,512
Real estate	1,919	2,929
Cash and money market	1,181	1,674
Other	1,919	2,720
Total	42,775	73,075

- (1) The Company does not control the investment mix or strategy of the pooled funds. The pooled funds guarantee a minimum rate of return. If actual investment returns are less than the guarantee minimum rate, then the provider's statutory reserves are used to top up the shortfall. The pooled funds primarily invest in hold to maturity bonds, real estate and other fixed income investments, which are expected to provide a stable rate of return.
- (2) The mutual funds primary aim is to provide investors with an exposure to a diversified mix of predominantly growth oriented assets (56%) with moderate to high volatility and some defensive assets (44%).

The investment strategy for all plan assets is generally to actively manage a portfolio that is diversified among asset classes, markets and regions. Certain of the investment funds do not invest in companies that do not meet certain socially responsible investment criteria. In addition to diversification, other risk management strategies employed by the investment funds include gradual implementation of portfolio adjustments and hedging currency risks.

The Company's plan assets are primarily invested in commingled funds holding equity and debt securities, which are valued using the net asset value (or NAV) provided by the administrator of the fund. The NAV is based on the value of the underlying assets owned by the fund, minus its liabilities, and then divided by the number of shares or units outstanding. Commingled funds are classified within Level 2 of the fair value hierarchy as the NAVs are not publicly available.

The Company has a pension committee that is comprised of various members of senior management. Among other things, the Company's pension committee oversees the investment and management of the plan assets, with a view to ensuring the prudent and effective management of such plans. In addition, the pension committee reviews investment manager performance results annually and approves changes to the investment managers.

The weighted average assumptions used to determine benefit obligations at December 31, 2016 and 2015 were as follows:

	December 31, 2016	December 31, 2015
Discount rates	2.9%	3.0%
Rate of compensation increase	2.5%	3.4%

The weighted average assumptions used to determine net pension expense for the years ended December 31, 2016, 2015 and 2014 were as follows:

	Year Ended December 31, 2016 \$	Year Ended December 31, 2015 \$	Year Ended December 31, 2014 \$
Discount rates	2.9%	3.0%	2.9%
Rate of compensation increase	2.5%	3.4%	4.2%
Expected long-term rates of return	4.2%	4.0%	4.0%

- (1) To the extent the expected return on plan assets varies from the actual return, an actuarial gain or loss results. The expected long-term rates of return on plan assets are based on the estimated weighted-average long-term returns of major asset classes. In determining asset class returns, the Company takes into account long-term returns of major asset classes, historical performance of plan assets, as well as the current interest rate environment. The asset class returns are weighted based on the target asset allocations.

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## 22. Equity-accounted Investments

In December 2015, Teekay LNG entered into a joint venture agreement with Nogaholding, GIC, and Samsung to form a joint venture, the Bahrain LNG Joint Venture, for the development of an LNG receiving and regasification terminal in Bahrain and the supply of a FSU vessel. The Bahrain LNG Joint Venture is a joint venture between Nogaholding (30%), Teekay LNG (30%), GIC (24%), and Samsung (16%). The project will include an offshore LNG receiving jetty and breakwater, an adjacent regasification platform, subsea gas pipelines from the platform to shore, an onshore gas receiving facility, and an onshore nitrogen production facility with a total LNG terminal capacity of 800 million standard cubic feet per day and will be owned and operated under a 20-year agreement commencing in early-2019 with an estimated fully built-up cost of approximately \$960.0 million which is expected to be funded by the Bahrain LNG Joint Venture through a combination of equity capital and project-level debt through a consortium of regional and international banks. In addition, Teekay LNG will supply a FSU vessel in connection with this project, which will be modified from one of the nine MEGI LNG carrier newbuildings ordered from DSME through a 20-year time-charter contract with the Bahrain LNG Joint Venture (see Note 3a).

As at December 31, 2016, Teekay LNG had advanced \$62.9 million (December 31, 2015 – \$nil) to the Bahrain LNG Joint Venture. These advances bear interest at LIBOR plus 1.25% and as at December 31, 2016, the interest accrued on these advances was \$0.1 million (December 31, 2015 – \$nil).

In October 2014, Teekay Offshore sold a 1995-built shuttle tanker, the *Navion Norvegia*, to the OOG-TK Libra GmbH & Co KG (or *Libra Joint Venture*), a 50/50 joint venture with OOG. The vessel is committed to a new FPSO unit conversion for the Libra field located in the Santos Basin offshore Brazil. The conversion project will be completed at Sembcorp Marine's Jurong Shipyard in Singapore and the FPSO unit is scheduled to commence operations in mid-2017 under a 12-year fixed-rate contract with Petrobras (see Note 15b).

In July 2014, Teekay LNG, entered into a 50/50 joint venture (or the *Yamal LNG Joint Venture*) with China LNG and ordered six internationally-flagged icebreaker LNG carriers for a project located on the Yamal Peninsula in Northern Russia (or the *Yamal LNG Project*) (See Note 3e).

In June 2014, Teekay LNG acquired from BG (which was subsequently acquired by Shell) its ownership interests in four 174,000-cubic meter Tri-Fuel Diesel Electric LNG carrier newbuildings, which will be constructed by Hudong-Zhonghua Shipbuilding (Group) Co., Ltd. in China for an estimated total fully built-up cost to the joint venture of approximately \$1.0 billion. The vessels, upon delivery, which are scheduled between September 2017 and January 2019, will each operate under 20-year fixed-rate time-charter contracts, plus extension options, with Methane Services Limited, a wholly-owned subsidiary of BG (see Note 3f).

In January 2014, Teekay and Teekay Tankers formed TIL, which seeks to opportunistically acquire, operate and sell modern second-hand tankers to benefit from an expected recovery in the current cyclical low of the tanker market. Teekay and Teekay Tankers in the aggregate purchased 5.0 million shares of common stock, representing an initial 20% interest in TIL, as part of a \$250 million private placement by TIL, which represents a total investment by Teekay and Teekay Tankers of \$50.0 million. In October 2014, Teekay Tankers acquired an additional 0.9 million common shares in TIL, representing 2.43% of the then outstanding share capital of TIL. In October 2014, TIL authorized a share repurchase program for up to \$30 million and in September 2015, TIL authorized an increase in its share repurchase program to \$60 million. As of December 31, 2016, TIL has repurchased \$87.6 million of its shares at an average price of NOK 88.31 per share. The Company's combined interests of Teekay and Teekay Tankers in TIL were 19.55% as at December 31, 2016 (December 31, 2015 - 17.62%) (see Note 3h). As of December 31, 2016, the aggregate value of the Company's investment in TIL, based on the quoted market price of TIL's common stock on the Oslo Stock Exchange was \$24.7 million (December 31, 2015 - \$72.8 million).

In June 2013, Teekay Offshore completed the acquisition from Teekay of its 50% interest in a FPSO unit, the *Cidade de Itajai* (or *Itajai*). The Itajai FPSO has been operating on the Baúna and Piracaba (previously named Tiro and Sidon) fields in the Santos Basin offshore Brazil since February 2013 under a nine-year fixed-rate time-charter contract, plus extension options, with Petrobras. The remaining 50% interest in the *Itajai* FPSO unit is owned by OOG.

In February 2013, Teekay LNG entered into a joint venture agreement with Exmar to own and charter-in LPG carriers with a primary focus on the mid-size gas carrier segment. Exmar LPG BVBA (or the *Exmar LPG Joint Venture*), took economic effect as of November 1, 2012 and, as of December 31, 2016, its fleet included 19 LPG carriers and four LPG carrier newbuildings scheduled for delivery in 2017 and 2018. For Teekay LNG's 50% ownership interest in the joint venture, including newbuilding payments made prior to the November 1, 2012 economic effective date of the joint venture, Teekay LNG invested \$133.1 million in exchange for equity and a shareholder loan and assumed approximately \$108 million of its pro rata share of existing debt and lease obligations as of the economic effective date. These debt and lease obligations are secured by certain vessels in the Exmar LPG Joint Venture fleet. The excess of the book value of net assets acquired over Teekay LNG's investment in the Exmar LPG Joint Venture, which amounted to approximately \$6.0 million, has been accounted for as an adjustment to the value of the vessels, charter agreements and lease obligations of the Exmar LPG Joint Venture and recognition of goodwill, in accordance with the final purchase price allocation. Control of the Exmar LPG Joint Venture is shared equally between Exmar and Teekay LNG. Teekay LNG accounts for its investment in the Exmar LPG Joint Venture using the equity method.

Teekay LNG has a 52% ownership interest in the joint venture between Marubeni Corporation and Teekay LNG (or the *Teekay LNG-Marubeni Joint Venture*), which owns six LNG carriers. Since control of the Teekay LNG-Marubeni Joint Venture is shared jointly between Marubeni and Teekay LNG, Teekay LNG accounts for its investment in the Teekay LNG-Marubeni Joint Venture using the equity method.

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Teekay LNG has a 33% ownership interest in the Angola Joint Venture that owns four newbuilding 160,400-cubic meter LNG carriers (or the *Angola LNG Carriers*). The Angola LNG Carriers are chartered at fixed rates to the Angola LNG Project. The High-Q Joint Venture is a joint venture arrangement between Teekay Tankers and Wah Kwong Maritime Transport Holdings Limited (or *Wah Kwong*) whereby Teekay Tankers holds a 50% interest. The RasGas 3 Joint Venture is a joint venture arrangement between Teekay LNG and QGTC Nakilat (1643-6) Holdings Corporation whereby Teekay LNG holds a 40% interest. The RasGas 3 Joint Venture owns four LNG carriers and related long-term fixed-rate time charters to service the expansion of a LNG project in Qatar. Teekay LNG has ownership interests ranging from 49% to 50% in its joint ventures with Exmar (or the *Exmar LNG Joint Venture*) which owns two LNG carriers that are chartered out under long term contracts.

In November 2011, Teekay acquired a 40% interest in a recapitalized Sevan for approximately \$25 million. Sevan owns (i) two partially-completed hulls available for upgrade to FPSOs or other offshore projects; (ii) a licensing agreement with ENI SpA; (iii) an engineering and offshore project development business; and (iv) intellectual property rights, including offshore unit design patents. As of December 31, 2016, the aggregate value of the Company's 43% interest (43% interest —December 31, 2015) in Sevan, based on the quoted market price of Sevan's common stock on the Oslo Stock Exchange, was \$44.9 million (\$44.9 million – December 31, 2015).

A condensed summary of the Company's investments in equity-accounted investees by segment is as follows (in thousands of U.S. dollars, except percentages):

Investments in Equity-accounted Investees <sup>(1)</sup>	Ownership Percentage	As at December 31,	
		2016 \$	2015 \$
<b>Teekay Offshore - Offshore Production</b>			
Libra Joint Venture	50%	69,972	17,952
Itajai	50%	71,827	59,692
<b>Teekay LNG - Liquefied Gas</b>			
Angola LNG Carriers	33%	63,673	56,203
BG (note 3f)	20% - 30%	33,594	25,574
Exmar LNG Joint Venture	50%	79,577	77,844
Exmar LPG Joint Venture	50%	165,064	163,730
RasGas3 Joint Venture	40%	173,037	160,684
Teekay LNG - Marubeni Joint Venture	52%	294,764	283,589
Yamal LNG Joint Venture (note 3e)	50%	152,927	100,084
Bahrain LNG Joint Venture	30%	64,003	—
<b>Teekay Tanker - Conventional Tankers</b>			
TIL (note 3h)	11%	47,710	44,195
High Q Joint Venture	50%	22,025	21,166
<b>Teekay Parent - Offshore Production</b>			
Sevan	43%	22,180	22,581
<b>Teekay Parent - Conventional Tankers</b>			
TIL (note 3h)	8%	36,699	34,224
Other	50%	2,802	16,072
		1,299,854	1,083,590

(1) Investments in equity-accounted investees is presented in prepaid expenses and other, loans to equity-accounted investees, equity-accounted investments and accrued liabilities and other in the Company's consolidated balance sheets.

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A condensed summary of the Company's financial information for equity-accounted investments (18% to 52% owned) shown on a 100% basis are as follows:

	As at December 31,	
	2016	2015
Cash and restricted cash	500,355	386,727
Other assets - current	150,378	162,414
Vessels and equipment	4,655,170	3,936,718
Net investment in direct financing leases	1,776,954	1,813,991
Other assets - non-current	74,096	80,987
Current portion of long-term debt and obligations under capital lease	360,942	345,336
Other liabilities - current and obligations under capital lease	160,312	162,076
Long-term debt and obligations under capital lease	4,208,214	3,459,187
Other liabilities - non-current	213,060	447,947

	Year Ended December 31,		
	2016	2015	2014 <sup>(1)</sup>
Revenues	882,650	985,318	998,655
Income from vessel operations	365,472	433,023	454,135
Realized and unrealized (loss) gain on derivative instruments	(10,900)	(38,955)	(58,884)
Net income	239,766	275,259	300,837

Certain of the comparative figures have been adjusted to conform to the presentation adopted in the current year.

(1) The results included for TIL are from the date of incorporation in January 2014.

For the year ended December 31, 2016, the Company recorded equity income of \$85.6 million (2015 – \$102.9 million and 2014 - \$128.1 million). The income was primarily comprised of the Company's share of net income (loss) from the Teekay LNG-Marubeni Joint Venture, Angola LNG Project, the RasGas 3 Joint Venture, Exmar LNG Joint Venture, Exmar LPG BVBA, and from the interest in the *Itajai*. For the year ended December 31, 2016, \$8.7 million of the equity gain related to the Company's share of unrealized gain (loss) on interest rate swaps associated with these projects (2015 – \$5.9 million and 2014 - \$1.1 million).

### 23. Subsequent Events

- a) On January 23, 2017, Teekay LNG issued in the Norwegian bond market NOK 300 million (equivalent to approximately \$36 million) in new senior unsecured bonds through an add-on to its existing NOK bonds due in October 2021, priced at 103.75% of face value. All principal and interest payments have been economically swapped into U.S. Dollars with a fixed interest rate of 7.69%.
- b) In late October 2016, Teekay Tankers entered into agreements to sell two Suezmax tankers, the *Ganges Spirit* and the *Yamuna Spirit*, for an aggregate sales price of \$33.8 million. The *Ganges Spirit* completed its sale in January 2017. The vessel was classified as held for sale on the consolidated balance sheet as at December 31, 2016 and its net book value was written down to its sales price. In February 2017 the sales price of the *Yamuna Spirit* was reduced to \$15.7 million and delivery to its new owner was completed in March 2017.
- c) In January 2017 Teekay Tankers sold approximately 3.8 million shares of its Class A common stock under its COP for net proceeds of \$8.6 million, net of issuance costs. In addition, Teekay Tankers issued 2.2 million new shares of its Class A common stock to Teekay in a private placement for gross proceeds of \$5.0 million and the price per share was set to equal the weighted average price of Teekay Tankers' Class A common stock for the ten trading days ending on the date of issuance.
- d) On February 28, 2017, Teekay LNG took delivery of its third MEGI LNG carrier newbuilding, the *Torben Spirit*, which commenced its 10-month plus one-year option charter contract with a major energy company on March 3, 2017. Teekay LNG partially financed this MEGI LNG carrier newbuilding through a sales-leaseback transaction of approximately \$125 million.
- e) On December 21, 2016, the RasGas 3 Joint Venture, of which Teekay LNG has a 40% ownership interest, completed its debt refinancing by entering into a \$723 million secured term loan facility maturing in 2026 which replaced its outstanding term loan of \$610 million. As a result, the RasGas 3 Joint Venture distributed \$100 million in February 2017 to its shareholders, of which Teekay LNG's proportionate share was \$40 million.

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- f) On March 31, 2017, the Teekay LNG-Marubeni Joint Venture completed the refinancing of its existing \$396 million debt facility by entering into a new \$335 million U.S. Dollar-denominated term loan maturing in September 2019. The term loan is collateralized by first-priority statutory mortgages over the *Marib Spirit*, *Arwa Spirit*, *Methane Spirit* and *Magellan Spirit*, first priority pledges or charges of all the issued shares of the respective vessel owning subsidiaries, and guaranteed by Teekay LNG and Marubeni Corporation on a several basis. As part of the completed refinancing, Teekay LNG invested \$57 million of additional equity, based on its proportionate ownership interest, into the Teekay LNG-Marubeni Joint Venture.