TransAlta
Corporation
Annual
Report
2013



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# Letter to Shareholders

Our mission at TransAlta is straightforward: to operate a competitive power generation company committed to serving customers, expanding our business, driving operational excellence and, of course, growing shareholder value.

These business goals must be achieved in the context of the market forces and regulatory environment in which we operate. In 2013, we made significant steps forward in the business. We:

- exceeded our target of serving over 600 megawatts ("MW") of customers in our Commercial and Industrial business;
- re-contracted over 835 MW of our facilities to provide for long-term cash predictability, which in some cases also extended the lives of those assets;
- added newly operational MWs to our portfolio through the commissioning of our New Richmond wind farm and the return to service of Sundance Units 1 and 2;
- returned our trading business to its historical performance levels within tighter risk parameters;
- created financial flexibility and revealed the underlying value of our renewables assets through the launch of TransAlta Renewables;

- achieved progress with our growth program with the
  acquisition of wind generation assets in Wyoming and
  completed the work to construct a pipeline in Western
  Australia to bring natural gas to our generation facilities.
  Since January of 2012, we've invested or announced
  approximately \$730 million in new growth projects that
  have added over \$80 million in earnings before interest,
  taxes, depreciation and amortization ("EBITDA") to
  our business; and
- achieved cost savings in our corporate organization by downsizing our corporate operations and implementing a shared services approach which were both announced in November of 2012.

While these accomplishments are meaningful, our Canadian coal fleet underperformed and impacted our financial results in a significant way. In addition, profits from our U.S. coal operation declined compared to last year as high priced supply contracts expired and production was sold at lower market prices.

2013 comparable EBITDA of \$1,023 million is slightly above 2012 levels. Funds from operations of \$729 million are below 2012 levels. We were very satisfied with the performance of our gas, hydro, wind, energy marketing and corporate operations as they improved their businesses and met their commitments. Our U.S. coal operation has worked diligently over the past three years, in the face of significantly lower commodity prices, to re-position their plant with a competitive cost structure. We believe they've performed extremely well and we now have that plant positioned to add cash flow to TransAlta as prices improve in their market. Our energy marketing operations returned to their normal level of profitability within a tighter risk profile and with the oversight of a strong compliance program. Our Canadian coal operation is now re-doubling its efforts to achieve performance at the level of excellence expected in TransAlta, which will provide increased cash flow in 2014. This work will position those plants for the period when the Power Purchase Arrangements begin to roll off in 2018 providing TransAlta with access to higher market-based prices.

As we concluded 2013, your board and management reflected on all of the actions that were taken over the past two years and those that remain necessary to position TransAlta for the future. Our analysis showed that balance sheet constraints required that we either reduce our growth strategy until 2018 when the Sundance Units 1 and 2 Power Purchase Arrangement expires providing more cash, or take other actions now to provide the financial flexibility needed to sustain growth.

As a result, in February of this year, we took two additional steps to strengthen our financial position. We sold our interests in CE Generation, the Blackrock development project, and Wailuku, and we aligned the dividend to an annualized amount of \$0.72 per share. Part of the business, located in California, required cash contributions over the course of the next several years that were not economic in the short term; a good long-term investment but not the right investment for us at this time. Our partner on these assets, MidAmerican, purchased our interest and remains partners with us on gas-fired generation development in Canada and certain transmission projects in Alberta.



We are committed to providing our shareholders with a strong and sustainable dividend while also having the funds necessary to support growth for the future.

We are committed to providing our shareholders with a strong and sustainable dividend while also having the funds necessary to support growth for the future. Both components are necessary to provide quality shareholder returns.

Our first priority in 2014 is to improve the performance of the Canadian coal fleet. Other priorities include:

- growing our gas and renewables businesses in our core markets;
- re-contracting our Ontario and Australia facilities where agreements roll off in the 2016 to 2019 period;
- diversifying our businesses into transmission and gas transportation where feasible; and
- building on our customer base within our trading operations.

While the requirements of regulators in the power industry are constantly changing and becoming more demanding, we aim to meet our priorities within a compliant and operationally excellent work environment.

We thank you for your continued support and we assure you that the management team is committed to executing on its plan to meet your expectations.

Sincerely,

Dawn L. Farrell

President and CFO

**Ambassador Gordon Giffin** 

Chair of the Board of Directors

Anden D Hiffin





# **Plant Summary**

As of January 31, 2014	Facility	Capacity (MW) <sup>1</sup>	Ownership (%)	Net capacity ownership interest (MW) <sup>1,2</sup>	Fuel	Revenue source	Contract expiry date
Western Canada	Sundance, AB <sup>3</sup>	2,141	100%	2,141	Coal	Alberta PPA <sup>4</sup> /Merchant <sup>5</sup>	2017-2020
39 Facilities	Keephills, AB	790	100%	790	Coal	Alberta PPA/Merchant <sup>6</sup>	2020
	Genesee 3, AB Keephills 3, AB	466 463	50% 50%	233 232	Coal Coal	Merchant Merchant	-
	Sheerness, AB	780	25%	195	Coal	Alberta PPA	2020
	Poplar Creek, AB	356	100%	356	Gas	LTC <sup>7</sup> /Merchant	2023
	Fort Saskatchewan, AB	118	30%	35	Gas	LTC	2019
	Brazeau, AB	355	100%	355	Hydro	Alberta PPA	2020
	Big Horn, AB	120	100%	120	Hydro	Alberta PPA	2020
	Spray, AB	103	100%	103	Hydro	Alberta PPA	2020
	Ghost, AB Rundle, AB	51 50	100% 100%	51 50	Hydro Hydro	Alberta PPA Alberta PPA	2020 2020
	Cascade, AB	36	100%	36	Hydro	Alberta PPA	2020
	Kananaskis, AB	19	100%	19	Hydro	Alberta PPA	2020
	Bearspaw, AB	17	100%	17	Hydro	Alberta PPA	2020
	Pocaterra, AB	15	100%	15	Hydro	Merchant	
	Horseshoe, AB	14	100%	14	Hydro	Alberta PPA	2020
	Barrier, AB Taylor, AB	13 13	100% 81%	13 10	Hydro Hydro	Alberta PPA Merchant	2020
	Interlakes, AB	5	100%	5	Hydro	Alberta PPA	2020
	Belly River, AB	3	81%	2	Hydro	Merchant	-
	Three Sisters, AB	3	100%	3	Hydro	Alberta PPA	2020
	Waterton, AB	3	81%	2	Hydro	Merchant	-
	St. Mary, AB	2	81%	2	Hydro	Merchant	
	Upper Mamquam, BC	25	81%	20	Hydro	LTC	2025
	Pingston, BC Bone Creek, BC	45 19	40% 81%	18 15	Hydro Hydro	LTC LTC	2023 2031
	Akolkolex, BC	10	81%	8	Hydro	LTC	2015
	Summerview 1, AB	70	81%	57	Wind	Merchant	
	Summerview 2, AB	66	81%	53	Wind	Merchant	_
	Ardenville, AB	69	81%	56	Wind	Merchant	-
	Blue Trail, AB	66	81%	53	Wind	Merchant	-
	Castle River, AB <sup>8</sup>	44	81%	35	Wind	Merchant	-
	McBride Lake, AB Soderglen, AB	75 71	40% 40%	30 28	Wind Wind	LTC Merchant	2023
	Cowley Ridge, AB	21	100%	21	Wind	Merchant	
	Cowley North, AB	20	81%	16	Wind	Merchant	_
	Sinnott, AB	7	81%	5	Wind	Merchant	-
	Macleod Flats, AB	3	81%	2	Wind	Merchant	-
Total Western Cana	da	6,546		5,219			
Eastern Canada	Sarnia, ON	506	100%	506	Gas	LTC	2022-2025
16 Facilities	Mississauga, ON	108	50%	54	Gas	LTC	2018
	Ottawa, ON	74	50%	37	Gas	LTC	2017-2033
	Windsor, ON	68 7	50% 100%	34 7	Gas	LTC/Merchant	2016
	Ragged Chute, ON Misema, ON	3		/	Hydro	Merchant	_
	IVII3CIIIa, OIN			2	Hydro	ITC	2027
	Galetta ON		81%	2	Hydro Hydro	LTC LTC	
	Galetta, ON Appleton, ON	2		2 2 1	Hydro	LTC LTC LTC	2030
	Galetta, ON Appleton, ON Moose Rapids, ON	2	81% 81%	2		LTC	2030 2030
	Appleton, ON	2 1	81% 81% 81%	2	Hydro Hydro	LTC LTC	2030 2030 2030 2029
	Appleton, ON Moose Rapids, ON Wolfe Island, ON Melancthon, ON <sup>9</sup>	2 1 1 198 200	81% 81% 81% 81% 81%	2 1 1 160 161	Hydro Hydro Hydro Wind Wind	LTC LTC LTC LTC LTC LTC	2030 2030 2030 2029 2026-2028
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Fotal Eastern Canad Jnited States 18 Facilities	Appleton, ON Moose Rapids, ON Wolfe Island, ON Melancthon, ON Le Nordais, QC Kent Hills, NB New Richmond, QC	2 1 1 198 200 99 150 68 1,484 1,340	81% 81% 81% 81% 81% 81% 100%	2 1 1 160 161 99 100 55 1,219	Hydro Hydro Hydro Wind Wind Wind Wind Wind	LTC	2030 2030 2030 2029 2026-2028 2033 2033-2035 2033
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- Megawatts are rounded to the nearest whole number; columns may not add due to rounding. Accounts for TransAlta's 80.7% ownership of TransAlta Renewables. Includes a 15 MW uprate on Sundance unit 3; the resulting increased capacity will not be realized until the generator stator is replaced. PPA refers to Power Purchase Agreement Merchant capacity refers to uprates on unit 4 (53 MW), unit 5 (53 MW), and unit 6 (44 MW). Merchant capacity refers to uprates on unit 1 (12 MW) and unit 2 (12 MW).

- Includes seven individual turbines at other locations.

  Comprised of two facilities.

  The plant is currently not in operation. The Corporation is currently assessing the generation needs of the region and the financial feasibility of bringing the plant back into operation.

  Comprised of ten facilities.

  Comprised of four facilities.

# Management's Discussion and Analysis

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This Management's Discussion and Analysis ("MD&A") should be read in conjunction with our audited 2013 consolidated financial statements and our 2014 Annual Information Form. Our consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") for Canadian publicly accountable enterprises. All dollar amounts in the following discussion, including the tables, are in millions of Canadian dollars unless otherwise noted. This MD&A is dated Feb. 20, 2014. Additional information respecting TransAlta Corporation ("TransAlta", "we", "our", "us", or "the Corporation"), including our Annual Information Form, is available on SEDAR at www.sedar.com, on EDGAR at www.sec.gov, and on our website at www.transalta.com.

# Highlights

# Strategic Highlights

### **Financial Flexibility and Positioning for Growth**

- TAMA Transmission LP ("TAMA Transmission") successfully qualified to participate as a proponent in the Fort McMurray West 500 kilovolt Transmission Project.
- Formation of TransAlta Renewables Inc. ("TransAlta Renewables"), creating a vehicle for enhancing TransAlta's strategy for growth in contracted and operating assets.

#### **Long-Term Stability of Cash Flows**

- Long-term contract extension to supply power to the BHP Billiton Nickel West operations in Western Australia.
- 50 megawatt ("MW") long-term contract with the Salt River Project signed by CalEnergy, LLC ("CalEnergy").
- 74 MW 20-year long-term power supply contract with the Ontario Power Authority ("OPA") for our Ottawa facility.
- 86 MW long-term contract with the City of Riverside signed by CalEnergy.
- Approval of long-term contract with Puget Sound Energy ("PSE") at Centralia Thermal.

#### Growth

- Announced plans to build and own (TransAlta ownership 43 per cent) a \$178 million natural gas pipeline to our Solomon power station.
- Acquired 144 MW wind farm in Wyoming.
- Began commercial operations of our 68 MW long-term contracted New Richmond wind farm.

# **Operational Financial Results**

- Consolidated: Comparable earnings before interest, taxes, depreciation, and amortization ("EBITDA") for 2013 increased \$8 million to \$1,023 million. The improvements in the wind, hydro, gas, trading, and corporate segments were partially offset by a decline in comparable EBITDA from our Canadian and U.S. coal operations. Lower realized prices and higher coal costs at Canadian Coal facilities and lower pricing at Centralia Thermal contributed to the bulk of the decline in the coal business in 2013.
- Canadian Coal: In 2013, comparable EBITDA was \$309 million compared to \$373 million in 2012 and \$273 million in 2011. The main impact to the business in 2013 was lower realized prices, higher penalties, and higher coal costs. We also took over the Highvale Mine in 2012 and needed to expand the mine to be able to deliver coal to all six Sundance units and all three Keephills units. Planned major maintenance for this business sector has returned to normal levels after a large capital program in 2012 was completed.
- U.S. Coal: Comparable EBITDA decreased to \$66 million in 2013 compared to \$148 million in 2012 and \$211 million in 2011. The decline in comparable EBITDA is due to weak merchant pricing and expiry of contracts through the 2011 to 2013 period. Lower fuel and purchased power cost in 2013 reflect re-negotiated rail costs, and capital was reduced significantly due to the long period of economic curtailment of these units under low prices.
- Gas: Comparable EBITDA increased by \$15 million to \$327 million primarily due to a full year of income from the Solomon power station that was acquired in August 2012, partially offset by higher operations, maintenance, and administration ("OM&A") costs resulting from higher routine maintenance. Capital expenditures in this business were \$58 million, up \$9 million compared to 2012, and down \$11 million compared to 2011. These are relatively normal run rates for capital for this business.
- Wind: Comparable EBITDA for wind improved by \$29 million in 2013 to \$180 million, primarily due to higher prices in the Alberta market and commencement of operations at the New Richmond facility in Québec.
- Hydro: Comparable EBITDA increased by \$20 million to \$147 million, primarily due to favourable pricing in the Alberta market.
- Equity Investments: The geothermal business, which is recorded within equity investments, lost \$10 million in 2013 compared to a loss of \$15 million in 2012. The reduction of the loss is primarily due to favourable prices in 2013 relative to 2012.
- Energy Trading Segment: Our Energy Trading business showed an improvement in comparable EBITDA of \$74 million in 2013 to \$61 million. Tighter risk controls and additional asset optimization capability contributed to the turnaround in this business.
- Corporate Segment: OM&A improved by \$16 million due to savings achieved through the restructuring in 2012.
- Overall availability, including finance leases and equity investments, was 85.5 per cent compared to 88.4 per cent in 2012.
   Adjusting for economic dispatching at Centralia Thermal, availability was 87.8 per cent compared to 90.0 per cent in 2012. The decrease is mainly due to higher unplanned outages at the Alberta coal Power Purchase Arrangement ("PPA") facilities, primarily driven by the Keephills Unit 1 force majeure outage, partially offset by lower planned outages at the Alberta coal facilities.
- Overall production increased 3,732 gigawatt hours ("GWh") to 42,482 GWh compared to 2012.

# **Consolidated Highlights**

- Funds from operations ("FFO") decreased \$59 million to \$729 million compared to 2012, primarily due to higher cash interest and cash taxes as well as differences in timing of cash proceeds associated with power hedges.
- Comparable earnings were \$81 million (\$0.31 per share), down from \$117 million (\$0.50 per share) in 2012. The decrease in
  comparable earnings is primarily due to an increase in depreciation and amortization, income taxes, and net interest, partially
  offset by an increase in comparable EBITDA.
- Reported net loss attributable to common shareholders was \$71 million (\$0.27 net loss per share), up from net loss attributable to common shareholders of \$615 million (\$2.62 net loss per share) in 2012. The change is driven by an increase in comparable EBITDA of \$8 million and the following non-comparable amounts, net of tax:
  - Decrease in asset impairment charges of \$342 million
  - Decrease in impact of Sundance Units 1 and 2 return to service of \$170 million
  - Decrease in impact of writeoff of deferred income tax assets of \$141 million
  - Increase in impact of the California claim of \$42 million
  - Increase in loss on assumption of pension obligations of \$22 million due to the assumption of mining operations at the Highvale Mine and related pension obligations for mine employees
  - Increase in loss on de-designated hedges of \$20 million
  - Decrease in restructuring provision of \$12 million
  - Decrease in gain on sale of collateral of \$11 million
- We have accrued for a potential settlement with San Diego Gas & Electric Company, the California Attorney General, and other government agencies with a pre-tax impact of U.S.\$52 million.

The following table depicts key financial results and statistical operating data:

Year ended Dec. 31	2013	2012	2011
Availability (%) <sup>1</sup>	85.5	88.4	85.4
Adjusted availability (%) <sup>1,2</sup>	87.8	90.0	88.2
Production (GWh) <sup>1</sup>	42,482	38,750	41,012
Revenues	2,292	2,210	2,618
Comparable EBITDA <sup>3</sup>	1,023	1,015	1,044
Net earnings (loss) attributable to common shareholders	(71)	(615)	290
Comparable net earnings attributable to common shareholders <sup>3</sup>	81	117	232
Funds from operations <sup>3</sup>	729	788	812
Cash flow from operating activities	765	520	690
Free cash flow <sup>3</sup>	295	258	417
Net earnings (loss) per share attributable to common shareholders, basic and diluted	(0.27)	(2.62)	1.31
Comparable earnings per share <sup>3</sup>	0.31	0.50	1.05
Funds from operations per share <sup>3</sup>	2.76	3.35	3.66
Free cash flow per share <sup>3</sup>	1.12	1.10	1.88
Dividends paid per common share	1.16	1.16	1.16
As at Dec. 31	2013	2012	
Total assets	9,783	9,503	
Total long-term liabilities	5,508	4,769	

<sup>1</sup> Availability and production includes all generating assets (generation operations, finance leases, and equity investments).

<sup>2</sup> Adjusted for economic dispatching at Centralia Thermal.

<sup>3</sup> These comparable items are not defined under IFRS. Presenting these items from period to period provides management and investors with the ability to evaluate earnings trends more readily in comparison with prior periods' results. Refer to the Non-IFRS Measures section of this MD&A for further discussion of these items, including, where applicable, reconciliations to measures calculated in accordance with IFRS.

#### Comparable EBITDA is as follows:

Year ended Dec. 31	2013	2012	2011
Generation Segment			
Canadian Coal	309	373	273
U.S. Coal	66	148	211
Gas	327	312	275
Wind	180	151	163
Hydro	147	127	105
Total Generation Segment	1,029	1,111	1,027
Energy Trading Segment	61	(13)	101
Corporate Segment	(67)	(83)	(84)
Total comparable EBITDA	1,023	1,015	1,044

# **Business Environment**

# Overview of the Business

We are a wholesale power generator and marketer with operations in Canada, the United States ("U.S."), and Australia. We own, operate, and manage a highly contracted and geographically diversified portfolio of assets and use a broad range of generation fuels including coal, natural gas, hydro, wind, and geothermal. During 2013, commercial operations began at our New Richmond wind farm and Sundance Units 1 and 2 were returned to service. We added an additional 628 MW of power to our generation portfolio as a result of these projects, increasing our gross generating capacity 1 to 9,046 MW (8,453 MW net ownership interest). Please refer to the Significant Events section of this MD&A for more information.

We operate in a variety of markets to generate electricity, find buyers for the power we generate, and arrange for its transmission. The major markets we operate in are Western Canada, the Western U.S., and Eastern Canada. The key characteristics of these markets are described below.

#### **Demand**

Demand for electricity, among other things, is a fundamental driver of prices in all of our markets. Economic growth is the main driver of longer-term changes in the demand for electricity. Historically, demand for electricity in all three of our major markets has grown at an average rate of one to three per cent per year. In recent years, demand growth has been weaker in Ontario and the Pacific Northwest due to economic conditions, while Alberta has shown steady growth.

Alberta has seen annual average demand growth of about three per cent over the past three years. Investment in oil sands development is a key driver of electricity demand growth in the province, and several large projects are under way that should bring new demand over the next several years. In the Pacific Northwest and Ontario, demand growth was relatively flat in 2013.

### Supply

Reserve margins measure available capacity in a market over and above the capacity needed to meet normal peak demand levels. Falling reserve margins indicate that generation capacity is becoming relatively scarce and results in increased power prices. During 2013, reserve margins in Alberta increased as a result of Sundance Units 1 and 2 returning to service and reserve margins were relatively flat in the Pacific Northwest. In Ontario, reserve margins decreased primarily due to the retirement of coal generation capacity, which was partially offset by the effect of nuclear generating plants returning to service at the end of 2012.

Renewable generation growth has been strong in all regions for the past several years. In 2013, neither Alberta nor the Pacific Northwest increased wind capacity; however, both regions completed small biomass projects. Ontario continues to develop wind and solar capacity through its Feed-in Tariff program and increased renewable capacity by over 1,000 MW in 2013.

<sup>1</sup> We measure capacity as net maximum capacity (see glossary for definition of this and other key terms), which is consistent with industry standards. Capacity figures represent capacity owned and in operation unless otherwise stated.

<sup>2</sup> All Generation assets excluding equity investments.

### **Transmission**

Transmission refers to the bulk delivery system of power and energy between generating units and consumers. In the North American market, we believe investment in transmission capacity has not kept pace with the growth in demand for electricity. Lead times in new transmission infrastructure projects are significant, subject to extensive consultation processes with landowners, and subject to regulatory requirements that can change frequently. As a result, existing generation or additions of generating capacity may not have access to markets until key bulk transmission upgrades and additions are completed.

#### **Alberta**

Transmission development in Alberta has not kept pace with growing loads and new generation connections. In 2009, the Government of Alberta declared several transmission projects as being critical, including three major transmission lines that will be completed between late 2013 and early 2015. A fourth major transmission line, consisting of two lines, is the subject of a competitive procurement process, in which TAMA Transmission, a partnership between TransAlta and MidAmerican Transmission, is participating. The Alberta Electric System Operator ("AESO") announced its selection of a short-list of companies for the first of the two lines, identifying that TAMA Transmission will participate in the next stage of its competitive process for the project. The AESO is expected to start the Request for Proposals ("RFP") process on the second line in 2015. Although the critical transmission projects should address constraints along major paths, a number of regional transmission lines are currently constrained or are forecast to become constrained in the near future as a result of new connections. In January 2014, the AESO published a new long-term transmission plan and has proposed a number of new transmission facilities to address these regional constraints. Until these projects can be completed, there will continue to be transmission constraints in some regions of the province, particularly southern Alberta, central-eastern Alberta, and Fort McMurray.

#### Ontario

Ontario has procured significant quantities of generation, in particular renewable generation, but procurement has been limited to prevent significant congestion on Ontario's transmission system. Several transmission projects in both southwestern and northeastern Ontario have been developed to increase transmission capability and facilitate the procurement of additional generation. The Independent Electricity System Operator's forecast of constrained generation for the time period from 2013 to 2015 includes minor impacts to generation in southwestern Ontario and significant impacts to generation in northern Ontario. Rapid load growth in the area north of Dryden as well as the potential to develop the mineral-rich area known as the Ring of Fire could require significant transmission expansion. This transmission expansion may be subject to a competitive process.

# **Environmental Legislation and Technologies**

Environmental issues and related legislation have, and will continue to have, an impact upon our business. Since 2007, we have incurred costs as a result of Greenhouse Gas ("GHG") legislation in Alberta. Please refer to the Climate Change and the Environment section of this MD&A for additional information on the changes to Alberta's GHG legislation that occurred in 2012. Our exposure to increased costs as a result of environmental legislation in Alberta is mitigated to some extent through change-in-law provisions in our PPAs. We are in discussions with the provincial government to ensure coordination between GHG and air pollutant regulations, such that emission reduction objectives are achieved in the most effective manner while taking into consideration the reliability and cost of Alberta's generation supply. In the State of Washington, the TransAlta Energy Bill (the "Bill") was signed into law and provides a framework to transition from coal to other forms of generation. Legislation in other jurisdictions is in various stages of maturity and sophistication.

While TransAlta discontinued its Pioneer carbon capture and storage ("CCS") project ("Project Pioneer") in April 2012, the detailed Front-End Engineering Design ("FEED") study that was completed provided us with a comprehensive analysis of this technology, which should provide ongoing value in the assessment of other carbon control strategies. We also are actively and broadly disseminating the knowledge from Project Pioneer to others who may benefit from it.

### **Economic Environment**

In 2014, we expect slow to moderate growth in all markets. We continue to monitor global events and their potential impact on the economy and our supplier and commodity counterparty relationships.

### **Contracted Cash Flows**

During the year, approximately 90 per cent of our consolidated power portfolio was contracted through the use of PPAs and other long-term contracts. We also entered into short-term physical and financial contracts for the remaining volumes, which are primarily for periods of up to five years. The average prices of these contracts for 2013 were approximately \$60 per megawatt hour ("MWh") in Alberta and approximately U.S.\$40 per MWh in the Pacific Northwest.

# **Electricity Prices**



Spot electricity prices are important to our business as our merchant natural gas, wind, hydro, and thermal facilities are exposed to these prices. Changes in these prices will affect our profitability, economic dispatching, and any contracting strategy. Our Alberta plants, operating under PPAs, receive contracted capacity payments based on targeted availability and will pay penalties or receive payments for production outside targeted availability based upon a rolling 30-day average of spot prices. The PPAs and long-term contracts covering a number of our generating facilities help minimize the impact of spot price changes.

Spot electricity prices in our markets are driven by customer demand, generator supply, natural gas prices, and the other business environment dynamics discussed above. We monitor these trends in prices, and schedule maintenance, where possible, during times of lower prices.

For the year ended Dec. 31, 2013, average spot prices in Alberta increased compared to 2012, primarily due to tighter supply and demand conditions. In the Pacific Northwest, average spot prices increased due to higher natural gas prices and lower hydro generation. Average spot prices in Ontario for the year ended Dec. 31, 2013 increased compared to 2012 due to higher natural gas prices, which was partially offset by an increase in supply as a result of nuclear generating plants returning to service.

In 2014, power prices in Alberta are expected to be lower than 2013 as a result of more baseload generation and fewer planned maintenance outages across the market. However, prices can vary based on supply and weather conditions. In the Pacific Northwest, we expect prices to settle higher than in 2013 due to marginally higher natural gas prices and an outlook for lower hydro generation compared to 2013.

In 2012, average spot prices in all three markets decreased compared to 2011, partially due to lower natural gas prices. In Alberta, spot prices also decreased as a result of overall higher availability. In the Pacific Northwest, spot prices also decreased as a result of increased wind and hydro generation. Spot prices in Ontario also decreased compared to 2011 due to increased supply resulting from facilities returning to service.

# **Spark Spreads**



Spark spreads measure the potential profit from generating electricity at current market rates. A spark spread is calculated as the difference between the market price of electricity and its cost of production. The cost of production is comprised of the total cost of fuel and the efficiency, or heat rate, with which the plant converts the fuel source to electricity. For most markets, a standardized plant heat rate is assumed to be 7,000 British Thermal Units ("Btu") per kilowatt hour ("KWh").

Spark spreads will also vary between plants due to their design, the geographical region in which they operate, and customer and/or market requirements. The change in the prices of electricity and natural gas, and the resulting spark spreads in our three major markets, affect our operational results.

For the year ended Dec. 31, 2013, average spark spreads increased in Alberta compared to 2012 due to higher power prices driven by tighter supply and demand conditions. In the Pacific Northwest, average spark spreads increased due to higher power prices driven by lower hydro generation. Average spark spreads in Ontario decreased for the year ended Dec. 31, 2013 compared to 2012 as power prices did not rise as rapidly as natural gas prices, largely due to nuclear generating plants returning to service and increased renewables generation.

In 2012, average spark spreads in Alberta decreased compared to 2011 due to lower power prices. In the Pacific Northwest and Ontario, average spark spreads increased as a result of lower natural gas prices compared to 2011. The decrease in natural gas prices was greater than the decrease in spot prices in both the Pacific Northwest and Ontario, causing the spark spread to increase compared to 2011.

# Strategy

Our goals are to deliver shareholder value by delivering solid returns through a combination of dividend yield and disciplined growth in cash flow per share, while striving for a low to moderate risk profile, balancing capital allocation, and maintaining financial strength. Our comparable cash flow growth is driven by optimizing and diversifying our existing assets and further expanding our overall portfolio and operations in Canada, the U.S., and Australia. We are focusing on these geographic areas as our expertise, scale, and diversified fuel mix allows us to create expansion opportunities in our core markets. Our strategy to achieve these goals has the following key elements:

# **Growth Strategy**

Our growth strategy is to continue to diversify our asset base in three core markets with a focus on renewables and natural gas-fired generation. Furthermore, we are focused on ensuring we replace our coal assets that are scheduled to retire in Alberta and the Pacific Northwest.

During 2013, we executed on our strategy through the commencement of commercial operations at our 68 MW New Richmond wind farm and the acquisition of a 144 MW wind farm in Wyoming through one of our wholly owned subsidiaries. In early 2014 we announced the construction of a new natural gas pipeline in Australia. Please refer to the Significant Events section of this MD&A for more information.

# **Financial Strategy**

Our financial strategy is to maintain a strong financial position and investment grade credit ratings to provide a solid foundation for our long-cycle, capital-intensive, and commodity-sensitive business. A strong financial position and investment grade credit ratings improve our competitiveness by providing greater access to capital markets, lowering our cost of capital compared to that of non-investment grade companies, and enabling us to contract our assets with customers on more favourable commercial terms. We value financial flexibility, which allows us to selectively access the capital markets when conditions are favourable.

### **Contracting Strategy**

In 2013, we continued to see some demand growth in our Alberta market; however, demand in the Pacific Northwest and Ontario remained relatively flat. While we are not immune to lower power prices, the impact of these lower prices is mitigated through our contracting strategy. Currently, approximately 88 per cent of 2014 and approximately 80 per cent of 2015 expected capacity across our fleet is contracted. On an aggregated portfolio basis, depending on market conditions, we target being up to 90 per cent contracted for the upcoming year. This contracting strategy helps protect our cash flow and our financial position through economic cycles.

#### **Operational Strategy**

We manage our facilities to achieve stable and predictable operations that are comparatively low cost and balanced with our fleet availability target. Our target for 2014 is to increase productivity and achieve overall fleet availability of 88 to 90 per cent. Over the last three years, our average adjusted availability has been 88.7 per cent, which is slightly below our corporate target.

# Capability to Deliver Results

We have the following core competencies and non-capital resources that give us the capability to achieve our corporate objectives. Refer to the Liquidity and Capital Resources section of this MD&A for further discussion of the capital resources available that will assist us in achieving our objectives.

# **Operational Excellence**

We seek to optimize our generating portfolio by owning and managing a mix of relatively low-risk assets and fuels to deliver an acceptable and predictable return. Our strategic focus is primarily on improving base operations, repositioning coal, and diversifying our portfolio.

# **Financial Strength**

We manage our financial position and cash flows to maintain financial strength and flexibility throughout all economic cycles. This financial discipline will continue to be important during 2014. We continue to maintain \$2.1 billion in committed credit facilities, and as of Dec. 31, 2013, \$0.9 billion was available to us. Our investment grade credit rating, available credit facilities, FFO, manageable debt maturity profile, and access to the capital markets provide us with financial flexibility. As a result, we can be selective if and when we go to the capital markets for funding.

The funding required for our growth strategy is supported by our financial strength. In 2013, we took advantage of favourable capital markets by completing the initial public offering of TransAlta Renewables in August, as well as an offering of \$400 million of Canadian medium-term senior notes. Looking forward, we expect continued capital market support for projects that meet our return requirements and risk profile.

Our senior unsecured debt is rated as investment grade, BBB- (stable), Baa3 (stable), and BBB (stable) with Standard and Poor's ("S&P"), Moody's Investors Services, and DBRS, respectively. Our preferred shares are rated P-3 and Pfd-3 with S&P and DBRS, respectively.

Participation in the Dividend Reinvestment and Share Purchase ("DRASP") plan is approximately 30 to 35 per cent.

# **Disciplined Capital Allocation**

We are committed to optimizing the balance between returning capital to shareholders, investing in the base business and growth opportunities, and maintaining a strong financial postion.

We continue to selectively grow our diversified generating fleet to increase production and meet future demand requirements, with growth projects that have the ability to meet or exceed our targeted rate of return. During 2013, commercial operations began at our 68 MW New Richmond wind farm, and in early 2014 we announced the construction of a new natural gas pipeline in Australia. We also completed the acquisition of a 144 MW wind farm in Wyoming through one of our wholly owned subsidiaries.

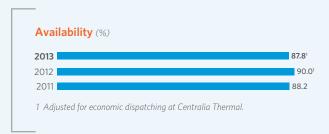
# People

Our experienced leadership team is made up of senior business leaders who bring a broad mix of skills in the electricity sector, finance, law, government, regulation, engineering, operations, construction, risk management, and corporate governance. The leadership team's experience and expertise, our employees' knowledge and dedication to superior operations, and our entire organization's knowledge of the energy business, in our opinion, has resulted in a long-term proven track record of financial stability.

# **Performance Metrics**

We have key measures that, in our opinion, are critical to evaluating how we are progressing towards meeting our goals. These measures, which include a mix of operational, risk management, and financial metrics, are discussed below.

# **Availability**



We strive to optimize the availability of our plants throughout the year to meet demand. However, this ability to meet demand is limited by the requirement to shut down for planned maintenance and unplanned outages, as well as by reduced production from derates. Our goal is to minimize these events through regular assessments of our equipment and a comprehensive review of our maintenance plans in order to balance our maintenance costs with optimal availability targets. Over the past three years, we have achieved an average adjusted

availability of 88.7 per cent, which was slightly below our long-term target of 89 to 90 per cent. If availability is also adjusted for the force majeure outage at Keephills Unit 1, the average adjusted availability is 89.7 per cent, which is within our long-term target. Our availability in 2013, after adjusting for economic dispatching at Centralia Thermal, was 87.8 per cent (2012 – 90.0 per cent).

Availability for the year ended Dec. 31, 2013 decreased compared to 2012, primarily due to higher unplanned outages at the Alberta coal PPA facilities, which was largely driven by the Keephills Unit 1 force majeure outage, partially offset by lower planned outages at the Alberta coal PPA facilities.

In 2012, availability increased compared to 2011, primarily due to lower planned and unplanned outages at Centralia Thermal and lower unplanned outages at the Alberta coal PPA facilities, partially offset by higher planned outages at the Alberta coal PPA facilities.

# **Operating Costs**



Our OM&A costs reflect the operating cost of our facilities. These costs can fluctuate due to the timing and nature of planned maintenance activities. The remainder of OM&A costs reflects the cost of day-to-day operations. Our target is to offset the impact of inflation in our recurring operating costs as much as possible through cost control and targeted productivity initiatives. We measure our ability to maintain productivity on OM&A based on the cost per installed MWh of capacity.

For the year ended Dec. 31, 2013, OM&A costs per installed MWh were consistent with 2012.

In 2012, OM&A costs per installed MWh decreased compared to 2011, primarily due to lower compensation costs as a result of productivity initiatives and a continued focus on reducing costs.

# **Cash Flow**

We focus our base business on delivering strong cash flows. In addition, our goal is to steadily grow comparable EBITDA and cash flows over the long term through the addition of new assets, recognizing that the amount of growth may fluctuate year over year with the amount of our cash flows from our base business.

Year ended Dec. 31	2013	2012	2011
Comparable EBITDA	1,023	1,015	1,044
Comparable Earnings Per Share ("EPS")	0.31	0.50	1.05
FFO	729	788	812
FFO per share	2.76	3.35	3.66
Free cash flow	295	258	417
Free cash flow per share	1.12	1.10	1.88

# Sustaining Capital and Productivity Expenditures

We are in a long-cycle, capital-intensive business that requires significant capital expenditures. Our goal is to undertake sustaining capital and productivity expenditures that ensure our facilities operate reliably and safely over a long period of time. Our sustaining capital and productivity expenditures are comprised of four components: (i) routine and mine capital, (ii) planned maintenance, (iii) productivity capital, and (iv) finance lease.



In 2013, we spent \$122 million less on sustaining capital and productivity expenditures compared to 2012, which was made up of \$11 million more on routine capital, an increase of \$15 million on mine capital, \$133 million less on planned maintenance, a decrease of \$24 million on productivity, and \$9 million more on finance leases. The increase in routine capital was primarily due to the generating rewind at the Keephills facility. Mine capital increased as a result of the purchase of pre-stripping trucks during the year. Planned maintenance decreased, primarily due to fewer planned

outages during the year. Productivity expenditures decreased as a result of a reduction in corporate improvement initiatives. The finance leases were for mining equipment that was in use, or committed to, by Prairie Mines and Royalty Ltd. ("PMRL") for mining operations at our Highvale Mine.

In 2012, we spent \$139 million more on sustaining capital and productivity expenditures compared to 2011, which was made up of \$18 million more on routine and mine capital, \$102 million more on planned maintenance, and \$19 million more on productivity. The increase in routine and mine capital was due to non-turnaround maintenance projects. Planned maintenance increased primarily due to planned outages at Keephills Units 1 and 2 and Sundance Units 3 and 5. A significant part of the expenditures at the Keephills facility relate to more comprehensive planned major maintenance, including significant component replacements that are not expected to be replaced again over the balance of the life of the plant. Productivity increased as a result of costs associated with several corporate improvement initiatives.

# Safety

Safety is our top priority with all of our staff, contractors, and visitors. Our objective is to maintain our Injury Frequency Rate ("IFR"), which includes employees and contractors, at less than 1.00 for 2013. Our ultimate goal is to achieve zero injury incidents.

Year ended Dec. 31	2013	2012	2011
IFR	0.93	0.89	0.89

# **Investment Grade Ratios**

Investment grade ratings support contracting activities and provide better access to capital markets through commodity and credit cycles. We are focused on maintaining a strong financial position and cash flow coverage ratios to support stable investment grade credit ratings.

Year ended Dec. 31	2013	2012	2011
Adjusted cash flow to interest coverage (times) <sup>1,2</sup>	4.0	4.4	4.4
Adjusted cash flow to debt (%) <sup>1,3</sup>	16.9	19.0	20.1
Debt to comparable EBITDA (times) <sup>4</sup>	4.2	4.1	3.8

- 1 Adjusted for the impacts associated with the California claim in 2013 and the Sundance Units 1 and 2 arbitration in 2012.
- 2 Adjusted cash flow to interest coverage is calculated as cash flow from operating activities before changes in working capital plus net interest expense divided by interest on debt less interest income.
- 3 Adjusted cash flow to debt is calculated as cash flow from operating activities before changes in working capital divided by average total debt less average cash and cash equivalents.
- 4 Debt to comparable EBITDA is calculated as long-term debt including current portion less cash and cash equivalents divided by comparable EBITDA.

Adjusted cash flow to interest coverage decreased in 2013 compared to 2012, primarily due to higher interest on debt. Adjusted cash flow to interest coverage in 2012 was comparable to 2011. Our goal is to maintain this ratio in a range of four to five times.

Adjusted cash flow to debt decreased in 2013 compared to 2012, due to higher average debt levels in 2013. Adjusted cash flow to debt decreased in 2012 compared to 2011 due to higher average debt levels in 2012. Our goal is to maintain this ratio in a range of 20 to 25 per cent.

We have elected to present debt to comparable EBITDA in place of the debt to invested capital ratio. We believe that the EBITDA-based metric is more relevant to the users of the financial statements as it is a more current, cash-based metric, rather than the invested capital metric, which uses historical balances. We also believe that the debt to comparable EBITDA ratio is a more meaningful metric that is consistent with the metrics the rating agencies that cover TransAlta use.

Debt to comparable EBITDA as at Dec. 31, 2013 was comparable to 2012. Debt to comparable EBITDA increased as at Dec. 31, 2012 compared to 2011 due to higher average debt levels and lower comparable EBITDA in 2012. Our goal is to maintain this ratio in a range of four to five times.

At times, and over a short-term period, the credit ratios may be outside of the specified target ranges while we realign the capital structure. During 2013, we took several steps to strengthen our financial position and reduce debt, using the approximate \$221 million in gross proceeds from the initial public offering of TransAlta Renewables to pay down debt, and utilizing the proceeds from dividends reinvested under the DRASP plan as a continued source of equity. Participation in the DRASP plan is currently at approximately 35 per cent.

We seek to maintain financial flexibility by using multiple sources of capital to finance capital allocation plans effectively, while maintaining a sufficient level of available liquidity to support contracting and trading activities. Further, financial flexibility allows our commercial team to contract our portfolio with a variety of counterparties on terms and prices that are favourable to our financial results.

# **Shareholder Value**

Our business model is designed to deliver low to moderate risk-adjusted sustainable returns and maintain financial strength and flexibility, which enhances shareholder value in a capital-intensive, long-cycle, commodity-based business. Our goal is to generate Total Shareholder Returns ("TSR")¹ through a combination of cash flow growth and dividend yield.

The table below shows our historical performance on this measure:

Year ended Dec. 31	2013	2012	2011
TSR (%)	(3.2)	(22.5)	4.9

We continue to focus on delivering shareholder returns. Improvements in the business will come from investments in productivity, with a focus on improving the Alberta coal business. We continue to be disciplined in our capital allocation process and are actively seeking growth opportunities in the U.S., Western Australia, and Canada, as demonstrated by the acquisition of the Solomon power station in 2012, the commencement of commercial operations at New Richmond, the Wyoming wind farm acquisition in the U.S., and the announcement of the Australian natural gas pipeline project in 2014. We are focused on delivering cash flow to fund the dividends and growth and maintain investment grade credit ratings.

<sup>1</sup> This measure is not defined under IFRS. We evaluate our performance and the performance of our business segments using a variety of measures. This measure is not necessarily comparable to a similarly titled measure of another company. TSR is the total amount returned to investors over a specific holding period and includes capital gains, capital losses, and dividends.

# **Results of Operations**

Our results of operations are presented on a consolidated basis and by business segment. We have three business segments: Generation, Energy Trading, and Corporate. For this MD&A, we have further split what is reported as our Generation business segment into the various fuel types to provide additional information to our readers. Some of our accounting policies require management to make estimates or assumptions that in some cases may relate to matters that are inherently uncertain. Some of our critical accounting policies and estimates include: revenue recognition, valuation and useful life of property, plant, and equipment ("PP&E"), financial instruments, decommissioning and restoration provisions, valuation of goodwill, income taxes, and employee future benefits. Refer to the Critical Accounting Policies and Estimates section of this MD&A for further discussion.

In this MD&A, the impact of foreign exchange fluctuations on foreign currency denominated transactions and balances is discussed with the relevant items from the Consolidated Statements of Earnings (Loss) and the Consolidated Statements of Financial Position. While individual line items on the Consolidated Statements of Financial Position may be impacted by foreign exchange fluctuations, the net impact of the translation of individual items relating to foreign operations to our presentation currency is reflected in accumulated other comprehensive income (loss) ("AOCI") in the equity section of the Consolidated Statements of Financial Position.

# **Significant Events**

Our consolidated financial results include the following significant events:

# 2013

#### California Claim

In response to complaints filed by San Diego Gas & Electric Company, the California Attorney General, and other government agencies, the Federal Energy Regulatory Commission ("FERC") ordered us to refund approximately U.S.\$47 million for sales we made in the organized markets of the California Power Exchange, the California Independent System Operator, and the California Department of Water Resources during the 2000 – 2001 period. In addition, the California parties have sought additional refunds that to date have been rejected by FERC. We have established a U.S.\$47 million provision to cover any potential refunds. Final rulings are not expected in the near future.

For the year ended Dec. 31, 2013, we accrued for a potential settlement of all outstanding disputes with the California parties, which resulted in a pre-tax charge to earnings of approximately U.S.\$52 million.

# Eastern Canada Ice Storm

In late December 2013, extreme weather conditions impacted our operations in parts of Ontario and Atlantic Canada, causing icing on turbine blades and consequently requiring us to shut down some of the wind turbines. The impact ranged from 7 to 12 days of downtime at each of the affected facilities, a total of 25.6 GWh of lost production, and approximately \$3 million in total lost revenues. Operations at all impacted sites have returned to normal.

#### **Acquisition by TransAlta Renewables**

On Dec. 20, 2013, we completed the acquisition, through one of our wholly owned subsidiaries, of a 144 MW wind farm in Wyoming for approximately U.S.\$102 million from an affiliate of NextEra Energy Resources, LLC. The wind farm is fully operational and contracted under a long-term PPA until 2028 with an investment grade counterparty. An economic interest in the wind farm was acquired by TransAlta Renewables from the Corporation in consideration for a payment equal to the original purchase price of the acquisition. We have extended a U.S.\$102 million loan to TransAlta Renewables to fund the acquisition. Terms of the loan require TransAlta Renewables to repay a minimum of U.S.\$45 million of the loan over the first 36 months with free cash flow from operations, and the balance on maturity on Dec. 31, 2018, through a long-term debt refinancing that is expected to be completed in conjunction with other financing needs of TransAlta Renewables.

The acquisition is expected to be accretive to cash flow per share for both the Corporation and TransAlta Renewables.

# **Senior Notes Offering**

On Nov. 25, 2013, we completed an offering of \$400 million medium-term senior notes that carry a coupon rate of 5.0 per cent, payable semi-annually, at an issue price equal to 99.516 per cent of the principal amount of the notes. The net proceeds from the offering were used to repay indebtedness, finance our long-term investment plan and growth projects, and for general corporate purposes.

# **Western Australia Contract Extension**

On Oct. 30, 2013, we announced a long-term contract extension to supply power to the BHP Billiton Nickel West operations in Western Australia from our Southern Cross Energy facilities ("Southern Cross"). The extension is effective immediately and replaces the previous contract, which was set to expire at the beginning of 2014.

Operating since 1996, Southern Cross has a total installed capacity of 245 MW from the Kambalda, Mt. Keith, Leinster, and Kalgoorlie power stations.

# **Salt River Project**

On Sept. 17, 2013, we announced that CalEnergy, a joint venture with MidAmerican Energy Holdings Company ("MidAmerican"), executed a 50 MW long-term contract for renewable geothermal power with Salt River Project, an Arizona utility, which runs from 2016 to 2039.

#### **Ontario Power Authority**

On Aug. 30, 2013, we announced the execution of a new agreement for a 20-year power supply term with the OPA, for our Ottawa gas facility, which is effective January 2014.

Under the new deal the plant will become dispatchable. This will assist in reducing the incidents of surplus baseload generation in the market, while maintaining the ability of the system to reliably produce energy when it is needed.

This new contract will benefit our shareholders by providing long-term stable earnings from this facility and will benefit ratepayers of Ontario by securing attractively priced capacity from this existing facility, reducing the need for new capacity to be built in the future and allowing hospitals in the area to continue to be served with the steam they need for heat and other energy processes, in an environmentally friendly manner.

#### TransAlta Renewables

On May 28, 2013, we formed a new subsidiary, TransAlta Renewables, to provide investors with the opportunity to invest directly in a highly contracted portfolio of power generation facilities. We retain control over TransAlta Renewables, and therefore we consolidate TransAlta Renewables. As a result, any loans outstanding or transactions between the Corporation and TransAlta Renewables are eliminated on consolidation in our financial statements.

#### Transfer of Generating Assets

On Aug. 9, 2013, we transferred 28 indirectly owned wind and hydroelectric generating assets to TransAlta Renewables through the sale of all the issued and outstanding shares of two subsidiaries: Canadian Hydro Developers, Inc. ("CHD") and Western Sustainable Power Inc. As consideration for the transfer, we received: i) 66.7 million common shares of TransAlta Renewables valued at \$10 per share for total share consideration of \$667 million; ii) a Closing Note receivable in the amount of \$187 million; iii) a Short Term Note receivable in the amount of \$250 million; iv) an Acquisition Note receivable in the amount of \$30 million; and v) an Amortizing Loan receivable in the amount of \$200 million.

# Initial Public Offering of Common Shares

On July 31, 2013, TransAlta Renewables filed a final prospectus to qualify the distribution of 20.0 million of its common shares, to be issued pursuant to the terms of an underwriting agreement at a price of \$10.00 per common share (the "Offering"). TransAlta Renewables granted to the underwriters an option (the "Over-Allotment Option"), exercisable in whole or in part for a period of 30 days following Closing, to purchase, at the Offering price, up to an additional 3.0 million common shares (representing 15 per cent of the common shares offered under the prospectus).

On Aug. 29, 2013, TransAlta Renewables completed the Offering and issued 20.0 million common shares for gross proceeds of \$200 million. The net proceeds of the Offering were used by TransAlta Renewables to repay the \$187 million Closing Note issued to the Corporation. On Aug. 29, 2013, the underwriters exercised their Over-Allotment Option in part to purchase an additional 2.1 million common shares at the Offering price of \$10.00 per common share for gross proceeds of \$21 million. TransAlta Renewables used the net proceeds received from the partial exercise of the Over-Allotment Option to repay a portion of the amount outstanding under the Acquisition Note issued to TransAlta. The remaining principal amount of \$9 million outstanding under the Acquisition Note after such payment was converted into 0.9 million common shares of TransAlta Renewables on the basis of one common share for each \$10.00 owing to the Corporation under the Acquisition Note. After completion of the transactions, we own 92.6 million common shares of TransAlta Renewables, representing an 80.7 per cent ownership interest. In total, we received \$207 million in cash consideration net of commissions and expenses.

Effective Aug. 9, 2013, the net earnings and total comprehensive income (loss) attributable to the 19.3 per cent divested interest are reflected in net earnings (loss) attributable to non-controlling interests and total comprehensive income (loss) attributable to non-controlling interests, respectively, on the Consolidated Statements of Earnings (Loss) and on the Consolidated Statements of Comprehensive Income (Loss), respectively. The excess of consideration received over the net book value of our divested interest was \$4 million and was recorded in retained earnings (deficit). As at Dec. 31, 2013, the net assets attributable to the 19.3 per cent divested interest are reflected in equity attributable to non-controlling interests in the Consolidated Statements of Financial Position.

#### Update on Hydro Facilities Due to Southern Alberta Flooding

Following extremely high rainfall and flooding during the second quarter in southern Alberta, we continue to safely and efficiently resolve operational challenges related to our hydro systems. Three of the hydro facilities we operate in Alberta in the Bow River Basin continue to be impacted by the flooding events and are currently being repaired. We have assessed any financial impact and continue to believe that we have sufficient insurance coverage for this damage, subject to a \$5 million deductible.

### City of Riverside

On June 18, 2013, we announced that CalEnergy had executed an 86 MW long-term contract for renewable geothermal power with the City of Riverside which runs from 2016 to 2039. CalEnergy will purchase the power from CE Generation LLC's ("CE Gen") portfolio of geothermal generating facilities in California's Imperial Valley.

#### Sundance Units 1 and 2 Return to Service

In December 2010, Units 1 and 2 of our Sundance facility were shut down due to conditions observed in the boilers at both units. On July 20, 2012, an arbitration panel concluded that Unit 1 and Unit 2 were not economically destroyed under the terms of the PPA and we were required to restore the units to service. For the year ended Dec. 31, 2012, the pre-tax income statement impact of the ruling that has been recorded under the caption "Sundance Units 1 and 2 return to service" in the Consolidated Statements of Earnings (Loss) was \$254 million.

The cost to repair Sundance Units 1 and 2 was approximately \$215 million. The total estimated spend increased by \$25 million due to additional scope of work for balance of plant systems and equipment as well as higher labour costs due to an increase in labour rates. This work was performed concurrently with the boiler repairs to prevent the need for a later outage for this work. During 2013, \$25 million of components were retired as a result of the work completed on the units to return them to service. Sundance Unit 1 returned to service on Sept. 2, 2013 and Unit 2 returned to service on Oct. 4, 2013. We have issued notices to the buyers regarding the cessation of the force majeure period for the two units.

# Premium Dividend™ Program

On May 8, 2013, we announced that as a result of the current low share price environment, we would suspend the Premium Dividend<sup>™</sup> component of the Premium Dividend<sup>™</sup>, Dividend Reinvestment and Optional Common Share Purchase Plan (the "Plan") following the payment of the quarterly dividend on July 1, 2013. Our Dividend Reinvestment and Optional Common Share Purchase Plan, components of the Plan remain effective in accordance with their current terms.

#### Keephills Unit 1

On March 5, 2013, an outage occurred at Unit 1 of our Keephills facility due to a stator winding failure found in the generator. Upon completion of the initial repair work, further condition testing and analysis identified greater winding degradation requiring a full rewind of the generator stator. In response to the event, we gave notice of a High Impact Low Probability ("HILP") event and claimed force majeure relief under the PPA. In the event of a force majeure, we are entitled to continue to receive our PPA capacity payment and are protected under the terms of the PPA from having to pay availability penalties. As a result, we do not expect the outage to have a material financial impact on the Corporation. The Unit was returned to service on Oct. 6, 2013. Arbitration on the matter began during the third quarter.

#### **New Richmond**

On March 13, 2013, our 68 MW New Richmond wind farm began commercial operations. The total cost of the project was approximately \$212 million. During 2013, we received a \$13 million reimbursement for costs of the terminal station.

# **SunHills Mining Limited Partnership**

Effective Jan. 17, 2013, we assumed, through our wholly owned SunHills Mining Limited Partnership ("SunHills"), operations and management control of the Highvale Mine from PMRL. PMRL employees working at the Highvale Mine were offered employment by SunHills, which agreed to assume responsibility for certain pension plan and pension funding obligations, that we previously funded through the payments made under the PMRL mining contracts. As a result, a pre-tax loss of \$29 million was recognized during the first quarter, along with the corresponding liabilities.

We also entered into finance leases for mining equipment that was in use, or committed to, by PMRL for mining operations. As a result, \$33 million in mining equipment has been capitalized to PP&E and the related finance lease obligations recognized during 2013. At the end of the lease terms, we are eligible to purchase the assets for a nominal amount.

#### **Change in Estimates - Useful Lives**

During 2013, management completed a review of the estimated useful lives of our hydro assets, having regard for, among other things, our economic life cycle maintenance program and the existing condition of the assets. As a result, depreciation was reduced by \$5 million for the year ended Dec. 31, 2013 and is expected to be reduced by \$5 million annually thereafter.

### **Centralia Coal Inventory Writedown**

During the year ended Dec. 31, 2013, we recognized a pre-tax writedown of \$22 million related to the coal inventory at our Centralia plant to write the inventory down to its net realizable value.

#### 2012

### **Sundance Unit 3**

On June 7, 2010, an outage occurred at Unit 3 of our Sundance facility due to the mechanical failure of critical generator components, which resulted in the Unit operating at a reduced capacity level. In response to the event, we gave notice of a HILP event and claimed force majeure relief under the PPA. The claim was disputed by the PPA Buyers. Due to the uncertainty of the resolution of the dispute, we accrued a provision, representing the potential penalties that may be required to be paid to the PPA Buyers.

The matter was heard before an arbitration panel during the third quarter of 2012. On Nov. 23, 2012, the arbitration panel concluded that a HILP event occurred and our claim for force majeure relief was affirmed. We have reversed a portion of the provision and, as a result, recognized \$9 million in revenues.

During the fourth quarter of 2012, the uprate at Sundance Unit 3 was completed. The total cost of the project is estimated at \$25 million and it is expected that a 15 MW efficiency uprate will be achieved at the facility. Although we completed the uprate, the resulting increased capacity will not be realized until we replace the generator stator.

#### **Senior Notes Offering**

On Nov. 7, 2012, we completed an offering of U.S.\$400 million senior notes maturing in 2022 and bearing an interest rate of 4.5 per cent. The net proceeds from the offering were used to repay borrowings under existing credit facilities and for general corporate purposes.

# **Corporate Restructuring**

On Oct. 30, 2012, we announced a restructuring of our resources as part of our ongoing strategy to continuously improve operational excellence and accelerate growth. As part of this restructuring, we incurred a one-time pre-tax charge of \$13 million.

# Strategic Partnership

On Oct. 25, 2012, TransAlta and MidAmerican entered into a new strategic partnership through which the two companies will work together to develop, build, and operate new natural gas-fired electricity generation projects in Canada. The agreement also encompasses our proposed Sundance 7 project. All development and construction, or acquisition, of approved projects will be funded equally by each partner and it is expected that TransAlta will be responsible for construction management, operations, and maintenance of projects that proceed.

# Sale of Common Shares

On Sept. 13, 2012, we completed a public offering of 19.2 million common shares and on Sept. 20, 2012, the underwriters exercised in part their over-allotment option to purchase 2.0 million common shares, all at a price of \$14.30 per common share, which resulted in total gross proceeds of \$304 million. The proceeds of the offering were used to partially fund the acquisition of the Solomon power station in Australia, to fund the construction of our 68 MW New Richmond wind project, repay short-term debt, and for general corporate purposes.

# **Acquisition of Solomon Power Station**

On Sept. 28, 2012, we announced that we completed the acquisition from Fortescue Metals Group Ltd. ("Fortescue") of its 125 MW natural gas-fired and diesel-fired Solomon power station in Western Australia for U.S.\$318 million. The facility will be commissioned during 2014. The facility is fully contracted with Fortescue under a long-term Power Purchase Agreement ("Agreement") with an initial term of 16 years, which commenced in October 2012, after which Fortescue will have the option to either extend the Agreement by an additional five years under the same terms or to acquire the facility. The facility and associated Agreement is accounted for as a finance lease with TransAlta being the lessor.

#### **Sundance Unit 6**

On Aug. 18, 2011, the Sundance Unit 6 Generator Step-Up Transformer was damaged as a result of a fire. We gave notice and claimed force majeure relief under the PPA. We have been refunded the penalties that were paid during the outage, a portion of which had previously been provided for, resulting in a net charge of \$18 million in net earnings. During the third quarter of 2012, the PPA Buyer informed us that they will be taking the matter to arbitration.

#### MF Global Inc.

In 2011, MF Global Holdings Ltd. filed for bankruptcy protection in the United States. MF Global Holdings Ltd. was the parent company of MF Global Inc., which we used as a broker-dealer for certain commodity transactions. During 2011, a reserve of U.S.\$18 million was taken on the collateral when the parent company of MF Global Inc. filed for bankruptcy protection. During 2012, we sold our claim against MF Global Inc. pertaining to the return of U.S.\$36 million of collateral that we had posted, for net proceeds of U.S.\$33 million. As a result, a pre-tax gain of \$15 million (\$11 million after tax) was realized in 2012.

### **Reversal of Asset Impairment Charges**

During the third quarter, we reversed \$41 million of pre-tax impairment losses previously taken on Sundance Units 1 and 2. The reversal arose as a result of the additional years of merchant operations expected to be realized at Units 1 and 2 due to the recent amendments to Canadian federal regulations. Please refer to the Change in Economic Useful Life section below for additional information.

#### Change in Economic Useful Life

As a result of amendments to Canadian federal GHG regulations requiring that coal-fired plants be shut down after a maximum of 50 years of operation, we have reviewed the useful lives of our Alberta coal-fired generating facilities and related coal mining assets and where permitted under the regulations, extended the useful lives to a maximum of 50 years. The previous draft regulations proposed shutdown after 45 years. As a result, pre-tax depreciation expense was reduced by \$12 million for the year ended Dec. 31, 2012 and is expected to be reduced by \$23 million annually thereafter. Please refer to the Climate Change and the Environment section of this MD&A for additional information.

# **Sale of Preferred Shares**

On Aug. 10, 2012, we completed a public offering of 9.0 million Series E 5.0 per cent Cumulative Redeemable Rate Reset First Preferred Shares, resulting in gross proceeds of \$225 million. The proceeds from the offering were used for general corporate purposes, including the funding of capital projects and the reduction of short-term indebtedness of the Corporation.

### **Centralia Thermal**

On July 25, 2012, we announced that we entered into an 11-year agreement to provide electricity from the Centralia Thermal plant to PSE. The contract begins in 2014 and runs until 2025 when the plant is scheduled to be shut down under the Bill that was signed on Dec. 23, 2011. Under the agreement, PSE will buy 180 MW of firm, base-load power starting in December 2014. In December 2015, the contract increases to 280 MW and from December 2016 to December 2024, the contract is for 380 MW. In the last year of the contract, the contracted volume is 300 MW. The agreement was approved, with conditions, by the Washington Utilities and Transportation Commission ("WUTC") on Jan. 9, 2013. On Jan. 23, 2013, it was announced that PSE has filed a petition for reconsideration of certain conditions within the decision issued by the WUTC. On June 25, 2013, regulatory approval was confirmed by the WUTC and as of July 5, 2013, the contract was in effect in accordance with the WUTC's terms and conditions.

# Centralia Coal Inventory Writedown

During the year, we recognized a pre-tax writedown of \$44 million related to the coal inventory at our Centralia plant. The writedown is recognized when prices indicate we cannot recover the cost of that inventory.

Of the inventory writedown, \$25 million relates to inventory on hand when we de-designated the hedges at Centralia Thermal. During the year, a pre-tax comparable earnings adjustment of \$25 million was recognized to offset the effect of this writedown. This adjustment was subsequently reversed as the related inventory was consumed during the year. Please refer to the Non-IFRS Measures section of this MD&A.

# Keephills Units 1 and 2 Uprates

Testing of the Keephills Units 1 and 2 uprates has been completed and it was determined that the actual capability of the uprates was less than originally anticipated. As a result, we have adjusted the uprates to 12 MW, bringing the maximum capability of these units to 395 MW each. The total costs of the projects were approximately \$51 million.

#### **Project Pioneer**

On April 26, 2012, Project Pioneer's industry partners announced they would not proceed with the joint CCS project. Project Pioneer was a joint effort by TransAlta, the Capital Power Corporation ("Capital Power"), Enbridge Inc., and the federal and provincial governments to demonstrate the commercial-scale viability of CCS technology.

The first step of the project was to prove the technical and economic feasibility of CCS through a FEED study before making any major capital commitments. Following the conclusion of the FEED study, the industry partners determined that although the technology works and capital costs were in line with expectations, the revenue from carbon sales and the price of emissions reductions were insufficient to allow the project to proceed. The impact of the cancellation of the project was not material for our 2012 results.

# Premium Dividend™, Dividend Reinvestment and Optional Common Share Purchase Plan

On Feb. 21, 2012, we added a Premium Dividend<sup>TM</sup> Component to our existing DRASP plan. The amended and restated plan provides our eligible shareholders with two options: i) to reinvest dividends at a current three per cent discount (may be from zero to five per cent at the discretion of the Board of Directors) to the average market price towards the purchase of new shares of TransAlta (the Dividend Reinvestment Component) or ii) to receive the equivalent to 102 per cent of the dividends payable in cash, the premium cash payment (the Premium Dividend<sup>TM</sup> Component).

Eligible shareholders enrolled in either the Dividend Reinvestment Component or the Premium Dividend<sup>TM</sup> Component will also be eligible to purchase new shares at a discount to the average market price under the optional cash payment component (the "OCP Component") of the Plan by directly investing up to \$5,000 per quarter. The applicable discount under the OCP Component is determined from time to time by the Board of Directors and is currently set at three per cent.

#### 2011

#### Sale of Preferred Shares

On Nov. 30, 2011, we completed our public offering of 11.0 million Series C 4.60 per cent Cumulative Redeemable Rate Reset First Preferred Shares, resulting in gross proceeds of \$275 million. The net proceeds from the offering were used for general corporate purposes, including the funding of capital projects and the reduction of short-term indebtedness of the Corporation and its affiliates.

# Genesee Unit 3 Outage

On Nov. 11, 2011, the Genesee Unit 3 plant, a 466 MW joint operation with Capital Power (233 MW net ownership interest), experienced an unplanned outage that resulted in damage to the turbine/generator bearings. Genesee Unit 3 returned to service on Jan. 15, 2012.

# Keephills Unit 3

On Sept. 1, 2011, our 450 MW Keephills Unit 3 thermal facility, of which we have a 50 per cent ownership interest, began commercial operations. The total cost of the project was approximately \$1.98 billion.

### Sale of Grande Prairie Facility

On July 27, 2011, we signed an agreement to sell our interest in the biomass facility located in Grande Prairie. This deal closed on Oct. 1, 2011. As a result, we realized a pre-tax gain of \$9 million in the fourth quarter of 2011.

#### **President and Chief Executive Officer**

On July 27, 2011, we announced that TransAlta's President and Chief Executive Officer Steve Snyder would retire, effective Jan. 1, 2012. Dawn Farrell, TransAlta's then Chief Operating Officer, succeeded Mr. Snyder as President and Chief Executive Officer on Jan. 2, 2012.

#### Bone Creek

On June 1, 2011, our 19 MW Bone Creek hydro facility began commercial operations. The total capital cost of the project was approximately \$52 million.

#### Sale of Meridian

On Dec. 20, 2010, TransAlta Cogeneration, L.P. ("TA Cogen"), a subsidiary that is owned 50.01 per cent by TransAlta, entered into an agreement for the sale of its 50 per cent interest in the Meridian facility. On April 1, 2011, TA Cogen closed the sale of its interest in the Meridian facility. The sale was effective Jan. 1, 2011. As a result, we realized a pre-tax gain of \$3 million during the second quarter of 2011.

# **Change in Estimated Residual Values**

During the first quarter of 2011, management completed a comprehensive review of the residual values of all of our generating assets, having regard for, among other things, expectations about the future condition of the assets, metal volumes, and other market-related factors. As a result, estimated residual values were revised, resulting in depreciation decreasing by \$13 million for the year ended Dec. 31, 2011 compared to 2010.

# **Subsequent Events**

# CE Gen, Blackrock Development Project, and Wailuku Holding Company, LLC

On Feb. 20, 2014, we announced an agreement to sell our 50 per cent ownership of CE Gen, the Blackrock development project ("Blackrock"), and Wailuku Holding Company, LLC ("Wailuku") to MidAmerican Renewables for proceeds of U.S.\$193.5 million. MidAmerican Renewables holds the other 50 per cent interest in CE Gen, Blackrock, and Wailuku.

#### Dividend

On Feb. 20, 2014, we announced the resizing of our dividend to a quarterly dividend of \$0.18 per common share (or \$0.72 per common share on an annualized basis) to align with our growth and financial objectives.

# Sundance Unit 6 Agreement

On Feb. 19, 2014, we reached an agreement with the PPA Buyer related to the dispute on Sundance Unit 6. We do not expect any material impact to the financial statements as a result of the agreement.

# Keephills Unit 2

On Jan. 31, 2014, an outage commenced at Unit 2 of our Keephills facility to perform a rewind of the generator stator as a result of the generator event in 2013 at Keephills Unit 1. We gave notice of a HILP event and claimed force majeure relief under the PPA.

# Fort McMurray Transmission Project

On Jan. 17, 2014, we announced that our strategic partnership with MidAmerican Transmission, TAMA Transmission, which was formed on May 9, 2013, successfully qualified to participate as a proponent in the Fort McMurray West 500 kilovolt Transmission Project. The AESO announced its selection of a short-list of companies, identifying that TAMA Transmission will participate in the next stage of its competitive process for the project.

# **Australia Natural Gas Pipeline**

On Jan. 15, 2014, we announced that, through a wholly owned subsidiary, an unincorporated joint venture named Fortescue River Gas Pipeline was formed, of which we have a 43 per cent interest. The first project of the new joint venture will be to build, own, and operate a \$178 million natural gas pipeline from the Dampier to Bunbury Natural Gas Pipeline to our Solomon power station.

# Discussion of Segmented Results

We have three business segments: Generation, Energy Trading, and Corporate.

**Generation:** Owns and operates hydro, wind, natural gas-fired and coal-fired facilities, and related mining operations in Canada, the U.S., and Australia. Generation revenues and overall profitability are derived from the availability and production of electricity and steam as well as ancillary services such as system support. Starting in 2013, electricity sales generated by our Commercial and Industrial group are assumed to be sourced from TransAlta's production and have been included in the Generation Segment on a net basis.

For more information on the strategic partnerships that we have entered into with MidAmerican and MidAmerican Transmission, please refer to the Significant Events section of this MD&A. MidAmerican also owns a 50 per cent interest in CE Gen and Wailuku. We are also involved in various joint arrangements with Canadian Power Holdings Inc. ("Canadian Power"), Capital Power, ENMAX Corporation ("ENMAX"), Nexen Inc. ("Nexen"), and Brookfield Asset Management Inc. ("Brookfield"). Canadian Power owns the minority interest in TA Cogen. The Capital Power joint arrangement provided the opportunity for us to acquire 50 per cent ownership in the 466 MW Genesee Unit 3 project, as well as to build the Keephills Unit 3 project. ENMAX and our Corporation each own 50 per cent of the McBride Lake wind project. Nexen and our Corporation each have a 50 per cent ownership in the Soderglen wind project. Brookfield owns the other 50 per cent interest in our Pingston hydro facility.

Our interests in the CE Gen, Wailuku, TAMA Transmission, and CalEnergy joint ventures are accounted for using the equity method. Accordingly, the related operational and financial results of these facilities are no longer included in the results of our international geographical regions. Although these assets no longer contribute to the operating income for accounting purposes, it is management's view that these facilities still form part of our operational results. Refer to the Equity Investments discussion of this MD&A for further details.

Our results are seasonal due to the nature of the electricity market and related fuel costs. Higher maintenance costs are usually incurred in the second and third quarters when electricity prices are expected to be lower, as electricity prices generally increase in the winter months in the Canadian market. Margins are also typically impacted in the second quarter due to the volume of hydro production resulting from spring runoff and rainfall in the Canadian and U.S. markets.

**Coal:** TransAlta owns and operates coal-fired facilities and related mining operations in Canada and the U.S. Coal revenues and overall profitability are derived from the availability and production of electricity.

#### **Canadian Coal**

During 2013, we completed the restoration of Sundance Units 1 and 2. For further information please refer to the Significant Events section of this MD&A.

Year ended Dec. 31	2013	2012	2011
Production (GWh)	21,568	20,265	21,475
Installed capacity (MW)	3,576	3,012	2,985
Revenues	916	913	760
Fuel and purchased power	451	383	324
Comparable gross margin <sup>1</sup>	465	530	436
Operations, maintenance, and administration	201	195	202
Taxes, other than income taxes	11	10	9
Intersegment cost allocation	4	3	-
Gain on sale of property, plant, and equipment	(2)	(10)	(8)
Mine depreciation	(58)	(41)	(40)
Comparable EBITDA <sup>1</sup>	309	373	273
Depreciation and amortization	292	268	220
Other <sup>2</sup>	-	(20)	(40)
Comparable operating income <sup>1</sup>	17	125	93
Sustaining expenditures:			
Routine capital	69	59	33
Mining equipment and land purchases	65	38	20
Finance leases	9	-	-
Planned major maintenance <sup>3</sup>	94	219	68
Total sustaining expenditures	237	316	121

# 2013

Production for the year ended Dec. 31, 2013 increased 1,303 GWh compared to 2012 due to Sundance Units 1 and 2 returning to service, lower planned outages at the Alberta coal PPA facilities, lower market curtailments, and higher PPA customer demand, partially offset by higher unplanned outages at the Alberta coal PPA facilities, primarily driven by the Keephills Unit 1 force majeure outage.

For the year ended Dec. 31, 2013, comparable EBITDA decreased by \$64 million compared to 2012 due to lower realized prices, higher penalties, higher coal costs, and higher unplanned outages at the Alberta coal PPA facilities, partially offset by lower planned outages at the Alberta coal PPA facilities and lower market curtailments. Coal costs increased as a result of an increased asset base from the mine transition and the normal advancement of the mine.

Depreciation and amortization for the year ended Dec. 31, 2013 increased by \$24 million compared to 2012 due to an increased asset base and an increase in mine depreciation, partially offset by a decrease in asset retirements and the effect of the change of the economic useful lives of certain plants during 2012.

For the year ended Dec. 31, 2013, the decrease in sustaining capital expenditures compared to 2012 is mainly due to the lower number of planned outages, offset by higher mining equipment purchases.

<sup>1</sup> Comparable figures are not defined under IFRS. Refer to the Non-IFRS Measures section of this MD&A for further discussion of these items, including, where applicable, reconciliations to net earnings attributable to common shareholders and cash flow from operating activities.

<sup>2</sup> Impacts to revenue associated with Sundance Units 1 and 2 to provide period over period comparability.

<sup>3</sup> Consists of three planned outages in 2013, six planned outages in 2012, and four planned outages in 2011.

Production for the year ended Dec. 31, 2012 decreased 1,210 GWh compared to 2011 due to higher planned outages at the Alberta coal PPA facilities and lower PPA customer demand, partially offset by the commencement of commercial operations at Keephills Unit 3 and lower unplanned outages at the Alberta coal PPA facilities.

For the year ended Dec. 31, 2012, comparable EBITDA increased by \$100 million compared to 2011 due to favourable pricing, net of unrealized mark-to-market movements and provisions, the commencement of commercial operations at Keephills Unit 3, and lower unplanned outages at the Alberta coal PPA facilities, partially offset by higher planned outages at the Alberta coal PPA facilities and unfavourable coal pricing.

Depreciation and amortization for the year ended Dec. 31, 2012 increased by \$48 million compared to 2011 due to an increased asset base, largely due to the commencement of commercial operations at Keephills Unit 3, and an increase in asset retirements, partially offset by a change in the economic lives of certain plants. Please refer to the Significant Events section of this MD&A for more information.

For the year ended Dec. 31, 2012, the increase in sustaining capital expenditures compared to 2011 was due to a high number of planned outages at Keephills Units 1 and 2 and Sundance Units 3 and 5.

#### U.S. Coal

Year ended Dec. 31	2013	2012	2011
Production (GWh)	6,711	3,736	5,135
Installed capacity (MW)	1,340	1,340	1,340
Revenues	346	368	534
Fuel and purchased power	205	150	262
Comparable gross margin	141	218	272
Operations, maintenance, and administration	43	39	47
Inventory writedown	22	19	-
Taxes, other than income taxes	4	6	6
Intersegment cost allocation	6	7	8
Gain on sale of property, plant, and equipment	-	(1)	-
Comparable EBITDA	66	148	211
Depreciation and amortization	56	66	80
Comparable operating income	10	82	131
Sustaining expenditures:			
Routine capital	6	10	18
Planned major maintenance	10	22	45
Total sustaining expenditures	16	32	63

# 2013

Production for the year ended Dec. 31, 2013 increased 2,975 GWh compared to 2012 due to lower economic dispatching at Centralia Thermal, driven by improving market conditions, partially offset by higher planned outages at Centralia Thermal.

For the year ended Dec. 31, 2013, comparable EBITDA decreased by \$82 million compared to 2012 due to contracts expiring and lower spot prices, partially offset by favourable coal pricing.

Depreciation and amortization for the year ended Dec. 31, 2013 decreased by \$10 million compared to 2012 due to the impact of a lower asset base as a result of asset impairments.

For the year ended Dec. 31, 2013, the decrease in sustaining capital expenditures compared to 2012 is mainly due to the lower expenditures on planned outages.

The outages at Centralia Thermal did not negatively impact our gross margins for the year ended Dec. 31, 2012 as we were able to extend our planned outages to take advantage of lower market prices to purchase power on the market to fulfill our power contracts.

Production for the year ended Dec. 31, 2012 decreased 1,399 GWh compared to 2011 due to higher economic dispatching at Centralia Thermal, partially offset by lower planned and unplanned outages at Centralia Thermal.

For the year ended Dec. 31, 2012, comparable EBITDA decreased \$63 million compared to 2011 due to lower pricing, including margins on purchased power, partially offset by reductions in OM&A due to lower routine maintenance and lower compensation costs as a result of productivity initiatives and a continued focus on costs.

Depreciation and amortization for the year ended Dec. 31, 2012 decreased \$14 million compared to 2011 due to a lower asset base as a result of asset impairments.

For the year ended Dec. 31, 2012, the decrease in sustaining capital expenditures compared to 2011 was due to the lower expenditures on planned outages.

Gas: TransAlta owns and operates natural gas-fired facilities in Canada and Australia. Gas revenues and overall profitability are derived from the availability and production of electricity and steam.

Year ended Dec. 31	2013	2012	2011
Production (GWh) <sup>1</sup>	7,854	8,230	7,936
Installed capacity (MW) <sup>1</sup>	1,567	1,567	1,567
Revenues	636	607	647
Fuel and purchased power	252	226	288
Comparable gross margin	384	381	359
Operations, maintenance, and administration	100	86	91
Taxes, other than income taxes	3	4	4
Finance lease income	(47)	(19)	(11)
Intersegment cost allocation	2	1	-
Gain on sale of property, plant, and equipment	-	(3)	-
Insurance recovery	(1)	-	-
Comparable EBITDA	327	312	275
Depreciation and amortization	107	109	109
Other	1	3	3
Comparable operating income	219	200	163
Sustaining expenditures:			
Routine capital	17	13	12
Planned major maintenance	41	36	57
Total sustaining expenditures	58	49	69

#### 2013

Production for the year ended Dec. 31, 2013 decreased 376 GWh compared to 2012 due to higher contract and market curtailments at our Ottawa and Sarnia facilities, partially offset by lower unplanned outages at our Sarnia facility.

For the year ended Dec. 31, 2013, comparable EBITDA increased by \$15 million compared to 2012 due to a full year of income from the Solomon power station that was acquired in August 2012, partially offset by higher OM&A costs resulting from higher routine maintenance.

Depreciation and amortization for the year ended Dec. 31, 2013 decreased by \$2 million compared to 2012 due to a decrease in asset retirements and favourable changes in foreign exchange rates.

1 Includes production and net ownership capacity for Fort Saskatchewan, a natural gas-fired facility that has been accounted for as a finance lease.

Production for the year ended Dec. 31, 2012 increased 294 GWh compared to 2011 due to favourable market conditions at our facilities.

For the year ended Dec. 31, 2012, comparable EBITDA increased by \$37 million compared to 2011 due to favourable contracted gas input costs, an increase in finance lease income from the start of our PPA at our Solomon power station in October 2012, and a decrease in OM&A due to productivity initiatives and a continued focus on costs.

Depreciation and amortization for the year ended Dec. 31, 2012 was comparable to 2011.

**Renewables:** TransAlta owns and operates hydro and wind facilities in Canada and the U.S. Renewable revenues and overall profitability are derived from the availability of water and wind resources and the production of electricity, as well as ancillary services such as system support.

#### Wind

During 2013, we began commercial operations at New Richmond, a 68 MW wind farm in Québec. We also completed the acquisition of a 144 MW wind farm in Wyoming through one of our wholly owned subsidiaries. For further information please refer to the Significant Events section of this MD&A.

Year ended Dec. 31	2013	2012	2011
Production (GWh)	2,709	2,583	2,802
Installed capacity (MW)	1,077	1,061	1,061
Revenues	237	207	231
Fuel and purchased power	13	12	14
Comparable gross margin	224	195	217
Operations, maintenance, and administration	38	38	48
Taxes, other than income taxes	5	5	6
Intersegment cost allocation	1	1	-
Comparable EBITDA	180	151	163
Depreciation and amortization	79	72	72
Comparable operating income	101	79	91
Sustaining expenditures:			
Routine capital	3	2	8
Planned major maintenance	6	2	(1)
Total sustaining expenditures	9	4	7

#### 2013

Production for the year ended Dec. 31, 2013 increased 126 GWh compared to 2012 due to the commencement of commercial operations at New Richmond.

For the year ended Dec. 31, 2013, comparable EBITDA increased by \$29 million compared to 2012 due to the commencement of commercial operations at New Richmond and higher Alberta merchant prices.

Depreciation and amortization for the year ended Dec. 31, 2013 increased by \$7 million compared to 2012 due to the commencement of operations at New Richmond.

Production for the year ended Dec. 31, 2012 decreased 219 GWh compared to 2011 due to lower wind volumes and the sale of the Grande Prairie biomass facility in 2011.

For the year ended Dec. 31, 2012, comparable EBITDA decreased by \$12 million compared to 2011 due to unfavourable prices, lower wind volumes, and the sale of the Grande Prairie biomass facility in 2011, partially offset by lower OM&A due to the sale of the Grande Prairie biomass facility in 2011 and lower compensation costs as a result of productivity initiatives and a continued focus on costs.

Depreciation and amortization for the year ended Dec. 31, 2012 was comparable to 2011.

# Hydro

Year ended Dec. 31	2013	2012	2011
Production (GWh)	2,085	2,356	2,044
Installed capacity (MW)	893	913	913
Revenues	181	164	142
Fuel and purchased power	5	7	7
Comparable gross margin	176	157	135
Operations, maintenance, and administration	31	27	30
Taxes, other than income taxes	3	2	2
Intersegment cost allocation	1	1	-
Insurance recovery	(6)	-	-
Gain on sale of property, plant, and equipment	-	-	(2)
Comparable EBITDA	147	127	105
Depreciation and amortization	25	29	23
Comparable operating income	122	98	82
Sustaining expenditures:			
Routine capital	9	7	17
Planned major maintenance	5	7	15
Total sustaining expenditures	14	14	32

#### 2013

Production for the year ended Dec. 31, 2013 decreased 271 GWh compared to 2012 due to lower water resources.

For the year ended Dec. 31, 2013, comparable EBITDA increased by \$20 million compared to 2012 due to favourable prices, partially offset by lower water resources.

Depreciation and amortization for the year ended Dec. 31, 2013 decreased by \$4 million compared to 2012 due to a change in the useful lives of the hydro assets during 2013.

# 2012

Production for the year ended Dec. 31, 2012 increased 312 GWh compared to 2011 due to higher water resources.

For the year ended Dec. 31, 2012, comparable EBITDA increased \$22 million compared to 2011 due to higher water resource volumes, partially offset by unfavourable prices.

Depreciation and amortization for the year ended Dec. 31, 2012 increased by \$6 million compared to 2011 due to an increased base and an increase in asset retirements.

# **Asset Impairment Charges and Reversals**

#### Renewables

During 2013, we recognized a total pre-tax impairment charge of \$4 million related to three contracted hydro assets within the renewables fleet. The assets were impaired primarily due to an increase in future capital and operating expenses that resulted from the completion of condition assessments. The annual impairment assessments are based on estimates of fair value less costs to sell derived from long range forecasts. The impairment losses are included in the Generation Segment.

#### Alberta Merchant

As part of the annual impairment review and assessment process in 2013, it was determined that our Alberta plants with significant merchant capacity should be considered one cash-generating unit (the "Alberta Merchant CGU"). Previously, each plant was assessed for impairment individually. The reasons for this change include consideration of the Final Regulations published by the Canadian federal government in September 2012 governing GHG emissions and the 50-year total life for Canadian coal-fired power plants; and the refinement of our risk management approach and practices regarding our Alberta wholesale market price exposure. The Final Regulations confirmed additional operating time and increased flexibility for our Alberta coal plants and led, in part, to a broadening of our view on the management of our Alberta wholesale market price exposure. While no impairment losses were recognized in 2013 for the Alberta Merchant CGU, total pre-tax impairment losses of \$23 million that were recognized previously on renewables plants that now form part of the Alberta Merchant CGU were reversed. The Alberta Merchant CGU's recoverable amount was based on an estimate of fair value less costs to sell using a discounted cash flow methodology, based on our long range forecasts and prices evidenced in the marketplace.

The pre-tax reversal is recognized in the Generation Segment.

#### **Centralia Thermal**

The Bill and a Memorandum of Agreement ("MoA") that was signed on Dec. 23, 2011 provided a framework for the orderly transition from coal-fired energy produced at Centralia Thermal and the shutdown of the units in 2020 and 2025. On July 25, 2012, we announced that we entered into a long-term power agreement to provide electricity from the Centralia Thermal plant to PSE from December 2014 until the facility is fully retired in 2025. As a result of these agreements, we recognized a pre-tax impairment charge of \$347 million included in the Generation Segment during the year ended Dec. 31, 2012. The impairment assessment was based on whether the carrying amount of the Centralia Thermal plant was recoverable based on an estimate of fair value less costs to sell.

In 2013 and 2012, \$28 million and \$169 million, respectively, of deferred income tax assets were written off related to the tax benefits of losses associated with our U.S. operations. We wrote these assets off as it was no longer considered probable that sufficient taxable income would be available from our existing U.S. operations to utilize the underlying tax losses. An increase in future U.S. income will allow us to write up our deferred income tax assets in future periods.

#### Reversals

Impairment charges can be reversed in future periods if the forecasted cash flows to be generated by the impacted plants improve.

# **Equity Investments**

Our investments in joint ventures are accounted for using the equity method and consist of our investments in CE Gen, Wailuku, TAMA Transmission, and CalEnergy.

Our interests in the CE Gen and Wailuku joint ventures are comprised of geothermal, natural gas, and hydro facilities in various locations throughout the U.S., with 852 MW of gross generating capacity (396 MW net ownership interest). The table below summarizes key operational information adjusted to reflect our interest in these investments:

Year ended Dec. 31	2013	2012	2011
Availability (%)	91.2	94.2	94.9
Production (GWh):			
Gas	385	380	308
Renewables	1,170	1,200	1,312
Total production	1,555	1,580	1,620

#### 2013

For the year ended Dec. 31, 2013, availability decreased compared to 2012 due to higher planned and unplanned outages.

For the year ended Dec. 31, 2013, production decreased by 25 GWh compared to 2012 due to higher planned and unplanned outages, partially offset by an increase in customer demand.

Equity loss for the year ended Dec. 31, 2013 was \$10 million compared to \$15 million for 2012. The reduction of the loss is primarily due to favourable pricing and favourable changes in foreign exchange rates, partially offset by higher planned and unplanned outages.

#### 2012

For the year ended Dec. 31, 2012, availability decreased compared to 2011 due to higher unplanned outages.

For the year ended Dec. 31, 2012, production decreased by 40 GWh compared to 2011 due to higher unplanned outages and lower customer demand.

For the year ended Dec. 31, 2012, equity losses from CE Gen and Wailuku were \$15 million as compared to income of \$14 million for 2011. The equity income decreased primarily due to higher unplanned outages and unfavourable pricing.

Since 2001, a significant portion of the output from the CE Gen plants has been subject to fixed energy price contracts. Commencing May 1, 2012, the terms of the contracts reverted to a pricing clause that permits the power purchaser to pay their short-run avoided costs ("SRAC") as the price for power. The SRAC is linked to the price of natural gas. There can be no assurances that prices based on the avoided cost of energy after May 1, 2012 will result in revenues equivalent to those realized under the fixed energy price structure.

On Sept. 17, 2013, we announced that CalEnergy, a joint venture with MidAmerican, executed a 50 MW long-term contract for renewable geothermal power with Salt River Project, an Arizona utility, which runs from 2016 to 2039.

On June 18, 2013, we also announced that CalEnergy had executed an 86 MW long-term contract for renewable geothermal power with the City of Riverside that runs from 2016 to 2039. CalEnergy will purchase the power from CE Gen's portfolio of geothermal generating facilities in California's Imperial Valley.

**Energy Trading:** Derives revenue and earnings from the wholesale trading of electricity and other energy-related commodities and derivatives. Achieving gross margins, while remaining within Value at Risk ("VaR") limits, is a key measure of Energy Trading's activities. Refer to the Value at Risk and Trading Positions discussion in the Risk Management section of this MD&A for further discussion on VaR.

Energy Trading utilizes contracts of various durations for the forward purchase and sale of electricity and for the purchase and sale of natural gas and transmission capacity. If the activities are performed on behalf of the Generation Segment, the results of these activities are included in the Generation Segment.

Our trading activities use a variety of instruments to manage risk, earn trading revenue, and gain market information. Our trading strategies consist of shorter-term physical and financial trades in regions where we have assets and the markets that interconnect with those regions. The portfolio primarily consists of physical and financial derivative instruments including forwards, swaps, futures, and options in various commodities. These contracts meet the definition of trading activities and have been accounted for at fair value under IFRS. Changes in the fair value of the portfolio are recognized in earnings in the period they occur.

While trading products are generally consistent between periods, positions held and resulting earnings impacts will vary due to current and forecasted external market conditions. Positions for each region are established based on the market conditions and the risk/reward ratio established for each trade at the time it is transacted. Results will therefore vary regionally or by strategy from one reported period to the next.

A portion of OM&A costs incurred within Energy Trading is allocated to the Generation Segment based on an estimate of operating expenses and a percentage of resources dedicated to providing support and services. This fixed fee intersegment allocation is represented as a cost recovery in Energy Trading and an operating expense within the Generation Segment.

The results of the Energy Trading Segment, with all trading results presented on a net basis, are as follows:

Year ended Dec. 31	2013	2012	2011
Revenues	79	3	137
Fuel and purchased power	-	-	-
Comparable gross margin	79	3	137
Operations, maintenance, and administration	32	29	44
Intersegment cost allocation	(14)	(13)	(8)
Comparable EBITDA	61	(13)	101
Depreciation and amortization	1	-	1
Comparable operating income (loss)	60	(13)	100

## 2013

For the year ended Dec. 31, 2013, Energy Trading comparable EBITDA increased by \$74 million compared to 2012 due to strong trading performance across all markets and prudent management of risk. The increase is attributable to successful trading strategies involving regional power demand and price differentials across all markets.

#### 2012

For the year ended Dec. 31, 2012, Energy Trading comparable EBITDA decreased by \$114 million compared to 2011 primarily due to the impact of unexpected weather patterns, plant outages, and unfavourable market expectations on power and gas pricing for trading positions held, partially offset by a decrease in OM&A due to decreased compensation costs as a result of lower earnings.

For the year ended Dec. 31, 2012, the intersegment cost allocation increased compared to 2011 due to additional support costs charged to the Generation Segment resulting from an increase in work performed by Energy Trading.

**Corporate:** Our Generation and Energy Trading segments are supported by a Corporate group that provides finance, tax, treasury, legal, regulatory, environmental, procurement, health and safety, sustainable development, corporate communications, government and investor relations, information technology, risk management, human resources, internal audit, and other administrative support.

The expenses incurred by the Corporate Segment are as follows:

Year ended Dec. 31	2013	2012	2011
Operations, maintenance, and administration	66	82	84
Taxes, other than income taxes	1	1	-
Comparable EBITDA	(67)	(83)	(84)
Depreciation and amortization	23	20	21
Comparable operating loss	(90)	(103)	(105)
Sustaining expenditures:			
Routine capital	22	24	27
Total sustaining expenditures	22	24	27

#### 2013

For the year ended Dec. 31, 2013, OM&A expense decreased by \$16 million compared to 2012 primarily due to lower compensation costs as a result of restructuring in the fourth quarter of 2012 and a continued focus on managing costs, partially offset by a decrease as a result of the way in which certain overhead cost allocations are made within the organization. These changes in methodologies primarily arose as a result of our 2012 realignment of resources and more clear focus between base operations and growth.

#### 2012

For the year ended Dec. 31, 2012, OM&A costs were comparable to 2011.

# **Net Interest Expense**

The components of net interest expense are shown below:

Year ended Dec. 31	2013	2012	2011
Interest on debt	240	227	228
Interest income	-	(2)	-
Capitalized interest	(2)	(4)	(31)
Ineffectiveness on hedges	-	4	(1)
Interest expense	238	225	196
Accretion of provisions	18	17	19
Net interest expense	256	242	215

For the year ended Dec. 31, 2013, net interest expense increased compared to 2012, primarily due to higher debt levels, unfavourable changes in foreign exchange rates, and higher interest rates, partially offset by lower ineffectiveness on hedges.

In 2012, net interest expense increased compared to 2011, primarily due to lower capitalized interest.

# **Income Taxes**

Our income tax rates and tax expense are based on the earnings generated in each jurisdiction in which we operate and any permanent differences between how pre-tax income is calculated for accounting and tax purposes. If there is a timing difference between when an expense or revenue item is recognized for accounting and tax purposes, these differences result in deferred income tax assets or liabilities and are measured using the income tax rate expected to be in effect when these temporary differences reverse. The impact of any changes in future income tax rates on deferred income tax assets or liabilities is recognized in earnings in the period the new rates are enacted.

A reconciliation of income taxes and effective tax rates on earnings, excluding non-comparable items, is presented below:

Year ended Dec. 31	2013	2012	2011
Earnings (loss) before income taxes	(12)	(445)	449
Income attributable to non-controlling interests	(29)	(37)	(38)
Equity (income) loss	10	15	(14)
Impacts associated with certain de-designated and ineffective hedges	103	72	(127)
Asset impairment charges (reversals)	(18)	324	17
Restructuring provision	(3)	13	-
Gain on sale of assets	(12)	(3)	(16)
Sundance Units 1 and 2 return to service	25	254	-
(Gain on sale of) reserve on collateral	-	(15)	18
Loss on assumption of pension obligations	29	-	-
Insurance recovery	(1)	-	-
California claim	56	-	-
Other non-comparable items	7	3	10
Earnings attributable to TransAlta shareholders excluding non-comparable items subject to tax	155	181	299
Income tax expense (recovery)	(8)	102	106
Income tax (expense) recovery related to impacts associated with certain de-designated and ineffective hedges	36	25	(46)
Income tax (expense) recovery related to asset impairment charges	(5)	(5)	4
Income tax (expense) recovery related to restructuring provision	(1)	3	-
Income tax expense related to gain on sale of assets	(2)	(1)	(4)
Income tax recovery related to Sundance Units 1 and 2 return to service	6	65	-
Income tax (expense) recovery related to (gain on sale of) reserve on collateral	-	(4)	5
Income tax expense related to writeoff of deferred income tax assets	(28)	(169)	-
Income tax recovery related to the resolution of certain outstanding tax matters	-	9	-
Income tax (expense) recovery related to changes in corporate income tax rates	5	(8)	-
Income tax recovery related to loss on assumption of pension obligations	7	-	-
Income tax recovery related to California claim	14	-	-
Reclassification of Part VI.1 tax	-	-	(2)
Income tax recovery related to other non-comparable items	2	1	3
Income tax expense excluding non-comparable items	26	18	66
Effective tax rate on earnings attributable to TransAlta shareholders excluding non-comparable items (%)	17	10	22

For the year ended Dec. 31, 2013, the income tax expense excluding non-comparable items increased compared to 2012 due to the positive resolution of certain tax contingency matters in the prior period and changes in the amount of earnings between the jurisdictions in which pre-tax income is earned.

In 2012, income tax expense excluding non-comparable items decreased compared to 2011 due to lower comparable earnings, changes in the amount of earnings between the jurisdictions in which pre-tax income is earned, and the positive resolution of certain outstanding tax matters.

For the year ended Dec. 31, 2013, the effective tax rate on earnings attributable to TransAlta shareholders excluding non-comparable items increased compared to 2012 due to changes in the amount of earnings between the jurisdictions in which pre-tax income is earned, the effect of certain deductions that do not fluctuate with earnings, and due to the positive resolution of certain tax contingency matters in the prior period.

In 2012, the effective tax rate on earnings attributable to TransAlta shareholders excluding non-comparable items decreased compared to 2011 due to changes in the amount of earnings between the jurisdictions in which pre-tax income is earned, the effect of certain deductions that do not fluctuate with earnings, and the positive resolution of certain outstanding tax matters.

# **Non-Controlling Interests**

We own 50.01 per cent of TA Cogen, which owns, operates, or has an interest in four natural gas-fired facilities and one coal-fired generating facility with a total gross generating capacity of 705 MW. Canadian Power owns the minority interest in TA Cogen. Natural Forces Technologies, Inc. owns a 17 per cent interest in our Kent Hills facility, which operates 150 MW of wind assets. Public shareholders own a 19.3 per cent interest in TransAlta Renewables, which operates 1,232 MW of renewable assets. Since we own a controlling interest in TA Cogen, Kent Hills, and TransAlta Renewables, we consolidate the entire earnings, assets, and liabilities in relation to our ownership of those assets.

Non-controlling interests on the Consolidated Statements of Earnings (Loss) and Consolidated Statements of Financial Position relate to the earnings and net assets attributable to TA Cogen, Kent Hills, and TransAlta Renewables that we do not own. On the Consolidated Statements of Cash Flows, cash paid to the minority shareholders of TA Cogen, Kent Hills, and TransAlta Renewables is shown in the financing section as distributions paid to subsidiaries' non-controlling interests.

Earnings attributable to non-controlling interests for the year ended Dec. 31, 2013 decreased \$8 million compared to 2012, due to lower earnings at TA Cogen.

In 2012, earnings attributable to non-controlling interests were comparable to 2011.

# **Additional IFRS Measures**

An additional IFRS measure is a line item, heading, or subtotal that is relevant to an understanding of the financial statements but is not a minimum line item mandated under IFRS, or the presentation of a financial measure that is relevant to an understanding of the financial statements but is not presented elsewhere in the financial statements. We have included line items entitled gross margin and operating income (loss) in our Consolidated Statements of Earnings (Loss) for the years ended Dec. 31, 2013, 2012, and 2011. Presenting these line items provides management and investors with a measurement of ongoing operating performance that is readily comparable from period to period.

# **Non-IFRS Measures**

We evaluate our performance and the performance of our business segments using a variety of measures. Those discussed below, and elsewhere in this MD&A, are not defined under IFRS and, therefore, should not be considered in isolation or as an alternative to or to be more meaningful than net earnings attributable to common shareholders or cash flow from operating activities, as determined in accordance with IFRS, when assessing our financial performance or liquidity. These measures are not necessarily comparable to a similarly titled measure of another company.

Each business unit assumes responsibility for its operating results measured to gross margin and operating income. Operating income and gross margin provides management and investors with a measurement of operating performance that is readily comparable from period to period.

Presenting earnings on a comparable basis, comparable gross margin, comparable operating income, and comparable EBITDA from period to period provides management and investors with supplemental information to evaluate earnings trends in comparison with results from prior periods. In calculating these items, we exclude the impact related to certain hedges that are either de-designated or deemed ineffective for accounting purposes, as management believes that these transactions are not representative of our business operations. As these gains (losses) have already been recognized in earnings in current or prior periods, future reported earnings will be lower; however, the expected cash flows from these contracts will not change. In calculating comparable earnings measures we have also excluded the 2012 coal inventory writedown, as the recognition of the writedown is related to the hedges that were de-designated or deemed ineffective during prior periods.

Other adjustments to earnings, such as those included in the earnings on a comparable basis calculation, have also been excluded as management believes these transactions are not representative of our business operations. Earnings on a comparable basis per share are calculated using the weighted average common shares outstanding during the period.

Presenting comparable EBITDA from period to period provides management and investors with a proxy for the amount of cash generated from operating activities before net interest expense, non-controlling interests, income taxes, and working capital adjustments.

Comparable operating income and EBITDA also include the earnings from the finance lease facilities that we operate. The finance lease income is used as a proxy for the operating income and EBITDA of these facilities.

Year ended Dec. 31	2013			2012 (restated)*		
	Danastad	Comparable		D t - d	Comparable	
Revenues	2,292	adjustments	total 2,395	2,210	adjustments 52 <sup>11</sup>	2,262
Fuel and purchased power	926	103	926	753	25 <sup>12</sup>	778
Gross margin	1,366	103	1,469	1,457	27	1,484
Operations, maintenance, and administration	516	(5) <sup>2</sup>	· · · · · · · · · · · · · · · · · · ·	499	(3) <sup>13</sup>	
Inventory writedown	22	(5)	22	449	(25) <sup>12</sup>	
Taxes, other than income taxes	27	_	27	28	(25)	28
Finance lease income	(46)			(16)	(3) <sup>3</sup>	
Insurance recovery	(40)	(1) <sup>4</sup>		(10)	(3)	(15)
Gain on sale of property, plant, and equipment		(2) <sup>5</sup>			(14)5	(14)
Mine depreciation	_	(58) <sup>6</sup>		_	(41) <sup>6</sup>	` '
Earnings before interest, taxes, depreciation, and amortization	847	176	1,023	902	113	1,015
Depreciation and amortization	525	58 <sup>7</sup>	583	509	55 <sup>14</sup>	564
Asset impairment charges	(18)		-	324	(324)8	
Restructuring provision	(3)		_	13	(13)8	
Other	(3)	1 <sup>3</sup>	1	-	(17) <sup>15</sup>	
Operating income	343	96	439	56	412	468
Equity loss	(10)		(10)	(15)		(15)
California claim	(56)		-	(15)	_	(13)
Sundance Units 1 and 2 return to service	(25)		_	(254)	254 <sup>8</sup>	_
Gain on sale of assets	12	(12)8	_	3	(3)8	_
Other income	_	-	_	1	_	1
Foreign exchange gain (loss)	1	_	1	(9)	_	(9)
Loss on assumption of pension obligations	(29)		_	_	_	_
Gain on sale of collateral	_	_	_	15	(15)8	_
Insurance recovery	8	<b>(8)</b> <sup>9</sup>	_	-	-	_
Earnings (loss) before interest and taxes	244	186	430	(203)	648	445
Net interest expense	256	_	256	242	_	242
Income tax expense (recovery)	(8)	<b>34</b> <sup>10</sup>	26	102	(84)10	18
Net earnings (loss)	(4)	152	148	(547)	732	185
Non-controlling interests	29	_	29	37	_	37
Net earnings (loss) attributable to TransAlta shareholders	(33)	152	119	(584)	732	148
Preferred share dividends	38	-	38	31	-	31
Net earnings (loss) attributable to common shareholders	(71)	152	81	(615)	732	117
Weighted average number of common shares outstanding in the period	264		264	235		235
Net earnings (loss) per share attributable to common shareholders	(0.27)	_	0.31	(2.62)	_	0.50

- \* Please refer to Note 3 of our audited consolidated financial statements for additional information regarding the restatements.
- 1 Impacts associated with certain de-designated and ineffective hedges.
- 2 Flood-related maintenance costs.
- 3 Decrease in finance lease receivable.
- 4 Comparable portion of insurance recovery received.
- 5 Gain on sale of PP&E that is included in depreciation and amortization for presentation purposes.
- 6 Mine depreciation that is included in fuel and purchased power for presentation purposes.
- 7 Total adjustments for gain on sale of PP&E, mine depreciation, and flood-related maintenance costs.
- 8 Non-comparable item.
- 9 Reclassification to include in EBITDA.
- 10 Net tax effect of all non-comparable items.
- 11 Includes impacts associated with certain de-designated and ineffective hedges and impacts to revenue associated with Sundance Units 1 and 2 to provide period over period comparability.
- 12 Non-comparable portion of inventory writedown.
- 13 Writeoff of Project Pioneer costs.
- 14 Total net adjustments for gain on sale of PP&E and mine depreciation.
- 15 Total net adjustments for impacts to revenue associated with Sundance Units 1 and 2 and decrease in finance lease receivable.

Year ended Dec. 31	4	2011 (Restated)*			
	Reported	Comparable adjustments	Comparable total		
Revenues	2,618	(167) <sup>1</sup>	2,451		
Fuel and purchased power	895	_	895		
Gross margin	1,723	(167)	1,556		
Operations, maintenance, and administration	552	(6) <sup>2</sup>	546		
Taxes, other than income taxes	27	-	27		
Finance lease income	(8)	$(3)^3$	(11)		
Gain on sale of property, plant, and equipment	-	(10) <sup>4</sup>	(10)		
Mine depreciation	-	(40) <sup>5</sup>	(40)		
Earnings before interest, taxes, depreciation, and amortization	1,152	(108)	1,044		
Depreciation and amortization	482	46 <sup>6</sup>	528		
Asset impairment charges	17	(17) <sup>7</sup>	-		
Other	-	(37)8	(37)		
Operating income	653	(100)	553		
Equity income	14	-	14		
Gain on sale of assets	16	(16) <sup>7</sup>	-		
Other income	2	-	2		
Foreign exchange loss	(3)	-	(3)		
Reserve on collateral	(18)	18 <sup>7</sup>	-		
Earnings before interest and taxes	664	(98)	566		
Net interest expense	215	-	215		
Income tax expense	106	(40) <sup>9</sup>	66		
Net earnings	343	(58)	285		
Non-controlling interests	38	-	38		
Net earnings attributable to TransAlta shareholders	305	(58)	247		
Preferred share dividends	15	-	15		
Net earnings attributable to common shareholders	290	(58)	232		
Weighted average number of common shares outstanding in the period	222		222		
Net earnings per share attributable to common shareholders	1.31		1.05		

<sup>\*</sup> Please refer to Note 3 of our audited consolidated financial statements for additional information regarding the restatements.

<sup>1</sup> Includes impacts associated with certain de-designated and ineffective hedges and impacts to revenue associated with Sundance Units 1 and 2 to provide period over period comparability.

<sup>2</sup> Writedown of wind development costs.

<sup>3</sup> Decrease in finance lease receivable.

<sup>4</sup> Gain on sale of PP&E that is included in depreciation and amortization for presentation purposes.

<sup>5</sup> Mine depreciation that is included in fuel and purchased power for presentation purposes.

<sup>6</sup> Total net adjustments for gain on sale of PP&E, mine depreciation, and writedown of capital spares.

<sup>7</sup> Non-comparable item.

<sup>8</sup> Total net adjustments for revenues associated with Sundance Units 1 and 2 and decrease in finance lease receivable.

 $<sup>9\ \ \</sup>textit{Net tax effect of all non-comparable items}.$ 

# Funds from Operations, Free Cash Flow, Funds from Operations per Share, and Free Cash Flow per Share

Presenting these items from period to period provides management and investors with a proxy for the amount of cash generated from operating activities, before changes in working capital, and provides the ability to evaluate cash flow trends more readily in comparison with results from prior periods. Starting in 2013, we have adjusted the calculation of free cash flow to be calculated as FFO less sustaining capital expenditures, dividends paid on preferred shares, and distributions paid to subsidiaries' non-controlling interests. FFO per share and free cash flow per share are calculated using the weighted average number of common shares outstanding during the period:

Year ended Dec. 31	2013	2012	2011
Cash flow from operating activities	765	520	690
Impacts to working capital associated with Sundance Units 1 and 2 arbitration	-	204	-
Impacts to working capital associated with California claim	27	-	-
Payment of restructuring costs	5	5	-
Flood-related maintenance costs	5	-	-
Decrease in finance lease receivable	1	3	3
Change in non-cash operating working capital balances	(74)	56	119
FFO	729	788	812
Deduct:			
Sustaining capital expenditures	(341)	(439)	(319)
Dividends paid on preferred shares	(38)	(32)	(15)
Distributions paid to subsidiaries' non-controlling interests	(55)	(59)	(61)
Free cash flow	295	258	417
Weighted average number of common shares outstanding in the period	264	235	222
FFO per share	2.76	3.35	3.66
Free cash flow per share	1.12	1.10	1.88
Year ended Dec. 31	2013	2012	2011
Comparable EBITDA	1,023	1,015	1,044
Unrealized (gain) loss from risk management activities	(27)	27	(48)
Impacts to revenue associated with Sundance Units 1 and 2 to provide period over period comparability	-	20	40
Cash interest expense	(238)	(225)	(196)
Provisions	11	11	22
Cash income tax expense	(39)	(13)	(26)
Realized foreign exchange loss	-	(4)	_
Decommissioning and restoration costs settled	(24)	(34)	(33)
Restructuring provision	3	(13)	-
Sundance Units 1 and 2 return to service	-	(211)	-
Gain on sale of (reserve on) collateral	-	15	-
Impacts to working capital associated with Sundance Units 1 and 2 arbitration	-	204	-
Payment of restructuring costs	5	5	-
Flood-related maintenance costs	5	-	-
Other non-cash items	10	(9)	9
FFO	729	788	812

# **Financial Position**

The following chart outlines significant changes in the Consolidated Statements of Financial Position from Dec. 31, 2012 to Dec. 31, 2013:

	Increase/ (Decrease)	Primary factors explaining change
Cash and cash equivalents	15	Timing of receipts and payments
Accounts receivable	(124)	Timing of customer receipts
Inventory	(16)	Writedown of coal inventory partially offset by higher average coal costs
Investments	20	Additions to equity investments
Finance lease receivable (current and long-term)	21	Favourable changes in foreign exchange rates
Property, plant, and equipment, net	149	Purchase of wind farm in Wyoming and additions partially offset by asset retirements and depreciation
Goodwill	13	Purchase of Wyoming wind farm
Intangible assets	39	Purchase of wind farm in Wyoming partially offset by amortization
Deferred income tax assets	28	Net deferred income tax recovery
Risk management assets (current and long-term)	118	Price movements and changes in underlying positions and settlements
Accounts payable and accrued liabilities	(48)	Timing of payments and lower capital accruals
Dividends payable	10	Increased dividends due to increase in total shares outstanding
Long-term debt (including current portion)	105	Issuance of senior notes, partially offset by use of net proceeds received on sale of the non-controlling interest in TransAlta Renewables to pay down borrowings on our credit facility
Finance lease obligation (including current portion)	25	Finance lease for mining equipment at the Highvale Mine
Decommissioning and other provisions (current and long-term)	20	Increase in decommissioning and other provisions
Deferred credits and other long-term liabilities	39	California claim and reimbursement received for New Richmond, partially offset by decrease in defined benefit accrual
Deferred income tax liabilities	(14)	Net deferred income tax recovery
Risk management liabilities (current and long-term)	74	Price movements and changes in underlying positions and settlements
Equity attributable to shareholders	(112)	Share dividends partially offset by issuance of common shares and net earnings for the period
Non-controlling interests	187	Sale of the non-controlling interest in TransAlta Renewables, partially offset by non-controlling interests' portion of net earnings net of distributions to non-controlling interests

# **Financial Instruments**

Financial instruments are used to manage our exposure to interest rates, commodity prices, and currency fluctuations, as well as other market risks. We currently use physical and financial swaps, forward sale and purchase contracts, futures contracts, foreign exchange contracts, interest rate swaps, and options to achieve our risk management objectives, which are described below. Financial instruments are accounted for using the fair value method of accounting. The initial recognition of fair value and subsequent changes in fair value can affect reported earnings in the period the change occurs if hedge accounting is not elected. Otherwise, changes in fair value will generally not affect earnings until the financial instrument is settled.

We have two types of financial instruments: (i) those that are used in the Generation and Energy Trading segments in relation to energy trading activities, commodity hedging activities, and other contracting activities and (ii) those used in the hedging of debt, projects, expenditures, and our net investment in foreign operations.

Some of our financial instruments and physical commodity contracts are recorded under own use accounting or qualify for, and are recorded under, hedge accounting rules. The accounting for those contracts for which we have elected to apply hedge accounting depends on the type of hedge. Our financial instruments are categorized as fair value hedges, cash flow hedges, net investment hedges, or non-hedges. These categories and their associated accounting treatments are explained in further detail below.

For all types of hedges, we test for effectiveness at the end of each reporting period to determine if the instruments are performing as intended and hedge accounting can still be applied. All financial instruments are designed to ensure that future cash inflows and outflows are predictable. In a hedging relationship, the effective portion of the change in the fair value of the hedging derivative does not impact net earnings, while any ineffective portion is recognized in net earnings.

As well, there are certain contracts in our portfolio that at their inception do not qualify for, or we have chosen not to elect to apply, hedge accounting. For these contracts, we recognize in net earnings mark-to-market gains and losses resulting from changes in forward prices compared to the price at which these contracts were transacted. These changes in price alter the timing of earnings recognition, but do not affect the final settlement amount received. The fair value of future contracts will continue to fluctuate as market prices change.

The fair value of derivatives traded by the Corporation that are not traded on an active exchange, or extend beyond the time period for which exchange-based quotes are available, are determined using valuation techniques or models.

# Fair Value Hedges

Fair value hedges are used to offset the impact of changes in the fair value of fixed rate long-term debt caused by variations in market interest rates. We use interest rate swaps in our fair value hedges.

In a fair value hedge, changes in the fair value of the hedging instrument (an interest rate swap, for example) are recognized in risk management assets or liabilities, and the related gains or losses are recognized in net earnings. The carrying amount of long-term debt subject to the hedge is adjusted for losses or gains associated with the hedged risk, with the corresponding amounts recognized in net earnings. As a result, only the net ineffectiveness is recognized in net earnings.

# Cash Flow Hedges

Cash flow hedges are categorized as project, foreign exchange, interest rate, or commodity hedges and are used to offset foreign exchange, interest rate, and commodity price exposures resulting from market fluctuations.

# **Project Hedges**

Foreign currency forward contracts are used to hedge foreign exchange exposures resulting from anticipated contracts and firm commitments denominated in foreign currencies, primarily related to capital expenditures.

#### Foreign Exchange, Interest Rate, and Commodity Hedges

Physical and financial swaps, forward sale and purchase contracts, futures contracts, and options are used primarily to offset the variability in future cash flows caused by fluctuations in electricity and natural gas prices. Foreign exchange forward contracts and cross-currency swaps are used to offset the exposures resulting from foreign-denominated long-term debt. Forward start interest rate swaps are used to offset the variability in cash flows related to interest expense resulting from anticipated issuances of long-term debt.

In a cash flow hedge, changes in the fair value of the hedging instrument (a forward contract or financial swap, for example) are recognized in risk management assets or liabilities, and the related gains or losses are recognized in other comprehensive income ("OCI"). These gains or losses are subsequently reclassified from OCI to net earnings in the same period as the hedged forecast cash flows impact net earnings, and offset the losses or gains arising from the forecast transactions. For project hedges, the gains and losses reclassified from OCI are included in the carrying amount of the related PP&E.

When we do not elect hedge accounting, or when the hedge is no longer effective and does not qualify for hedge accounting, the gains or losses as a result of changes in prices, interest, or exchange rates related to these financial instruments are recorded in net earnings in the period in which they arise.

# Net Investment Hedges

Foreign currency forward contracts and foreign-denominated long-term debt are used to hedge exposure to changes in the carrying values of our net investments in foreign operations that have a functional currency other than the Canadian dollar. Gains or losses on these instruments are recognized and deferred in OCI and reclassified to net earnings on the disposal of the foreign operation. We attempt to manage our foreign exchange translation exposure by matching foreign-denominated expenses with revenues, such as offsetting revenues from our U.S. operations with interest payments on our U.S. dollar debt.

# Non-Hedges

Financial instruments not designated as hedges are used to reduce commodity price, foreign exchange, and interest rate risks. Changes in the fair value of financial instruments not designated as hedges are recognized in risk management assets or liabilities, and the related gains or losses are recognized in net earnings in the period in which the change occurs.

# Fair Values

The majority of fair values for our project, foreign exchange, interest rate, commodity hedges, and non-hedge derivatives are calculated using adjusted quoted prices from an active market or inputs validated by broker quotes. We may enter into commodity transactions involving non-standard features for which market-observable data is not available. These transactions are defined under IFRS as Level III instruments. Level III instruments incorporate inputs that are not observable from the market, and fair value is therefore determined using valuation techniques. Fair values are validated by using reasonable possible alternative assumptions as inputs to valuation techniques, and any material differences are disclosed in the notes to the financial statements. At Dec. 31, 2013, Level III instruments had a net asset carrying value of \$66 million. Refer to the Critical Accounting Policies and Estimates section of this MD&A for further details regarding valuation techniques. Our risk management profile and practices have not changed materially from Dec. 31, 2012.

# **Employee Share Ownership**

We employ a variety of stock-based compensation plans to align employee and corporate objectives.

Under the terms of our stock option plans, employees below manager level may receive grants that vest in equal instalments over four years and expire after ten years.

Under the terms of the Performance Share Ownership Plan ("PSOP"), certain employees receive grants which, after three years, make them eligible to receive a set number of common shares, including the value of reinvested dividends over the period, or the equivalent value in cash plus dividends, based upon our TSR relative to companies comprising the comparator group. After three years, once PSOP eligibility has been determined and provided our performance exceeded the 25th percentile, common shares are awarded, with 50 per cent of the common shares released to the participant and the remaining 50 per cent held in trust for one additional year for employees below vice-president level, and for two additional years for employees at the vice-president level and above. The effect of the PSOP does not materially affect the calculation of the total weighted average number of common shares outstanding.

Under the terms of the Employee Share Purchase Plan, we extend an interest-free loan to our employees below executive level for up to 30 per cent of the employee's base salary for the purchase of our common shares from the open market. The loan is repaid over a three-year period by the employee through payroll deductions unless the shares are sold, at which point the loan becomes due on demand. As at Dec. 31, 2013, accounts receivable from employees under the plan totalled \$3 million (2012 - \$4 million). This program is not available to officers and senior management.

# **Employee Future Benefits**

We have registered pension plans in Canada and the U.S. covering substantially all employees of the Corporation, its domestic subsidiaries, and specific named employees working internationally. These plans have defined benefit and defined contribution options, and in Canada there is an additional supplemental defined benefit plan for members whose annual earnings exceed the Canadian income tax limit. Except for the newly acquired SunHills plans, the Canadian and U.S. defined benefit pension plans are closed to new entrants. The U.S. defined benefit pension plan was frozen effective Dec. 31, 2010, resulting in no future benefits being earned. The most recent actuarial valuation for accounting purposes of the registered and supplemental pension plans was conducted as at Dec. 31, 2013 for the Canadian pension plan and Jan. 1, 2013 for the U.S. pension plan.

We provide other health and dental benefits for disabled members and retired members, typically up to the age of 65 (other post-employment benefits). The most recent actuarial valuation of these plans was conducted at Dec. 31, 2013 for the Canadian plan and Jan. 1, 2013 for the U.S. plan.

The supplemental pension plan is an obligation of the Corporation. We are not obligated to fund the supplemental plan but are obligated to pay benefits under the terms of the plan as they come due. We have posted a letter of credit in the amount of \$63 million to secure the obligations under the supplemental plan.

# **Statements of Cash Flows**

The following charts highlight significant changes in the Consolidated Statements of Cash Flows for the years ended Dec. 31, 2013 and 2012:

Year ended Dec. 31	2013	2012	Explanation of change
Cash and cash equivalents, beginning of year	27	49	
Provided by (used in):			
Operating activities	765	520	Favourable changes in working capital of \$307 million, net of a \$27 million impact associated with the California claim in 2013 and a \$204 million impact associated with the Sundance Units 1 and 2 arbitration in 2012, partially offset by lower cash earnings of \$62 million
Investing activities	(703)	(1,048)	Decrease in acquisition of finance lease of \$312 million, a decrease in additions to PP&E and intangibles of \$149 million, an increase in realized gains on financial instruments of \$26 million, and an increase in proceeds on sale of PP&E of \$11 million, partially offset by the acquisition of the Wyoming wind farm for \$109 million, an increase in equity investments of \$17 million, a net negative impact of \$12 million related to changes in collateral received from or paid to counterparties, and a decrease in investing non-cash working capital balances of \$27 million
Financing activities	(47)	504	Decrease in proceeds on issuance of common shares of \$293 million, a decrease in borrowings under credit facilities of \$271 million partially due to the use of net proceeds received from the sale of the non-controlling interest in TransAlta Renewables to pay down borrowings on our credit facility, a decrease in proceeds on issuance of preferred shares of \$217 million, an increase in common share cash dividends of \$12 million, partially offset by an increase in proceeds on sale of non-controlling interest in subsidiary of \$207 million, an increase in realized gains on financial instruments of \$46 million, a decrease in long-term debt payments of \$14 million, and an increase in proceeds on the issuance of long-term debt of \$10 million
Translation of foreign currency cash	-	2	
Cash and cash equivalents, end of year	42	27	
Year ended Dec. 31	2012	2011	Explanation of change
Cash and cash equivalents, beginning of year	49	35	,
Provided by (used in):			
Operating activities	520	690	Lower cash earnings of \$29 million and unfavourable changes in working capital of \$141 million, net of a \$204 million impact associated with the Sundance Units 1 and 2 arbitration
Investing activities	(1,048)	(608)	Acquisition of Solomon finance lease for \$312 million, an increase in additions to PP&E and intangibles of \$259 million, and a decrease in proceeds on sale of PP&E and facilities of \$46 million, partially offset by a net positive impact of \$176 million related to changes in collateral
Financing activities	504	(70)	received from or paid to counterparties Issuance of long-term debt of \$388 million, increase in issuance of common shares of \$291 million, and a decrease in common share cash dividends of \$87 million due to dividends reinvested through the dividend reinvestment plan, partially offset by an increase in debt repayments of \$80 million, a decrease of \$50 million in proceeds from the issuance of preferred shares, an increase in realized losses on financial instruments of \$40 million, and an increase in preferred share dividends of \$17 million
Financing activities  Translation of foreign currency cash	504	(70)	received from or paid to counterparties  Issuance of long-term debt of \$388 million, increase in issuance of common shares of \$291 million, and a decrease in common share cash dividends of \$87 million due to dividends reinvested through the dividend reinvestment plan, partially offset by an increase in debt repayments of \$80 million, a decrease of \$50 million in proceeds from the issuance of preferred shares, an increase in realized losses on financial instruments of \$40 million, and an increase in preferred

# Liquidity and Capital Resources

Liquidity risk arises from our ability to meet general funding needs, engage in trading and hedging activities, and manage the assets, liabilities, and capital structure of the Corporation. Liquidity risk is managed by maintaining sufficient liquid financial resources to fund obligations as they come due in the most cost-effective manner.

Our liquidity needs are met through a variety of sources, including cash generated from operations, borrowings under our long-term credit facilities, and long-term debt or equity issued under our Canadian and U.S. shelf registrations. Our primary uses of funds are operational expenses, capital expenditures, dividends, distributions to non-controlling limited partners, and interest and principal payments on debt securities.

# Debt

Long-term debt totalled \$4.3 billion as at Dec. 31, 2013 compared to \$4.2 billion as at Dec. 31, 2012. Total long-term debt increased from Dec. 31, 2012, primarily due to unfavourable changes in foreign exchange rates.

#### **Credit Facilities**

At Dec. 31, 2013, we had a total of \$2.1 billion (2012 - \$2.0 billion) of committed credit facilities, of which \$0.9 billion (2012 - \$0.8 billion) is not drawn and is available, subject to customary borrowing conditions. At Dec. 31, 2013, the \$1.2 billion (2012 - \$1.3 billion) of credit utilized under these facilities was comprised of actual drawings of \$0.8 billion (2012 - \$1.0 billion) and letters of credit of \$0.4 billion (2012 - \$0.3 billion). These facilities are comprised of a \$1.5 billion committed syndicated bank facility that matures in 2017, with the remainder comprised of bilateral credit facilities, of which \$0.3 billion matures in 2017 and \$0.2 billion matures in the fourth quarter of 2015. We anticipate renewing these facilities, based on reasonable commercial terms, prior to their maturities.

In addition to the \$0.9 billion available under the credit facilities, we have \$42 million of available cash.

# Share Capital

At Dec. 31, 2013, we had 268.2 million (2012 - 254.7 million) common shares issued and outstanding. During the year ended Dec. 31, 2013, 13.5 million (2012 - 31.1 million) common shares were issued for \$186 million (2012 - \$456 million), which was comprised of dividends reinvested under the terms of the Plan. During 2012, we issued 9.7 million common shares for \$159 million for dividends reinvested under the terms of the Plan, 21.2 million common shares were issued through a public offering for total net proceeds of \$295 million, and 0.2 million common shares were issued for proceeds of \$2 million.

At Dec. 31, 2013, we had 32.0 million (2012 - 32.0 million) preferred shares issued and outstanding.

On Feb. 19, 2014, we had 270.4 million common shares and 12.0 million Series A, 11.0 million Series C, and 9.0 million Series E first preferred shares outstanding.

# **Guarantee Contracts**

We have obligations to issue letters of credit and cash collateral to secure potential liabilities to certain parties, including those related to potential environmental obligations, energy trading activities, hedging activities, and purchase obligations. At Dec. 31, 2013, we provided letters of credit totalling \$370 million (2012 – \$336 million) and cash collateral of \$21 million (2012 – \$19 million). These letters of credit and cash collateral secure certain amounts included on our Consolidated Statements of Financial Position under risk management liabilities and decommissioning and other provisions.

# **Working Capital**

As at Dec. 31, 2013, the excess of current liabilities over current assets is \$105 million (2012 – \$436 million). The excess of current liabilities over current assets decreased \$331 million compared to 2012 due to a decrease in the current portion of long-term debt and current risk management liabilities, partially offset by a decrease in accounts receivable and current risk management assets.

# **Capital Structure**

Our capital structure consisted of the following components as shown below:

	2013		2012	
As at Dec. 31	Amount	%	Amount	%
Debt, net of available cash and cash equivalents	4,280	55	4,192	56
Non-controlling interests	517	7	330	4
Equity attributable to shareholders	2,906	38	3,018	40
Total capital	7,703	100	7,540	100

#### Commitments

Contractual repayments of transmission, operating leases, commitments under mining agreements, commitments under long-term service agreements, long-term debt and the related interest, and growth project commitments are as follows:

ć	Natural gas, transportation, and other purchase contracts	Transmission and power purchase agreements	Operating leases	Coal supply and mining agreements	Long-term service agreements	Long-term debt <sup>1</sup>	Interest on long-term debt <sup>2</sup>	Total
2014	39	11	12	172	42	209	211	696
2015	14	12	10	123	26	689	178	1,052
2016	13	9	10	126	25	29	172	384
2017	13	3	8	41	20	854	162	1,101
2018	12	3	7	41	27	732	123	945
2019 and therea	fter 103	6	52	501	174	1,807	783	3,426
Total	194	44	99	1,004	314	4,320	1,629	7,604

As part of the Bill signed into law in the State of Washington and the subsequent MoA, we have committed to fund \$55 million over the remaining life of the Centralia coal plant to support economic development, promote energy efficiency, and develop energy technologies related to the improvement of the environment. The MoA contains certain provisions for termination and in the event of the termination of the MoA this funding will no longer be required.

# **Unconsolidated Structured Entities or Arrangements**

Disclosure is required of all unconsolidated structured entities or arrangements such as transactions, agreements, or contractual arrangements with unconsolidated entities, structured finance entities, special purpose entities, or variable interest entities that are reasonably likely to materially affect liquidity or the availability of, or requirements for, capital resources. We currently have no such unconsolidated structured entities or arrangements.

# Climate Change and the Environment

All energy sources used to generate electricity have some impact on the environment. While we are pursuing a business strategy that includes investing in low-impact renewable energy resources such as wind, hydro, and geothermal, we also believe that coal and natural gas as fuels will continue to play an important role in meeting future energy needs. Regardless of the fuel type, we place significant importance on environmental compliance and continued environmental impact mitigation, while seeking to deliver low-cost electricity.

1 Repayments of long-term debt include amounts related to our credit facilities that are currently scheduled to mature in 2015 and 2017.

2 Interest on long-term debt is based on debt currently in place with no assumption as to re-financing an instrument on maturity.

# Ongoing and Recently Passed Environmental Legislation

Changes in current environmental legislation do have, and will continue to have, an impact upon our operations and our business.

#### **Alberta**

In October 2012, the Alberta Government released its renewed Clean Air Strategy, which sets out a broad framework for managing air emissions and air quality in the future. The framework focuses on a continuous improvement model for regional air quality. It also states that Alberta will take responsibility for implementing any federal air quality standards. There are no specific requirements in this framework that immediately impact our operations.

In Alberta there are requirements for coal-fired generation units to implement additional air emission controls for oxides of nitrogen ("NOx") and sulphur dioxide (" $SO_2$ ") once they reach the end of their respective PPAs, in most cases at 2020. These regulatory requirements were developed by the province in 2004 as a result of multi-stakeholder discussions under Alberta's Clean Air Strategic Alliance ("CASA"). However, the release of the federal GHG regulations may create a potential misalignment between the CASA air pollutant requirements and schedules, and the GHG retirement schedules for older coal plants, which in themselves will result in significant reductions of NOx,  $SO_2$ , and particulates. We are in discussions with the provincial government to ensure coordination between GHG and air pollutant regulations, such that emission reduction objectives are achieved in the most effective manner while taking into consideration the reliability and cost of Alberta's generation supply.

#### Canada

On Sept. 11, 2012, the Canadian federal government published the final regulations governing GHG emissions from coal-fired power plants, to become effective on July 1, 2015. The regulations provide for up to 50 years of life for coal units, at which point units must meet an emissions performance standard of approximately 420 tonnes per GWh. There are some exceptions that require older units commissioned before 1975 to reach end of life by Dec. 31, 2019, and units commissioned between 1975 and 1986 to reach end of life by Dec. 31, 2029. We believe the final regulations provide additional operating time and increased flexibility for our Canadian coal units, allowing for a smoother transition of those units in a more cost-effective manner.

#### **United States**

In the U.S., on June 25, 2013, President Obama announced his Climate Action Plan, which sets out plans for GHG emission standards to be imposed by the Environmental Protection Agency ("EPA") for new and existing power plants. Subsequently, on Sept. 20, 2013, the EPA issued draft regulations for new coal-fired plants that, if adopted, would require new coal plants to achieve GHG emissions of no more than 1,100 pounds per MWh of carbon dioxide (significantly below current average emissions for coal-fired plants) in order to be approved. These regulations are expected to be finalized by mid-2014. These proposed regulations do not currently have an impact on our operations. Standards for existing units are to be finalized by June 2015. State implementation plans are to be completed a year later. There will be few additional details as to how existing coal (and potentially natural gas) units might be treated until the EPA releases a draft rule. Furthermore, the U.S. Supreme Court has agreed to review a challenge to the EPA's right to regulate GHG emissions from stationary sources like power plants, so the future of this regulation is uncertain.

In December 2011, the EPA issued national standards for mercury emissions from power plants. Existing sources will have up to four years to comply. We have already voluntarily installed mercury capture technology at our Centralia coal-fired plant, and began full capture operations in early 2012. We have also installed additional technology to further reduce NOx, consistent with the Bill passed in 2011.

In addition to the federal, regional, and state regulations that we must comply with, we also comply with the standards established by the North American Electric Reliability Corporation ("NERC"). NERC is the electric reliability organization certified by the Federal Energy Regulatory Commission in the U.S. to establish and enforce reliability standards for the bulk-power system. NERC develops and enforces reliability standards; assesses adequacy annually; monitors the bulk-power system; and educates, trains, and certifies industry personnel.

Recent changes to environmental regulations may materially adversely affect us. As indicated under "Risk Factors" in our Annual Information Form and within the Risk Management section of this MD&A, many of our activities and properties are subject to environmental requirements, as well as changes in our liabilities under these requirements, which may have a material adverse effect upon our consolidated financial results.

# TransAlta Activities

Reducing the environmental impact of our activities has a benefit not only to our operations and financial results, but also to the communities in which we operate. We expect that increased scrutiny will be placed on environmental emissions and compliance, and we therefore have a proactive approach to minimizing risks to our results. Our Board of Directors provides oversight to our environmental management programs and emission reduction initiatives to ensure continued compliance with environmental regulations.

In 2013, we estimate that 27.5 million tonnes of GHGs with an intensity of 0.801 tonnes per MWh (2012 – 27 million tonnes of GHGs with an intensity of 0.816 tonnes per MWh) were emitted as a result of normal operating activities.<sup>1</sup>

Our environmental management programs encompass the following elements:

#### Renewable Power

We continue to invest in and build renewable power resources. Commercial operations began at our 68 MW New Richmond wind facility during the first quarter of 2013 and on Dec. 20, 2013 we completed the acquisition of a 144 MW wind farm in Wyoming. A larger renewable portfolio provides increased flexibility in generation and creates incremental environmental value through renewable energy certificates or through offsets.

# **Environmental Controls and Efficiency**

We continue to make operational improvements and investments to our existing generating facilities to reduce the environmental impact of generating electricity. We installed mercury control equipment at our Alberta Thermal operations in 2010 in order to meet the province's 70 per cent reduction objectives, and voluntarily at our Centralia coal-fired plant in 2012. Our Keephills Unit 3 plant began operations in September 2011 using supercritical combustion technology to maximize thermal efficiency, as well as  $SO_2$  capture and low NOx combustion technology, which is consistent with the technology that is currently in use at Genesee Unit 3. Uprate projects completed at our Keephills and Sundance plants have improved the energy and emissions efficiency of those units.

The PPAs for our Alberta-based coal facilities contain change-in-law provisions that allow us the opportunity to recover capital and operating compliance costs from our PPA customers.

# **Policy Participation**

We are active in policy discussions at a variety of levels of government. These discussions have allowed us to engage in proactive discussions with governments and industry participants to meet environmental requirements over the longer term.

# **Clean Combustion Technologies**

We look to advance clean energy technologies through organizations such as the Canadian Clean Power Coalition, which examines emerging clean combustion technologies such as gasification.

# **Offsets Portfolio**

TransAlta maintains an emissions offsets portfolio with a variety of instruments that can be used for compliance purposes or otherwise banked or sold. We continue to examine additional emissions offset opportunities that will allow us to meet emission targets at a competitive cost. Any investments in offsets will meet certification criteria in the market in which they are to be used.

<sup>1 2013</sup> data are estimates based on best available data at the time of report production. GHGs include water vapour, carbon dioxide ("CO<sub>2</sub>"), methane, nitrous oxide, sulphur hexafluoride, hydrofluorocarbons, and perfluorocarbons. The majority of our estimated GHG emissions are comprised of CO<sub>2</sub> emissions from stationary combustion.

# Forward-Looking Statements

This MD&A, the documents incorporated herein by reference, and other reports and filings made with the securities regulatory authorities include forward-looking statements or information (collectively referred to herein as "forward-looking statements") within the meaning of the "safe harbour" provisions of applicable securities legislation. All forward-looking statements are based on our beliefs as well as assumptions based on information available at the time the assumption was made and on management's experience and perception of historical trends, current conditions, and expected future developments, as well as other factors deemed appropriate in the circumstances. Forward-looking statements are not facts, but only predictions and generally can be identified by the use of statements that include phrases such as "may", "will", "believe", "expect", "anticipate", "intend", "plan", "foresee", "potential", "enable", "continue", or other comparable terminology. These statements are not guarantees of our future performance and are subject to risks, uncertainties, and other important factors that could cause our actual performance to be materially different from that projected.

In particular, this MD&A contains forward-looking statements pertaining to our business and anticipated financial performance including, for example: the timing and the completion and commissioning of projects under development, including major projects, and their attendant costs; expectations regarding AESO's plans for resolving regional constraints on Alberta's transmission system; our estimated spend on matters relating to the 2013 flood in Alberta, spend on growth, and sustaining capital and productivity projects; expectations in terms of the cost of operations, capital spend, and maintenance, and the variability of those costs; the impact of certain hedges on future reported earnings and cash flows; expectations related to future earnings and cash flow from operating and contracting activities; estimates of fuel supply and demand conditions and the costs of procuring fuel; expectations for demand for electricity in both the short term and long term, and the resulting impact on electricity prices; the impact of load growth, increased capacity, and natural gas costs on power prices; expectations in respect of generation availability, capacity, and production; expectations regarding the role different energy sources will play in meeting future energy needs; expected financing of our capital expenditures; expected governmental regulatory regimes and legislation and their expected impact on us and the timing of the implementation of such regimes and regulations, as well as the cost of complying with resulting regulations and laws; our trading strategies and the risk involved in these strategies; estimates of future tax rates, future tax expense, and the adequacy of tax provisions; accounting estimates; anticipated growth rates in our markets; expectations for the outcome of existing or potential legal and contractual claims; investigations and disputes; expectations for the ability to access capital markets at reasonable terms; the estimated impact of changes in interest rates and the value of the Canadian dollar relative to the U.S. dollar and other currencies in locations where we do business; the monitoring of our exposure to liquidity risk; expectations regarding the renewal of collective bargaining agreements; expectations in respect to the global economic environment and growing scrutiny by investors relating to sustainability performance; our credit practices; the estimated contribution of Energy Trading activities to gross margin; and expectations relating to the performance of TransAlta Renewables' assets.

Factors that may adversely impact our forward-looking statements include risks relating to: fluctuations in market prices and the availability of fuel supplies required to generate electricity; our ability to contract our generation for prices that will provide expected returns; the regulatory and political environments in the jurisdictions in which we operate; environmental requirements and changes in, or liabilities under, these requirements; changes in general economic conditions including interest rates; operational risks involving our facilities, including unplanned outages at such facilities; disruptions in the transmission and distribution of electricity; the effects of weather; disruptions in the source of fuels, water, or wind required to operate our facilities; natural disasters; the threat of domestic terrorism and cyber-attacks; equipment failure and our ability to carry out the repairs in a cost-effective manner or timely manner; energy trading risks; industry risk and competition; fluctuations in the value of foreign currencies and foreign political risks; the need for additional financing; structural subordination of securities; counterparty credit risk; insurance coverage; our provision for income taxes; legal and contractual proceedings involving the Corporation; outcomes of investigations and disputes; reliance on key personnel; labour relations matters; development projects and acquisitions; and the satisfactory receipt of applicable regulatory approvals for the closing of the Wyoming acquisition. The foregoing risk factors, among others, are described in further detail in the Risk Management section of this MD&A and under the heading "Risk Factors" in our 2014 Annual Information Form.

Readers are urged to consider these factors carefully in evaluating the forward-looking statements and are cautioned not to place undue reliance on these forward-looking statements. The forward-looking statements included in this document are made only as of the date hereof and we do not undertake to publicly update these forward-looking statements to reflect new information, future events or otherwise, except as required by applicable laws. In light of these risks, uncertainties, and assumptions, the forward-looking events might occur to a different extent or at a different time than we have described, or might not occur. We cannot assure that projected results or events will be achieved.

# 2014 Outlook

#### **Business Environment**

#### Demand

Alberta electricity demand is expected to grow at an average rate of three per cent annually as a result of several large oil sands projects that will bring new demand over the next several years. Electricity demand in the Pacific Northwest is expected to increase approximately one per cent per year, due in part to a large emphasis on energy efficiency across the region. Demand growth in Ontario is expected to remain weak at below one per cent.

#### Supply

New supply in the near term and intermediate term is expected to come primarily from investment in renewable energy and natural gas-fired generation across most North American markets. This expectation is driven by the relatively low prices in the natural gas market combined with a continued expectation that GHG legislation of some form is still expected in Canada and the U.S.

Alberta will likely see roughly flat reserve margins over the next several years based on generation projects currently under construction and forecasted load growth. The Ontario reserve margin will also remain relatively flat until expected nuclear refurbishments take capacity offline around 2016. The Pacific Northwest is expected to see slightly falling reserve margins in the near term, although the market is expected to remain well supplied.

Green technologies have gained favour with regulators and the general public, creating increasing pressure to supply power using renewable resources such as wind, hydro, geothermal, and solar. In Alberta, 20 MW of waste heat and biomass projects were completed in 2013 and 40 MW are currently under construction. Currently, there are 300 MW of wind generation facilities under construction and approximately 1,000 MW have received regulatory approval. In total, approximately 2,300 MW of wind generation is in the AESO interconnection queue. However, not all announced generation is expected to be built and some projects cannot be developed prior to transmission expansions.

Ontario and the Pacific Northwest are also expected to add renewable capacity in the next several years. In the Pacific Northwest, the expiry of the wind production tax credit is expected to drive capacity to come online before the end of 2015. Ontario is expected to bring on in excess of 1,000 MW of renewable capacity, made up primarily of wind, solar, and biomass projects.

Cogeneration projects at large oil sands developments are expected to be a key source of new generation supply within Alberta. These projects supply heat to the oil sands facility alongside electricity production. As a result, these facilities are a very competitive and efficient source of new generation capacity. Alberta currently has about 4,250 MW of cogeneration capacity and another 300 MW of capacity is under construction.

While there are many new developments that will likely impact the future supply of electricity, the low cost of our base load operations means that we expect our plants will continue to be supported in the market.

# Transmission

The existing Alberta, Ontario, and Pacific Northwest transmission systems are congested and aging, resulting in constraints on our generation operations as expected electricity flows exceed the systems' current capacity. The reinforcement of the transmission system in Alberta will alleviate congestion on major transmission paths, but there will continue to be congestion at the regional level. Upgrades to the transmission system in Ontario will alleviate congestion in some parts of the province, but generation in northern Ontario will continue to be constrained by limited transmission capacity.

Cost pressures will continue to create interest in ways to introduce competition into the development of transmission facilities. Future transmission developments in both Alberta and Ontario could become subject to competitive procurement processes and create opportunities to bid on those developments. The AESO is currently running an RFP process for the first of two transmission lines between the Edmonton and Fort McMurray regions. TAMA Transmission is participating in this RFP process and qualified to participate as a proponent in the project. The AESO announced its selection of a short-list of companies, identifying that TAMA Transmission will participate in the next stage of its competitive process for the project. The AESO is expected to start the RFP process on the second line in 2015.

# **Power Prices**

In 2014, power prices in Alberta are expected to be lower than 2013 as a result of more baseload generation and fewer planned maintenance outages across the market. However, prices can vary based on supply and weather conditions. In the Pacific Northwest, we expect prices to settle higher than in 2013 due to marginally higher natural gas prices and an outlook for lower hydro generation compared to 2013.

# **Environmental Legislation**

The finalization of the federal Canadian GHG regulations for coal-fired power has initiated further activities. We are in discussions with the provincial government to ensure coordination between GHG and air pollutant regulations, such that emission reduction objectives are achieved in the most effective manner while taking into consideration the reliability and cost of Alberta's generation supply. This may provide additional flexibility to coal-fired generators in meeting such regulatory requirements. For further information on the Canadian GHG regulations, please refer to the Significant Events section of this MD&A.

In addition, discussions are ongoing between the federal and provincial governments regarding a national Air Quality Management System for air pollutants. In Alberta's recently released Clean Air Strategy, the province indicated that its provincial air quality management system will operationalize any national system. Our current outlook is that, for Alberta, provincial regulations will be considered as equivalent to any future national framework.

On Jan. 21, 2013, the Ontario government released a discussion paper for public input on reducing GHG emissions in the province, with the stated intent of developing GHG regulations for all major industrial sectors by 2015. No specific targets or regulatory approaches have yet been proposed.

In the U.S., the President's Climate Action Plan provides an indication of how GHG regulation of existing fossil-fuel based generation may unfold, although we expect the implementation process to take several years. Our agreement with Washington State, established in April 2011, provides regulatory clarity at the state level regarding an emissions regime related to the Centralia Coal plant until 2025. We expect this agreement may mitigate separate federal action from the EPA. Additionally, new federal air pollutant regulations for the power sector are anticipated, but are not expected to directly affect our coal-fired operations in Washington State.

Effective January 2013, direct deliveries of power to the California Independent System Operator were subject to Cap and Trade Regulations established by the California Air Resource Board. We continue to monitor our GHG inventory into California.

In Australia, the carbon tax implemented in July 2012 remains in place. However, on Nov. 13, 2013, the recently elected Liberal government introduced legislation to repeal the carbon tax by July 2014, and replace it with a Direct Action plan that would fund industry for actions to reduce emissions. The legislation has not yet been passed. While TransAlta's gas-fired operations are subject to the tax, all related costs are flowed to contracted customers.

We continue to closely monitor the progress and risks associated with environmental legislation changes on our future operations.

The siting, construction, and operation of electrical energy facilities requires interaction with many stakeholders. Recently, certain stakeholders have brought actions against government agencies and owners over alleged adverse impacts of wind projects. We are monitoring these claims in order to assess the risk associated with these activities.

# **Economic Environment**

In 2014, we expect slow to moderate growth in all markets. We continue to monitor global events and their potential impact on the economy and our supplier and commodity counterparty relationships.

We had no material counterparty losses in 2013. We continue to monitor counterparty credit risk and have established risk management policies to mitigate counterparty risk. We do not anticipate any material change to our existing credit practices and continue to deal primarily with investment grade counterparties.

# **Operations**

# Capacity, Production, and Availability

Generating capacity is expected to increase in 2014 primarily due to the commencement of operations at our Solomon power station in Australia. Prior to the effect of any economic dispatching, overall production is expected to increase in 2014 due to lower planned and unplanned outages. Overall availability is expected to be in the range of 88 to 90 per cent in 2014.

# **Contracted Cash Flows**

Through the use of Alberta PPAs, long-term contracts, and other short-term physical and financial contracts, on average, approximately 72 per cent of our capacity is contracted over the next seven years. On an aggregated portfolio basis, depending on market conditions, we target being up to 90 per cent contracted for the upcoming calendar year. As at the end of 2013, approximately 88 per cent of our 2014 capacity was contracted. The average prices of our short-term physical and financial contracts for 2014 are approximately \$55 per MWh in Alberta and approximately U.S.\$40 per MWh in the Pacific Northwest.

#### **Fuel Costs**

Mining coal in Alberta is subject to cost increases due to greater overburden removal, inflation, capital investments, and commodity prices. Seasonal variations in coal costs at our Alberta mine are minimized through the application of standard costing. Coal costs for 2014, on a standard cost per tonne basis, are expected to be 10 to 12 per cent lower than 2013 due to Sundance Units 1 and 2 operating for a full year and realizing the benefits from insourcing operational accountability from PMRL at the Highvale Mine during 2013.

Although we own the Centralia mine in the State of Washington, it is not currently operational. Fuel at Centralia Thermal is purchased from external suppliers in the Powder River Basin and delivered by rail. The delivered cost of fuel per MWh for 2014 is expected to increase between one to three per cent.

The value of coal inventories is assessed for impairment at the end of each reporting period. If the inventory is impaired, further charges are recognized in net earnings. For more information on the inventory impairment charges recorded in 2013, please refer to the Significant Events section of this MD&A.

We purchase natural gas from outside companies coincident with production or have it supplied by our customers, thereby minimizing our risk to changes in prices. The continued success of unconventional gas production in North America could reduce the year-to-year volatility of prices in the near term.

We closely monitor the risks associated with changes in electricity and input fuel prices on our future operations and, where we consider it appropriate, use various physical and financial instruments to hedge our assets and operations from such price risks.

# **Energy Trading**

Earnings from our Energy Trading Segment are affected by prices in the market, overall strategies adopted, and changes in legislation. We continuously monitor both the market and our exposure in order to maximize earnings while still maintaining an acceptable risk profile. Our 2014 objective is for Energy Trading to contribute between \$50 million and \$65 million in gross margin for the year.

#### **Exposure to Fluctuations in Foreign Currencies**

Our strategy is to minimize the impact of fluctuations in the Canadian dollar against the U.S. dollar, euro, and Australian dollar by offsetting foreign-denominated assets with foreign-denominated liabilities and by entering into foreign exchange contracts. We also have foreign-denominated expenses, including interest charges, which largely offset our net foreign-denominated revenues.

#### **Net Interest Expense**

Net interest expense for 2014 is expected to be in line with 2013. However, changes in interest rates and in the value of the Canadian dollar relative to the U.S. dollar can affect the amount of net interest expense incurred.

# **Liquidity and Capital Resources**

If there is increased volatility in power and natural gas markets, or if market trading activities increase, we may need additional liquidity in the future. We expect to maintain adequate available liquidity under our committed credit facilities.

# **Accounting Estimates**

A number of our accounting estimates, including those outlined in the Critical Accounting Policies and Estimates section of this MD&A, are based on the current economic environment and outlook. Under the current economic environment, market fluctuations could impact, among other things, future commodity prices, foreign exchange rates, and interest rates, which could, in turn, impact future earnings and the unrealized gains or losses associated with our risk management assets and liabilities and asset valuation for our asset impairment calculations.

# **Income Taxes**

The effective tax rate on earnings excluding non-comparable items for 2014 is expected to be approximately 17 to 22 per cent, which is lower than the statutory tax rate of 25 per cent, due to changes in the amount of earnings between the jurisdictions in which pre-tax income is earned and the effect of certain deductions that do not fluctuate with earnings.

# **Capital Expenditures**

Our major projects are focused on sustaining our current operations and supporting our growth strategy.

# **Growth and Major Project Expenditures**

In 2013, we spent a total of \$211 million on growth and major project expenditures, net of any joint venture contributions received. Commercial operations began at our New Richmond wind farm and Sundance Units 1 and 2 were returned to service.

A summary of the significant growth and major projects that are in progress is outlined below:

	Total Project		Project 2014		
	Estimated spend	Spent to date	Estimated spend	Target Completion date	Details
Project					
Australia natural gas pipeline	86	-	86	Q1 2015	270 kilometer pipeline to supply natural gas to our Solomon power station in Western Australia
Transmission	10	-	10	Q4 2014	Regulated transmission that receives a return on investment
Hydro life extension	15-20	-	15-20	Q4 2014	Generator replacement and turbine runner improvements to extend the life of selected plants
Total major projects and growth	111-116	_	111-116		

#### Transmission

For the year ended Dec. 31, 2013, a total of \$2 million was spent on transmission projects. Transmission projects consist of the major maintenance and reconfiguration of Alberta's transmission networks to reinforce the transmission system and to increase the capacity of power flow in the lines.

# **Sustaining Capital and Productivity Expenditures**

A significant portion of our sustaining capital and productivity expenditures is planned major maintenance, which includes inspection, repair and maintenance of existing components, and the replacement of existing components. Planned major maintenance costs are capitalized as part of PP&E and are amortized on a straight-line basis over the term until the next major maintenance event. It excludes amounts for day-to-day routine maintenance, unplanned maintenance activities, and minor inspections and overhauls, which are expensed as incurred.

For 2014, our estimate for total sustaining capital and productivity expenditures, net of any contributions received, is allocated among the following:

Category	Description	in 2013	Expected spend in 2014
Routine capital	Expenditures to maintain our existing generating capacity	126	110-115
Mining equipment and land purchases <sup>1</sup>	Expenditures related to mining equipment and land purchases	53	45-50
Finance leases	Payments related to mining equipment under finance leases	9	5-10
Planned major maintenance	Regularly scheduled major maintenance	153	175-190
Total sustaining expenditures		341	335-365
Productivity capital	Projects to improve power production efficiency and corporate improvement initiatives	33	10-15
Total sustaining and productivity expenditures		374	345-380

During the year, we acquired \$33 million of mining equipment under finance leases and we made principal repayments of \$9 million.

<sup>1</sup> An additional \$12 million for mining equipment in use is not payable until 2014.

The table below shows the amount of planned maintenance capitalized and expensed:

Year ended Dec. 31	2013	2012	2011
Capitalized	153	286	184
Expensed	-	-	2
	153	286	186
GWh lost	3,264	4,186	2,872

Details of the 2014 planned major maintenance program are outlined as follows:

	Coal	Gas and Renewables	Expected spend in 2014
Capitalized	120-130	55-60	175-190
Expensed	-	0-5	0-5
	120-130	55-65	175-195

		Gas and	
	Coal	Renewables	Total
GWh lost	2,200-2,210	400-410	2,600-2,620

#### **Financing**

Financing for these capital expenditures is expected to be provided by cash flow from operating activities, existing borrowing capacity, reinvested dividends under the Plan, and capital markets. The funds required for committed growth, sustaining capital, and productivity projects are not expected to be significantly impacted by the current economic environment due to the highly contracted nature of our cash flows, our financial position, and the amount of capital available to us under existing committed credit facilities.

# Risk Management

Our business activities expose us to a variety of risks including, but not limited to, increased regulatory changes, rapidly changing market dynamics, and increased volatility in our key commodity markets. Our goal is to manage these risks so that we are reasonably protected from an unacceptable level of risk or financial exposure while still enabling business development. We use a multi-level risk management oversight structure to manage the risks arising from our business activities, the markets in which we operate, and the political environments and structures with which we interface.

The responsibilities of various stakeholders of our risk management oversight structure are described below:

The Board of Directors provides stewardship of the Corporation; ensures that the Corporation establishes policies and procedures for the identification, assessment, and management of principal risks and risk appetite; and receives an annual comprehensive Enterprise Risk Management ("ERM") review. The ERM review consists of a holistic view of the Corporation's inherent risks, how we mitigate these risks, and residual risks. It defines our risks, discusses who is responsible to manage each risk, how the risks are interrelated with each other, and identifies the applicable risk metrics.

**The Audit and Risk Committee ("ARC")**, established by the Board of Directors, provides assistance to the Board of Directors in fulfilling its oversight responsibility relating to the integrity of our financial statements and the financial reporting process; the systems of internal accounting and financial controls; the internal audit function; the external auditors' qualifications and terms and conditions of appointment, including remuneration; independence; performance and reports; and the legal and risk compliance programs as established by management and the Board of Directors. The ARC approves our Commodity and Financial Exposure Management policies and reviews quarterly ERM reporting.

**The Risk Management Committee ("RMC")** is chaired by our Chief Financial and Chief Investment Officer and is comprised of the Vice-President and Treasurer, Executive Vice-President Trading and Marketing, Vice-President Risk Management, Vice-President Regulatory and Compliance, and Chief Engineer. The RMC acts as the operational and financial risk oversight body for the Corporation.

**The Technical Risk and Commercial Team ("TRACT")** is a committee chaired by the Vice-President, Engineering, Environment, and Construction Services, and is comprised of our financial and operations directors. It reviews major projects and commercial agreements at various stages through development, prior to submission for approval by the Investment Committee and the Board of Directors.

The Investment Committee is chaired by our Chief Financial and Chief Investment Officer and is comprised of the Chief Executive Officer, Chief Legal Officer, the Executive Vice-President Corporate Services, Vice-President Mergers and Acquisitions, Vice-President Risk Management, and Vice-President Construction. It reviews and approves all major capital expenditures including growth, productivity, life extensions, and major coal outages. Projects that are approved by the committee will then be put forward for approval by the Board of Directors.

#### **Risk Controls**

Our risk controls have several key components:

#### **Enterprise Tone**

We strive to foster beliefs and actions that are true to and respectful of our many stakeholders. We do this by investing in communities where we live and work, operating and growing sustainably, putting safety first, and being responsible to the many groups and individuals with whom we work.

#### **Policies**

We maintain a comprehensive set of enterprise-wide policies. These policies establish delegated authorities and limits for business transactions, as well as allow for an exception approval process. Periodic reviews and audits are performed to ensure compliance with these policies. All employees and directors are required to sign a corporate code of conduct on an annual basis.

#### Reporting

On a regular basis, residual risk exposures are reported to key decision makers including the Board of Directors, senior management, and the RMC. Reporting to the RMC includes analysis of new risks, monitoring of status to risk limits, review of events that can affect these risks, and discussion and status of actions to minimize risks. This monthly reporting provides for effective and timely risk management and oversight.

# Whistleblower System

We have a system in place where employees, shareholders, or other stakeholders may anonymously report any potential ethical concerns. These concerns can be submitted anonymously, either directly to the ARC or to the Director, Internal Audit, who engages Corporate Security, Legal, and Human Resources in determining the appropriate course of action. These concerns and any actions taken are discussed with the chair of the ARC.

# Value at Risk and Trading Positions

VaR is one of the primary measures used to manage our exposure to market risk resulting from energy trading activities. VaR is calculated and reported on a daily basis. This metric describes the potential change in the value of our trading portfolio over a three-day period within a 95 per cent confidence level, resulting from normal market fluctuations.

VaR is a commonly used metric that is employed by industry to track the risk in energy trading positions and portfolios. Two common methodologies for estimating VaR are the historical variance/covariance and Monte Carlo approaches. We estimate VaR using the historical variance/covariance approach. An inherent limitation of historical variance/covariance VaR is that historical information used in the estimate may not be indicative of future market risk. Stress tests are performed periodically to measure the financial impact to the trading portfolio resulting from potential market events, including fluctuations in market prices, volatilities of those prices, and the relationships between those prices. We also employ additional risk mitigation measures. VaR at Dec. 31, 2013 associated with our proprietary energy trading activities was \$2 million (2012 – \$2 million). Refer to the Commodity Price Risk section of this MD&A for further discussion.

# **Risk Factors**

Risk is an inherent factor of doing business. The following section addresses some, but not all, risk factors that could affect our future results and our activities in mitigating those risks. These risks do not occur in isolation, but must be considered in conjunction with each other.

Certain sections will show the after-tax effect on net earnings of changes in certain key variables. The analysis is based on business conditions and production volumes in 2013. Each item in the sensitivity analysis assumes all other potential variables are held constant. While these sensitivities are applicable to the period and the magnitude of changes on which they are based, they may not be applicable in other periods, under other economic circumstances, or for a greater magnitude of changes. The changes in rates should also not be assumed to be proportionate to earnings in all instances.

#### Volume Risk

Volume risk relates to the variances from our expected production. For example, the financial performance of our hydro, wind, and geothermal operations are partially dependent upon the availability of their input resources in a given year. Where we are unable to produce sufficient quantities of output in relation to contractually specified volumes, we may be required to pay penalties or purchase replacement power in the market.

We manage volume risk by:

- actively managing our assets and their condition through the Generation Segment and Capital and Asset Reporting group in order to be proactive in plant maintenance so that our plants are available to produce when required,
- monitoring water resources throughout Alberta and British Columbia to the best of our ability and optimizing this resource
  against real-time electricity market opportunities,
- placing our wind and geothermal facilities in locations that we believe to have sufficient resources in order for us to be able to generate sufficient electricity to meet the requirements of our contracts. However, we cannot guarantee that these resources will be available when we need them or in the quantities that we require, and
- diversifying our fuels and geography as one way of mitigating regional or fuel-specific events.

The sensitivities of volumes to our net earnings are shown below:

		Approximate impact
Factor	Increase or decrease (%)	on net earnings
Availability/production	1	21

#### **Generation Equipment and Technology Risk**

There is a risk of equipment failure due to wear and tear, latent defect, design error or operator error, among other things, which could have a material adverse effect on the Corporation. Although our generation facilities have generally operated in accordance with expectations, there can be no assurance that they will continue to do so. Our plants are exposed to operational risks such as failures due to cyclic, thermal, and corrosion damage in boilers, generators, and turbines, and other issues that can lead to outages and increased volume risk. If plants do not meet availability or production targets specified in their PPA or other long-term contracts, we may be required to compensate the purchaser for the loss in the availability of production or record reduced energy or capacity payments. For merchant facilities, an outage can result in lost merchant opportunities. Therefore, an extended outage could have a material adverse effect on our business, financial condition, results of operations, or our cash flows.

As well, we are exposed to procurement risk for specialized parts that may have long lead times. If we are unable to procure these parts when they are needed for maintenance activities, we could face an extended period where our equipment is unavailable to produce electricity.

The original equipment manufacturer for the generators at Sundance Units 3 to 6 has recently revised the operating criteria for the units such that they will no longer be able to produce the same amount of leading reactive power ("MVAR") at current active power output levels. Reactive power refers to the voltage support that is required to make electrical systems like the Alberta Interconnected Electric System work and deliver active power through transmission lines. The production of reactive power can have a negative impact on the ability of a generator to produce active power as high reactive power demands can require a unit to reduce its active power output levels. TransAlta is engaged in the AESO's ongoing consultation process for the development of interconnection rules specifying, among other things, required MVAR levels.

We manage our generation equipment and technology risk by:

- operating our generating facilities within defined and proven operating standards that are designed to maximize the availability
  of our generating facilities for the longest period of time,
- performing preventative maintenance on a regular basis,
- adhering to a comprehensive plant maintenance program and regular turnaround schedules,
- adjusting maintenance plans by facility to reflect the equipment type and age,
- having sufficient business interruption coverage in place in the event of an extended outage,
- having force majeure clauses in our thermal and other PPAs and other long-term contracts,
- using technology in our generating facilities that is selected and maintained with the goal of maximizing the return on those assets,
- monitoring technological advances and evaluating their impact upon our existing generating fleet and related maintenance programs,
- negotiating strategic supply agreements with selected vendors to ensure key components are available in the event of a significant outage,
- entering into long-term arrangements with our strategic supply partners to ensure availability of critical spare parts, and
- developing a long-term asset management strategy with the objective of maximizing the life cycles of our existing facilities and/or replacement of selected generating assets.

#### **Commodity Price Risk**

We have exposure to movements in certain commodity prices, including the market price of electricity and fuels used to produce electricity in both our electricity generation and proprietary trading businesses.

We manage the financial exposure associated with fluctuations in electricity price risk by:

- entering into long-term contracts that specify the price at which electricity, steam, and other services are provided,
- maintaining a portfolio of short-, medium-, and long-term contracts to mitigate our exposure to short-term fluctuations in commodity prices,
- purchasing natural gas coincident with production for merchant plants so spot market spark spreads are adequate to produce and sell electricity at a profit, and
- ensuring limits and controls are in place for our proprietary trading activities.

In 2013, we had approximately 90 per cent (2012 - 90 per cent) of production under short-term and long-term contracts and hedges. In the event of a planned or unplanned plant outage or other similar event, however, we are exposed to changes in electricity prices on purchases of electricity from the market to fulfill our supply obligations under these short- and long-term contracts.

We manage the financial exposure to fluctuations in the costs of fuels used in production by:

- entering into long-term contracts that specify the price at which fuel is to be supplied to our plants,
- hedging emissions costs by entering into various emission trading arrangements, and
- selectively using hedges, where available, to set prices for fuel.

In 2013, 64 per cent (2012 – 69 per cent) of our cost of gas used in generating electricity was contractually fixed or passed through to our customers and 100 per cent (2012 – 100 per cent) of our purchased coal costs were contractually fixed.

The sensitivities of price changes to our net earnings are shown below:

Factor	Increase or decrease	on net earnings
Electricity price	\$ 1.00/MWh	8
Natural gas price	\$ 0.10/GJ	1
Coal price	\$ 1.00/tonne	13

# **Fuel Supply Risk**

We buy natural gas and some of our coal to supply the fuel needed to operate our facilities. Having sufficient fuel available when required for generation is essential to maintaining our ability to produce electricity under contracts and for merchant sale opportunities.

At our coal-fired plants, input costs, such as diesel, tires, the price and availability of mining equipment, the volume of overburden removed to access coal reserves, rail rates, and the location of mining operations relative to the power plants are some of the exposures in our mining operations. Additionally, the ability of the mines to deliver coal to the power plants can be impacted by weather conditions and labour relations. At Centralia Thermal, interruptions at our suppliers' mines and the availability of trains to deliver coal could affect our ability to generate electricity.

We manage coal supply risk by:

- ensuring that the majority of the coal used in electrical generation is from reserves permitted through coal rights we have
  purchased or for which have long-term supply contracts, thereby limiting our exposure to fluctuations in the supply of coal from
  third parties. All of the coal used in generating activities in Alberta is from reserves permitted through coal rights we have
  purchased. The coal used in generating activities in Centralia is secured through long-term supply contracts,
- using longer-term mining plans to ensure the optimal supply of coal from our mines,
- sourcing the majority of the coal used at Centralia Thermal under a mix of short-, medium-, and long-term contracts and from
  multiple mine sources to ensure sufficient coal is available at a competitive cost,
- contracting sufficient trains to deliver the coal requirements at Centralia Thermal,
- ensuring coal inventories on hand at Alberta Thermal and Centralia Thermal are at appropriate levels for usage requirements,
- ensuring efficient coal handling and storage facilities are in place so that the coal being delivered can be processed in a timely
  and efficient manner,
- monitoring and maintaining coal specifications, carefully matching the specifications mined with the requirements of our plants, and
- hedging diesel exposure in mining and transportation costs.

We believe adequate supplies of natural gas at reasonable prices will be available for plants when existing supply contracts expire.

### **Environmental Risk**

Environmental risks are risks to our business associated with existing and/or changes in environmental regulations. New emission reduction objectives for the power sector are being established by governments in Canada and the U.S. We anticipate continued and growing scrutiny by investors relating to sustainability performance. These changes to regulations may affect our earnings by imposing additional costs on the generation of electricity, such as emission caps, requiring additional capital investments in emission capture technology, or requiring us to invest in offset credits. It is anticipated that these compliance costs will increase due to increased political and public attention to environmental concerns.

We manage environmental risk by:

- seeking continuous improvement in numerous performance metrics such as emissions, safety, land and water impacts, and environmental incidents,
- having an International Organization for Standardization and Occupational Health and Safety Assessment Series-based environmental health and safety management system in place that is designed to continuously improve environmental performance,
- committing significant experienced resources to work with regulators in Canada and the U.S. to advocate that regulatory changes are well designed and cost effective,
- developing compliance plans that address how to meet or exceed emission standards for GHGs, mercury, SO<sub>2</sub>, and NOx, which will be adjusted as regulations are finalized,
- purchasing emission reduction offsets,
- investing in renewable energy projects, such as wind and hydro generation, and
- investing in clean coal technology development, which potentially provides long-term promise for large emission reductions from fossil-fuel-fired generation.

We strive to be in compliance with all environmental regulations relating to operations and facilities. Compliance with both regulatory requirements and management system standards is regularly audited through our performance assurance policy and results are reported quarterly to the Governance and Environmental Committee.

We are a founder of the Canadian Clean Power Coalition dedicated to developing clean combustion technologies, which in turn will mitigate the environmental and financial risks associated with continued fossil fuel use for power generation.

#### **Credit Risk**

Credit risk is the risk to our business associated with changes in the creditworthiness of entities with which we have commercial exposures. This risk results from the ability of a counterparty to either fulfill its financial or performance obligations to us or where we have made a payment in advance of the delivery of a product or service. The inability to collect cash due to us or to receive products or services may have an adverse impact upon our net earnings and cash flows.

We manage our exposure to credit risk by:

- establishing and adhering to policies that define credit limits based on the creditworthiness of counterparties, contract term limits, and the credit concentration with any specific counterparty,
- requiring formal sign-off on contracts that include commercial, financial, legal, and operational reviews,
- requiring security instruments, such as parental guarantees, letters of credit, and cash collateral that can be collected if a
  counterparty fails to fulfill its obligation or goes over its limits, and
- reporting our exposure using a variety of methods that allow key decision makers to assess credit exposure by counterparty.

  This reporting allows us to assess credit limits for counterparties and the mix of counterparties based on their credit ratings.

If established credit exposure limits are exceeded, we take steps to reduce this exposure, such as requesting collateral, if applicable, or by halting commercial activities with the affected counterparty. However, there can be no assurances that we will be successful in avoiding losses as a result of a contract counterparty not meeting its obligations.

Our credit risk management profile and practices have not changed materially from Dec. 31, 2012. We had no material counterparty losses in 2013, and we are exposed to minimal credit risk for Alberta PPAs because under the terms of these arrangements, receivables are substantially all secured by letters of credit. We continue to keep a close watch on changes and trends in the market and the impact these changes could have on our energy trading business and hedging activities, and will take appropriate actions as required, although no assurance can be given that we will always be successful.

A summary of our credit exposure for our energy trading operations and hedging activities at Dec. 31, 2013 is provided below:

Counterparty credit rating	Net exposure amount
Investment grade	349
Non-investment grade	-
No external rating, internally rated as investment grade	50
No external rating, internally rated as non-investment grade	4

The maximum credit exposure to any one customer for commodity trading operations, excluding the California Independent System Operator and California Power Exchange, and including the fair value of open trading positions, is \$23 million (2012 – \$25 million).

# **Currency Rate Risk**

We have exposure to various currencies as a result of our investments and operations in foreign jurisdictions, the earnings from those operations, the acquisition of equipment and services and foreign-denominated commodities from foreign suppliers, and our U.S.-denominated debt. Our exposures are primarily to the U.S., euro, and Australian currencies. Changes in the values of these currencies in relation to the Canadian dollar may affect our earnings or the value of our foreign investments to the extent that these positions or cash flows are not hedged or the hedges are ineffective.

We manage our currency rate risk by establishing and adhering to policies that include:

- hedging our net investments in foreign operations using a combination of foreign-denominated debt and financial instruments.
   Our strategy is to offset 90 to 100 per cent of all such foreign currency exposures. At Dec. 31, 2013, we have hedged approximately 96 per cent (2012 94 per cent) of our foreign currency net investment exposure,
- offsetting earnings from our foreign operations as much as possible by using expenditures denominated in the same foreign currencies and financial instruments to hedge the balance of this exposure, and
- entering into forward foreign exchange contracts to hedge future foreign-denominated receipts and expenditures, and all U.S.-denominated debt outside of our net investment portfolio.

The sensitivity of our net earnings to changes in foreign exchange rates has been prepared using management's assessment that an average five cent increase or decrease in the U.S., euro or Australian currencies relative to the Canadian dollar is a reasonable potential change over the next quarter, and is shown below:

		Approximate impact
Factor	Increase or decrease	on net earnings
Exchange rate	\$0.05	1

# **Liquidity Risk**

Liquidity risk relates to our ability to access capital to be used for energy trading activities, commodity hedging, capital projects, debt refinancing, and general corporate purposes. Investment grade ratings support these activities and provide a more reliable and cost-effective means to access capital markets through commodity and credit cycles. We are focused on maintaining a strong financial position and stable investment grade credit ratings.

Counterparties enter into certain electricity and natural gas purchase and sale contracts for the purposes of asset-backed sales and proprietary trading. The terms and conditions of these contracts require the counterparties to provide collateral when the fair value of the obligation pursuant to these contracts is in excess of any credit limits granted. Downgrades in creditworthiness by certain credit rating agencies may decrease the credit limits granted and accordingly increase the amount of collateral that may have to be provided.

We manage liquidity risk by:

- monitoring liquidity on trading positions,
- preparing and revising longer-term financing plans to reflect changes in business plans and the market availability of capital,
- reporting liquidity risk exposure for energy trading activities on a regular basis to the RMC, senior management, and the ARC,
- maintaining investment grade credit ratings, and
- maintaining sufficient undrawn committed credit lines to support potential liquidity requirements.

#### **Interest Rate Risk**

Changes in interest rates can impact our borrowing costs while the opposite impact will be seen on the capacity revenues we receive from our Alberta PPA plants. Changes in our cost of capital may also affect the feasibility of new growth initiatives.

We manage interest rate risk by establishing and adhering to policies that include:

- employing a combination of fixed and floating rate debt instruments, and
- monitoring the mixture of floating and fixed rate debt and adjusting where necessary to ensure a continued efficient mixture of these types of debt.

At Dec. 31, 2013, approximately 21 per cent (2012 – 24 per cent) of our total debt portfolio was subject to movements in floating interest rates through a combination of floating rate debt and interest rate swaps.

The sensitivity of changes in interest rates upon our net earnings is shown below:

		Approximate impact
Factor	Increase or decrease (%)	on net earnings
Interest rate	0.25	2

#### **Project Management Risk**

As we are currently working on three generating projects, we face risks associated with cost overruns, delays, and performance.

We manage project risks by:

- ensuring all projects are vetted by the TRACT Committee so that projects have been highly scrutinized to see that established
  processes and policies are followed, risks have been properly identified and quantified, input assumptions are reasonable, and
  returns are realistically forecasted prior to senior management and Board of Directors approvals,
- using a consistent and disciplined project management methodology and processes,
- performing detailed analysis of project economics prior to construction or acquisition and by determining our asset contracting strategy to ensure the right mix of contracted and merchant capacity prior to commencement of construction,
- partnering with those who have previously been able to deliver projects economically and on budget,
- developing and following through with comprehensive plans that include critical paths identified, key delivery points, and backup plans,
- managing project closeouts so that any learnings from the project are incorporated into the next significant project,
- fixing the price and availability of the equipment, foreign currency rates, warranties, and source agreements as much as is economically feasible prior to proceeding with the project, and
- entering into labour agreements to provide security around cost and productivity.

#### **Human Resource Risk**

Human resource risk relates to the potential impact upon our business as a result of changes in the workplace. Human resource risk can occur in several ways:

- potential disruption as a result of labour action at our generating facilities,
- reduced productivity due to turnover in positions,
- inability to complete critical work due to vacant positions,
- failure to maintain fair compensation with respect to market rate changes, and
- reduced competencies due to insufficient training, failure to transfer knowledge from existing employees, or insufficient expertise within current employees.

We manage this risk by:

- monitoring industry compensation and aligning salaries with those benchmarks,
- using incentive pay to align employee goals with corporate goals,
- monitoring and managing target levels of employee turnover, and
- ensuring new employees have the appropriate training and qualifications to perform their jobs.

In 2013, 54 per cent (2012 - 43 per cent) of our labour force was covered by 12 (2012 - 11) collective bargaining agreements. In 2013, five (2012 - two) agreements were renegotiated. We anticipate negotiating five agreements in 2014. We do not anticipate any significant issues in the renewal of these agreements.

# Regulatory and Political Risk

Regulatory and political risk describes the risk to our business associated with potential changes to the existing regulatory structures and the political influence upon those structures. This risk can come from market re-regulation, increased oversight and control, structural or design changes in markets, or other unforeseen influences. Market rules are often dynamic and we are not able to predict whether there will be any material changes in the regulatory environment or the ultimate effect of changes in the regulatory environment on our business.

We manage these risks systematically through our Legal and Regulatory Compliance program, which is reviewed periodically to ensure its effectiveness. We work with governments, regulators, electric system operators, and other stakeholders to resolve issues as they arise. We are actively monitoring changes to market rules and market design, and we engage in market-sponsored stakeholder engagement processes. Through these and other avenues, we engage in advocacy and policy discussions at a variety of levels. These stakeholder negotiations have allowed us to engage in proactive discussions with governments over the longer term.

International investments are subject to unique risks and uncertainties relating to the political, social, and economic structures of the respective country and such country's regulatory regime. We mitigate this risk through the use of non-recourse financing and insurance.

#### **Transmission Risk**

Access to transmission lines and transmission capacity for existing and new generation are key in our ability to deliver energy produced at our power plants to our customers. The risks associated with the aging existing transmission infrastructure in Alberta, Ontario, and the Pacific Northwest continue to increase because new connections to the power system are consuming transmission capacity quicker than it is being added by new transmission developments.

#### **Reputation Risk**

Our reputation is one of our most valued assets. Reputation risk relates to the risk associated with our business because of changes in opinion from the general public, private stakeholders, governments, and other entities.

We manage reputation risk by:

- striving as a neighbour and business partner in the regions where we operate to build viable relationships based on mutual understanding leading to workable solutions with our neighbours and other community stakeholders,
- clearly communicating our business objectives and priorities to a variety of stakeholders on a routine basis,
- maintaining positive relationships with various levels of government,
- pursuing sustainable development as a longer-term corporate strategy,
- ensuring that each business decision is made with integrity and in line with our corporate values,
- communicating the impact and rationale of business decisions to stakeholders in a timely manner, and
- maintaining strong corporate values that support reputation risk management initiatives.

# **Corporate Structure Risk**

We conduct a significant amount of business through subsidiaries and partnerships. Our ability to meet and service debt obligations is dependent upon the results of operations of our subsidiaries and the payment of funds by our subsidiaries in the form of distributions, loans, dividends, or otherwise. In addition, our subsidiaries may be subject to statutory or contractual restrictions that limit their ability to distribute cash to us.

# **General Economic Conditions**

Changes in general economic conditions impact product demand, revenue, operating costs, the timing and extent of capital expenditures, the net recoverable value of PP&E, financing costs, credit risk, and counterparty risk.

#### **Income Taxes**

Our operations are complex and located in several countries. The computation of the provision for income taxes involves tax interpretations, regulations, and legislation that are continually changing. Our tax filings are subject to audit by taxation authorities. Management believes that it has adequately provided for income taxes as required by IFRS, based on all information currently available.

The sensitivity of changes in income tax rates upon our net earnings is shown below:

		Approximate impact
Factor	Increase or decrease (%)	on net earnings <sup>1</sup>
Tax rate	1	-

The effective tax rate on comparable earnings before income taxes, equity income, and other items for 2013 was 17 per cent. The effective income tax rate can change depending on the mix of earnings from various countries and certain deductions that do not fluctuate with earnings.

# **Legal Contingencies**

We are occasionally named as a party in various claims and legal proceedings that arise during the normal course of our business. We review each of these claims, including the nature of the claim, the amount in dispute or claimed, and the availability of insurance coverage. There can be no assurance that any particular claim will be resolved in our favour or that such claims may not have a material adverse effect on us.

# **Other Contingencies**

We maintain a level of insurance coverage deemed appropriate by management. There were no significant changes to our insurance coverage during renewal of the insurance policies on December 31. The deductible for 2014 catastrophic losses (earthquake, flood, and wind) was increased for 2014. Our insurance coverage may not be available in the future on commercially reasonable terms. There can be no assurance that our insurance coverage will be fully adequate to compensate for potential losses incurred. In the event of a significant economic event, the insurers may not be capable of fully paying all claims.

<sup>1</sup> A one per cent change in the tax rate applied to current year pre-tax earnings would not result in a material impact to net earnings. Based on current year pre-tax net earnings, a change in the tax rate of approximately nine per cent would be required to result in a \$1 million impact on net earnings.

# **Critical Accounting Policies And Estimates**

The selection and application of accounting policies is an important process that has developed as our business activities have evolved and as accounting rules and guidance have changed. Accounting rules generally do not involve a selection among alternatives, but involve an implementation and interpretation of existing rules and the use of judgment relative to the circumstances existing in the business. Every effort is made to comply with all applicable rules on or before the effective date, and we believe the proper implementation and consistent application of accounting rules is critical.

However, not all situations are specifically addressed in the accounting literature. In these cases, our best judgment is used to adopt a policy for accounting for these situations. We draw analogies to similar situations and the accounting guidelines governing them, consider foreign accounting standards, and consult with our independent auditors about the appropriate interpretation and application of these policies. Each of the critical accounting policies involves complex situations and a high degree of judgment either in the application and interpretation of existing literature or in the development of estimates that impact our consolidated financial statements.

Our significant accounting policies are described in Note 2 to our audited consolidated financial statements within this Annual Report. The most critical of these policies are those related to revenue recognition, financial instruments, valuation of PP&E and associated contracts, project development costs, useful life of PP&E, valuation of goodwill, leases, income taxes, employee future benefits, decommissioning and restoration provisions, and other provisions. Each policy involves a number of estimates and assumptions to be made about matters that are uncertain at the time the estimate is made. Different estimates, with respect to key variables used for the calculations, or changes to estimates, could potentially have a material impact on our financial position or results of operations.

We have discussed the development and selection of these critical accounting estimates with our ARC and our independent auditors. The ARC has reviewed and approved our disclosure relating to critical accounting estimates in this MD&A.

These critical accounting estimates are described as follows:

# **Revenue Recognition**

The majority of our revenues are derived from the sale of physical power, leasing of power facilities, and from energy trading activities.

Revenues under long-term electricity and thermal sales contracts generally include one or more of the following components: fixed capacity payments for availability, energy payments for generation of electricity, incentives or penalties for exceeding or not meeting availability targets, excess energy payments for power generation above committed capacity, and ancillary services. Each of these components is recognized upon output, delivery, or satisfaction of contractually specific targets. Revenues from non-contracted capacity are comprised of energy payments, at market prices, for each MWh produced and are recognized upon delivery.

In certain situations, a long-term electricity or thermal sales contract may contain, or be considered, a lease. Where the terms and conditions of the contract result in the customer assuming the principal risks and rewards of ownership of the underlying asset, the contractual arrangement is considered a finance lease, which results in the recognition of finance lease income. Where we retain the principal risks and rewards, the contractual arrangement is an operating lease. Rental income, including contingent rents where applicable, is recognized over the term of the contract. Revenues associated with non-lease elements are recognized as goods or services revenues as outlined above.

Energy trading activities use derivatives such as physical and financial swaps, forward sales contracts, and futures contracts and options, to earn trading revenues and to gain market information. These derivatives are accounted for using fair value accounting and are presented on a net basis in the Consolidated Statements of Earnings (Loss) when hedge accounting is not applied. The initial recognition of fair value and subsequent changes in fair value affect reported earnings in the period the change occurs. The fair values of those instruments that remain open at the financial position date represent unrealized gains or losses and are presented on the Consolidated Statements of Financial Position as risk management assets or liabilities.

The determination of the fair value of energy trading contracts and derivative instruments is complex and relies on judgments concerning future prices, volatility, and liquidity, among other factors. Some of our derivatives are not traded on an active exchange or extend beyond the time period for which exchange-based quotes are available, requiring us to use internal valuation techniques or models.

# **Financial Instruments**

The fair value of a financial instrument is the amount of consideration that would be agreed upon in an arm's-length transaction between knowledgeable and willing parties who are under no compulsion to act. Fair values can be determined by reference to prices for that instrument in active markets to which we have access. In the absence of an active market, we determine fair values based on valuation models or by reference to other similar products in active markets.

Fair values determined using valuation models require the use of assumptions. In determining those assumptions, we look primarily to external readily observable market inputs. However, if not available, we use inputs that are not based on observable market data.

#### **Level Determinations and Classifications**

The Level I, II, and III classifications in the fair value hierarchy utilized by the Corporation are defined below. The fair value measurement of a financial instrument is included in only one of the three levels, the determination of which is based on the lowest level input that is significant to the derivation of the fair value.

#### Level I

Fair values are determined using inputs that are quoted prices (unadjusted) in active markets for identical assets or liabilities that we have the ability to access. In determining Level I fair values, we use quoted prices for identically traded commodities obtained from active exchanges such as the New York Mercantile Exchange.

#### Level II

Fair values are determined, directly or indirectly, using inputs that are observable for the asset or liability.

Fair values falling within the Level II category are determined through the use of quoted prices in active markets, which in some cases are adjusted for factors specific to the asset or liability, such as basis, credit valuation, and location differentials. Energy Trading includes, in Level II, over-the-counter derivatives with values based on observable commodity futures curves and derivatives with inputs validated by broker quotes or other publicly available market data providers. Level II fair values are also determined using valuation techniques, such as option pricing models and regression or extrapolation formulas, where the inputs are readily observable, including commodity prices for similar assets or liabilities in active markets, and implied volatilities for options.

In determining Level II fair values of other risk management assets and liabilities, we use observable inputs other than unadjusted quoted prices that are observable for the asset or liability, such as interest rate yield curves and currency rates. For certain financial instruments where insufficient trading volume or lack of recent trades exists, we rely on similar interest or currency rate inputs and other third-party information such as credit spreads.

#### Level III

Fair values are determined using inputs for the asset or liability that are not readily observable.

We may enter into commodity transactions for which market-observable data is not available. In these cases, Level III fair values are determined using valuation techniques such as the Black-Scholes, mark-to-forecast, and historical bootstrap models with inputs that are based on historical data such as unit availability, transmission congestion, demand profiles for individual non-standard deals and structured products, and/or volatilities and correlations between products derived from historical prices. We also have various contracts with terms that extend beyond a liquid trading period. As forward market prices are not available for the full period of these contracts, the value of these contracts is derived by reference to a forecast that is based on a combination of external and internal fundamental modelling, including discounting. As a result, these contracts are classified in Level III.

We have a Commodity Exposure Management Policy (the "Policy"), which governs both the commodity transactions undertaken in our proprietary trading business and those undertaken to manage commodity price exposures in our generation business. The Policy defines and specifies the controls and management responsibilities associated with commodity trading activities, as well as the nature and frequency of required reporting of such activities.

Methodologies and procedures regarding energy trading Level III fair value measurements are determined by our Risk Management department. Level III fair values are calculated within our Energy Trading Risk Management system based on underlying contractual data as well as observable and non-observable inputs. Development of non-observable inputs requires the use of judgment. To ensure reasonability, system-generated Level III fair value measurements are reviewed and validated by the Risk Management and Finance departments. Review occurs formally on a quarterly basis or more frequently if daily review and monitoring procedures identify unexpected changes to fair value, or changes to key parameters.

The effect of using reasonably possible alternative assumptions as inputs to valuation techniques from which the Level III energy trading fair values are determined at Dec. 31, 2013 is estimated to be a +/- \$105 million (2012 - \$26 million) impact to the carrying value of the financial instruments. Fair values are stressed for volumes and prices. The volumes are stressed up and down one standard deviation from historically available production data. Prices are stressed for longer-term deals where there are no liquid market quotes using various internal and external forecasting sources to establish a high and a low price range.

# Valuation of PP&E and Associated Contracts

As at Dec. 31, 2013, PP&E makes up 74 per cent of our assets, of which 99 per cent relates to the Generation Segment. On an annual basis, and when indicators of impairment exist, we determine whether the net carrying amount of PP&E, or the cash-generating unit ("CGU") to which it belongs, is in excess of its recoverable amount.

Factors that could indicate that an impairment exists include significant underperformance relative to historical or projected operating results; significant changes in the manner in which an asset is used or in our overall business strategy; or significant negative industry or economic trends. In some cases, these events are clear. However, in many cases, a clearly identifiable event indicating possible impairment does not occur. Instead, a series of individually insignificant events occur over a period of time leading to an indication that an asset may be impaired. This can be further complicated in situations where we are not the operator of the facility. Events can occur in these situations that may not be known until a date subsequent to their occurrence.

Our businesses, the market, and business environment are routinely monitored, and judgments and assessments are made to determine whether an event has occurred that indicates a possible impairment. If such an event has occurred, an estimate is made of the recoverable amount of the PP&E or CGU to which it belongs. Recoverable amount is the higher of an asset's fair value less costs to sell and its value in use. In estimating either fair value less costs to sell or value in use using discounted cash flow methods, estimates and assumptions must be made about sales prices, cost of sales, production, fuel consumed, retirement costs, and other related cash inflows or outflows over the life of the plants, which can range from 30 to 60 years. In developing these assumptions, management uses estimates of contracted and future market prices based on expected market supply and demand in the region in which the plant operates, anticipated production levels, planned and unplanned outages, and transmission capacity or constraints for the remaining life of the plant. These estimates and assumptions are susceptible to change from period to period and actual results can, and often do, differ from the estimates, and can have either a positive or negative impact on the estimate of the impairment charge, and may be material.

As a result of our review in 2013 and other specific events, net pre-tax asset impairment reversals of \$18 million (2012 – charges of \$367 million) were recorded related to certain facilities. Refer to the Asset Impairment Charges and Reversals section of this MD&A for further details.

The impairment charges can be reversed in future periods if circumstances improve. No assurances can be given if any reversal will occur or the amount or timing of any such reversal.

# **Project Development Costs**

Deferred project development costs include external, direct, and incremental costs that are necessary for completing an acquisition or construction project. These costs are recognized in operating expenses until construction of a plant or acquisition of an investment is likely to occur, there is reason to believe that future costs are recoverable, and that efforts will result in future value to us, at which time the costs incurred subsequently are included in PP&E or Investments. The appropriateness of the carrying amount of these costs is evaluated each reporting period, and unrecoverable amounts of capitalized costs for projects no longer probable of occurring are charged to net earnings.

# **Useful Life of PP&E**

Each significant component of an item of PP&E is depreciated over its estimated useful life. A component is a tangible asset that can be separately identified as an asset and is expected to provide a benefit of greater than one year. Estimated useful lives are determined based on current facts and past experience, and take into consideration the anticipated physical life of the asset, existing long-term sales agreements and contracts, current and forecasted demand, the potential for technological obsolescence, and regulations. The useful lives of PP&E and depreciation rates used are reviewed at least annually to ensure they continue to be appropriate.

In 2013, depreciation and amortization expense per the Consolidated Statements of Cash Flows was \$585 million (2012 - \$564 million), of which \$58 million (2012 - \$41 million) relates to mining equipment and is included in fuel and purchased power.

# Valuation of Goodwill

We evaluate goodwill for impairment at least annually, or more frequently if indicators of impairment exist. If the carrying amount of a CGU, including goodwill, exceeds the unit's fair value, any excess represents a goodwill impairment loss. A CGU is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets. Please refer to Note 25 of our audited consolidated financial statements within this Annual Report for additional information regarding changes to CGUs in our goodwill impairment assessments.

Goodwill arose on the acquisitions of the Wyoming wind farm, CHD, Merchant Energy Group of the Americas, Inc., and Vision Quest Windelectric Inc. As at Dec. 31, 2013, this goodwill had a total carrying amount of \$460 million (2012 – \$447 million). Under the equity method of accounting, the goodwill arising on the acquisition of CE Gen is included in the determination of the amount of the investment in CE Gen and is tested for impairment as part of the net investment.

We reviewed the carrying amount of goodwill prior to year-end and determined that the fair values of the related CGUs to which goodwill relates, based on estimates of future cash flows, exceeded their carrying amounts, and no goodwill impairments existed.

Determining the fair value of the CGUs is susceptible to changes from period to period as management is required to make assumptions about future cash flows, production and trading volumes, margins, and fuel and operating costs. Had assumptions been made that resulted in fair values of the CGUs declining by ten per cent from current levels, there would not have been any impairment of goodwill.

#### Leases

In determining whether the Corporation's PPAs and other long-term electricity and thermal sales contracts contain, or are, leases, management must use judgment in assessing whether the fulfillment of the arrangement is dependent on the use of a specific asset and the arrangement conveys the right to use the asset. For those agreements considered to contain, or be, leases, further judgment is required to determine whether substantially all of the significant risks and rewards of ownership are transferred to the customer or remain with TransAlta, to appropriately account for the agreement as either a finance or operating lease. These judgments can be significant to how we classify amounts related to the arrangement as PP&E or as a finance lease receivable on the Consolidated Statements of Financial Position, and therefore the value of certain items of revenue and expense is dependent upon such classifications.

# **Income Taxes**

In accordance with IFRS, we use the liability method of accounting for income taxes. Under the liability method, deferred income tax assets and liabilities are recognized on the differences between the carrying amounts of assets and liabilities and their respective income tax basis.

Preparation of the consolidated financial statements involves determining an estimate of, or provision for, income taxes in each of the jurisdictions in which we operate. The process also involves making an estimate of taxes currently payable and taxes expected to be payable or recoverable in future periods, referred to as deferred income taxes. Deferred income taxes result from the effects of temporary differences due to items that are treated differently for tax and accounting purposes. The tax effects of these differences are reflected in the Consolidated Statements of Financial Position as deferred income tax assets and liabilities. An assessment must also be made to determine the likelihood that our future taxable income will be sufficient to permit the recovery of deferred income tax assets. To the extent that such recovery is not probable, deferred income tax assets must be reduced. The reduction of the deferred income tax asset can be reversed if the estimated future taxable income improves. No assurances can be given if any reversal will occur or the amount or timing of any such reversal. Management must exercise judgment in its assessment of continually changing tax interpretations, regulations, and legislation to ensure deferred income tax assets and liabilities are complete and fairly presented. Differing assessments and applications than our estimates could materially impact the amount recognized for deferred income tax assets and liabilities. Our tax filings are subject to audit by taxation authorities. The outcome of some audits may change our tax liability, although we believe that we have adequately provided for income taxes in accordance with IFRS based on all information currently available. The outcome of pending audits is not known nor is the potential impact on the consolidated financial statements determinable.

Deferred income tax assets of \$118 million (2012 – \$90 million) have been recorded on the Consolidated Statements of Financial Position as at Dec. 31, 2013. These assets primarily relate to net operating loss carryforwards. We believe there will be sufficient taxable income that will permit the use of these loss carryforwards in the tax jurisdictions where they exist.

Deferred income tax liabilities of \$459 million (2012 – \$473 million) have been recorded on the Consolidated Statements of Financial Position as at Dec. 31, 2013. These liabilities are comprised primarily of taxes on unrealized gains from risk management transactions and income tax deductions in excess of related depreciation of PP&E.

# **Employee Future Benefits**

We provide selected pension and post-employment benefits to employees. The cost of providing these benefits is dependent upon many factors that result from actual plan experience and assumptions of future experience.

The liabilities for future benefits and associated pension costs included in annual compensation expenses are impacted by employee demographics, including age, compensation levels, employment periods, the level of contributions made to the plans, and earnings on plan assets.

Changes to the provisions of the plans may also affect current and future pension costs. Pension costs may also be significantly impacted by changes in key actuarial assumptions, including, for example, the discount rates used in determining the defined benefit obligation and the net interest cost on the net defined benefit liability. The discount rate used to estimate our obligation reflects high-quality corporate fixed income securities currently available and expected to be available during the period to maturity of the pension benefits.

The plan assets are comprised primarily of equity and fixed income investments. Fluctuations in the return on plan assets as a result of actual equity market returns and changes in interest rates may result in increased or decreased pension costs in future periods.

In 2013, amendments to IFRS accounting rules regarding defined benefit pensions arose, and the expected long-term rate of return on plan assets is no longer an assumption that is used to estimate expected returns on plan assets. Instead, the discount rate is used to determine a net interest cost on the net defined benefit liability (asset), as applicable, and this net interest cost is recognized in net earnings. Despite this change in accounting requirements, the actual returns on plan assets continue to be an important measure, and impacts the determination of the net defined benefit liability recognized on our Consolidated Statements of Financial Position. For the year ended Dec. 31, 2013, the plan assets had a positive return of \$44 million, compared to \$24 million in 2012.

# **Decommissioning and Restoration Provisions**

We recognize decommissioning and restoration provisions for PP&E in the period in which they are incurred if there is a legal or constructive obligation to reclaim the plant and/or site and if a reasonable estimate of a fair value can be determined. The fair value of the liability is described as the amount at which the liability could be settled in a current transaction between willing parties. Expected values are probability weighted to deal with the risks and uncertainties inherent in the timing and amount of settlement of many decommissioning and restoration provisions. Expected values are discounted at the risk-free interest rate adjusted to reflect the market's evaluation of our credit standing.

As at Dec. 31, 2013, the decommissioning and restoration provisions recorded on the Consolidated Statements of Financial Position were \$270 million (2012 – \$262 million). We estimate the undiscounted amount of cash flow required to settle the decommissioning and restoration provisions is approximately \$1.0 billion, which will be incurred between 2013 and 2072. The majority of these costs will be incurred between 2020 and 2050.

Sensitivities for the major assumptions are as follows:

		Approximate impact
Factor	Increase or decrease (%)	on net earnings
Discount rate	1	2
Undiscounted decommissioning and restoration provision	10	1

# Other Provisions

Where necessary, we recognize provisions arising from ongoing business activities, such as interpretation and application of contract terms and force majeure claims. These provisions, and subsequent changes thereto, are determined using our best estimate of the outcome of the underlying event and can also be impacted by determinations made by third parties, in compliance with contractual requirements. The actual amount of the provisions that may be required could differ materially from the amount recognized.

# **Current Accounting Changes**

# Adoption of New or Amended IFRS

On Jan. 1, 2013, we adopted the following new accounting standards that were previously issued by the International Accounting Standards Board ("IASB"):

# **IFRS 10 Consolidated Financial Statements**

IFRS 10 replaces the parts of International Accounting Standard ("IAS") 27 Consolidated and Separate Financial Statements that deal with consolidated financial statements and Standing Interpretations Committee ("SIC") Interpretation 12 Consolidation – Special Purpose Entities. IFRS 10 defines the principle of control, establishes control as the basis for determining when entities are to be consolidated, and provides guidance on how to apply the principle of control to identify whether an investor controls an investee. Under IFRS 10, an investor controls an investee when it has all of the following: (i) power over the investee; (ii) exposure, or rights, to variable returns from the investee; and (iii) the ability to affect those returns.

We applied IFRS 10 retrospectively by reassessing whether, on Jan. 1, 2013, we had control of all of our previously consolidated entities. As a result of adopting IFRS 10, no changes arose in the entities we controlled and consolidated.

# **IFRS 11 Joint Arrangements**

IFRS 11 replaces IAS 31 Interests in Joint Ventures and SIC-13 Jointly Controlled Entities – Non-Monetary Contributions by Venturers. IFRS 11 provides for a principles-based approach to the accounting for joint arrangements that requires an entity to recognize its contractual rights and obligations arising from its involvement in joint arrangements. A joint arrangement is an arrangement in which two or more parties have joint control. Under IFRS 11, joint arrangements are classified as either a joint operation, or a joint venture, whereas under IAS 31, they were classified as a jointly controlled asset, jointly controlled operation or a jointly controlled entity. IFRS 11 requires the use of the equity method of accounting for interests in joint ventures, whereas IAS 31 permitted a choice of the equity method or proportionate consolidation for jointly controlled entities. Under IFRS 11, for joint operations, each party recognizes its respective share of the assets, liabilities, revenues, and expenses of the arrangement, generally resulting in proportionate consolidation accounting.

We applied IFRS 11 retrospectively by reassessing the type of, and accounting for, each joint arrangement in existence at Jan. 1, 2013. No significant impacts resulted.

# IFRS 12 Disclosure of Interests in Other Entities

IFRS 12 contains enhanced disclosure requirements about an entity's interests in subsidiaries, joint arrangements, associates, and consolidated and unconsolidated structured entities (special purpose entities). The objective of IFRS 12 is that an entity should disclose information that helps financial statement users evaluate the nature of, and risks associated with, its interests in other entities and the effects of those interests on its financial statements. Disclosures arising from the adoption of IFRS 12 can be found in Notes 14, 18, and 29 of our audited consolidated financial statements within this Annual Report.

### IFRS 13 Fair Value Measurement

IFRS 13 establishes a single source of guidance for all fair value measurements required by other IFRS, clarifies the definition of fair value, and enhances disclosures about fair value measurements. IFRS 13 applies when other IFRS require or permit fair value measurements or disclosures. IFRS 13 specifies how an entity should measure fair value and disclose fair value information. It does not specify when an entity should measure an asset, a liability, or its own equity instrument at fair value. Our adoption of IFRS 13, prospectively on Jan. 1, 2013, did not have a material financial impact upon the consolidated financial position or results of operations; however, certain new or enhanced disclosures are required and can be found in Note 19 of our audited consolidated financial statements within this Annual Report.

# **IAS 1 Presentation of Financial Statements**

Amendments to IAS 1 *Presentation of Financial Statements* issued in June 2011 were intended to improve the consistency and clarity of the presentation of items of comprehensive income by requiring that items presented in OCI be grouped on the basis of whether they subsequently reclassified from OCI to net earnings or not. The Consolidated Statements of Comprehensive Income (Loss) have been reorganized to comply with the required groupings.

# IAS 19 Employee Benefits

Amendments to IAS 19 *Employee Benefits* are intended to improve the recognition, presentation, and disclosure of defined benefit plans. The amendments require the recognition of changes in defined benefit obligations and in fair value of plan assets when they occur, thus eliminating the "corridor approach" previously permitted. All actuarial gains and losses must be recognized immediately through OCI and the net pension liability or asset recognized at the full amount of the plan deficit or surplus. Additional changes relate to the presentation, into three components, of changes in defined benefit obligations and plan assets: service cost and net interest cost is recognized in net earnings and remeasurements are recognized in OCI. The net interest cost introduced in these amendments removes the concept of expected return on plan assets that was previously recognized in net earnings.

We calculate the net interest cost for our defined benefit plans by applying the discount rate at the beginning of the reporting period to the net defined benefit liability at the beginning of the reporting period. An expected return on plan assets is no longer calculated and recognized as part of pension expense. The elimination of the corridor method had no impact as we have, since the adoption of IFRS, recognized actuarial gains and losses in OCI in the period in which they occurred.

On adoption, we applied the amendments retrospectively. The impacts as at Dec. 31, 2012 and Jan. 1, 2012, respectively, were an increase in the cumulative prior periods' pre-tax pension expense of \$17 million and \$11 million (\$12 million and \$8 million after-tax, respectively), as a result of the application of the net interest cost requirements.

For the year ended Dec. 31, 2012, OM&A expense increased by \$4 million (2011 - \$7 million) as a result of increased pension expense and net after-tax actuarial losses on defined benefit plans as reported in OCI decreased by \$3 million (2011 - \$5 million).

# Interpretation 20 Stripping Costs in the Production Phase of a Surface Mine ("IFRIC 20")

IFRIC 20 clarifies the requirements for accounting for stripping costs in the production phase of a surface mine. Stripping costs are costs associated with the process of removing waste from a surface mine in order to gain access to mineral ore deposits. The Interpretation clarifies when production stripping should lead to the recognition of an asset and how that asset should be measured, both initially and in subsequent periods.

We recognize a stripping activity asset for our Highvale mine when all of the following are met: (i) it is probable that the future benefit associated with improved access to the coal reserves associated with the stripping activity will be realized; (ii) the component of the coal reserve to which access has been improved can be identified; and (iii) the costs related to the stripping activity associated with that component can be measured reliably. Costs include those directly incurred to perform the stripping activity as well as an allocation of directly attributable overheads. The resulting stripping activity asset is amortized on a unit-of-production basis over the expected useful life of the identified component that it relates to. The amortization is recognized as a component of the standard cost of coal inventory.

As required by the transitional provision of IFRIC 20, we applied the Interpretation to production stripping costs incurred on or after Jan. 1, 2011, which will be the earliest comparative period presented within our annual financial statements for the year ended Dec. 31, 2013, which will result in adjustments to the 2012 earnings. The impacts on the Consolidated Statements of Financial Position as at Dec. 31, 2012 were to recognize \$9 million in costs as a stripping activity asset, increase coal inventory by \$2 million, both classified within inventory, increase deferred income tax liabilities by \$3 million, and decrease retained deficit by \$8 million. The impacts on the Consolidated Statements of Financial Position as at Jan. 1, 2012 were to recognize \$9 million in costs as a stripping activity asset, decrease coal inventory by \$2 million, both classified within inventory, increase deferred income tax liabilities by \$2 million, and increase retained earnings by \$5 million.

The impact of this change in accounting policy on the Consolidated Statements of Earnings (Loss) for the year ended Dec. 31, 2012 was a reduction of \$4 million in fuel and purchased power (2011 - \$7 million).

Basic and diluted net earnings per share attributable to common shareholders for 2012 decreased by \$0.01 (2011 - nil) as a result of IAS 19 and IFRIC 20 impacts.

#### **IFRS 7 Financial Instruments: Disclosures**

Amendments to IFRS 7 include disclosures about all recognized financial instruments that are set-off in accordance with IAS 32. The amendments also require disclosure of information about recognized financial instruments subject to enforceable master netting arrangements and similar agreements even if they are not set-off under IAS 32. The resulting disclosures can be found in Note 20 of our audited consolidated financial statements within this Annual Report.

# **Annual Improvements 2009-2011**

In May 2012, the IASB issued a collection of necessary, non-urgent amendments to several IFRS resulting from its annual improvements process. We have applied the amendments, as applicable, on Jan. 1, 2013. None of the amendments, which are generally technical and narrow in scope, had a material financial impact upon the consolidated financial position or results of operations.

# **Future Accounting Changes**

New or amended applicable accounting standards that have been previously issued by the IASB but are not yet effective, and have not been applied, are as follows:

#### **IFRS 9 Financial Instruments**

In November 2009, the IASB issued IFRS 9 *Financial Instruments*, which replaced the classification and measurement requirements in IAS 39 *Financial Instruments: Recognition and Measurement* for financial assets. Financial assets must be classified and measured at either amortized cost or at fair value through profit or loss or through OCI depending on the basis of the entity's business model for managing the financial asset, and the contractual cash flow characteristics of the financial asset.

In October 2010, the IASB issued additions to IFRS 9 regarding financial liabilities. The new requirements address the problem of volatility in net earnings arising from an issuer choosing to measure a liability at fair value and require that the portion of the change in fair value due to changes in the entity's own credit risk be presented in OCI, rather than within net earnings.

In November 2013, the IASB issued amendments to IFRS 9 that introduce a new general hedge accounting model intended to be simpler and more closely focus on how an entity manages its risks. Additional amendments to IFRS 9 allow a reporting entity to present changes in its own credit risk associated with liabilities designated at fair value through profit or loss in OCI.

The IASB also removed the Jan. 1, 2015 mandatory effective date from IFRS 9. The IASB will decide on a new effective date when the entire IFRS 9 project is closer to completion. Entities may still early-adopt the finalized and issued provisions of IFRS 9.

We do not expect that any material impacts will result from these standards; however, we continue to assess the impact of adopting these amendments on the consolidated financial statements.

# IAS 36 Impairment of Assets (Recoverable Amount Disclosures)

In May 2013, the IASB issued amendments to the disclosure requirements of IAS 36 *Impairment of Assets*. The amendments clarify that the recoverable amount of an asset or cash-generating unit is to be disclosed only in periods in which an impairment loss has been recognized or reversed. Additional disclosures regarding the level of the IFRS 13 fair value hierarchy and information about valuation techniques and key assumptions are required, in certain circumstances, when an impairment loss or reversal has been recognized and the recoverable amount is based on fair value less costs of disposal. The amended disclosure requirements apply retrospectively to annual reporting periods beginning on or after Jan. 1, 2014.

# IAS 32 Offsetting Financial Assets and Liabilities

In December 2011, the IASB issued amendments to IAS 32 *Financial Instruments: Presentation*. The amendments are intended to clarify certain aspects of the existing guidance on offsetting financial assets and financial liabilities due to the diversity in application of the requirements on offsetting and are effective for annual periods beginning on or after Jan. 1, 2014. We are currently assessing the impact of adopting the IAS 32 amendments on the consolidated financial statements.

# **Selected Quarterly Information**

	Q1 2013	Q2 2013	Q3 2013	Q4 2013
Revenue	540	542	623	587
Net earnings (loss) attributable to common shareholders	(11)	15	(9)	(66)
Net earnings (loss) per share attributable to common shareholders, basic and diluted	(0.04)	0.06	(0.03)	(0.25)
Comparable earnings per share	0.12	0.03	0.15	0.00
	Q1 2012	Q2 2012	Q3 2012	Q4 2012
Revenue	644	398	522	646
Net earnings (loss) attributable to common shareholders	88	(798)	56	39
Net earnings (loss) per share attributable to common shareholders, basic and diluted	0.39	(3.52)	0.24	0.15
Comparable earnings (loss) per share	0.20	(0.10)	0.18	0.22

Basic and diluted EPS attributable to common shareholders and comparable EPS are calculated each period using the weighted average common shares outstanding during the period. As a result, the sum of the EPS for the four quarters making up the calendar year may sometimes differ from the annual EPS.

# **Controls and Procedures**

Management has evaluated, with the participation of our Chief Executive Officer and Chief Financial Officer, the effectiveness of our disclosure controls and procedures as of the end of the period covered by this report. Disclosure controls and procedures refer to controls and other procedures designed to ensure that information required to be disclosed in the reports we file or submit under the Securities Exchange Act of 1934, as amended ("Exchange Act") are recorded, processed, summarized, and reported within the time periods specified in the rules and forms of the Securities and Exchange Commission. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by us in our reports that we file or submit under the Exchange Act is accumulated and communicated to management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding our required disclosure. In designing and evaluating our disclosure controls and procedures, management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives, and management is required to apply its judgment in evaluating and implementing possible controls and procedures.

There has been no change in the internal control over financial reporting during the period covered by this report that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting. Based on the foregoing evaluation, our Chief Executive Officer and Chief Financial Officer have concluded that, as of Dec. 31, 2013, the end of the period covered by this report, our disclosure controls and procedures were effective at a reasonable assurance level.

# Consolidated Financial Statements

# Management's Report

# To the Shareholders of TransAlta Corporation

The consolidated financial statements and other financial information included in this annual report have been prepared by management. It is management's responsibility to ensure that sound judgment, appropriate accounting principles and methods, and reasonable estimates have been used to prepare this information. They also ensure that all information presented is consistent.

Management is also responsible for establishing and maintaining internal controls and procedures over the financial reporting process. The internal control system includes an internal audit function and an established business conduct policy that applies to all employees. In addition, TransAlta Corporation has a code of conduct that applies to all employees and is signed annually. The code of conduct can be viewed on TransAlta's website (www.transalta.com). Management believes the system of internal controls, review procedures, and established policies provide reasonable assurance as to the reliability and relevance of financial reports. Management also believes that TransAlta's operations are conducted in conformity with the law and with a high standard of business conduct.

The Board of Directors ("the Board") is responsible for ensuring that management fulfills its responsibilities for financial reporting and internal control. The Board carries out its responsibilities principally through its Audit and Risk Committee ("the Committee"). The Committee, which consists solely of independent directors, reviews the financial statements and annual report and recommends them to the Board for approval. The Committee meets with management, internal auditors, and external auditors to discuss internal controls, auditing matters, and financial reporting issues. Internal and external auditors have full and unrestricted access to the Committee. The Committee also recommends the firm of external auditors to be appointed by the shareholders.

Dawn L. Farrell

President and Chief Executive Officer

February 20, 2014

Brett M. Gellner

Chief Financial and Chief Investment Officer

# Management's Annual Report on Internal Control over Financial Reporting

# To the Shareholders of TransAlta Corporation

The following report is provided by management in respect of TransAlta Corporation's internal control over financial reporting (as defined in Rules 13a-15f and 15d-15f under the *United States Securities Exchange Act of 1934*).

TransAlta's management is responsible for establishing and maintaining adequate internal control over financial reporting for TransAlta Corporation.

Management has used the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") framework to evaluate the effectiveness of TransAlta Corporation's internal control over financial reporting. Management believes that the COSO framework is a suitable framework for its evaluation of TransAlta Corporation's internal control over financial reporting because it is free from bias, permits reasonably consistent qualitative and quantitative measurements of TransAlta Corporation's internal controls, is sufficiently complete so that those relevant factors that would alter a conclusion about the effectiveness of TransAlta Corporation's internal controls are not omitted, and is relevant to an evaluation of internal control over financial reporting.

Internal control over financial reporting cannot provide absolute assurance of achieving financial reporting objectives because of its inherent limitations. Internal control over financial reporting is a process that involves human diligence and compliance and is subject to lapses in judgment and breakdowns resulting from human failures. Internal control over financial reporting also can be circumvented by collusion or improper overrides. Because of such limitations, there is a risk that material misstatements may not be prevented or detected on a timely basis by internal control over financial reporting. However, these inherent limitations are known features of the financial reporting process, and it is possible to design safeguards into the process to reduce, though not eliminate, this risk.

TransAlta Corporation proportionately consolidates the accounts of the Sheerness and Genesee Unit 3 joint operations and equity accounts for the CE Generation, LLC ("CE Gen") and Wailuku River Hydroelectric, L.P. ("Wailuku") joint ventures in accordance with International Financial Reporting Standards ("IFRS"). Management does not have the contractual ability to assess the internal controls of these joint arrangements. Once the financial information is obtained from these joint arrangements it falls within the scope of TransAlta Corporation's internal controls framework. Management's conclusion regarding the effectiveness of internal controls does not extend to the internal controls at the transactional level of these joint arrangements. The 2013 consolidated financial statements of TransAlta Corporation included \$886 million and \$857 million of total and net assets, respectively, as of December 31, 2013, and \$199 million and \$38 million of revenues and net earnings, respectively, for the year then ended related to these joint arrangements.

Management has assessed the effectiveness of TransAlta Corporation's internal control over financial reporting, as at December 31, 2013, and has concluded that such internal control over financial reporting is effective.

Ernst & Young LLP, who has audited the consolidated financial statements of TransAlta Corporation for the year ended December 31, 2013, has also issued a report on internal control over financial reporting under Auditing Standard No. 5 of the Public Company Accounting Oversight Board (United States). This report is located on the following page of this Annual Report.

Dawn L. Farrell

President and Chief Executive Officer

February 20, 2014

Brett M. Gellner

Chief Financial and Chief Investment Officer

# Independent Auditors' Report of Registered Public Accounting Firm

# To the Shareholders of TransAlta Corporation

We have audited TransAlta Corporation's internal control over financial reporting as of December 31, 2013, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria) (1992 framework). The Corporation'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 the accompanying Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Corporation'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, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A corporation'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 corporation'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 corporation; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the corporation are being made only in accordance with authorizations of management and directors of the corporation; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the corporation'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.

As indicated in the accompanying Management's Annual Report on Internal Control over Financial Reporting, management's assessment of and conclusion on the effectiveness of internal control over financial reporting did not include the internal controls of the CE Gen, Sheerness, Wailuku, and Genesee Unit 3 joint arrangements, which are included in the 2013 consolidated financial statements of the Corporation and constituted \$886 million and \$857 million of total and net assets, respectively, as of December 31, 2013, and \$199 million and \$38 million of revenues and net earnings, respectively, for the year then ended. Our audit of internal control over financial reporting of the Corporation did not include an evaluation of the internal control over financial reporting of the CE Gen, Sheerness, Wailuku, and Genesee Unit 3 joint arrangements.

In our opinion, TransAlta Corporation maintained, in all material respects, effective internal control over financial reporting as of December 31, 2013, based on the COSO criteria.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated statements of financial position of TransAlta Corporation as of December 31, 2013 and 2012, and the related consolidated statements of earnings (loss), comprehensive income (loss), changes in equity and cash flows for each of the years in the three-year period ended December 31, 2013 and our report dated February 20, 2014, expressed an unqualified opinion thereon.

Chartered Accountants Calgary, Canada

Ernst + Young LLP

February 20, 2014

# Independent Auditors' Report of Registered Public Accounting Firm

# To the Shareholders of TransAlta Corporation

We have audited the accompanying consolidated statements of financial position of TransAlta Corporation as of December 31, 2013 and 2012, and the related consolidated statements of earnings (loss), comprehensive income (loss), changes in equity and cash flows for each of the years in the three-year period ended December 31, 2013. These financial statements are the responsibility of the Corporation's management. Our responsibility is to express an opinion on these 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 financial statements referred to above present fairly, in all material respects, the consolidated financial position of TransAlta Corporation at December 31, 2013 and 2012, and the consolidated results of its operations and its cash flows for each of the years in three-year period ended December 31, 2013, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

As discussed in Note 3 to the consolidated financial statements, the Corporation changed its method of accounting for employee benefits and accounting for stripping costs in the production phase of a surface mine as a result of the adoption of IAS 19, "Employee Benefits" and IFRIC 20, "Stripping Costs in the Production Phase of a Surface Mine" effective January 1, 2013, which included the disclosure of a statement of financial position as of January 1, 2012.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), TransAlta Corporation's internal control over financial reporting as of December 31, 2013, based on criteria established in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (1992 framework) and our report dated February 20, 2014 expressed an unqualified opinion on TransAlta Corporation's internal control over financial reporting.

Chartered Accountants Calgary, Canada

Ernst + Young LLP

February 20, 2014

# Consolidated Statements of Earnings (Loss)

Year ended Dec. 31 (in millions of Canadian dollars except where noted)	2013	2012 (Restated)*	2011 (Restated)*
Revenues (Note 12)	2,292	2,210	2,618
Fuel and purchased power (Note 11)	926	753	895
Gross margin	1,366	1,457	1,723
Operations, maintenance, and administration (Note 11)	516	499	552
Depreciation and amortization	525	509	482
Asset impairment charges (reversals) (Note 13)	(18)	324	17
Inventory writedown (Note 22)	22	44	_
Restructuring provision (Note 28)	(3)	13	_
Taxes, other than income taxes	27	28	27
Operating income	297	40	645
Finance lease income (Notes 8 and 12)	46	16	8
Equity income (loss) (Note 14)	(10)	(15)	14
California claim (Note 5)	(56)	_	_
Sundance Units 1 and 2 return to service (Note 6)	(25)	(254)	_
Gain on sale of assets (Note 8)	12	3	16
Other income	-	1	2
Foreign exchange gain (loss)	1	(9)	(3)
Loss on assumption of pension obligations (Note 7)	(29)	_	_
Gain on sale of (reserve on) collateral (Note 9)	-	15	(18)
Insurance recovery (Note 10)	8	_	_
Net interest expense (Note 15)	(256)	(242)	(215)
Earnings (loss) before income taxes	(12)	(445)	449
Income tax expense (recovery) (Note 16)	(8)	102	106
Net earnings (loss)	(4)	(547)	343
Net earnings (loss) attributable to:			
TransAlta shareholders	(33)	(584)	305
Non-controlling interests (Note 18)	29	37	38
	(4)	(547)	343
Net earnings (loss) attributable to TransAlta shareholders	(33)	(584)	305
Preferred share dividends (Note 32)	38	31	15
Net earnings (loss) attributable to common shareholders	(71)	(615)	290
Weighted average number of common shares outstanding in the year (millions)	264	235	222
Net earnings (loss) per share attributable to common shareholders, basic and diluted (Note 31)	(0.27)	(2.62)	1.31

<sup>\*</sup> See Note 3 for prior period restatements.

See accompanying notes.

# Consolidated Statements of Comprehensive Income (Loss)

Year ended Dec. 31 (in millions of Canadian dollars)	2013	2012 (Restated)*	2011 (Restated)*
Net earnings (loss)	(4)	(547)	343
Other comprehensive income (loss)			
Net actuarial gains (losses) on defined benefit plans, net of tax <sup>1</sup>	31	(23)	(21)
Losses on derivatives designated as cash flow hedges, net of tax <sup>2</sup>	-	(2)	(4)
Reclassification of losses on derivatives designated as cash flow hedges to non-financial assets, net of tax <sup>3</sup>	1	5	-
Total items that will not be reclassified subsequently to net earnings	32	(20)	(25)
Gains (losses) on translating net assets of foreign operations	37	(23)	32
Gains (losses) on financial instruments designated as hedges of foreign operations, net of tax <sup>4</sup>	(35)	13	(33)
Gains (losses) on derivatives designated as cash flow hedges, net of tax <sup>5</sup>	76	(12)	(99)
Reclassification of gains on derivatives designated as cash flow hedges to net earnings, net of tax <sup>6</sup>	(24)	(6)	(177)
Total items that will be reclassified subsequently to net earnings	54	(28)	(277)
Other comprehensive income (loss)	86	(48)	(302)
Total comprehensive income (loss)	82	(595)	41
Total comprehensive income (loss) attributable to:			
Common shareholders	41	(626)	23
Non-controlling interests	41	31	18
	82	(595)	41

 $<sup>^{\</sup>star}$  See Note 3 for prior period restatements.

 $See\ accompanying\ notes.$ 

<sup>1</sup> Net of income tax expense of 11 for the year ended Dec. 31, 2013 (2012 – 8 recovery, 2011 – 7 recovery).

<sup>2</sup> Net of income tax of nil for the year ended Dec. 31, 2013 (2012 - 1 recovery, 2011 - 2 recovery).

<sup>3</sup> Net of income tax recovery of 1 for the year ended Dec. 31, 2013 (2012 – 2 recovery, 2011 – nil).

<sup>4</sup> Net of income tax recovery of 5 for the year ended Dec. 31, 2013 (2012 – 2 expense, 2011 – 5 recovery).

 $<sup>5\ \ \</sup>text{Net of income tax expense of 12 for the year ended Dec. 31, 2013 (2012-4 expense, 2011-5 recovery)}.$ 

<sup>6</sup> Net of income tax expense of 1 for the year ended Dec. 31, 2013 (2012 – 20 expense, 2011 – 94 expense).

# **Consolidated Statements of Financial Position**

(in millions of Canadian dollars)	Dec. 31, 2013	Dec. 31, 2012 (Restated)*	Jan. 1, 2012 (Restated)*
Cash and cash equivalents (Note 21)	42	27	49
Accounts receivable (Notes 17, 19, and 20)	473	597	541
Current portion of finance lease receivable (Notes 12 and 19)	3	2	3
Collateral paid (Notes 19 and 20)	20	19	45
Prepaid expenses	12	7	8
Risk management assets (Notes 19 and 20)	112	201	391
Inventory (Note 22)	77	93	92
Income taxes receivable (Note 23)	8	4	2
THEOTHE LAXES TECCHADIO (TOLE 25)	747	950	1,131
Investments (Note 14)	192	172	193
Long-term receivable (Note 9)	-	-	18
Long-term portion of finance lease receivable (Notes 12 and 19)	377	357	42
Property, plant, and equipment (Notes 24 and 42)			
Cost	12,024	11,481	11,386
Accumulated depreciation	(4,831)	(4,437)	(4,115)
	7,193	7,044	7,271
Goodwill (Notes 25 and 42)	460	447	447
Intangible assets (Notes 26 and 42)	323	284	276
Deferred income tax assets (Note 16)	118	90	213
Risk management assets (Notes 19 and 20)	276	69	99
Other assets (Notes 27 and 42)	97	90	90
Total assets	9,783	9,503	9,780
Accounts payable and accrued liabilities (Notes 19 and 20)	447	495	463
Current portion of decommissioning and other provisions (Note 28)	16	33	99
Collateral received (Notes 19 and 20)	-	2	16
Risk management liabilities (Notes 19 and 20)	84	167	208
Income taxes payable	3	7	22
Dividends payable (Notes 19, 20, and 31)	85	75	67
Current portion of finance lease obligation (Notes 8, 12, and 19)	8	-	-
Current portion of long-term debt (Notes 19, 20, and 29)	209	607	316
	852	1,386	1,191
Long-term debt (Notes 19, 20, and 29)	4,113	3,610	3,721
Finance lease obligation (Notes 8, 12, and 19)	17	-	-
Decommissioning and other provisions (Note 28)	316	279	283
Deferred income tax liabilities (Note 16)	459	473	530
Risk management liabilities (Notes 19 and 20)	263	106	142
Deferred credits and other long-term liabilities (Note 30)	340	301	281
Equity			
Common shares (Note 31)	2,913	2,726	2,273
Preferred shares (Note 32)	781	781	562
Contributed surplus	9	9	9
Retained earnings (deficit)	(735)	(362)	524
Accumulated other comprehensive loss (Note 33)	(62)	(136)	(94)
Equity attributable to shareholders	2,906	3,018	3,274
Non-controlling interests (Note 18)	517	330	358
Total equity	3,423	3,348	3,632
Total liabilities and equity	9,783	9,503	9,780

<sup>\*</sup> See Note 3 for prior period restatements.

Commitments (Note 40)

Contingencies (Note 41)

Subsequent events (Note 43)

See accompanying notes.

On behalf of the Board:

**Gordon D. Giffin**Director

Anden D Hiffen

Karen E. Maidment

Karen E. Maidment
Director

# Consolidated Statements of Changes in Equity

(in millions of Canadian dollars)

	Common shares	Preferred shares	Contributed surplus	Retained earnings (deficit) (Restated)*	Accumulated other comprehensive income (loss) <sup>1</sup> (Restated)*	Attributable to shareholders	Attributable to non-controlling interests	Total
Balance, Dec. 31, 2011	2,273	562	9	524	(94)	3,274	358	3,632
Net earnings (loss)	-	-	-	(584)	-	(584)	37	(547)
Other comprehensive income (loss):								
Net losses on translating net assets of foreign operations, net of hedges and of tax	-	-	-	-	(10)	(10)	-	(10)
Net losses on derivatives designated as cash flow hedges, net of tax	-	-	-	-	(9)	(9)	(6)	(15)
Net actuarial gains on defined benefits plans, net of tax	-	-	-	-	(23)	(23)	-	(23)
Total comprehensive income				(584)	(42)	(626)	31	(595)
Common share dividends	-	-	-	(271)	-	(271)	-	(271)
Preferred share dividends	-	-	-	(31)	-	(31)	-	(31)
Distributions paid to non-controlling interests	-	-	-	_	-	-	(59)	(59)
Common shares issued	453	-	-	-	-	453	-	453
Preferred shares issued	-	219	-	-	-	219	-	219
Balance, Dec. 31, 2012	2,726	781	9	(362)	(136)	3,018	330	3,348
Net earnings (loss)	-	-	-	(33)	-	(33)	29	(4)
Other comprehensive income:								
Net gains on translating net assets of foreign operations, net of hedges and of tax	_	_	-	_	2	2	-	2
Net gains on derivatives designated as cash flow hedges, net of tax	-	_	-	_	41	41	12	53
Net actuarial gains on defined benefits plans, net of tax	-	-	-	-	31	31	-	31
Total comprehensive income				(33)	74	41	41	82
Common share dividends	-	-	-	(306)	-	(306)	-	(306)
Preferred share dividends	-	-	-	(38)	-	(38)	-	(38)
Formation of TransAlta Renewables Inc. (Note 4)	-	-	-	4	-	4	206	210
Distributions paid, and payable, to non-controlling interests	-	_	-	_	-	-	(60)	(60)
Common shares issued	187	-	-	-	-	187	_	187
Balance, Dec. 31, 2013	2,913	781	9	(735)	(62)	2,906	517	3,423

 $<sup>^{\</sup>star}$  See Note 3 for prior period restatements.

See accompanying notes.

<sup>1</sup> Refer to Note 33 for details on components of, and changes in, Accumulated other comprehensive income (loss).

# **Consolidated Statements of Cash Flows**

	2013	2012	2011
Year ended Dec. 31 (in millions of Canadian dollars)		(Restated)*	(Restated)*
Operating activities			
Net earnings (loss)	(4)	(547)	343
Depreciation and amortization (Note 42)	585	564	532
Gain on sale of assets (Note 8)	(12)	(3)	(16)
California claim (Note 5)	28	-	-
Accretion of provisions (Note 28)	18	17	19
Decommissioning and restoration costs settled (Note 28)	(24)	(34)	(33)
Deferred income tax expense (recovery) (Note 16)	(47)	89	80
Unrealized (gain) loss from risk management activities	76	99	(175)
Unrealized foreign exchange (gain) loss	(1)	5	3
Provisions	11	11	22
Asset impairment charges (reversals) (Note 13)	(18)	324	17
Sundance Units 1 and 2 return to service (Notes 6 and 13)	25	43	-
Reserve on collateral (Note 9)	-	-	18
Equity loss, net of distributions received (Note 14)	10	14	1
Other non-cash items	44	(6)	(2)
Cash flow from operations before changes in working capital	691	576	809
Change in non-cash operating working capital balances (Note 37)	74	(56)	(119)
Cash flow from operating activities	765	520	690
Investing activities			
Additions to property, plant, and equipment (Notes 24 and 42)	(561)	(703)	(453)
Additions to intangibles (Notes 26 and 42)	(32)	(39)	(30)
Acquisition of finance lease (Note 8)	-	(312)	-
Addition to equity investments	(17)	-	-
Proceeds on sale of property, plant, and equipment	14	3	12
Proceeds on sale of facilities and development projects (Note 8)	-	3	40
Acquisition of the remaining 50% of the Taylor Hydro joint venture (Note 8)	-	-	(7)
Resolution of certain outstanding tax matters (Notes 16 and 23)	2	9	3
Realized gains (losses) on financial instruments	14	(13)	(12)
Net decrease in collateral received from counterparties	(1)	(13)	(109)
Net (increase) decrease in collateral paid to counterparties	-	24	(56)
Decrease in finance lease receivable	1	3	3
Acquisition of Wyoming wind farm (Note 8)	(109)	-	-
Other	15	(8)	(3)
Change in non-cash investing working capital balances	(29)	(2)	4
Cash flow used in investing activities	(703)	(1,048)	(608)
Financing activities			
Net increase (decrease) in borrowings under credit facilities (Note 29)	(119)	152	155
Repayment of long-term debt (Note 29)	(328)	(314)	(234)
Issuance of long-term debt (Note 29)	398	388	-
Dividends paid on common shares (Note 31)	(116)	(104)	(191)
Dividends paid on preferred shares (Note 32)	(38)	(32)	(15)
Net proceeds on issuance of common shares (Note 31)	-	293	2
Net proceeds on issuance of preferred shares (Note 32)	-	217	267
Net proceeds on sale of non-controlling interest in subsidiary (Note 4)	207	-	-
Realized gains (losses) on financial instruments	15	(31)	9
Distributions paid to subsidiaries' non-controlling interests (Note 18)	(55)	(59)	(61)
Decrease in finance lease obligation	(9)	-	_
Other	(2)	(6)	(2)
Cash flow from (used in) financing activities	(47)	504	(70)
Cash flow from (used in) operating, investing, and financing activities	15	(24)	12
Effect of translation on foreign currency cash	_	2	2
Increase (decrease) in cash and cash equivalents	15	(22)	14
Cash and cash equivalents, beginning of year	27	49	35
Cash and cash equivalents, end of year	42	27	49
Cash income taxes paid (recovered)	46	30	(1)
Cash interest paid	240	234	197

<sup>\*</sup> See Note 3 for prior period restatements.

See accompanying notes.

# Notes to Consolidated Financial Statements

(Tabular amounts in millions of Canadian dollars, except as otherwise noted)

# 1. Corporate Information

### A. Description of the Business

TransAlta Corporation ("TransAlta" or "the Corporation") was incorporated under the *Canada Business Corporations Act* in March 1985. The Corporation became a public company in December 1992 after TransAlta Utilities Corporation became a subsidiary.

The three reportable segments of the Corporation are as follows:

#### I. Generation

The Generation Segment owns and operates hydro, wind, geothermal, natural gas- and coal-fired facilities, and related mining operations in Canada, the United States ("U.S."), and Australia. Generation's revenues are derived from the availability and production of electricity and steam as well as ancillary services such as system support. Starting in 2013, electricity sales generated by the Corporation's Commercial and Industrial group are assumed to be sourced from the Corporation's production and have been included in the Generation Segment on a net basis.

#### II. Energy Trading

The Energy Trading Segment derives revenue and earnings from the wholesale trading of electricity and other energy-related commodities and derivatives.

Energy Trading manages available generating capacity as well as the fuel and transmission needs of the Generation Segment by utilizing contracts of various durations for the forward sales of electricity and for the purchase of natural gas and transmission capacity. Energy Trading is also responsible for recommending portfolio optimization decisions. The results of all of these activities are included in the Generation Segment.

#### III. Corporate

The Corporate Segment provides finance, tax, treasury, legal, regulatory, environmental, health and safety, sustainable development, corporate communications, government and investor relations, information technology, risk management, human resources, internal audit, and other administrative support to the Generation and Energy Trading segments.

# B. Basis of Preparation

These consolidated financial statements have been prepared by management in compliance with IFRS as issued by the International Accounting Standards Board ("IASB").

The consolidated financial statements have been prepared on a historical cost basis except for financial instruments that are measured at fair value, as explained in the following accounting policies.

These consolidated financial statements were authorized for issue by the Board of Directors on Feb. 20, 2014.

#### C. Basis of Consolidation

The consolidated financial statements include the accounts of the Corporation and the subsidiaries that it controls. Control exists where the Corporation has the power to govern the financial and operating policies of the subsidiary so as to obtain benefits from its activities, generally indicated by ownership of, directly or indirectly, more than one-half of the voting rights. The financial statements of the subsidiaries are prepared for the same reporting period and apply consistent accounting policies as the parent company.

# 2. Significant Accounting Policies

### A. Revenue Recognition

The majority of the Corporation's revenues are derived from the sale of physical power, leasing of power facilities, and from energy marketing and trading activities.

Revenues are measured at the fair value of the consideration received or receivable.

Revenues under long-term electricity and thermal sales contracts generally include one or more of the following components: fixed capacity payments for availability, energy payments for generation of electricity, incentives or penalties for exceeding or not meeting availability targets, excess energy payments for power generation above committed capacity, and ancillary services. Each component is recognized when: i) output, delivery, or satisfaction of specific targets is achieved, all as governed by contractual terms; ii) the amount of revenue can be measured reliably; iii) it is probable that the economic benefits will flow to the Corporation; and iv) the costs incurred or to be incurred in respect of the transaction can be reliably measured. Revenue from the rendering of services is recognized when criteria ii), iii), and iv) above are met and when the stage of completion of the transaction at the end of the reporting period can be measured reliably.

Revenues from non-contracted capacity are comprised of energy payments, at market prices, for each megawatt hour ("MWh") produced, and are recognized upon delivery.

Electricity sales generated by the Corporation's Commercial and Industrial group that are sourced from the Corporation's production are recognized on a net basis.

In certain situations, a long-term electricity or thermal sales contract may contain, or be considered, a lease. Revenues associated with non-lease elements are recognized as goods or services revenues as outlined above. Revenues associated with leases are recognized as outlined in Note 2(R).

Trading activities involve the use of derivatives such as physical and financial swaps, forward sales contracts, futures contracts, and options, which are used to earn trading revenues and to gain market information. These derivatives are accounted for using fair value accounting. The initial recognition and subsequent changes in fair value affect reported net earnings in the period the change occurs and are presented on a net basis in the Consolidated Statements of Earnings (Loss). The fair values of instruments that remain open at the end of the reporting period represent unrealized gains or losses and are presented on the Consolidated Statements of Financial Position as risk management assets or liabilities. Some of the derivatives used by the Corporation in trading activities are not traded on an active exchange or have terms that extend beyond the time period for which exchange-based quotes are available. The fair values of these derivatives are determined using internal valuation techniques or models.

# **B.** Foreign Currency Translation

The Corporation, its subsidiary companies, and joint arrangements each determine their functional currency based on the currency of the primary economic environment in which they operate. The Corporation's functional currency is the Canadian dollar while the functional currencies of the subsidiary companies and joint arrangements are either the Canadian, U.S., or Australian dollar. Transactions denominated in a currency other than the functional currency of an entity are translated at the exchange rate in effect on the transaction date. The resulting exchange gains and losses are included in each entity's net earnings in the period in which they arise.

The Corporation's foreign operations are translated to the Corporation's presentation currency, which is the Canadian dollar, for inclusion in the consolidated financial statements. Foreign-denominated monetary and non-monetary assets and liabilities of foreign operations are translated at exchange rates in effect at the end of the reporting period and revenue and expenses are translated at exchange rates in effect on the transaction date. The resulting translation gains and losses are included in Other Comprehensive Income (Loss) ("OCI") with the cumulative gain or loss reported in Accumulated Other Comprehensive Income (Loss) ("AOCI"). Amounts previously recognized in AOCI are recognized in net earnings when there is a reduction in the net investment as a result of a disposal, partial disposal, or loss of control.

### C. Financial Instruments and Hedges

#### I. Financial Instruments

Financial assets and financial liabilities, including derivatives and certain non-financial derivatives, are recognized on the Consolidated Statements of Financial Position when the Corporation becomes a party to the contract. All financial instruments, except for certain non-financial derivative contracts that meet the Corporation's own use requirements, are measured at fair value upon initial recognition. Measurement in subsequent periods depends on whether the financial instrument has been classified as: at fair value through profit or loss, available-for-sale, held-to-maturity, loans and receivables, or other financial liabilities. Classification of the financial instrument is determined at inception depending on the nature and purpose of the financial instrument.

Financial assets and financial liabilities classified or designated as at fair value through profit or loss are measured at fair value with changes in fair values recognized in net earnings. Financial assets classified as either held-to-maturity or as loans and receivables, and other financial liabilities, are measured at amortized cost using the effective interest method of amortization.

Financial assets are derecognized when the contractual rights to receive cash flows expire. Financial liabilities are removed from the Consolidated Statements of Financial Position when the obligation is discharged, cancelled, or expired.

Financial assets and financial liabilities are offset and the net amount is reported in the Consolidated Statements of Financial Position if there is a currently enforceable legal right to offset the recognized amounts and there is an intention to settle on a net basis, to realize the assets and settle the liabilities simultaneously.

Derivative instruments that are embedded in financial or non-financial contracts that are not already required to be recognized at fair value are treated and recognized as separate derivatives if their risks and characteristics are not closely related to their host contracts and the contract is not measured at fair value. Changes in the fair values of these and other derivative instruments are recognized in net earnings with the exception of the effective portion of i) derivatives designated as cash flow hedges and ii) hedges of foreign currency exposure of a net investment in a foreign operation, each of which is recognized in OCI. Derivatives used in trading activities are described in more detail in Note 2(A).

Transaction costs are expensed as incurred for financial instruments classified or designated as at fair value through profit or loss. For other financial instruments, such as debt instruments, transaction costs are recognized as part of the carrying amount of the financial instrument. The Corporation uses the effective interest method of amortization for any transaction costs or fees, premiums, or discounts earned or incurred for financial instruments measured at amortized cost.

#### II. Hedges

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Where hedge accounting can be applied and the Corporation chooses to seek hedge accounting treatment, a hedge relationship is designated as a fair value hedge, a cash flow hedge, or a hedge of foreign currency exposures of a net investment in a foreign operation. A hedging relationship qualifies for hedge accounting if, at inception, it is formally designated and documented as a hedge, and the hedge is expected to be highly effective at inception and on an ongoing basis. The documentation includes identification of the hedging instrument and hedged item or transaction, the nature of the risk being hedged, the Corporation's risk management objectives and strategy for undertaking the hedge, and how hedge effectiveness will be assessed. The process of hedge accounting includes linking derivatives to specific assets and liabilities on the Consolidated Statements of Financial Position or to specific firm commitments or highly probable anticipated transactions.

The Corporation formally assesses, both at the hedge's inception and on an ongoing basis, whether the derivatives used are highly effective in offsetting changes in fair values or cash flows of hedged items. If the above hedge criteria are not met or the Corporation does not apply hedge accounting, the derivative is accounted for on the Consolidated Statements of Financial Position at fair value, with subsequent changes in fair value recorded in net earnings in the period of change.

#### a. Fair Value Hedges

In a fair value hedging relationship, the carrying amount of the hedged item is adjusted for changes in fair value attributable to the hedged risk, with the changes being recognized in net earnings. Changes in the fair value of the hedged item, to the extent that the hedging relationship is effective, are offset by changes in the fair value of the hedging derivative, which is also recorded in net earnings. Hedge effectiveness for fair value hedges is achieved if changes in the fair value of the derivative are highly effective at offsetting changes in the fair value of the item hedged. If hedge accounting is discontinued, the carrying amount of the hedged item is no longer adjusted and the cumulative fair value adjustments to the carrying amount of the hedged item are amortized to net earnings over the remaining term of the original hedging relationship.

The Corporation primarily uses interest rate swaps as fair value hedges to manage the ratio of floating rate versus fixed rate debt. Interest rate swaps require the periodic exchange of payments without the exchange of the notional principal amount on which the payments are based. Interest expense on the debt is adjusted to include the payments made or received under the interest rate swaps.

#### b. Cash Flow Hedges

In a cash flow hedging relationship, the effective portion of the change in the fair value of the hedging derivative is recognized in OCI while any ineffective portion is recognized in net earnings. Hedge effectiveness is achieved if the derivatives' cash flows are highly effective at offsetting the cash flows of the hedged item and the timing of the cash flows is similar. All components of each derivative's change in fair value are included in the assessment of cash flow hedge effectiveness. If hedge accounting is discontinued, the amounts previously recognized in AOCI are reclassified to net earnings during the periods when the variability in the cash flows of the hedged item affects net earnings. Gains and losses on derivatives are reclassified to net earnings from AOCI immediately when the forecasted transaction is no longer expected to occur within the time period specified in the hedge documentation.

The Corporation primarily uses physical and financial swaps, forward sales contracts, futures contracts, and options as cash flow hedges to hedge the Corporation's exposure to fluctuations in electricity and natural gas prices. If hedging criteria are met, the fair values of the hedges are recorded in risk management assets or liabilities with changes in value being reported in OCI. Gains and losses on these derivatives are recognized, on settlement, in net earnings in the same period and financial statement caption as the hedged exposure.

The Corporation also uses foreign currency forward contracts as cash flow hedges to hedge the foreign exchange exposures resulting from highly probable forecasted project-related transactions denominated in foreign currencies. If the hedging criteria are met, changes in fair value are reported in OCI with the fair value being reported in risk management assets or liabilities, as appropriate. Upon settlement of the derivative, any gain or loss on the forward contracts is included in the cost of the asset acquired or liability incurred.

The Corporation uses forward starting interest rate swaps as cash flow hedges to hedge exposures to anticipated changes in interest rates for forecasted issuances of debt. If the hedging criteria are met, changes in fair value are reported in OCI with the fair value being reported in risk management assets or liabilities, as appropriate. When the swaps are closed out on issuance of the debt, the resulting gains or losses recorded in AOCI are amortized to net earnings over the term of the swap. If no debt is issued, the gains or losses are recognized in net earnings immediately.

### c. Hedges of Foreign Currency Exposures of a Net Investment in a Foreign Operation

In hedging a foreign currency exposure of a net investment in a foreign operation, the effective portion of foreign exchange gains and losses on the hedging instrument is recognized in OCI and the ineffective portion is recognized in net earnings. The related fair values are recorded in risk management assets or liabilities, as appropriate. The amounts previously recognized in AOCI are recognized in net earnings when there is a reduction in the hedged net investment as a result of a disposal, partial disposal, or loss of control. The Corporation primarily uses foreign currency forward contracts and foreign-denominated debt to hedge exposure to changes in the carrying values of the Corporation's net investments in foreign operations that result from changes in foreign exchange rates.

### D. Cash and Cash Equivalents

Cash and cash equivalents are comprised of cash and highly liquid investments with original maturities of three months or less.

#### E. Collateral Paid and Received

The terms and conditions of certain contracts may require the Corporation or its counterparties to provide collateral when the fair value of the obligation pursuant to these contracts is in excess of any credit limits granted. Downgrades in creditworthiness by certain credit rating agencies may decrease the credit limits granted and accordingly increase the amount of collateral that may have to be provided.

### F. Inventory

#### I. Fuel

The Corporation's inventory balance is comprised of coal and natural gas used as fuel, which is measured at the lower of cost and net realizable value. Cost is determined using the weighted average cost method.

The cost of internally produced coal inventory is determined using absorption costing, which is defined as the sum of all applicable expenditures and charges directly incurred in bringing inventory to its existing condition and location. Available coal inventory tends to increase during the second and third quarters as a result of favourable weather conditions and lower electricity production as maintenance is performed. Due to the limited number of processing steps incurred in mining coal and preparing it for consumption and the relatively low value on a per-unit basis, management does not distinguish between work in process and coal available for consumption. The cost of natural gas and purchased coal inventory includes all applicable expenditures and charges incurred in bringing the inventory to its existing condition and location.

#### II. Energy Trading

Commodity inventories held in the Energy Trading Segment for trading purposes are measured at fair value less costs to sell. Changes in fair value less costs to sell are recognized in net earnings in the period of change.

# G. Property, Plant, and Equipment

The Corporation's investment in property, plant, and equipment ("PP&E") is initially measured at the original cost of each component at the time of construction, purchase, or acquisition. A component is a tangible portion of an asset that can be separately identified and depreciated over its own expected useful life, and is expected to provide a benefit for a period in excess of one year. Original cost includes items such as materials, labour, borrowing costs, and other directly attributable costs, including the initial estimate of the cost of decommissioning and restoration. Costs are recognized as PP&E assets if it is probable that future economic benefits will be realized and the cost of the item can be measured reliably.

The cost of major spare parts is capitalized and classified as PP&E, as these items can only be used in connection with an item of PP&E.

Planned maintenance is performed at regular intervals. Planned major maintenance includes inspection, repair and maintenance of existing components, and the replacement of existing components. Costs incurred for planned major maintenance activities are capitalized in the period maintenance activities occur and are amortized on a straight-line basis over the term until the next major maintenance event. Expenditures incurred for the replacement of components during major maintenance are capitalized and amortized over the estimated useful life of such components.

The cost of routine repairs and maintenance and the replacement of minor parts are charged to net earnings as incurred.

Subsequent to initial recognition and measurement at cost, all classes of PP&E continue to be measured using the cost model and are reported at cost less accumulated depreciation and impairment losses, if any.

An item of PP&E or a component is derecognized upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on derecognizion of the asset is included in the income statement when the asset is derecognized.

The estimate of the useful lives of each component of PP&E is based on current facts and past experience, and takes into consideration existing long-term sales agreements and contracts, current and forecasted demand, and the potential for technological obsolescence. The useful life is used to estimate the rate at which the component of PP&E is depreciated. PP&E assets are subject to depreciation when the asset is considered to be available for use, which is typically upon commencement of commercial operations. Each significant component of an item of PP&E is depreciated to its residual value over its estimated useful life, using straight-line or unit-of-production methods. Estimated useful lives, residual values, and depreciation methods are reviewed annually and are subject to revision based on new or additional information. The effect of a change in useful life, residual value, or depreciation method is accounted for prospectively.

Estimated useful lives of the components of depreciable assets, categorized by asset class, are as follows:

Thermal generation 3-50 years
Gas generation 2-30 years
Renewable generation 3-60 years
Mining property and equipment 4-50 years
Capital spares and other 2-50 years

TransAlta capitalizes borrowing costs on capital invested in projects under construction (see Note 2(S)). Upon commencement of commercial operations, capitalized borrowing costs, as a portion of the total cost of the asset, are depreciated over the estimated useful life of the related asset.

# H. Intangible Assets

Intangible assets acquired in a business combination are recognized separately from goodwill at their fair value at the date of acquisition. Intangible assets acquired separately are recognized at cost. Internally generated intangible assets arising from development projects are recognized when certain criteria related to the feasibility of internal use or sale of the intangible asset, and its probable future economic benefits, are demonstrated. Intangible assets are initially recognized at cost, which is comprised of all directly attributable costs necessary to create, produce, and prepare the intangible asset to be capable of operating in the manner intended by management.

Subsequent to initial recognition, intangible assets continue to be measured using the cost model, and are reported at cost less accumulated amortization and impairment losses, if any. Amortization is included in depreciation and amortization and fuel and purchased power in the Consolidated Statements of Earnings (Loss).

Amortization commences when the intangible asset is available for use, and is computed on a straight-line basis over the intangible asset's estimated useful life, except for coal rights, which are amortized using a unit-of-production basis, based on the estimated mine reserves. Estimated useful lives of intangible assets may be determined, for example, with reference to the term of the related contract or licence agreement. The estimated useful lives and amortization methods are reviewed annually with the effect of any changes being accounted for prospectively. Intangible assets with indefinite useful lives are not amortized, but are tested for impairment annually.

Intangible assets consist of power sale contracts with fixed prices higher than market prices at the date of acquisition, coal rights, software, and intangibles under development. Estimated useful lives of intangible assets are as follows:

Software 2-7 years
Power contracts 1-30 years

# I. Impairment of Tangible and Intangible Assets Excluding Goodwill

At the end of each reporting period, the Corporation reviews the net carrying amount of PP&E and finite life intangible assets to determine whether there is any indication that an impairment loss may exist.

Factors that could indicate that an impairment exists include: significant underperformance relative to historical or projected operating results; significant changes in the manner in which an asset is used, or in the Corporation's overall business strategy; or significant negative industry or economic trends. In some cases, these events are clear. However, in many cases, a clearly identifiable event indicating a possible impairment does not occur. Instead, a series of individually insignificant events occurs over a period of time leading to an indication that an asset may be impaired. This can be further complicated in situations where the Corporation is not the operator of the facility. Events can occur in these situations that may not be known until a date subsequent to their occurrence.

The Corporation's businesses, the market, and the business environment are routinely monitored, and judgments and assessments are made to determine whether an event has occurred that indicates a possible impairment. If such an event has occurred, an estimate is made of the recoverable amount of the asset or cash-generating unit ("CGU") to which the asset belongs. Information regarding the 2013 determination of CGUs for asset impairment testing can be found in Note 13. Recoverable amount is the higher of an asset's fair value less costs to sell and its value in use. Fair value is the amount at which an item could be bought or sold in a current transaction between willing parties. Value in use is the present value of the estimated future cash flows expected to be derived from the asset from its continued use and ultimate disposal by the Corporation. When the recoverable amount is based on value in use, the Corporation bases its impairment on detailed cash flow budgets and forecasts over the asset's useful life. If the recoverable amount is less than the carrying amount of the asset or CGU, an asset impairment loss is recognized in net earnings, and the asset's carrying amount is reduced to its recoverable amount.

At each reporting date, an assessment is made whether there is any indication that an impairment loss previously recognized may no longer exist or may have decreased. If such indication exists, the recoverable amount of the asset or CGU to which the asset belongs is estimated and the impairment loss previously recognized is reversed if there has been an increase in the recoverable amount. Where an impairment loss is subsequently reversed, the carrying amount of the asset is increased to the lesser of the revised estimate of its recoverable amount or the carrying amount that would have been determined (net of depreciation) had no impairment loss been recognized previously. A reversal of an impairment loss is recognized in net earnings.

#### J. Goodwill

Goodwill arising in a business combination is recognized as an asset at the date control is acquired. Goodwill is measured as the cost of an acquisition plus the amount of any non-controlling interest in the acquiree (if applicable) less the fair value of the related identifiable assets acquired and liabilities assumed.

Goodwill is not subject to amortization, but is tested for impairment at least annually, or more frequently, if an analysis of events and circumstances indicate that a possible impairment may exist. These events could include a significant change in financial position of the CGUs to which the goodwill relates or significant negative industry or economic trends. For impairment purposes, goodwill is allocated to each of the Corporation's CGUs that are expected to benefit from the synergies of the business combination in which the goodwill arose. Information regarding the 2013 determination of CGUs for goodwill impairment testing can be found in Note 25. To test for impairment, the recoverable amount of the CGUs to which the goodwill relates is compared to the carrying amount of the CGUs. If the recoverable amount is less than the carrying amount, an impairment loss is recognized in net earnings immediately, by first reducing the carrying amount of the goodwill, and then by reducing the carrying amount of the other assets in the unit. An impairment loss recognized for goodwill is not reversed in subsequent periods.

### K. Project Development Costs

Project development costs include external, direct, and incremental costs that are necessary for completing an acquisition or construction project. These costs are recognized as operating expenses until construction of a plant or acquisition of an investment is likely to occur, there is reason to believe that future costs are recoverable, and that efforts will result in future value to the Corporation, at which time the costs incurred subsequently are included in other assets. The appropriateness of the carrying amount of these costs is evaluated each reporting period, and amounts capitalized for projects no longer probable of occurring are charged to net earnings.

# L. Income Taxes

The Corporation uses the liability method of accounting for income taxes. Under the liability method, deferred income tax assets and liabilities are recognized on the differences between the carrying amounts of assets and liabilities and their respective income tax basis (temporary differences). A deferred income tax asset may also be recognized for the benefit expected from unused tax credits and losses available for carryforward, to the extent that it is probable that future taxable earnings will be available against which the tax credits and losses can be applied. Deferred income tax assets and liabilities are measured based on income tax rates and tax laws that are enacted or substantively enacted by the end of the reporting period and that are expected to apply in the years in which temporary differences are expected to be realized or settled. Deferred income tax is charged or credited to net earnings, except when related to items charged or credited to either OCI or directly to equity. The carrying amount of deferred income tax assets is evaluated at the end of each reporting period and is reduced to the extent that it is no longer probable that sufficient taxable income will be available to allow all or part of the asset to be realized.

Deferred income tax liabilities are recognized for taxable temporary differences arising on investments in subsidiaries, except where the Corporation is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

#### M. Employee Future Benefits

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The Corporation has defined benefit pension and other post-employment benefit plans. The current service cost of providing benefits under the defined benefit plans is determined using the projected unit credit method pro-rated based on service. The net interest cost is determined by applying the discount rate to the net defined benefit liability. The discount rate used to determine the present value of the defined benefit obligation, and the net interest cost, is determined by reference to market yields at the end of the reporting period on high-quality corporate bonds with terms and currencies that match the estimated terms and currencies of the benefit obligations. Re-measurements, which include actuarial gains and losses and the return on plan assets (excluding net interest), are recognized through OCI in the period in which they occur. Actuarial gains and losses arise from experience adjustments and changes in actuarial assumptions. Re-measurements are not reclassified to profit or loss, from OCI, in subsequent periods.

Gains or losses arising from either a curtailment or settlement of a defined benefit plan are recognized when the curtailment or settlement occurs. When the restructuring of a benefit plan gives rise to a curtailment and a settlement of obligations, the curtailment is accounted for prior to the settlement.

In determining whether statutory minimum funding requirements of the Corporation's defined benefit pension plans give rise to recording an additional liability, letters of credit provided by the Corporation as security are considered to alleviate the funding requirements. No additional liability results in these circumstances.

Contributions payable under defined contribution pension plans are recognized as a liability and an expense in the period in which the services are rendered.

### N. Provisions

Provisions are recognized when the Corporation has a present obligation (legal or constructive) as a result of a past event, it is probable that the Corporation will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation. A legal obligation can arise through a contract, legislation, or other operation of law. A constructive obligation may arise from the Corporation's actions whereby through an established pattern of past practice, published policies, or a sufficiently specific current statement, the Corporation has indicated it will accept certain responsibilities and has thus created a valid expectation that it will discharge those responsibilities. The amount recognized as a provision is the best estimate, re-measured at each period-end, of the expenditures required to settle the present obligation, considering the risks and uncertainties associated with the obligation. Where expenditures are expected to be incurred in the future, the obligation is measured at its present value using a current market-based, risk-adjusted interest rate.

The Corporation records a decommissioning and restoration provision for all generating facilities and mine sites for which it is legally or constructively required to remove the facilities at the end of their useful lives and restore the plant or mine sites. For some hydro facilities, the Corporation is required to remove the generating equipment, but is not required to remove the structures. Initial decommissioning provisions are recognized at their present value when incurred. At each reporting date, the Corporation determines the present value of the provision using current discount rates that reflect the time value of money and associated risks. The Corporation recognizes the initial decommissioning and restoration provisions, as well as changes resulting from revisions to cost estimates and period-end revisions to the market-based, risk-adjusted discount rate, as a cost of the related PP&E (see Note 2(G)). The accretion of the net present value discount is charged to net earnings each period and is included in net interest expense. Where the Corporation expects to receive reimbursement from a third party for a portion of future decommissioning costs, the reimbursement is recognized as a separate asset when it is virtually certain that the reimbursement will be received. Decommissioning and restoration obligations for coal mines are incurred over time, as new areas are mined, and a portion of the provision is settled over time as areas are reclaimed prior to final pit reclamation. Reclamation costs for mining assets are recognized on a unit-of-production basis.

Changes in other provisions resulting from revisions to estimates of expenditures required to settle the obligation or period-end revisions to the market-based, risk-adjusted discount rate are recognized in net earnings. The accretion of the net present value discount is charged to net earnings each period and is included in net interest expense.

### O. Share-Based Payments

The Corporation measures equity-settled stock option awards using the fair value method. Compensation expense is measured at the grant date at the fair value of the award and is recognized over the vesting period based on the Corporation's estimate of the number of options that will eventually vest. Each equity-settled share-based payment award that vests in instalments is accounted for as a separate award with its own distinct fair value measurement.

Compensation costs associated with awards under the Performance Share Ownership Plan ("PSOP") are accrued based on the fair value of each award, the service period completed, and the number of equivalent common shares eligible employees and directors have earned each period-end, which is based upon the percentile ranking of the total shareholder return of the Corporation's common shares in comparison to the total shareholder returns of companies comprising the comparative group.

For share-based payments earned under cash-settled phantom stock option plans, a liability, and corresponding compensation cost, is recognized at each period-end, until final settlement, based on the fair value of each award and the service period completed.

#### P. Emission Credits and Allowances

Emission credits and allowances are recorded as inventory at cost. Those purchased for use by the Corporation are recorded at cost and are carried at the lower of weighted average cost and net realizable value. Credits granted to, or internally generated by, TransAlta are recorded at nil. Emission liabilities are recorded using the best estimate of the amount required by the Corporation to settle its obligation in excess of government-established caps and targets. To the extent compliance costs are recoverable under the terms of contracts with third parties, these amounts are recognized as revenue in the period of recovery.

Emission credits and allowances that are held for trading and that meet the definition of a derivative are accounted for using the fair value method of accounting. Allowances that do not satisfy the criteria of a derivative are accounted for using the accrual method.

### Q. Assets Held for Sale

Assets are classified as held for sale if their carrying amount will be recovered primarily through a sale as opposed to continued use by the Corporation. Assets classified as held for sale are measured at the lower of their carrying amount and fair value less costs to sell. Any impairment is recognized in net earnings. Depreciation ceases when an asset is classified as held for sale. Assets classified as held for sale are reported as current assets in the Consolidated Statements of Financial Position.

#### R. Leases

A lease is an arrangement whereby the lessor conveys to the lessee, in return for a payment or series of payments, the right to use an asset for an agreed period of time.

Power purchase arrangements ("PPA") and other long-term contracts may contain, or may be considered, leases where the fulfillment of the arrangement is dependent on the use of a specific asset (i.e. a generating unit) and the arrangement conveys to the customer the right to use that asset.

Where the Corporation determines that the contractual provisions of a contract contain, or are, a lease and result in the customer assuming the principal risks and rewards of ownership of the asset, the arrangement is a finance lease. Assets subject to finance leases are not reflected as PP&E and the net investment in the lease, represented by the present value of the amounts due from the lessee, is recorded in the Consolidated Statements of Financial Position as a financial asset, classified as a finance lease receivable. The payments considered to be part of the leasing arrangement are apportioned between a reduction in the lease receivable and finance lease income. The finance lease income element of the payments is recognized using a method that results in a constant rate of return on the net investment in each period and is reflected in finance lease income on the Consolidated Statements of Earnings (Loss).

Where the Corporation determines that the contractual provisions of a contract contain, or are, a lease and result in the Corporation retaining the principal risks and rewards of ownership of the asset, the arrangement is an operating lease. For operating leases, the asset is, or continues to be, capitalized as PP&E and depreciated over its useful life. Rental income, including contingent rent, from operating leases is recognized over the term of the arrangement and is reflected in revenue on the Consolidated Statements of Earnings (Loss). Contingent rent may arise when payments due under the contract are not fixed in amount but vary based on a future factor such as the amount of use or production.

#### S. Borrowing Costs

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TransAlta capitalizes borrowing costs that are directly attributable to, or relate to general borrowings used for, the construction of qualifying assets. Qualifying assets are assets that take a substantial period of time to prepare for their intended use and typically include generating facilities or other assets that are constructed over periods of time exceeding 12 months. Borrowing costs are considered to be directly attributable if they could have been avoided if the expenditure on the qualifying asset had not been made. Borrowing costs that are capitalized are included in the cost of the related PP&E component. Capitalization of borrowing costs ceases when substantially all the activities necessary to prepare the asset for its intended use are complete.

All other borrowing costs are expensed in the period in which they are incurred.

### T. Non-Controlling Interests

Non-controlling interests arise from business combinations in which the Corporation acquires less than a 100 per cent interest. Non-controlling interests are initially measured at either fair value or at the non-controlling interest's proportionate share of the acquiree's identifiable net assets. The Corporation determines on a transaction by transaction basis which measurement method is used.

Non-controlling interests also arise from other contractual arrangements between the Corporation and other parties, whereby the other party has acquired an interest in a specified asset or operation, and the Corporation retains control.

Subsequent to acquisition, the carrying amount of non-controlling interests is increased or decreased by the non-controlling interest's share of subsequent changes in equity and payments to the non-controlling interest. Total comprehensive income is attributed to the non-controlling interests even if this results in the non-controlling interests having a negative balance.

### **U.** Joint Arrangements

A joint arrangement is a contractual arrangement that establishes the terms by which two or more parties agree to undertake and jointly control an economic activity. TransAlta's joint arrangements are generally classified as two types: joint operations and joint ventures.

A joint operation arises when the parties that have joint control have rights to the assets, and obligations for the liabilities, relating to the arrangement. Generally, each party takes a share of the output from the asset and each bears an agreed upon share of the costs incurred in respect of the joint operation. The Corporation reports its interests in joint operations in its consolidated financial statements using the proportionate consolidation method by recognizing its share of the assets, liabilities, revenues, and expenses in respect of its interest in the joint operation.

In a joint venture, the venturers do not have rights to individual assets or obligations of the venture. Rather, each venturer has rights to the net assets of the arrangement. The Corporation reports its interests in joint ventures using the equity method. Under the equity method, the investment is initially recognized at cost and the carrying amount is increased or decreased to recognize the Corporation's share of the joint venture's net earnings or loss after the date of acquisition. The impact of transactions between the Corporation and joint ventures are eliminated based on the Corporation's ownership interest. Distributions received from joint ventures reduce the carrying amount of the investment. Any excess of the cost of an acquisition less the fair value of the recognized identifiable assets, liabilities, and contingent liabilities of an acquired joint venture is recognized as goodwill and is included in the carrying amount of the investment and is assessed for impairment as part of the investment.

Investments in joint ventures are evaluated for impairment at each reporting date by first assessing whether there is objective evidence that the investment is impaired. Objective evidence could include, for example, such factors as significant financial difficulty of the investee, or information about significant changes with an adverse effect that have taken place in the technological, market, economic, or legal environment in which the investee operates, which may indicate that the cost of the investment may not be recovered. If such objective evidence is present, an impairment loss is recognized if the investment's recoverable amount is less than its carrying amount. The investment's recoverable amount is determined as the higher of value in use and fair value less costs to sell.

#### V. Government Incentives

Government incentives are recognized when the Corporation has reasonable assurance that it will comply with the conditions associated with the incentive and that the incentive will be received. When the incentive relates to an expense item, it is recognized in net earnings over the same period in which the related costs or revenues are recognized. When the incentive relates to an asset, it is recognized as a reduction of the carrying amount of PP&E and released to earnings as a reduction in depreciation over the expected useful life of the related asset.

### W. Significant Accounting Judgments and Key Sources of Estimation Uncertainty

The preparation of consolidated financial statements requires management to make judgments, estimates, and assumptions that could affect the reported amounts of assets, liabilities, revenues, expenses, and disclosures of contingent assets and liabilities during the period. These estimates are subject to uncertainty. Actual results could differ from those estimates due to factors such as fluctuations in interest rates, foreign exchange rates, inflation and commodity prices, and changes in economic conditions, legislation, and regulations.

In the process of applying the Corporation's accounting policies, management has to make judgments and estimates about matters that are highly uncertain at the time the estimate is made and that could significantly affect the amounts recognized in the consolidated financial statements. Different estimates with respect to key variables used in the calculations, or changes to estimates, could potentially have a material impact on the Corporation's financial position or performance. The key judgments and sources of estimation uncertainty are described below:

#### I. Impairment of PP&E and Goodwill

Impairment exists when the carrying amount of an asset or CGU to which goodwill relates exceeds its recoverable amount, which is the higher of its fair value less cost to sell and its value in use. An assessment is also made at each reporting date as to whether there is any indication that previously recognized impairment losses may no longer exist or may have decreased. In determining fair value less costs to sell, information about third-party transactions for similar assets is used and if none are available, other valuation techniques, such as discounted cash flows, are used. Value in use is computed using the present value of management's best estimates of future cash flows based on the current use and present condition of the asset. In estimating either fair value less costs to sell or value in use using discounted cash flow methods, estimates and assumptions must be made about sales prices, cost of sales, production, fuel consumed, retirement costs, and other related cash inflows or outflows over the life of the plants, which can range from 30 to 60 years. In developing these assumptions, management uses estimates of contracted and future market prices based on expected market supply and demand in the region in which the plant operates, anticipated production levels, planned and unplanned outages, changes to regulations, and transmission capacity or constraints for the remaining life of the plant. These estimates and assumptions are susceptible to change from period to period and actual results can, and often do, differ from the estimates, and can have either a positive or negative impact on the estimate of the impairment charge, and may be material. Key assumptions used in determining the 2012 recoverable amount of the Centralia Coal plant and Sundance Units 1 and 2 are further explained in Note 13. Information regarding the 2013 determination of CGUs for asset and goodwill impairment testing can be found in Notes 13 and 25.

#### II. Leases

In determining whether the Corporation's PPAs and other long-term electricity and thermal sales contracts contain, or are, leases, management must use judgment in assessing whether the fulfillment of the arrangement is dependent on the use of a specific asset and the arrangement conveys the right to use the asset. For those agreements considered to contain, or be, leases, further judgment is required to determine whether substantially all of the significant risks and rewards of ownership are transferred to the customer or remain with the Corporation, to appropriately account for the agreement as either a finance or operating lease. These judgments can be significant and impact how the Corporation classifies amounts related to the arrangement as either PP&E or as a finance lease receivable on the Consolidated Statements of Financial Position, and therefore the amount of certain items of revenue and expense is dependent upon such classifications.

#### III. Income Taxes

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Preparation of the consolidated financial statements involves determining an estimate of, or provision for, income taxes in each of the jurisdictions in which the Corporation operates. The process also involves making an estimate of income taxes currently payable and income taxes expected to be payable or recoverable in future periods, referred to as deferred income taxes. Deferred income taxes result from the effects of temporary differences due to items that are treated differently for tax and accounting purposes. The tax effects of these differences are reflected in the Consolidated Statements of Financial Position as deferred income tax assets and liabilities. An assessment must also be made to determine the likelihood that the Corporation's future taxable income will be sufficient to permit the recovery of deferred income tax assets. To the extent that such recovery is not probable, deferred income tax assets must be reduced. Management must exercise judgment in its assessment of continually changing tax interpretations, regulations, and legislation to ensure deferred income tax assets and liabilities are complete and fairly presented. Differing assessments and applications than the Corporation's estimates could materially impact the amount recognized for deferred income tax assets and liabilities.

#### IV. Financial Instruments and Derivatives

The Corporation's financial instruments and derivatives are accounted for at fair value, with the initial and subsequent changes in fair value affecting earnings in the period the change occurs. The fair values of financial instruments and derivatives are classified within three levels, with Level III fair values determined using inputs for the asset or liability that are not readily observable. These fair value levels are outlined and discussed in more detail in Note 19. Some of the Corporation's fair values are included in Level III because they are not traded on an active exchange or have terms that extend beyond the time period for which exchange-based quotes are available and require the use of internal valuation techniques or models to determine fair value. The determination of the fair value of these contracts and derivative instruments can be complex and relies on judgments and estimates concerning future prices, volatility, and liquidity, among other factors. These fair value estimates may not necessarily be indicative of the amounts that could be realized or settled, and changes in these assumptions could affect the reported fair value of financial instruments. Fair values can fluctuate significantly and can be favourable or unfavourable depending on current market conditions. Judgment is also used in determining whether a highly probable forecasted transaction designated in a cash flow hedge is expected to occur based on the Corporation's estimates of pricing and production to allow the future transaction to be fulfilled.

#### V. Project Development Costs

Project development costs are capitalized in accordance with the accounting policy in Note 2(K). Management is required to use judgment to determine if there is reason to believe that future costs are recoverable, and that efforts will result in future value to the Corporation, in determining the amount to be capitalized.

#### VI. Provisions for Decommissioning and Restoration Activities

TransAlta recognizes provisions for decommissioning and restoration obligations as outlined in Note 2(N) and Note 28. Initial decommissioning provisions, and subsequent changes thereto, are determined using the Corporation's best estimate of the required cash expenditures, adjusted to reflect the risks and uncertainties inherent in the timing and amount of settlement. The estimated cash expenditures are present valued using a current, risk-adjusted, market-based, pre-tax discount rate. A change in estimated cash flows, market interest rates, or timing could have a material impact on the carrying amount of the provision.

#### VII. Useful Life of PP&E

Each significant component of an item of PP&E is depreciated over its estimated useful life. Estimated useful lives are determined based on current facts and past experience, and take into consideration the anticipated physical life of the asset, existing long-term sales agreements and contracts, current and forecasted demand, the potential for technological obsolescence, and regulations. The useful lives of PP&E are reviewed at least annually to ensure they continue to be appropriate.

#### VIII. Employee Future Benefits

The Corporation provides pension and other post-employment benefits, such as health and dental benefits, to employees. The cost of providing these benefits is dependent upon many factors, including actual plan experience and estimates and assumptions about future experience.

The liability for pension and post-employment benefits and associated costs included in annual compensation expenses are impacted by estimates related to:

- employee demographics, including age, compensation levels, employment periods, the level of contributions made to the plans, and earnings on plan assets;
- the effects of changes to the provisions of the plans; and
- changes in key actuarial assumptions, including rates of compensation and health-care cost increases, and discount rates.

Due to the complexity of the valuation of pension and post-employment benefits, a change in the estimate of any one of these factors could have a material effect on the carrying amount of the liability for pension and other post-employment benefits or the related expense. These assumptions are reviewed annually to ensure they continue to be appropriate.

# IX. Other Provisions

Where necessary, TransAlta recognizes provisions arising from ongoing business activities, such as interpretation and application of contract terms, ongoing litigation, and force majeure claims. These provisions, and subsequent changes thereto, are determined using the Corporation's best estimate of the outcome of the underlying event and can also be impacted by determinations made by third parties, in compliance with contractual requirements. The actual amount of the provisions that may be required could differ materially from the amount recognized.

# 3. Accounting Changes

### A. Adoption of New or Amended IFRS

On Jan. 1, 2013, the Corporation adopted the following new accounting standards that were previously issued by the IASB:

#### I. IFRS 10 Consolidated Financial Statements

IFRS 10 replaces the parts of IAS 27 Consolidated and Separate Financial Statements that deal with consolidated financial statements and Standing Interpretations Committee ("SIC") Interpretation 12 Consolidation – Special Purpose Entities. IFRS 10 defines the principle of control, establishes control as the basis for determining when entities are to be consolidated, and provides guidance on how to apply the principle of control to identify whether an investor controls an investee. Under IFRS 10, an investor controls an investee when it has all of the following: (i) power over the investee; (ii) exposure, or rights, to variable returns from the investee; and (iii) the ability to affect those returns.

IFRS 10 was applied retrospectively by the Corporation by reassessing whether, on Jan. 1, 2013, the Corporation had control of all of its previously consolidated entities. As a result of adopting IFRS 10, no changes arose in the entities controlled and consolidated by the Corporation.

#### II. IFRS 11 Joint Arrangements

IFRS 11 replaces IAS 31 Interests in Joint Ventures and SIC-13 Jointly Controlled Entities – Non-Monetary Contributions by Venturers. IFRS 11 provides for a principles-based approach to the accounting for joint arrangements that requires an entity to recognize its contractual rights and obligations arising from its involvement in joint arrangements. A joint arrangement is an arrangement in which two or more parties have joint control. Under IFRS 11, joint arrangements are classified as either a joint operation or a joint venture, whereas under IAS 31, they were classified as a jointly controlled asset, jointly controlled operation, or a jointly controlled entity. IFRS 11 requires the use of the equity method of accounting for interests in joint ventures, whereas IAS 31 permitted a choice of the equity method or proportionate consolidation for jointly controlled entities. Under IFRS 11, for joint operations, each party recognizes its respective share of the assets, liabilities, revenues, and expenses of the arrangement, generally resulting in proportionate consolidation accounting.

IFRS 11 was applied retrospectively by the Corporation by reassessing the type of, and accounting for, each joint arrangement in existence at Jan. 1, 2013. No significant impacts resulted.

#### III. IFRS 12 Disclosure of Interests in Other Entities

IFRS 12 contains enhanced disclosure requirements about an entity's interests in subsidiaries, joint arrangements, associates, and consolidated and unconsolidated structured entities (special purpose entities). The objective of IFRS 12 is that an entity should disclose information that helps financial statement users evaluate the nature of, and risks associated with, its interests in other entities and the effects of those interests on its financial statements. Disclosures arising from the adoption of IFRS 12 can be found in Notes 14, 18, and 29.

#### IV. IFRS 13 Fair Value Measurement

IFRS 13 establishes a single source of guidance for all fair value measurements required by other IFRS, clarifies the definition of fair value, and enhances disclosures about fair value measurements. IFRS 13 applies when other IFRS require or permit fair value measurements or disclosures. IFRS 13 specifies how an entity should measure fair value and disclose fair value information. It does not specify when an entity should measure an asset, a liability, or its own equity instrument at fair value. The Corporation's adoption of IFRS 13, prospectively on Jan. 1, 2013, did not have a material financial impact upon the consolidated financial position or results of operations; however, certain new or enhanced disclosures are required and can be found in Note 19.

### V. IAS 1 Presentation of Financial Statements

Amendments to IAS 1 *Presentation of Financial Statements* issued in June 2011 were intended to improve the consistency and clarity of the presentation of items of comprehensive income by requiring that items presented in OCI be grouped on the basis of whether they are subsequently reclassified from OCI to net earnings or not. The Consolidated Statements of Comprehensive Income (Loss) have been reorganized to comply with the required groupings.

#### VI. IAS 19 Employee Benefits

Amendments to IAS 19 Employee Benefits are intended to improve the recognition, presentation, and disclosure of defined benefit plans. The amendments require the recognition of changes in defined benefit obligations and in fair value of plan assets when they occur, thus eliminating the "corridor approach" previously permitted. All actuarial gains and losses must be recognized immediately through OCI and the net pension liability or asset recognized at the full amount of the plan deficit or surplus.

Additional changes relate to the presentation, into three components, of changes in defined benefit obligations and plan assets: service cost and net interest cost is recognized in net earnings and remeasurements are recognized in OCI. The net interest cost introduced in these amendments removes the concept of expected return on plan assets that was previously recognized in net earnings.

The Corporation calculates the net interest cost for its defined benefit plans by applying the discount rate at the beginning of the reporting period to the net defined benefit liability at the beginning of the reporting period. An expected return on plan assets is no longer calculated and recognized as part of pension expense. The elimination of the corridor method had no impact as the Corporation has, since the adoption of IFRS, recognized actuarial gains and losses in OCI in the period in which they occurred.

On adoption, the Corporation applied the amendments retrospectively. The impacts as at Dec. 31, 2012 and Jan. 1, 2012, respectively, were an increase in the cumulative prior periods' pre-tax pension expense of \$17 million and \$11 million (\$12 million and \$8 million after-tax, respectively), as a result of the application of the net interest cost requirements.

For the year ended Dec. 31, 2012, Operations, maintenance, and administration expense increased by \$4 million (2011 – \$7 million) as a result of increased pension expense and net after-tax actuarial losses on defined benefit plans as reported in OCI decreased by \$3 million (2011 – \$5 million).

#### VII. Interpretation 20 Stripping Costs in the Production Phase of a Surface Mine ("IFRIC 20")

IFRIC 20 clarifies the requirements for accounting for stripping costs in the production phase of a surface mine. Stripping costs are costs associated with the process of removing waste from a surface mine in order to gain access to mineral ore deposits. The Interpretation clarifies when production stripping should lead to the recognition of an asset and how that asset should be measured, both initially and in subsequent periods.

The Corporation recognizes a stripping activity asset for its Highvale mine when all of the following are met: (i) it is probable that the future benefit associated with improved access to the coal reserves associated with the stripping activity will be realized; (ii) the component of the coal reserve to which access has been improved can be identified; and (iii) the costs related to the stripping activity associated with that component can be measured reliably. Costs include those directly incurred to perform the stripping activity as well as an allocation of directly attributable overheads. The resulting stripping activity asset is amortized on a unit-of-production basis over the expected useful life of the identified component that it relates to. The amortization is recognized as a component of the standard cost of coal inventory.

As required by the transitional provision of IFRIC 20, the Interpretation was applied by the Corporation to production stripping costs incurred on or after Jan. 1, 2011, which will be the earliest comparative period presented within the Corporation's annual financial statements for the year ended Dec. 31, 2013, which resulted in adjustments to the 2012 earnings. The impacts on the Consolidated Statements of Financial Position as at Dec. 31, 2012 were to recognize \$9 million in costs as a stripping activity asset, increase coal inventory by \$2 million, both classified within inventory, increase deferred income tax liabilities by \$3 million, and decrease retained deficit by \$8 million. The impacts on the Consolidated Statements of Financial Position as at Jan. 1, 2012 were to recognize \$9 million in costs as a stripping activity asset, decrease coal inventory by \$2 million, both classified within inventory, increase deferred income tax liabilities by \$2 million, and increase retained earnings by \$5 million.

The impact of this change in accounting policy on the Consolidated Statements of Earnings (Loss) for the year ended Dec. 31, 2012 was a reduction of \$4 million in fuel and purchased power (2011 - \$7 million).

Basic and diluted net earnings per share attributable to common shareholders for 2012 decreased by \$0.01 (2011 - nil) as a result of IAS 19 and IFRIC 20 impacts.

#### VIII. IFRS 7 Financial Instruments: Disclosures

Amendments to IFRS 7 include disclosures about all recognized financial instruments that are set-off in accordance with IAS 32. The amendments also require disclosure of information about recognized financial instruments subject to enforceable master netting arrangements and similar agreements even if they are not set-off under IAS 32. The resulting disclosures can be found in Note 20.

#### IX. Annual Improvements 2009-2011

In May 2012, the IASB issued a collection of necessary, non-urgent amendments to several IFRS resulting from its annual improvements process. The amendments, as applicable, have been applied by the Corporation on Jan. 1, 2013. None of the amendments, which are generally technical and narrow in scope, had a material financial impact upon the consolidated financial position or results of operations.

### **B.** Current Accounting Changes

#### **Change in Estimates - Useful Lives**

During 2013, management completed a comprehensive review of the estimated useful lives of our hydro assets, having regard for, among other things, our economic life cycle maintenance program and the existing condition of the assets. As a result, depreciation was reduced by \$5 million for the year ended Dec. 31, 2013 and is expected to be reduced by \$5 million annually thereafter.

### C. Prior Year Accounting Changes

#### Change in Estimates - Useful Lives

As a result of amendments to Canadian federal regulations requiring that coal-fired plants be shut down after 50 years of operation, the Corporation reviewed the useful lives of its Alberta coal-fired generating facilities and related coal mining assets and where permitted under the regulations, extended the useful lives to the maximum of 50 years. The previous draft regulations proposed shutdown after 45 years. As a result, depreciation expense was reduced by \$12 million for the year ended Dec. 31, 2012 compared to 2011.

### D. Comparative Figures

Certain comparative figures have been reclassified to conform to the current period's presentation. These reclassifications did not impact previously reported net earnings.

#### E. Future Accounting Changes

New or amended applicable accounting standards that have been previously issued by the IASB but are not yet effective, and have not been applied by the Corporation, are as follows:

#### **IFRS 9 Financial Instruments**

In November 2009, the IASB issued IFRS 9 Financial Instruments, which replaced the classification and measurement requirements in IAS 39 Financial Instruments: Recognition and Measurement for financial assets. Financial assets must be classified and measured at either amortized cost or at fair value through profit or loss or through OCI depending on the basis of the entity's business model for managing the financial asset, and the contractual cash flow characteristics of the financial asset.

In October 2010, the IASB issued additions to IFRS 9 regarding financial liabilities. The new requirements address the problem of volatility in net earnings arising from an issuer choosing to measure a liability at fair value and require that the portion of the change in fair value due to changes in the entity's own credit risk be presented in OCI, rather than within net earnings.

In November 2013, the IASB issued amendments to IFRS 9 that introduce a new general hedge accounting model intended to be simpler and more closely focus on how an entity manages its risks. Additional amendments to IFRS 9 allow a reporting entity to present changes in its own credit risk associated with liabilities designated at fair value through profit or loss in OCI.

The IASB also removed the Jan. 1, 2015 mandatory effective date from IFRS 9. The IASB will decide on a new effective date when the entire IFRS 9 project is closer to completion. Entities may still early-adopt the finalized and issued provisions of IFRS 9.

The Corporation does not expect that any material impacts will result from these standards; however, the Corporation continues to assess the impact of adopting these amendments on the consolidated financial statements.

#### II. IAS 36 Impairment of Assets (Recoverable Amount Disclosures)

In May 2013, the IASB issued amendments to the disclosure requirements of IAS 36 *Impairment of Assets*. The amendments clarify that the recoverable amount of an asset or CGU is to be disclosed only in periods in which an impairment loss has been recognized or reversed. Additional disclosures regarding the level of the IFRS 13 fair value hierarchy and information about valuation techniques and key assumptions are required, in certain circumstances, when an impairment loss or reversal has been recognized and the recoverable amount is based on fair value less costs of disposal. The amended disclosure requirements apply retrospectively to annual reporting periods beginning on or after Jan. 1, 2014.

#### III. IAS 32 Offsetting Financial Assets and Liabilities

In December 2011, the IASB issued amendments to IAS 32 Financial Instruments: Presentation. The amendments are intended to clarify certain aspects of the existing guidance on offsetting financial assets and financial liabilities due to the diversity in application of the requirements on offsetting and are effective for annual periods beginning on or after Jan. 1, 2014. The Corporation is currently assessing the impact of adopting the IAS 32 amendments on the consolidated financial statements.

# 4. TransAlta Renewables Inc.

On May 28, 2013 the Corporation formed a new subsidiary, TransAlta Renewables Inc. ("TransAlta Renewables"), to provide investors with the opportunity to invest directly in a highly contracted portfolio of renewable power generation facilities. The Corporation retains control over TransAlta Renewables, and therefore consolidates TransAlta Renewables. As a result, any loans outstanding or transactions between the Corporation and TransAlta Renewables are eliminated on consolidation in the Corporation's financial statements.

### A. Transfer of Generating Assets

On Aug. 9, 2013, the Corporation transferred 28 indirectly owned wind and hydroelectric generating assets to TransAlta Renewables through the sale of all the issued and outstanding shares of two subsidiaries: Canadian Hydro Developers, Inc. ("CHD") and Western Sustainable Power Inc. As consideration for the transfer, the Corporation received: i) 66.7 million common shares of TransAlta Renewables valued at \$10.00 per share for total share consideration of \$667 million; ii) a Closing Note receivable in the amount of \$187 million; iii) a Short Term Note receivable in the amount of \$250 million; iv) an Acquisition Note receivable in the amount of \$30 million; and v) an Amortizing Loan receivable in the amount of \$200 million.

### B. Initial Public Offering of Common Shares

On July 31, 2013, TransAlta Renewables filed a final prospectus to qualify the distribution of 20.0 million of its common shares, to be issued pursuant to the terms of an underwriting agreement at a price of \$10.00 per common share (the "Offering"). TransAlta Renewables granted to the underwriters an option (the "Over-Allotment Option"), exercisable in whole or in part for a period of 30 days following Closing, to purchase, at the Offering price, up to an additional 3.0 million common shares (representing 15 per cent of the common shares offered under the prospectus).

On Aug. 29, 2013, TransAlta Renewables completed the Offering and issued 20.0 million common shares for gross proceeds of \$200 million. The net proceeds of the Offering were used by TransAlta Renewables to repay the \$187 million Closing Note issued to the Corporation. On Aug. 29, 2013, the underwriters exercised their Over-Allotment Option in part to purchase an additional 2.1 million common shares at the Offering price of \$10.00 per common share for gross proceeds of \$21 million. TransAlta Renewables used the net proceeds received from the partial exercise of the Over-Allotment Option to repay a portion of the amount outstanding under the Acquisition Note issued to TransAlta. The remaining principal amount of \$9 million outstanding under the Acquisition Note after such payment has been converted into 0.9 million common shares of TransAlta Renewables on the basis of one common share for each \$10.00 owing to the Corporation under the Acquisition Note. After completion of the transactions, the Corporation owns 92.6 million common shares of TransAlta Renewables, representing an 80.7 per cent ownership interest. In total, the Corporation received \$207 million in cash consideration net of commissions and expenses.

Effective Aug. 9, 2013, the net earnings and total comprehensive income (loss) attributable to the 19.3 per cent divested interest are reflected in net earnings (loss) attributable to non-controlling interests and total comprehensive income (loss) attributable to non-controlling interests, respectively, on the Consolidated Statements of Earnings (Loss) and on the Consolidated Statements of Comprehensive Income (Loss), respectively. The excess of consideration received over the net book value of the Corporation's divested interest was \$4 million and was recorded in retained earnings (deficit). As at Dec. 31, 2013, the net assets attributable to the 19.3 per cent divested interest are reflected in equity attributable to non-controlling interests in the Consolidated Statements of Financial Position.

# 5. California Claim

In response to complaints filed by San Diego Gas & Electric Company, the California Attorney General, and other government agencies, the Federal Energy Regulatory Commission ("FERC") ordered TransAlta to refund approximately U.S.\$47 million for sales made by it in the organized markets of the California Power Exchange, the California Independent System Operator, and the California Department of Water Resources during the 2000 – 2001 period. In addition, the California parties have sought additional refunds, which to date have been rejected by FERC. TransAlta established a U.S.\$47 million provision to cover any potential refunds. Final rulings are not expected in the near future.

For the year ended Dec. 31, 2013, the Corporation accrued for a potential settlement of all outstanding disputes with the California parties, which resulted in a pre-tax charge to earnings of approximately U.S.\$52 million.

# 6. Sundance Units 1 and 2 Return to Service

In December 2010, Units 1 and 2 of the Corporation's Sundance facility were shut down due to conditions observed in the boilers at both units. On July 20, 2012, an arbitration panel concluded that Unit 1 and Unit 2 were not economically destroyed under the terms of the PPA and the Corporation was required to restore the units to service. For the year ended Dec. 31, 2012, the pre-tax income statement impact of the ruling that has been recorded under the caption "Sundance Units 1 and 2 return to service" in the Consolidated Statements of Earnings (Loss) was \$254 million.

During 2013, \$25 million of components were retired as a result of the work completed on the units to return them to service. Sundance Unit 1 returned to service on Sept. 2, 2013 and Unit 2 returned to service on Oct. 4, 2013. The Corporation has issued notices to the buyers regarding the cessation of the force majeure period for the two units.

# 7. SunHills Mining Limited Partnership

Effective Jan. 17, 2013, the Corporation assumed, through its wholly owned SunHills Mining Limited Partnership ("SunHills"), operations and management control of the Highvale Mine from Prairie Mines and Royalty Ltd. ("PMRL"). PMRL employees working at the Highvale Mine were offered employment by SunHills, which agreed to assume responsibility for certain pension plan and pension funding obligations, which the Corporation previously funded through the payments made under the PMRL mining contracts. As a result, a pre-tax loss of \$29 million was recognized during the first quarter, along with the corresponding liabilities.

The Corporation also entered into finance leases for mining equipment that was in use, or committed to, by PMRL for mining operations. As a result, \$33 million in mining equipment has been capitalized to PP&E and the related finance lease obligations recognized during 2013. At the end of the lease terms, the Corporation is eligible to purchase the assets for a nominal amount. The amounts payable under the finance leases are further discussed in Note 12(B).

# 8. Acquisitions and Disposals

#### A. Acquisitions

#### I. 2013

On Dec. 20, 2013, the Corporation completed the acquisition of a 144 megawatt ("MW") wind farm in Wyoming ("Wyoming Wind") from an affiliate of NextEra Energy Resources, LLC. The total cash consideration transferred was U.S.\$102 million (\$109 million). The acquisition is TransAlta's first wind project in the Western United States and aligns with the Corporation's strategy of growing its renewables platform and diversifying its presence in that region.

At the acquisition date, the fair value of assets acquired and liabilities assumed is as follows:

Assets:	
Property, plant, and equipment	79
Intangible assets	20
Goodwill	13
Total assets acquired	112
Liabilities:	
Decommissioning and restoration provision	3
Total liabilities assumed	3
Total consideration transferred	109

Goodwill arose in the acquisition primarily as a result of the expectation by the Corporation of future market growth and development opportunities in the region. These benefits are not recognized separately from goodwill as they do not meet the recognition criteria for identifiable intangible assets. All of the goodwill is expected to be deductible for tax purposes.

The initial accounting for the acquisition has been provisionally determined, as certain joint tax elections are still to be agreed upon and completed by the Corporation and the seller, and the elected amounts could impact the acquisition date fair values.

Revenue of \$1 million and net earnings of \$1 million attributable to the operations of the Wyoming Wind farm have been included in net earnings, from Dec. 20, 2013.

#### II. 2012

On Sept. 28, 2012, the Corporation acquired the 125 MW Solomon power station located in Western Australia from Fortescue Metals Group Ltd. ("Fortescue") for U.S.\$318 million. The power station was commissioned in the fourth quarter of 2013. The facility is fully contracted with Fortescue under a long-term Power Purchase Agreement ("Agreement") with an initial term of 16 years commencing in October 2012, after which Fortescue will have the option to either extend the Agreement for an additional five years under the same terms or to acquire the facility. The Corporation has accounted for the facility and associated Agreement as a finance lease with TransAlta being the lessor (see Note 12(A)).

#### III. 2011

On Nov. 1, 2011, the Corporation purchased the remaining 50 per cent of the Taylor Hydro jointly controlled asset from Capital Power, the joint venture partner, for \$7 million. As the Corporation acquired control of the overall business, the entire asset was remeasured at the acquisition-date fair value.

### B. Disposals

During 2013, the Corporation realized a pre-tax gain of \$10 million relating to the sale of land and a pre-tax gain of \$2 million relating to the sale of British Columbia water rights.

During 2011, the Corporation sold its biomass facility located in Grande Prairie. The sale was effective Sept. 1, 2011 and closed on Oct. 1, 2011. As a result, the Corporation realized a pre-tax gain of \$9 million. During 2012, the Corporation realized a pre-tax gain of \$3 million resulting from the release of the remaining consideration related to the achievement of the Environmental Attribute Conditions by the purchaser.

# 9. Gain on Sale of (Reserve on) Collateral

During September 2012, the Corporation sold, for net proceeds of U.S.\$33 million, its claim against MF Global Inc. pertaining to the return of U.S.\$36 million of collateral that had been posted by the Corporation. As a result, a pre-tax gain of \$15 million (\$11 million after tax) was realized. The claim, filed during the first quarter of 2012, related primarily to the Corporation's collateral on foreign futures transactions.

In October 2011, MF Global Holdings Ltd. filed for bankruptcy protection in the United States. MF Global Holdings Ltd. is the parent company of MF Global Inc., which was used by TransAlta as a broker-dealer for certain commodity transactions. MF Global Inc. had not filed for bankruptcy in 2011 but, under the U.S. Securities Investor Protection Act, the Securities Investor Protection Corp. was overseeing a liquidation of the broker-dealer to return assets to customers. A trustee had been appointed to take control of and liquidate the assets of MF Global Inc. and return client collateral. A significant portion of TransAlta's collateral related to collateral on foreign futures transactions that would have been in accounts in the United Kingdom ("U.K.") and was subject to a dispute between the U.S. trustee and the U.K. administrator. In December 2011, TransAlta had net collateral of approximately U.S.\$36 million with MF Global Inc. and due to the uncertainty of collection, a U.S.\$18 million reserve was recognized. At Dec. 31, 2011, the net amount of the collateral had been reclassified to a long-term asset on the Consolidated Statements of Financial Position.

# 10. Insurance Recovery

During 2013, the Corporation realized a pre-tax gain of \$8 million relating to business interruption insurance claims made as a result of the flooding during the second quarter of 2013 and forced outages at the Corporation's gas and hydro facilities in 2011.

# 11. Expenses by Nature

Expenses classified by nature are as follows:

Year ended Dec. 31	2	2013	2	2012		2011
	Fuel and purchased power	Operations, maintenance, and administration	Fuel and purchased power	Operations, maintenance, and administration	Fuel and purchased power	Operations, maintenance, and administration
Fuel	778	-	645	-	714	-
Purchased power	85	-	63	-	138	-
Depreciation	58	-	41	-	40	-
Salaries and benefits	5	251	4	261	3	296
Other operating expenses	-	265	-	238	-	256
Total	926	516	753	499	895	552

# 12. Leases

### A. The Corporation as Lessor

#### I. Finance Leases

Amounts receivable under the Corporation's finance leases, including the Fort Saskatchewan cogeneration facility and the Solomon power station finance leases, are as follows:

As at Dec. 31	2013	}	2012	
	Minimum lease payments	Present value of minimum lease payments	Minimum lease payments	Present value of minimum lease payments
Within one year	50	46	46	43
Second to fifth years inclusive	209	143	194	132
More than five years	494	160	513	158
	753	349	753	333
Less: unearned finance lease income	548	-	558	-
Add: unguaranteed residual value	175	31	164	26
Total finance leases receivable	380	380	359	359
Included in the Consolidated Statements of Financial Position as:				
Current portion of finance lease receivable	3		2	
Finance lease receivable	377		357	
	380		359	

The interest rates inherent in the leases are fixed at the contract date for the entire lease term and are approximately 17 per cent and 12 per cent per annum, respectively, for the Fort Saskatchewan and the Solomon finance leases.

# II. Operating Leases

Several of the Corporation's PPAs and other long-term contracts meet the criteria of operating leases. Total rental income, including contingent rent, related to these contracts and reported in revenues in the Consolidated Statements of Earnings (Loss) for the year ended Dec. 31, 2013 was \$208 million (2012 – \$188 million, 2011 – \$159 million).

# B. The Corporation as Lessee

#### I. Finance Leases

Amounts payable under the Corporation's finance leases for mining equipment (see Note 7) are as follows:

Dec. 31, 2013 Present value of Minimum lease minimum lease payments payments Within one year 9 Second to fifth years inclusive 18 16 27 25 Less: interest cost 2 Total finance lease obligation 25 25 Included in the Consolidated Statements of Financial Position as: Current portion of finance lease obligation 8 Finance lease obligation 17 25

### II. Operating Leases

TransAlta has operating leases in place for buildings, vehicles, and various types of equipment.

During the year ended Dec. 31, 2013, \$10 million (2012 – \$13 million, 2011 – \$12 million) was recognized as an expense in the Consolidated Statements of Earnings (Loss) in respect of these operating leases. No sublease payments were received or made, nor were any contingent rental payments made in respect of these operating leases.

Future minimum lease payments required under non-cancellable operating leases are as follows:

Total minimum lease payments	99
2019 and thereafter	52
2018	7
2017	8
2016	10
2015	10
2014	12

# 13. Asset Impairment Charges and Reversals

#### A. Renewables

During 2013, the Corporation recognized a total pre-tax impairment charge of \$4 million related to three contracted hydro assets within the renewables fleet. The assets were impaired primarily due to an increase in future capital and operating expenses that resulted from the completion of condition assessments. The annual impairment assessments are based on estimates of fair value less costs to sell derived from long range forecasts. The impairment losses are included in the Generation Segment.

During 2012, the Corporation recognized a pre-tax impairment charge of \$18 million related to five assets within the renewables fleet. The impairments resulted from the completion of the annual impairment assessment based on estimates of fair value less costs to sell, derived from the long range forecasts and prices evidenced in the marketplace. The assets were impaired primarily due to expectations regarding lower market prices. The impairment losses were included in the Generation Segment.

#### B. Alberta Merchant

As part of the annual impairment review and assessment process in 2013, it was determined that the Corporation's Alberta plants that have significant merchant capacity should be considered one cash-generating unit (the "Alberta Merchant CGU"). Previously, each plant was assessed for impairment individually. The reasons for this change include consideration of the Final Regulations published by the Canadian federal government in September 2012 governing Greenhouse Gas emissions and the 50-year total life for Canadian coal-fired power plants; and the Corporation's refinement of its risk management approach and practices regarding its Alberta wholesale market price exposure. The Final Regulations confirmed additional operating time and increased flexibility for the Corporation's Alberta coal plants and led, in part, to the Corporation broadening its view on the management of its Alberta wholesale market price exposure. While no impairment losses were recognized in 2013 for the Alberta Merchant CGU, total pre-tax impairment losses of \$23 million that were recognized previously on renewables plants that now form part of the Alberta Merchant CGU were reversed. The Alberta Merchant CGU's recoverable amount was based on an estimate of fair value less costs to sell using a discounted cash flow methodology, based on the Corporation's long range forecasts and prices evidenced in the marketplace.

The pre-tax reversal is recognized in the Generation Segment.

#### C. Sundance Units 1 and 2

During 2012, the Corporation reversed \$41 million of the \$43 million impairment losses previously taken on Sundance Units 1 and 2. The reversal arose as a result of the additional years of merchant operations expected to be realized at Units 1 and 2 due to amendments to Canadian federal regulations requiring that coal-fired plants be shut down after a maximum of 50 years of operation. The previous draft regulations proposed shutdown after 45 years. The recoverable amount was based on an estimate of fair value less costs to sell, derived from the cash flows expected to result over the revised useful life of the Units, taking into consideration the provisions of the PPA and prices evidenced in the marketplace. The impairment assessment was based on an estimate of fair value less costs to sell, derived from the cash flows expected to result under the provisions of the PPA. The loss and reversal were included in the Generation Segment.

#### D. Centralia Thermal

The TransAlta Energy Bill and a Memorandum of Agreement was signed on Dec. 23, 2011 that provided a framework for the orderly transition from coal-fired energy produced at Centralia Thermal and the shutdown of the units in 2020 and 2025. On July 25, 2012, the Corporation announced that it entered into a long-term power agreement to provide electricity from the Centralia Thermal plant to Puget Sound Energy ("PSE") from December 2014 until the facility is fully retired in 2025. As a result of these agreements, the Corporation recognized a pre-tax impairment charge of \$347 million included in the Generation Segment during 2012. The impairment assessment was based on whether the carrying amount of the Centralia Thermal plant was recoverable based on an estimate of fair value less costs to sell.

#### E. Reversals

 $Impairment\ charges\ can\ be\ reversed\ in\ future\ periods\ if\ the\ forecasted\ cash\ flows\ to\ be\ generated\ by\ the\ impacted\ plants\ improve.$ 

# 14. Investments

The Corporation's investments in joint ventures accounted for using the equity method consist of its investments in CE Gen, Wailuku, TAMA Transmission LP, and CalEnergy, LLC ("CalEnergy").

The change in investments is as follows:

Balance, Dec. 31, 2011	193
Equity loss	(15)
Distributions received	(1)
Change in foreign exchange rates	(5)
Balance, Dec. 31, 2012	172
Equity loss	(10)
Addition to equity investments	17
Change in foreign exchange rates	13
Balance, Dec. 31, 2013	192

Summarized financial information on the results of operations and financial position relating to the Corporation's pro-rata interests in CE Gen, Wailuku, TAMA Transmission LP, and CalEnergy is as follows:

Year ended Dec. 31	2013	2012	2011
Results of operations			
Revenues	108	101	133
Expenses	(118)	(116)	(119)
Proportionate share of net earnings (loss)	(10)	(15)	14

Summarized financial information relating to 100 per cent of CE Gen, including adjustments for the application of consistent accounting policies and the Corporation's purchase price adjustments, is as follows:

Year ended Dec. 31	2013	2012	2011
Revenues	212	197	263
Depreciation and amortization	85	86	96
Interest expense	21	22	29
Income tax recovery	(23)	(26)	(7)
Net loss	(19)	(30)	(25)
Other comprehensive loss	(1)	-	-
Total comprehensive loss	(20)	(30)	(25)
Distributions received	_	_	15
As at Dec. 31		2013	2012

Long-term assets	658	675
Current liabilities	(76)	(62)
Long-term liabilities	(361)	(409)
Net assets	328	297
Additional items included above		
Cash and cash equivalents	50	27
Current financial liabilities <sup>1</sup>	(48)	(35)
Long-term financial liabilities <sup>1</sup>	(201)	(233)

<sup>1</sup> Excludes trade and other payables and provisions

Current assets

A reconciliation of the carrying amount to the Corporation's 50 per cent interest in the CE Gen joint venture is as follows:

As at Dec. 31	2013	2012
Net assets	328	297
Less: minority interest in CE Gen	(13)	(14)
Less: 50 per cent of CE Gen's net assets not owned by the Corporation	(128)	(116)
Net investment	187	167

CE Gen's ability to make distributions to its owners, including the Corporation, is restricted by covenants and conditions, including principal and interest funding deposit requirements imposed by certain project-related debt agreements.

At Dec. 31, 2013, the carrying amount of the Corporation's net investment in Wailuku, TAMA Transmission LP, and CalEnergy is \$5 million (2012 - \$5 million).

On Feb. 20, 2014, the Corporation announced an agreement to sell the Corporation's 50 per cent ownership of CE Gen and Wailuku (see Note 43).

# 15. Net Interest Expense

The components of net interest expense are as follows:

Year ended Dec. 31	2013	2012	2011
Interest on debt	240	227	228
Interest income	-	(2)	-
Capitalized interest (Note 24)	(2)	(4)	(31)
Ineffectiveness on hedges	-	4	(1)
Interest expense	238	225	196
Accretion of provisions (Note 28)	18	17	19
Net interest expense	256	242	215

The Corporation capitalizes interest during the construction phase of growth capital projects. The capitalized interest in 2013 and 2012 related to the New Richmond wind farm. The capitalized interest in 2011 relates primarily to Keephills Unit 3.

# 16. Income Taxes

# A. Consolidated Statements of Earnings (Loss)

### I. Rate Reconciliations

Year ended Dec. 31	2013	2012	2011
Earnings (loss) before income taxes	(12)	(445)	449
Equity (income) loss (Note 14)	10	15	(14)
Net earnings attributable to non-controlling interests	(29)	(37)	(38)
Adjusted earnings (loss) before income taxes	(31)	(467)	397
Statutory Canadian federal and provincial income tax rate (%)	25.0	25.0	26.5
Expected income tax expense (recovery)	(8)	(117)	105
Increase (decrease) in income taxes resulting from:			
Lower effective foreign tax rates	(21)	(49)	(3)
Resolution of uncertain tax matters	(1)	(27)	-
Statutory and other rate differences	(5)	7	(1)
Writedown of deferred income tax assets	28	289	-
Other	(1)	(1)	5
Income tax expense (recovery)	(8)	102	106
Effective tax rate (%)	26	(22)	27

### II. Components of Income Tax Expense

The components of income tax expense (recovery) are as follows:

Year ended Dec. 31	2013	2012	2011
Current income tax expense	38	27	26
Adjustments in respect of current income tax of previous years	1	(3)	-
Adjustments in respect of deferred income tax of previous years	(1)	1	-
Deferred income tax expense (recovery) related to the origination and reversal of temporary differences	(68)	(71)	78
Deferred income tax expense (recovery) resulting from changes in tax rates or laws <sup>1</sup>	(5)	7	-
Benefit arising from previously unrecognized tax loss, tax credit, or temporary difference of a prior period used to reduce current income tax expense	-	(11)	-
(Benefit) expense arising from previously unrecognized tax loss, tax credit, or temporary difference of a prior period used to reduce deferred income tax expense	(1)	(16)	2
Deferred income tax expense arising from the writedown of deferred income tax assets	28	168	-
Income tax expense (recovery)	(8)	102	106

<sup>1</sup> On June 20, 2012, the Ontario budget bill froze the Ontario general corporate tax rate at 11.5 per cent. The Corporation had been using the previously substantively enacted tax rate of 10.0 per cent. During 2013, the Corporation adjusted the deferred tax rate to incorporate the Ontario M&P tax credit, which reduced the corporate tax rate back to 10.0 per cent. During 2013, changes in provincial rates were enacted in British Columbia and New Brunswick.

Year ended Dec. 31	2013	2012	2011
Current income tax expense	39	13	26
Deferred income tax expense (recovery)	(47)	89	80
Income tax expense (recovery)	(8)	102	106

# B. Consolidated Statements of Changes in Equity

The aggregate current and deferred income tax related to items charged or credited to equity are as follows:

Year ended Dec. 31	2013	2012	2011
Income tax expense (recovery) related to:			
Net impact related to cash flow hedges	12	(15)	(101)
Net impact related to net investment hedges	(5)	2	(5)
Net actuarial losses	11	(8)	(7)
Common and preferred share issuance costs	-	(5)	(2)
Income tax expense (recovery) reported in equity	18	(26)	(115)

### C. Consolidated Statements of Financial Position

Significant components of the Corporation's deferred income tax assets (liabilities) are as follows:

As at Dec. 31	2013	2012
Net operating loss carryforwards	665	574
Future decommissioning and restoration costs	91	91
Property, plant, and equipment	(923)	(865)
Risk management assets and liabilities, net	(24)	(21)
Employee future benefits and compensation plans	60	67
Interest deductible in future periods	63	57
Allowance for doubtful accounts	18	18
Foreign exchange differences on U.Sdenominated debt	6	(24)
Deferred coal rights revenue	13	-
Other deductible temporary differences	7	9
Net deferred income tax liability, before writedown of deferred income tax assets	(24)	(94)
Writedown of deferred income tax assets <sup>1</sup>	(317)	(289)
Net deferred income tax liability, after writedown of deferred income tax assets	(341)	(383)

<sup>1</sup> During 2013, the Corporation wrote off \$28 million (2012 - \$289 million) of deferred income tax assets related to approximately \$80 million (2012 - \$826 million) of deductible temporary differences of its U.S. operations. The deferred income tax assets relate mainly to property, plant, and equipment, future decommissioning and restoration costs, undeducted interest, and net operating losses that expire between 2021 and 2033.

The net deferred income tax liability is presented in the Consolidated Statements of Financial Position as follows:

As at Dec. 31	2013	2012
Deferred income tax assets <sup>1</sup>	118	90
Deferred income tax liabilities	(459)	(473)
Net deferred income tax liability	(341)	(383)

<sup>1</sup> The deferred income tax assets presented on the Consolidated Statements of Financial Position are recoverable based on estimated future earnings. The assumptions used in the estimate of future earnings are based on the Corporation's long-range forecasts.

#### D. Contingencies

As of Dec. 31, 2013, the Corporation had recognized a net liability of \$8 million (2012 - \$9 million) related to uncertain tax positions. The change in the liability for uncertain tax positions is as follows:

Balance, Dec. 31, 2013	(8)
Decrease as a result of settlements with taxation authorities	4
Increase as a result of tax positions taken during a prior period	(3)
Balance, Dec. 31, 2012	(9)
Decrease as a result of settlements with taxation authorities	34
Balance, Dec. 31, 2011	(43)

# 17. Accounts Receivable

As at Dec. 31	2013	2012
Gross accounts receivable	522	643
Allowance for doubtful accounts (Note 5)	(49)	(46)
Net accounts receivable	473	597
The change in allowance for doubtful accounts is as follows:  Balance, Dec. 31, 2011		47
Change in foreign exchange rates		(1)
Balance, Dec. 31, 2012		46
Change in foreign exchange rates		3
Ralance Dec 31 2013		49

# 18. Non-Controlling Interests

Equity attributable to Canadian Power Holdings Inc.

The Corporation's subsidiaries and operations that have non-controlling interests are as follows:

Subsidiary/Operation	Non-controlling interest
TransAlta Cogeneration L.P.	49.99% - Canadian Power Holdings Inc.
TransAlta Renewables	19.30% - Public shareholders
Kent Hills wind farm <sup>1</sup>	17% - Natural Forces Technologies Inc.

<sup>1</sup> Owned by TransAlta Renewables.

# A. Summarized Financial Information Relating to Subsidiaries with Significant Non-Controlling Interests

# I. TransAlta Cogeneration L.P.

mansArta Cogeneration L.i.			
Year ended Dec. 31	2013	2012	2011
Results of operations			
Revenues	295	306	316
Net earnings	48	69	69
Total comprehensive income	71	57	31
Amounts attributable to the non-controlling interest:			
Net earnings	24	34	34
Total comprehensive income	36	28	16
Distributions paid to Canadian Power Holdings Inc.	(46)	(55)	(55)
As at Dec. 31		2013	2012
Current assets		56	71
Long-term assets		632	678
Current liabilities		(56)	(74)
Long-term liabilities		(68)	(87)
Total equity		(564)	(588)

(280)

(290)

### II. TransAlta Renewables

Year ended Dec. 31	2013 <sup>1</sup>
Results of operations	
Revenues	245
Net earnings	53
Total comprehensive income	54
Amounts attributable to the non-controlling interests:	
Natural Forces Technologies Inc.	
Net earnings	3
Total comprehensive income	3
Public shareholders	
Net earnings	2
Total comprehensive income	2
Distributions paid to Natural Forces Technologies Inc.	(4)
Dividends paid to public shareholders of TransAlta Renewables	(5)

<sup>1</sup> TransAlta Renewables was formed in August 2013; accordingly, a non-controlling interest did not exist prior to 2013 and comparative information is not provided.

As at Dec. 31	2013
Current assets	59
Long-term assets	1,954
Current liabilities	(100)
Long-term liabilities	(846)
Total equity	(1,067)
Equity attributable to Natural Forces Technologies Inc.	(39)
Equity attributable to public shareholders of TransAlta Renewables	(198)

# B. Consolidated Statements of Earnings (Loss)

Year ended Dec. 31	2013	2012	2011
Canadian Power Holdings Inc.'s interest in TransAlta Cogeneration, L.P.	24	34	35
Public shareholders' interest in TransAlta Renewables	2	-	-
Natural Forces Technologies Inc.'s interest in Kent Hills	3	3	3
Total	29	37	38

# C. Consolidated Statements of Financial Position

As at Dec. 31	2013	2012
Canadian Power Holdings Inc.'s interest in TransAlta Cogeneration, L.P.	280	290
Public shareholders' interest in TransAlta Renewables	198	-
Natural Forces Technologies Inc.'s interest in Kent Hills	39	40
Total	517	330
The change in non-controlling interests is as follows:		
Balance, Dec. 31, 2011		358
Non-controlling interests' portion of net earnings		37
Non-controlling interests' portion of OCI		(6)
Distributions paid to non-controlling interests		(59)
Balance, Dec. 31, 2012		330
Formation of TransAlta Renewables		206
Non-controlling interests' portion of net earnings		29
Non-controlling interests' portion of OCI		12
Distributions paid, and payable, to non-controlling interests		(60)

# D. Consolidated Statements of Cash Flows

As at Dec. 31, 2013

Distributions paid by subsidiaries to non-controlling interests are as follows:

Year ended Dec. 31	2013	2012	2011
TransAlta Cogeneration, L.P.	46	55	57
TransAlta Renewables	5	-	-
Kent Hills	4	4	4
Total	55	59	61

517

# 19. Financial Instruments

# A. Financial Assets and Liabilities - Classification and Measurement

Financial assets and financial liabilities are measured on an ongoing basis at fair value or amortized cost (see Note 2(C)). The following table outlines the carrying amounts and classifications of the financial assets and liabilities:

Carrying value of financial instruments as at Dec. 31, 2013

	Derivatives used for hedging	Derivatives classified as held for trading	Loans and receivables	Other financial liabilities	Total
Financial assets					
Accounts receivable	-	-	473	-	473
Collateral paid	-	-	20	-	20
Finance lease receivable <sup>1</sup>	-	-	380	-	380
Risk management assets					
Current	16	96	-	-	112
Long-term	250	26	-	-	276
Financial liabilities					
Accounts payable and accrued liabilities	-	-	-	447	447
Finance lease obligation <sup>1</sup>	-	-	25	-	25
Dividends payable	-	-	-	85	85
Risk management liabilities					
Current	19	65	-	-	84
Long-term	232	31	-	-	263
Long-term debt <sup>1</sup>	-	-	-	4,322	4,322

<sup>1</sup> Includes current portion.

Carrying value of financial instruments as at Dec. 31, 2012

		Derivatives			
	Derivatives used cla for hedging	assified as held for trading	Loans and receivables	Other financial liabilities	Total
Financial assets					
Accounts receivable	-	-	597	-	597
Collateral paid	-	-	19	-	19
Finance lease receivable <sup>2</sup>	-	-	359	-	359
Risk management assets					
Current	14	187	-	-	201
Long-term	18	51	-	-	69
Financial liabilities					
Accounts payable and accrued liabilities	-	-	-	495	495
Collateral received	-	-	-	2	2
Dividends payable	-	-	-	75	75
Risk management liabilities					
Current	47	120	-	-	167
Long-term	95	11			106
Long-term debt <sup>2</sup>	-	-	-	4,217	4,217

<sup>2</sup> Includes current portion.

#### B. Fair Value of Financial Instruments

The fair value of a financial instrument is the amount of consideration that would be agreed upon in an arm's-length transaction between knowledgeable and willing parties who are under no compulsion to act. Fair values can be determined by reference to prices for that instrument in active markets to which the Corporation has access. In the absence of an active market, the Corporation determines fair values based on valuation models or by reference to other similar products in active markets.

Fair values determined using valuation models require the use of assumptions. In determining those assumptions, the Corporation looks primarily to external readily observable market inputs. However, if not available, the Corporation uses inputs that are not based on observable market data.

#### I. Levels I, II, and III Fair Value Measurements and Transfers between Fair Value Levels

The Level I, II, and III classifications in the fair value hierarchy utilized by the Corporation are defined below. The fair value measurement of a financial instrument is included in only one of the three levels, the determination of which is based on the lowest level input that is significant to the derivation of the fair value.

#### a. Level I

Fair values are determined using inputs that are quoted prices (unadjusted) in active markets for identical assets or liabilities that the Corporation has the ability to access. In determining Level I fair values, the Corporation uses quoted prices for identically traded commodities obtained from active exchanges such as the New York Mercantile Exchange.

#### b. Level II

Fair values are determined, directly or indirectly, using inputs that are observable for the asset or liability.

Fair values falling within the Level II category are determined through the use of quoted prices in active markets, which in some cases are adjusted for factors specific to the asset or liability, such as basis, credit valuation, and location differentials. Energy Trading includes, in Level II, over-the-counter derivatives with values based on observable commodity futures curves and derivatives with inputs validated by broker quotes or other publicly available market data providers. Level II fair values are also determined using valuation techniques, such as option pricing models and regression or extrapolation formulas, where the inputs are readily observable, including commodity prices for similar assets or liabilities in active markets, and implied volatilities for options.

In determining Level II fair values of other risk management assets and liabilities, the Corporation uses observable inputs other than unadjusted quoted prices that are observable for the asset or liability, such as interest rate yield curves and currency rates. For certain financial instruments where insufficient trading volume or lack of recent trades exists, the Corporation relies on similar interest or currency rate inputs and other third-party information such as credit spreads.

### c. Level III

Fair values are determined using inputs for the asset or liability that are not readily observable.

The Corporation may enter into commodity transactions for which market-observable data is not available. In these cases, Level III fair values are determined using valuation techniques such as the Black-Scholes, mark-to-forecast, and historical bootstrap models with inputs that are based on historical data such as unit availability, transmission congestion, demand profiles for individual non-standard deals and structured products, and/or volatilities and correlations between products derived from historical prices.

The Corporation also has various contracts with terms that extend beyond a liquid trading period. As forward market prices are not available for the full period of these contracts, the value of these contracts is derived by reference to a forecast that is based on a combination of external and internal fundamental modelling, including discounting. As a result, these contracts are classified in Level III.

The Corporation has a Commodity Exposure Management Policy (the "Policy"), which governs both the commodity transactions undertaken in its proprietary trading business and those undertaken to manage commodity price exposures in its generation business. The Policy defines and specifies the controls and management responsibilities associated with commodity trading activities, as well as the nature and frequency of required reporting of such activities.

Methodologies and procedures regarding energy trading Level III fair value measurements are determined by the Corporation's Risk Management department. Level III fair values are calculated within the Corporation's Energy Trading Risk Management system based on underlying contractual data as well as observable and non-observable inputs. Development of non-observable inputs requires the use of judgment. To ensure reasonability, system-generated Level III fair value measurements are reviewed and validated by the Risk Management and Finance departments. Review occurs formally on a quarterly basis or more frequently if daily review and monitoring procedures identify unexpected changes to fair value or changes to key parameters.

The effect of using reasonably possible alternative assumptions as inputs to valuation techniques from which the Level III energy trading fair values are determined at Dec. 31, 2013 is estimated to be a +/- \$105 million (2012 - \$26 million) impact to the carrying value of the financial instruments. Fair values are stressed for volumes and prices. The volumes are stressed up and down one standard deviation from historically available production data. Prices are stressed for longer-term deals where there are no liquid market quotes using various internal and external forecasting sources to establish a high and a low price range.

Information about the significant unobservable inputs used in determining Level III fair values is as follows:

Description	Fair value as at Dec. 31, 2013	Valuation Technique	Unobservable input	Range
Unit contingent power purchases	43	Historical bootstrap	Price discount Volumetric discount <sup>1</sup>	0-2 per cent 0-14 per cent
Long-term power sale	225	Long-term price forecast	Illiquid future power prices	\$34.40-\$90.83
Coal supply revenue sharing	(12)	Black-Scholes	Volumes (MWh)	18-25 per cent of available generation
			Illiquid future implied volatilities in MidC power	35 per cent
Unit contingent power sales	(5)	Black-Scholes	Illiquid future implied volatilities in MidC power	55 per cent

<sup>1</sup> A change in the volumetric discount, could, depending on other market dynamics, result in a directionally similar change in the price discount.

### d. Transfers between Fair Value Levels

Fair value Level transfers can occur where the availability of inputs that are used to determine fair values have changed. A transfer from Level III to Level II occurs where inputs that were not readily observable have become observable during the period. The Corporation's policy is for Level transfers to occur at the end of each period. During 2013, \$28 million of fair value was transferred from Level III net risk management assets to Level II net risk management assets. The trade terms of these contracts were originally beyond a liquid trading period where forward price forecasts were not available for the full period of the contract. During the period, the contract terms were determined to be within a liquid trading period where observable prices were available.

### II. Energy Trading

Energy trading includes risk management assets and liabilities that are used in the Energy Trading and Generation segments in relation to trading activities and certain contracting activities.

The following table summarizes the key factors impacting the fair value of the energy trading risk management assets and liabilities by classification level during the years ended Dec. 31, 2013 and 2012, respectively:

		Hedges		Non-Hedges			Total		
	Level I	Level II	Level III	Level I	Level II	Level III	Level I	Level II	Level III
Net risk management assets (liabilities) at Dec. 31, 2012	-	(63)	3	(1)	79	28	(1)	16	31
Changes attributable to:									
Market price changes on existing contracts	-	(18)	(6)	-	(21)	26	-	(39)	20
Market price changes on new contracts	-	5	58	-	(21)	(1)	-	(16)	57
Contracts settled	-	10	-	1	(51)	(14)	1	(41)	(14)
Transfers out of Level III	-	-	-	-	28	(28)	-	28	(28)
Net risk management assets (liabilities) Dec. 31, 2013	-	(66)	55	-	14	11	-	(52)	66
Additional Level III information:									
Gains recognized in OCI			52			-			52
Total gains included in earnings before income taxes			-			25			25
Unrealized gains included in earnings before income taxes relating to net assets held at Dec. 31, 2013			_			11			11

		Hedges			Non-Hedges			Total	
	Level I	Level II	Level III	Level I	Level II	Level III	Level I	Level II	Level III
Net risk management assets (liabilities) at Dec. 31, 2011	-	(90)	(14)	-	287	7	-	197	(7)
Changes attributable to:									
Market price changes on existing contracts	-	25	10	-	(3)	27	-	22	37
Market price changes on new contracts	-	7	-	-	(10)	4	-	(3)	4
Contracts settled	-	14	7	(1)	(210)	(14)	(1)	(196)	(7)
Discontinued hedge accounting on certain contracts	-	(19)	-	-	15	4	-	(4)	4
Net risk management assets (liabilities) at Dec. 31, 2012	-	(63)	3	(1)	79	28	(1)	16	31
Additional Level III information:									
Gains recognized in OCI			10			-			10
Total gains (losses) included in earnings before income taxes			(7)			31			24
Unrealized gains included in earnings before income taxes relating to net assets held at Dec. 31, 2012			-			17			17

To the extent applicable, changes in net risk management assets and liabilities for non-hedge positions are reflected within earnings of the Energy Trading and Generation segments.

The anticipated settlement of the contracts outstanding at Dec. 31, 2013, over each of the next five calendar years and thereafter, is as follows:

		2014	2015	2016	2017	2018	2019 and thereafter	Total
Hedges	Level I	-	-	-	-	-	-	-
	Level II	(16)	(18)	(21)	(11)	-	-	(66)
	Level III	1	1	5	11	12	25	55
Non-Hedges	Level I	-	-	-	-	-	-	-
	Level II	(14)	13	12	3	-	-	14
	Level III	35	(6)	(7)	(1)	(1)	(9)	11
Total	Level I	-	-	-	-	-	-	-
	Level II	(30)	(5)	(9)	(8)	-	-	(52)
	Level III	36	(5)	(2)	10	11	16	66
Total net assets (liabilities)		6	(10)	(11)	2	11	16	14

### III. Other Risk Management Assets and Liabilities

Other risk management assets and liabilities include risk management assets and liabilities that are used in hedging and non-hedging non-energy trading transactions, such as debt and the net investment in foreign operations.

The following tables summarize the key factors impacting the fair value of the other risk management assets and liabilities by classification level during the years ended Dec. 31, 2013 and 2012, respectively:

	Hedges		Non-Hedges			Total			
	Level I	Level II	Level III	Level I	Level II	Level III	Level I	Level II	Level III
Net risk management assets (liabilities) at Dec. 31, 2012	-	(50)	-	-	1	-	-	(49)	_
Changes attributable to:									
Market price changes on existing contracts	-	41	-	-	-	-	-	41	-
Market price changes on new contracts	-	12	-	-	-	-	-	12	-
Contracts settled	-	23	-	-	-	-	-	23	_
Net risk management assets at Dec. 31, 2013	-	26	-	_	1	-	-	27	_

	Hedges		Non-Hedges			Total			
	Level I	Level II	Level III	Level I	Level II	Level III	Level I	Level II	Level III
Net risk management liabilities at Dec. 31, 2011	-	(50)	-	-	-	-	-	(50)	-
Changes attributable to:									
Market price changes on existing contracts	-	(17)	-	-	-	-	-	(17)	-
Market price changes on new contracts	-	(7)	-	-	1	-	-	(6)	-
Contracts settled	-	24	-	-	-	-	-	24	-
Net risk management assets (liabilities) at Dec. 31, 2012	-	(50)	-	-	1	-	-	(49)	-

Changes in other risk management assets and liabilities related to hedge positions are reflected within net earnings when such transactions have settled during the period or when ineffectiveness exists in the hedging relationship.

The anticipated settlement of the contracts outstanding at Dec. 31, 2013, over each of the next five calendar years and thereafter, is as follows:

							2019 and	
		2014	2015	2016	2017	2018	thereafter	Total
Hedges	Level I	-	-	-	-	-	-	-
	Level II	12	6	1	-	7	-	26
	Level III	-	-	-	-	-	-	-
Non-Hedges	Level I	-	-	-	-	-	-	-
	Level II	1	-	-	-	-	-	1
	Level III	-	-	-	-	-	-	-
Total	Level I	-	-	-	-	-	-	-
	Level II	13	6	1	-	7	-	27
	Level III	-	-	-	-	-	-	-
Total net asse	ets	13	6	1	-	7	-	27

The fair value of financial liabilities measured at other than fair value is as follows:

	Fair value				
	Level I	Level II	Level III	Total	Total carrying value
Long-term debt <sup>1</sup> - Dec. 31, 2013	-	4,367	-	4,367	4,262
Long-term debt <sup>1</sup> – Dec. 31, 2012	-	4,426	-	4,426	4,157

<sup>1</sup> Includes current portion and excludes U.S.\$50 million of debt measured and carried at fair value.

The fair values of the Corporation's debentures and senior notes are determined using prices observed in secondary markets. Non-recourse and other long-term debt fair values are determined by calculating an implied price based on a current assessment of the yield to maturity.

The book value of other short-term financial assets and liabilities (cash and cash equivalents, accounts receivable, collateral paid, accounts payable and accrued liabilities, collateral received, and dividends payable) approximates fair value due to the liquid nature of the asset or liability.

### C. Inception Gains and Losses

The majority of derivatives traded by the Corporation are based on adjusted quoted prices on an active exchange or extend beyond the time period for which exchange-based quotes are available. The fair values of these derivatives are determined using inputs that are not readily observable. Refer to Note 19(B) for fair value Level III valuation techniques used. In some instances, a difference may arise between the fair value of a financial instrument at initial recognition (the "transaction price") and the amount calculated through a valuation model. This unrealized gain or loss at inception is recognized in net earnings (loss) only if the fair value of the instrument is evidenced by a quoted market price in an active market, observable current market transactions that are substantially the same, or a valuation technique that uses observable market inputs. Where these criteria are not met, the difference is deferred on the Consolidated Statements of Financial Position in risk management assets or liabilities, and is recognized in net earnings (loss) over the term of the related contract. The difference between the transaction price and the fair value determined using a valuation model, yet to be recognized in net earnings (loss), and a reconciliation of changes during the year ended Dec. 31, 2013 is as follows:

As at Dec. 31	2013	2012
Unamortized gain at beginning of year	5	4
New inception gains	156	3
Amortization recorded in net earnings during the year	(1)	(2)
Unamortized gain at end of year	160	5

During 2013, the Corporation finalized the Centralia Coal plant contract with PSE. The contract was designated as an all-in-one cash flow hedge. As a result, the contract was recognized as a risk management asset at fair value. The fair value was classified as Level III, which resulted in the recognition of an inception gain. The inception gain was deferred and recorded as a risk management liability.

# 20. Risk Management Activities

## A. Risk Management Assets and Liabilities

Aggregate risk management assets and liabilities are as follows:

As at Dec. 31	2013					
	Net investment hedges	Cash flow hedges	Fair value hedges	Not designated as a hedge	Total	Total
Risk management assets						
Energy trading						
Current	-	3	-	95	98	198
Long-term	-	235	-	26	261	59
Total energy trading risk management assets	_	238	-	121	359	257
Other						
Current	1	12	-	1	14	3
Long-term	-	8	7	-	15	10
Total other risk management assets	1	20	7	1	29	13
Risk management liabilities						
Energy trading						
Current	-	18	-	65	83	141
Long-term	-	231	-	31	262	70
Total energy trading risk management liabilities	-	249	-	96	345	211
Other						
Current	-	1	-	-	1	26
Long-term	-	1	-	-	1	36
Total other risk management liabilities	-	2	-	-	2	62
Net energy trading risk management assets (liabilities)	_	(11)	-	25	14	46
Net other risk management assets (liabilities)	1	18	7	1	27	(49)
Net total risk management assets (liabilities)	1	7	7	26	41	(3)

Additional information on derivative instruments has been presented on a net basis below.

## I. Netting Arrangements

Information about the Corporation's financial assets and liabilities that are subject to enforceable master netting arrangements or similar agreements is as follows:

As at Dec. 31		201	13		2012			
	Current financial assets	Long-term financial assets	Current financial liabilities	Long-term financial liabilities	Current financial assets	Long-term financial assets	Current financial liabilities	Long-term financial liabilities
Gross amounts recognized	371	270	(341)	(68)	522	331	(452)	(317)
Gross amounts set-off	(157)	-	156	1	(252)	(186)	252	186
Net amounts as presented in the Consolidated Statements of Financial Position	214	270	(185)	(67)	270	145	(200)	(131)

### II. Hedges

### a Net Investment Hedges

### i. Hedges of Foreign Operations

The Corporation hedges its net investment in foreign operations with U.S.-denominated borrowings, cross-currency interest rate swaps, and foreign currency forward contracts.

The Corporation's net investment hedges are comprised of U.S. dollar denominated long-term debt with a face value of U.S.\$850 million (Dec. 31, 2012 – U.S.\$770 million) and the following foreign currency forward contracts:

As at Dec. 31	2013		2012				
Notional amount sold	Notional amount purchased	Fair value asset	Maturity	Notional amount sold	Notional amount purchased	Fair value asset	Maturity
Foreign Currency	Forward Contracts						
AUD200	CAD188	1	2014	AUD175	CAD181	1	2013
USD10	CAD11	-	2014	USD35	CAD34	-	2013

During 2013, the Corporation de-designated \$20 million of U.S. dollar denominated debentures from its net investment hedges. The cumulative net foreign exchange gains (losses) related to these hedges up to the date of de-designation will remain in OCI until a disposal of the related U.S. foreign operation occurs. These instruments were designated as part of the Corporation's net investment hedge at Dec. 31, 2012.

During 2012, the Corporation de-designated \$300 million of borrowings under a U.S. dollar denominated credit facility, \$50 million of U.S. dollar denominated senior notes, and U.S.\$60 million of foreign currency forward contracts from its net investment hedges due to a reduction in its investment in U.S. foreign operations arising from the Centralia Thermal plant impairment. The cumulative net foreign exchange gains (losses) related to these hedges up to the date of de-designation will remain in OCI until a disposal of the related U.S. foreign operation occurs. These instruments were designated as part of the Corporation's net investment hedge at Dec. 31, 2011.

#### ii. Effect of Net Investment Hedges

The following table summarizes the pre-tax amounts recognized in OCI related to financial instruments used in net investment hedges:

Year ended	2013	2012	2011
Financial instruments in net investment hedging relationships	Pre-tax gain (loss) recognized in OCI	Pre-tax gain (loss) recognized in OCI	Pre-tax gain (loss) recognized in OCI
Long-term debt	(53)	19	(23)
Foreign currency contracts	13	(4)	(15)
OCI impact	(40)	15	(38)

No gains or losses on net investment hedges were reclassified from OCI in 2013, 2012, or 2011.

For the year ended Dec. 31, 2013, a net after-tax gain of \$2 million (2012 – loss of \$10 million, 2011 – loss of \$1 million), relating to the translation of the Corporation's net investment in foreign operations, net of hedging, was recognized in OCI. All net investment hedges currently have no ineffective portion.

### b. Cash Flow Hedges

### i. Energy Trading Risk Management

The Corporation's outstanding Energy Trading derivative instruments designated as hedging instruments are as follows:

As at Dec. 31	2013		2012		
Type (thousands)	Notional amount sold	Notional amount purchased	Notional amount sold	Notional amount purchased	
Electricity (MWh)	5,977	-	5,624	-	
Natural gas (GJ)	963	35,775	570	37,827	
Oil (gallons)	-	4,116	-	4,116	

During 2013, unrealized pre-tax gains of \$1 million (2012 – nil) were released from AOCI and recognized in earnings due to hedge ineffectiveness for accounting purposes. All designated hedging relationships were effective as of Dec. 31, 2013.

During 2013, unrealized pre-tax gains of nil (2012 – \$90 million gain, 2011 – \$207 million gain), related to certain power hedging relationships that were previously de-designated and deemed ineffective for accounting purposes, were released from AOCI and recognized in net earnings. The cash flow hedges were in respect of future power production expected to occur during 2012 and 2013. In the first quarter of 2011, the production was assessed as highly probable not to occur based on then forecast prices. These unrealized gains were calculated using current forward prices that will change between now and the time the contracts will be settled. Had these hedges not been deemed ineffective for accounting purposes, the revenues associated with these contracts would have been recorded in net earnings when settled, the majority of which occurred during 2012; however, the expected cash flows from these contracts will not change.

During 2012, the Corporation discontinued hedge accounting for certain cash flow hedges that no longer met the criteria for hedge accounting. As at Dec. 31, 2013, cumulative gains of \$4 million will continue to be deferred in AOCI and will be reclassified to net earnings as the forecasted transactions occur.

### ii. Foreign Currency Rate Risk Management

The Corporation uses foreign exchange forward contracts to hedge a portion of its future foreign-denominated receipts and expenditures, and both foreign exchange forward contracts and cross-currency swaps to manage foreign exchange exposure on foreign-denominated debt not designated as a net investment hedge.

As at Dec. 31	2013				2012			
Notional amount sold	Notional amount purchased	Fair value asset	Maturity	Notional amount sold	Notional amount purchased	Fair value asset (liability)	Maturity	
Foreign Exchange	oreign Exchange Forward Contracts - foreign-denominated receipts/expenditures							
USD4	CAD4	-	2014	USD3	CAD3	-	2013	
CAD3	EUR2	-	2014	CAD32	EUR25	1	2013	
CAD220	USD205	2	2014-2018	CAD245	USD228	(12)	2013-2017	
Foreign Exchange	Forward Contracts - fo	oreign-denon	ninated debt					
CAD52	USD50	2	2014	CAD50	USD50	-	2013	
-	-	-	-	CAD314	USD300	(14)	2013	
CAD106	USD100	1	2014	CAD100	USD100	-	2013	
CAD310	USD300	9	2014	CAD308	USD300	(8)	2013	
USD100	CAD107	-	2014	-	-	-	-	
CAD22	USD20	-	2014	-	-	-	-	
Cross-Currency S	waps - foreign-denom	inated debt						
CAD530	USD500	4	2015	CAD530	USD500	(28)	2015	

# iii. Effect of Cash Flow Hedges

 $The following \ tables \ summarize \ the \ pre-tax \ amounts \ recognized \ in \ and \ reclassified \ out \ of \ OCI \ related \ to \ cash \ flow \ hedges:$ 

V		D	21	2012	
Year	ended	Dec.	-31.	7013	

	Effectiv	e portion		Ineffective portion		
Derivatives in cash flow hedging relationships	Pre-tax gain (loss) recognized in OCI	Location of (gain) loss reclassified from OCI	Pre-tax (gain) loss reclassified from OCI	Location of (gain) loss reclassified from OCI	Pre-tax (gain) loss recognized in earnings	
Commodity contracts	11	Revenue	36	Revenue	(2)	
Foreign exchange forwards on commodity contracts	11	Revenue	2	Revenue	-	
Foreign exchange forwards on project hedges	-	Property, plant, and equipment	2	Foreign exchange (gain) loss	-	
Foreign exchange forwards on U.S. debt hedges	33	Foreign exchange (gain) loss	(38)	Foreign exchange (gain) loss	-	
Cross-currency swaps	33	Foreign exchange (gain) loss	(29)	Foreign exchange (gain) loss	-	
Forward starting interest rate swaps	-	Interest expense	6	Interest expense	-	
OCI impact	88	OCI impact	(21)	Net earnings impact	(2)	

### Year ended Dec. 31, 2012

			,		
	Effectiv	e portion		Ineffective p	ortion
Derivatives in cash flow hedging relationships	Pre-tax gain (loss) recognized in OCI	Location of (gain) loss reclassified from OCI	Pre-tax (gain) loss reclassified from OCI	Location of (gain) loss reclassified from OCI	Pre-tax (gain) loss recognized in earnings
Commodity contracts	36	Revenue	15	Revenue	(90)
Foreign exchange forwards on commodity contracts	(3)	Revenue	1	Revenue	-
Foreign exchange forwards on project hedges	(3)	Property, plant, and equipment	7	Foreign exchange (gain) loss	-
Foreign exchange forwards on U.S. debt hedges	(20)	Foreign exchange (gain) loss	30	Foreign exchange (gain) loss	-
Cross-currency swaps	(6)	Foreign exchange (gain) loss	13	Foreign exchange (gain) loss	-
Forward starting interest rate swaps	(15)	Interest expense	2	Interest expense	3
OCI impact	(11)	OCI impact	68	Net earnings impact	(87)

### Year ended Dec. 31, 2011

Effective portion Ineffective					ortion
Derivatives in cash flow hedging relationships	Pre-tax gain (loss) recognized in OCI	Location of (gain) loss reclassified from OCI	Pre-tax (gain) loss reclassified from OCI	Location of (gain) loss reclassified from OCI	Pre-tax (gain) loss recognized in earnings
Commodity contracts	(92)	Revenue	(43)	Revenue	(207)
Foreign exchange forwards on commodity contracts	3	Revenue	-	Revenue	_
Foreign exchange forwards on project hedges	(6)	Property, plant, and equipment	-	Foreign exchange (gain) loss	_
Foreign exchange forwards on U.S. debt hedges	3	Foreign exchange (gain) loss	(36)	Foreign exchange (gain) loss	_
Cross-currency swaps	7	Foreign exchange (gain) loss	13	Foreign exchange (gain) loss	_
Forward starting interest rate swaps	(25)	Interest expense	2	Interest expense	-
OCI impact	(110)	OCI impact	(64)	Net earnings impact	(207)

Over the next 12 months, the Corporation estimates that \$20 million of after-tax losses will be reclassified from AOCI to net earnings. These estimates assume constant natural gas and power prices, interest rates, and exchange rates over time; however, the actual amounts that will be reclassified will vary based on changes in these factors.

### c. Fair Value Hedges

#### i. Interest Rate Risk Management

The Corporation has converted a portion of its fixed interest rate debt with a rate of 6.65 per cent (Dec. 31, 2011 – 5.75 and 6.65 per cent) to a floating interest rate based on the U.S. LIBOR rate using interest rate swaps as outlined below:

As at Dec. 31	2013			2012	
Notional amount	Fair value asset	Maturity	Notional	Fair value	Maturity
Notional amount	asset	iviaturity	amount	asset	iviaturity
USD50	7	2018	USD50	10	2018

Including the interest rate swaps above, 21 per cent of the Corporation's debt as at Dec. 31, 2013 is subject to floating interest rates (2012 - 24 per cent).

### ii. Effects of Fair Value Hedges

The following table summarizes the pre-tax impact on the Consolidated Statements of Earnings (Loss) of fair value hedges, including any ineffective portion:

Year ended Dec. 31		2013	2012	2011
Derivatives in fair value hedging relationships	Location of gain (loss) recognized in earnings			
Interest rate contracts	Net interest expense	(2)	(16)	4
Long-term debt	Net interest expense	2	15	(3)
Earnings (loss) impact		-	(1)	1

### III. Non-Hedges

The Corporation enters into various derivative transactions as well as other contracting activities that do not qualify for hedge accounting or where a choice was made not to apply hedge accounting. As a result, the related assets and liabilities are classified as held for trading. The net realized and unrealized gains or losses from changes in the fair value of these derivatives are reported in earnings in the period the change occurs.

### a. Energy Trading Risk Management

As at Dec. 31	2013		2012		
Type (Thousands)	Notional amount sold	Notional amount purchased	Notional amount sold	Notional amount purchased	
Electricity (MWh)	34,741	24,456	40,962	32,051	
Natural gas (GJ)	215,730	224,661	1,021,137	1,018,557	
Emissions (tonnes)	70	70	138	128	
Oil (gallons)	-	9,576	-	7,560	

### b. Other Non-Hedge Derivatives

As at Dec. 31	2013		2012						
Notional amount sold	Notional amount purchased	Fair value asset	Maturity	Notional amount sold	Notional amount purchased	Fair value asset	Maturity		
Foreign Exchange	Forward Contracts								
-	-	-	-	CAD21	AUD20	-	2013		
CAD91	USD85	1	2014	CAD127	USD128	1	2013-2014		

#### c. Total Return Swaps

The Corporation has certain compensation and deferred and restricted share unit programs, the values of which depend on the common share price of the Corporation. The Corporation has fixed a portion of the settlement cost of these programs by entering into a total return swap for which hedge accounting has not been applied. The total return swap is cash settled every quarter based upon the difference between the fixed price and the market price of the Corporation's common shares at the end of each quarter.

### d. Effect of Non-Hedges

For the year ended Dec. 31, 2013, the Corporation recognized a net unrealized loss of \$40 million (2012 – loss of \$123 million, 2011 – gain of \$123 million) related to commodity derivatives.

For the year ended Dec. 31, 2013, a gain of \$8 million (2012 – loss of \$4 million, 2011 – loss of \$4 million) related to foreign exchange and other derivatives was recognized and is comprised of a net unrealized loss of \$1 million (2012 – gain of \$1 million, 2011 – gain of \$3 million) and a net realized gain of \$9 million (2012 – loss of \$5 million, 2011 – loss of \$7 million).

### B. Nature and Extent of Risks Arising from Financial Instruments

The following discussion is limited to the nature and extent of risks arising from financial instruments.

#### I. Market Risk

#### a. Commodity Price Risk

The Corporation has exposure to movements in certain commodity prices in both its electricity generation and proprietary trading businesses, including the market price of electricity and fuels used to produce electricity. Most of the Corporation's electricity generation and related fuel supply contracts are considered to be contracts for delivery or receipt of a non-financial item in accordance with the Corporation's expected own use requirements and are not considered to be financial instruments. As such, the discussion related to commodity price risk is limited to the Corporation's proprietary trading business and commodity derivatives used in hedging relationships associated with the Corporation's electricity generating activities.

### i. Commodity Price Risk - Proprietary Trading

The Corporation's Energy Trading Segment conducts proprietary trading activities and uses a variety of instruments to manage risk, earn trading revenue, and gain market information.

In compliance with the Policy, proprietary trading activities are subject to limits and controls, including Value at Risk ("VaR") limits. The Board of Directors approves the limit for total VaR from proprietary trading activities. VaR is the most commonly used metric employed to track and manage the market risk associated with trading positions. A VaR measure gives, for a specific confidence level, an estimated maximum pre-tax loss that could be incurred over a specified period of time. VaR is used to determine the potential change in value of the Corporation's proprietary trading portfolio, over a three-day period within a 95 per cent confidence level, resulting from normal market fluctuations. VaR is estimated using the historical variance – covariance approach.

VaR is a measure that has certain inherent limitations. The use of historical information in the estimate assumes that price movements in the past will be indicative of future market risk. As such, it may only be meaningful under normal market conditions. Extreme market events are not addressed by this risk measure. In addition, the use of a three-day measurement period implies that positions can be unwound or hedged within three days, although this may not be possible if the market becomes illiquid.

The Corporation recognizes the limitations of VaR and actively uses other controls, including restrictions on authorized instruments, volumetric and term limits, stress-testing of individual portfolios and of the total proprietary trading portfolio, and management reviews when loss limits are triggered.

Changes in market prices associated with proprietary trading activities affect net earnings in the period that the price changes occur. VaR at Dec. 31, 2013 associated with the Corporation's proprietary energy trading activities was \$2 million (2012 - \$2 million, 2011 - \$5 million).

### ii. Commodity Price Risk - Generation

The Generation Segment utilizes various commodity contracts to manage the commodity price risk associated with electricity generation, fuel purchases, emissions, and byproducts, as considered appropriate. A Commodity Exposure Management Policy is prepared and approved annually, which outlines the intended hedging strategies associated with the Corporation's generation assets and related commodity price risks. Controls also include restrictions on authorized instruments, management reviews on individual portfolios, and approval of asset transactions that could add potential volatility to the Corporation's reported net earnings.

TransAlta has entered into various contracts with other parties whereby the other parties have agreed to pay a fixed price for electricity to TransAlta. While not all of the contracts create an obligation for the physical delivery of electricity to other parties, the Corporation has the intention and believes it has sufficient electrical generation available to satisfy these contracts and, where able, has designated these as cash flow hedges for accounting purposes. As a result, changes in market prices associated with these cash flow hedges do not affect net earnings in the period in which the price change occurs. Instead, changes in fair value are deferred until settlement through AOCI, at which time the net gain or loss resulting from the combination of the hedging instrument and hedged item affects net earnings.

VaR at Dec. 31, 2013 associated with the Corporation's commodity derivative instruments used in generation hedging activities was \$42 million (2012 - \$5 million, 2011 - \$5 million).

On asset-backed physical transactions, the Corporation's policy is to seek own use contract status or hedge accounting treatment. For positions and economic hedges that do not meet hedge accounting requirements or for short-term optimization transactions such as buybacks entered into to offset existing hedge positions, these transactions are marked to the market value with changes in market prices associated with these transactions affecting net earnings in the period in which the price change occurs. VaR at Dec. 31, 2013 associated with these transactions was \$11 million (2012 – \$9 million, 2011 – \$9 million).

### b. Interest Rate Risk

Interest rate risk arises as the fair value or future cash flows of a financial instrument can fluctuate because of changes in market interest rates. Changes in interest rates can impact the Corporation's borrowing costs and the capacity payments received under the PPAs. Changes in the cost of capital may also affect the feasibility of new growth initiatives.

The possible effect on net earnings and OCI, for the years ended Dec. 31, 2013, 2012, and 2011, due to changes in market interest rates affecting the Corporation's floating rate debt, interest-bearing assets, financial instruments measured at fair value through profit or loss, and hedging interest rate derivatives, is outlined below. The sensitivity analysis has been prepared using management's assessment that a 25 basis point (2012 – 50 basis point, 2011 – 50 basis point) increase or decrease is a reasonable potential change over the next quarter in market interest rates.

Year ended Dec. 31	2013		2012	) -	2011		
	Net earnings	t earnings			Net earnings	rnings	
	increase <sup>1</sup>	OCI loss <sup>1</sup>	increase <sup>1</sup>	OCI loss <sup>1</sup>	increase <sup>1</sup>	OCI loss <sup>1</sup>	
Basis point change	2	-	4	-	4	(8)	

<sup>1</sup> This calculation assumes a decrease in market interest rates. An increase would have the opposite effect.

#### c Currency Rate Risk

The Corporation has exposure to various currencies, such as the euro, the U.S. dollar, and the Australian dollar, as a result of investments and operations in foreign jurisdictions, the net earnings from those operations, and the acquisition of equipment and services from foreign suppliers.

The foreign currency risk sensitivities outlined below are limited to the risks that arise on financial instruments denominated in currencies other than the functional currency.

The possible effect on net earnings and OCI, for the years ended Dec. 31, 2013, 2012, and 2011, due to changes in foreign exchange rates associated with financial instruments denominated in currencies other than the functional currency, is outlined below. The sensitivity analysis has been prepared using management's assessment that an average five cent (2012 – five cent, 2011 – six cent) increase or decrease in these currencies relative to the Canadian dollar is a reasonable potential change over the next quarter.

Year ended Dec. 31	201	<b>2013</b> 2012			2011		
Currency	Net earnings increase <sup>1</sup>	OCI gain <sup>1,2</sup>	Net earnings decrease <sup>1</sup>	OCI gain <sup>1,2</sup>	Net earnings decrease <sup>1</sup>	OCI gain <sup>1,2</sup>	
USD	2	8	(2)	11	(4)	11	
EUR	-	-	-	1	-	3	
Total	2	8	(2)	12	(4)	14	

- 1 These calculations assume an increase in the value of these currencies relative to the Canadian dollar. A decrease would have the opposite effect.
- 2 The foreign exchange impact related to financial instruments designated as hedging instruments in net investment hedges has been excluded.

#### II. Credit Risk

Credit risk is the risk that customers or counterparties will cause a financial loss for the Corporation by failing to discharge their obligations, and the risk to the Corporation associated with changes in creditworthiness of entities with which commercial exposures exist. The Corporation actively manages its exposure to credit risk by assessing the ability of counterparties to fulfill their obligations under the related contracts prior to entering into such contracts. The Corporation makes detailed assessments of the credit quality of all counterparties and, where appropriate, obtains corporate guarantees, cash collateral, and/or letters of credit to support the ultimate collection of these receivables. For commodity trading and origination, the Corporation sets strict credit limits for each counterparty and monitors exposures on a daily basis. TransAlta uses standard agreements that allow for the netting of exposures and often include margining provisions. If credit limits are exceeded, TransAlta will request collateral from the counterparty or halt trading activities with the counterparty. TransAlta is exposed to minimal credit risk for Alberta Thermal PPAs as receivables are substantially all secured by letters of credit.

The Corporation uses external credit ratings, as well as internal ratings in circumstances where external ratings are not available, to establish credit limits for counterparties. The following table outlines the distribution, by credit rating, of financial assets as at Dec. 31, 2013:

	Investment	Non-investment	
(Per cent)	grade	grade	Total
Accounts receivable	90	10	100
Risk management assets	99	1	100

The Corporation's maximum exposure to credit risk at Dec. 31, 2013, without taking into account collateral held or right of set-off, is represented by the current carrying amounts of accounts receivable and risk management assets as per the Consolidated Statements of Financial Position. Letters of credit and cash are the primary types of collateral held as security related to these amounts. The maximum credit exposure to any one customer for commodity trading operations and hedging, including the fair value of open trading, net of any collateral held, at Dec. 31, 2013 was \$23 million (2012 – \$25 million).

At Dec. 31, 2013, TransAlta had one counterparty whose net settlement position accounted for greater than 10 per cent of the total trade receivables outstanding at year-end. The Corporation has evaluated the risk of default related to this counterparty to be minimal.

The Corporation utilizes an allowance for doubtful accounts to record potential credit losses associated with trade receivables. A reconciliation of the account for the year is presented in Note 17.

### III. Liquidity Risk

Liquidity risk relates to the Corporation's ability to access capital to be used for proprietary trading activities, commodity hedging, capital projects, debt refinancing, and general corporate purposes. Investment grade ratings support these activities and provide better access to capital markets through commodity and credit cycles. TransAlta is focused on maintaining a strong financial position and stable investment grade credit ratings.

Counterparties enter into certain electricity and natural gas purchase and sale contracts for the purposes of asset-backed sales and proprietary trading. The terms and conditions of these contracts may require the counterparties to provide collateral when the fair value of the obligation pursuant to these contracts is in excess of any credit limits granted. Downgrades in creditworthiness by certain credit rating agencies may decrease the credit limits granted and accordingly increase the amount of collateral that may have to be provided.

TransAlta manages liquidity risk by monitoring liquidity on trading positions; preparing and revising longer-term financing plans to reflect changes in business plans and the market availability of capital; reporting liquidity risk exposure for proprietary trading activities on a regular basis to the Exposure Management Committee, senior management, and the Board of Directors; and maintaining investment grade credit ratings.

A maturity analysis of the Corporation's net financial liabilities, as at Dec. 31, 2013, is as follows:

					2	2019 and	
	2014	2015	2016	2017	2018 th	nereafter	Total
Accounts payable and accrued liabilities	447	-	-	-	-	-	447
Debt <sup>1</sup>	209	689	29	854	732	1,807	4,320
Energy trading risk management (assets) liabilities	(6)	10	11	(2)	(11)	(16)	(14)
Other risk management (assets) liabilities	(13)	(6)	(1)	-	(7)	-	(27)
Interest on long-term debt <sup>2</sup>	211	178	172	162	123	783	1,629
Dividends payable	85	-	-	-	-	-	85
Total	933	871	211	1,014	837	2,574	6,440

<sup>1</sup> Excludes impact of hedge accounting and includes drawn credit facilities that are currently scheduled to mature in 2015 and 2017.

### C. Collateral

### I. Financial Assets Provided as Collateral

At Dec. 31, 2013, the Corporation provided \$20 million (2012 – \$19 million) in cash as collateral to regulated clearing agents as security for commodity trading activities. These funds are held in segregated accounts by the clearing agents.

### II. Financial Assets Held as Collateral

At Dec. 31, 2013, the Corporation received nil (2012 – \$2 million) in cash collateral associated with counterparty obligations. Under the terms of the contracts, the Corporation may be obligated to pay interest on the outstanding balances and to return the principal when the counterparties have met their contractual obligations, or when the amount of the obligation declines as a result of changes in market value. Interest payable to the counterparties on the collateral received is calculated in accordance with each contract.

### III. Contingent Features in Derivative Instruments

Collateral is posted in the normal course of business based on the Corporation's senior unsecured credit rating as determined by certain major credit rating agencies. Certain of the Corporation's derivative instruments contain financial assurance provisions that require collateral to be posted only if a material adverse credit-related event occurs. If a material adverse event resulted in the Corporation's senior unsecured debt falling below investment grade, the counterparties to such derivative instruments could request ongoing full collateralization.

As at Dec. 31, 2013, the Corporation had posted collateral of \$94 million (2012 – \$85 million) in the form of letters of credit on derivative instruments primarily in a net liability position. Certain derivative agreements contain credit-risk-contingent features, including a credit rating downgrade to below investment grade, which if triggered would result in the Corporation having to post an additional \$88 million of collateral to its counterparties based upon the value of the derivatives at Dec. 31, 2013.

<sup>2</sup> Not recognized as a financial liability on the Consolidated Statements of Financial Position.

## 21. Restricted Cash

At Dec. 31, 2012, \$2 million of cash and cash equivalents was restricted due to Project Pioneer and was not available for general use.

# 22. Inventory

Inventory held in the normal course of business, which includes coal, emission credits, and natural gas, is valued at the lower of cost and net realizable value. Inventory held for Energy Trading, which includes natural gas and emission credits and allowances, is valued at fair value less costs to sell.

The components of inventory are as follows:

As at Dec. 31	2013	2012 (Restated)*
Coal	53	78
Deferred stripping costs	13	9
Natural gas	5	2
Purchased emission credits	6	4
Total	77	93
* See Note 2 for prior period restatements.		
The change in inventory is as follows:		
Balance, Dec. 31, 2011		92
Net additions		46
Writedowns		(52)
Reversal of writedowns		8
Change in foreign exchange rates		(1)
Balance, Dec. 31, 2012		93
Net additions		7
Writedowns		(22)

No inventory is pledged as security for liabilities.

# 23. Income Taxes Receivable

Change in foreign exchange rates

Balance, Dec. 31, 2013

In 2008, the Corporation was reassessed by taxation authorities in Canada relating to the sale of its previously operated Transmission Business, requiring the Corporation to pay \$49 million in taxes and interest. The Corporation challenged this reassessment. During 2010, a decision from the Tax Court of Canada was received that allowed for the recovery of \$38 million of the previously paid taxes and interest. TransAlta filed an appeal with the Federal Court in 2010 to pursue the remaining \$11 million. The appeal decision from the Federal Court was received on Jan. 20, 2012, and the ruling was in TransAlta's favour. The Crown had 60 days from the date of judgment to appeal the decision. No appeal was filed by the Crown. TransAlta received \$9 million in 2012 and the remaining \$2 million in 2013.

(1)

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# 24. Property, Plant, and Equipment

A reconciliation of the changes in the carrying amount of property, plant, and equipment is as follows:

	Land	Thermal generation		Renewable generation	Mining property and equipment	Assets under construc- tion	Capital spares and other <sup>1</sup>	Total
Cost		0	0	0				
As at Dec. 31, 2011	74	5,539	1,843	2,506	945	196	283	11,386
Additions	_	_	_	1	_	683	19	703
Disposals	_	(10)	(1)	_	_	_	_	(11)
Asset impairment charges (Note 13)	_	(378)	_	(18)	(12)	_	_	(408)
Asset impairment reversals (Note 13)	_	29	_	_	12	_	_	41
Revisions and additions to decommissioning and restoration costs	_	(14)	11	(4)	(6)	_	_	(13)
Retirement of assets	_	(145)		(8)		_	(1)	(185)
Change in foreign exchange rates	_	(20)		-	(1)	(1)		(24)
Transfers	1	383	40	59	30	(536)		(8)
As at Dec. 31, 2012	75	5,384	1,870	2,536	959	342	315	11,481
Additions	-	3,304	1,070	2,330	-	534	27	561
Additions - finance lease (Note 7)				_	33	-	_	33
Acquisition of Wyoming wind farm (Note 8)	-	_	_	78	-	_	1	79
Disposals	(1)	_	_	_	(3)	_	_	(4)
Asset impairment (charges) reversals (Note 13)	-	-	(1)	21	-	-	-	20
Revisions and additions to decommissioning and restoration costs	-	(3)	(7)	_	15	_	_	5
Retirement of assets	_	(159)	(13)	(13)	(17)	_	_	(202)
Change in foreign exchange rates	1	65	(26)	_	4	_	1	45
Transfers	2	357	35	235	75	(723)	25	6
As at Dec. 31, 2013	77	5,644	1,858	2,857	1,066	153	369	12,024
Accumulated depreciation								
As at Dec. 31, 2011	-	2,386	802	449	411	-	67	4,115
Depreciation	-	257	97	87	38	-	12	491
Retirement of assets	-	(120)	(17)	(3)	(6)	-	-	(146)
Change in foreign exchange rates	-	(13)	(1)	-	(1)	-	-	(15)
Transfers	-	-	(7)	(1)	-	-	-	(8)
As at Dec. 31, 2012	-	2,510	874	532	442	-	79	4,437
Depreciation	-	263	99	91	57	-	13	523
Retirement of assets	-	(121)	(10)	(10)	(10)	-	-	(151)
Disposals	-	-	-	-	(3)	-	-	(3)
Change in foreign exchange rates	-	40	(12)	-	2	-	(2)	28
Asset impairment (charges) reversals (Note 13)	-	-	-	2	_	-	-	2
Transfers	_	-	(5)	-	-	_	-	(5)
As at Dec. 31, 2013	_	2,692	946	615	488	-	90	4,831
Carrying amount								
As at Dec. 31, 2011	74	3,153	1,041	2,057	534	196	216	7,271
As at Dec. 31, 2012	75	2,874	996	2,004	517	342	236	7,044
As at Dec. 31, 2013	77	2,952	912	2,242	578	153	279	7,193

<sup>1</sup> Includes major spare parts and stand-by equipment available, but not in service, and spare parts used for routine, preventative, or planned maintenance.

The Corporation capitalized \$2 million of interest to PP&E in 2013 (2012 - \$4 million) at a weighted average rate of 5.46 per cent (2012 - 5.41 per cent).

# 25. Goodwill

Goodwill acquired through business combinations has been allocated to CGUs that are expected to benefit from the synergies of the acquisitions, as follows:

As at Dec. 31	2013	2012
Energy Trading	30	30
Renewables	-	417
Renewables and Alberta Merchant	417	-
U.S. Operations	13	-
Total goodwill	460	447

In assessing whether goodwill is impaired, the carrying amount of the CGUs (including goodwill) is compared with the recoverable amount of the CGU. The recoverable amount is the higher of fair value less costs to sell and value in use. The impairment review for goodwill is conducted annually. The recoverable amounts exceeded the carrying amounts of the CGUs and there was no impairment of goodwill in 2013, 2012, or 2011.

In 2012, \$417 million of the Corporation's goodwill was allocated to the Renewables CGU, which was comprised of all of the Corporation's merchant and contracted wind and hydro facilities, and assessed for impairment.

In 2013, as part of the annual impairment review and assessment process for the Corporation's PP&E assets, the Alberta plants that have significant merchant capacity were considered to be one CGU (the "Alberta Merchant CGU") (see Note 13). The Corporation's merchant renewables facilities were assigned to this CGU. Consequently, the \$417 million of goodwill that was tested for impairment in 2012 at the Renewables CGU level has been tested at the combined Renewables and Alberta Merchant CGUs group level.

The Corporation determined the recoverable amount of the Renewables and Alberta Merchant CGUs group by calculating its fair value less cost to sell using discounted cash flow projections. The Corporation's long-range forecasts, which represent forecasted cash flows for generating facilities over their expected useful lives, ranging from 5 to 59 years, are the primary source of information for determining fair value. They contain forecasts for production and sale of electricity, revenues, operating costs, and capital expenditures. In developing these plans, various assumptions, such as electricity prices, natural gas prices, and cost inflation rates are established. These assumptions take into account existing and forecast prices, regional supply-demand balances, other macroeconomic factors, and historical trends and variability. The results of the long-range forecasts are reviewed and approved by senior management.

The key assumptions impacting the determination of fair value for the Renewables and Alberta Merchant CGUs group are electricity production and sales prices. Forecasts of electricity production for each facility are determined taking into consideration contracts for the sale of electricity, historic production, regional supply-demand balances, and capital maintenance and expansion plans. Forecasted sales prices for each facility are determined by taking into consideration contract prices for facilities subject to long- or short-term contracts, forward price curves for merchant plants, and regional supply-demand balances. Where forward price curves are not available for the duration of the facility's useful life, prices are determined by extrapolation techniques using historical industry and company-specific data. The resulting fair value measurement is categorized within Level III of the fair value hierarchy. Discount rates used for the Renewables and Alberta Merchant CGUs group goodwill impairment calculation ranged from 4.9 per cent to 7.1 per cent.

No reasonably possible change in the assumptions would result in any impairment of goodwill.

The goodwill resulting from the Wyoming Wind farm acquisition has been assigned to the U.S. Operations CGU.

# 26. Intangible Assets

A reconciliation of the changes in the carrying amount of intangible assets is as follows:

		Intangibles under			
	Coal rights	Software and other	Power contracts	development	Total
Cost					
As at Dec. 31, 2011	152	127	173	18	470
Additions	6	-	-	33	39
Retirements	-	(5)	-	-	(5)
Transfers	-	11	-	(11)	-
As at Dec. 31, 2012	158	133	173	40	504
Additions	20	-	-	29	49
Acquisition of Wyoming wind farm (Note 8)	-	-	20	-	20
Retirements	-	(10)	-	-	(10)
Transfers	-	50	-	(47)	3
As at Dec. 31, 2013	178	173	193	22	566
Accumulated amortization					
As at Dec. 31, 2011	96	79	19	-	194
Amortization	4	19	8	-	31
Retirements	-	(5)	-	-	(5)
As at Dec. 31, 2012	100	93	27	-	220
Amortization	4	21	8	-	33
Retirements	-	(10)	-	-	(10)
As at Dec. 31, 2013	104	104	35	-	243
Carrying amount					
As at Dec. 31, 2011	56	48	154	18	276
As at Dec. 31, 2012	58	40	146	40	284
As at Dec. 31, 2013	74	69	158	22	323

# 27. Other Assets

The components of other assets are as follows:

As at Dec. 31	2013	2012
Deferred licence fees	18	21
Project development costs	36	35
Deferred service costs	19	19
Long-term prepaids	17	5
Keephills Unit 3 transmission deposit	6	7
Other	1	3
Total other assets	97	90

Deferred licence fees consist primarily of licences to lease the land on which certain generating assets are located, and are amortized on a straight-line basis over the useful life of the generating assets to which the licences relate.

Project development costs include external, direct, and incremental costs incurred during the development phase of future power projects. The appropriateness of the carrying value of these costs is evaluated each reporting period, and unrecoverable amounts for projects no longer probable of occurring are charged to expense.

Deferred service costs are TransAlta's contracted payments for shared capital projects required at the Genesee Unit 3 and Keephills Unit 3 sites. These costs are amortized over the life of these projects.

The Keephills Unit 3 transmission deposit is TransAlta's proportionate share of a provincially required deposit. The full amount of the deposit is anticipated to be reimbursed over the next nine years, as long as certain performance criteria are met.

# 28. Decommissioning and Other Provisions

The change in decommissioning and other provision balances is as follows:

	Decommissioning and restoration	Restructuring	Other	Total
D.L D 21 2011		Restructuring		
Balance, Dec. 31, 2011	301	-	81	382
Liabilities incurred	16	13	56	85
Liabilities settled	(44)	(5)	(17)	(66)
Accretion	16	-	1	17
Revisions in estimated cash flows	(11)	-	2	(9)
Revisions in discount rates	(15)	-	-	(15)
Reversals <sup>1</sup>	-	-	(81)	(81)
Change in foreign exchange rates	(1)	-	-	(1)
Balance, Dec. 31, 2012	262	8	42	312
Liabilities incurred	4	-	29	33
Liabilities settled	(24)	(5)	(2)	(31)
Accretion	17	-	1	18
Revisions in estimated cash flows	16	-	2	18
Revisions in discount rates	(12)	-	-	(12)
Reversals <sup>1</sup>	-	(3)	(11)	(14)
Acquisition of Wyoming Wind (Note 8)	3	-	-	3
Change in foreign exchange rates	4	-	1	5
Balance, Dec. 31, 2013	270	-	62	332

<sup>1</sup> The reversal of other provisions includes Sundance Units 1 and 2 and Sundance Unit 3 provisions that were reversed as a result of the conclusions of the respective arbitration decisions in 2012.

	Decommissioning			
	and restoration	Restructuring	Other	Total
Balance, Dec. 31, 2012	262	8	42	312
Current portion	13	8	12	33
Non-current portion	249	-	30	279
Balance, Dec. 31, 2013	270	-	62	332
Current portion	11	-	5	16
Non-current portion	259	-	57	316

### A. Decommissioning and Restoration

A provision has been recognized for all generating facilities and mines for which TransAlta is legally, or constructively, required to remove the facilities at the end of their useful lives and restore the sites to their original condition. TransAlta estimates that the undiscounted amount of cash flow required to settle these obligations is approximately \$1.0 billion, which will be incurred between 2013 and 2072. The majority of the costs will be incurred between 2020 and 2050. At Dec. 31, 2013, the Corporation had provided a surety bond in the amount of U.S.\$136 million (2012 – U.S.\$136 million) in support of future decommissioning obligations at the Centralia coal mine. At Dec. 31, 2013, the Corporation had provided letters of credit in the amount of \$115 million (2012 – \$79 million) in support of future decommissioning obligations at the Alberta mine.

### **B.** Restructuring Provisions

On Oct. 30, 2012, the Corporation announced a restructuring of resources as part of its ongoing strategy to continuously improve operational excellence and accelerate the growth of the company. Approximately 165 positions were eliminated. In 2012, a provision and a related pre-tax restructuring expense of \$13 million were recognized. On completion of the restructuring in 2013, the balance of the provision in the amount of \$3 million was reversed.

### C. Other Provisions

Other provisions include an amount related to a portion of the Corporation's fixed price commitments under several natural gas transportation contracts for firm transportation that is not expected to be used. Accordingly, the unavoidable costs of meeting these obligations exceed the economic benefits expected to be received. The contracts extend to 2018.

Other provisions also include provisions arising from ongoing business activities and include amounts related to commercial disputes between the Corporation and customers or suppliers. Information about the expected timing of settlement and uncertainties that could impact the amount or timing of settlement has not been provided as this may impact the Corporation's ability to settle the provisions in the most favourable manner.

# 29. Long-Term Debt

### A. Debt and Credit facilities

The amounts outstanding are as follows:

As at Dec. 31		2013			2012	
	Carrying value	Face value	Interest <sup>1</sup>	Carrying value	Face value	Interest <sup>1</sup>
Credit facilities <sup>2</sup>	852	852	2.6%	950	950	2.4%
Debentures	1,269	1,251	6.1%	839	851	6.6%
Senior notes <sup>3</sup>	1,797	1,809	5.6%	2,017	1,990	5.6%
Non-recourse <sup>4</sup>	376	380	5.9%	375	380	5.9%
Other	28	28	6.3%	36	36	6.5%
	4,322	4,320		4,217	4,207	
Less: recourse current portion	(209)	(209)		(606)	(606)	
Less: non-recourse current portion	-	-		(1)	(1)	
Total long-term debt	4,113	4,111		3,610	3,600	

- 1 Interest is an average rate weighted by principal amounts outstanding before the effect of hedging.
- 2 Composed of bankers' acceptances and other commercial borrowings under long-term committed credit facilities. Includes U.S.\$300 million at Dec. 31, 2013 (Dec. 31, 2012 U.S.\$300 million).
- 3 U.S. face value at Dec. 31, 2013 U.S.\$1.7 billion (Dec. 31, 2012 U.S.\$2.0 billion).
- 4 Includes U.S.\$20 million at Dec. 31, 2013 (Dec. 31, 2012 U.S.\$20 million).

A portion of the Corporation's fixed rate debentures and senior notes have been hedged using fixed to floating interest rate swaps (see Note 20) and are recorded at fair value. The balance of long-term debt is not hedged and is recorded at amortized cost.

Credit facilities are drawn on the Corporation's \$1.5 billion committed syndicated bank credit facility and on the Corporation's U.S.\$300 million committed bilateral facility. The \$1.5 billion committed syndicated bank facility is the primary source for short-term liquidity after the cash flow generated from the Corporation's business. In May 2013, the Corporation completed a renewal of its four-year revolving \$1.5 billion committed syndicated credit facility and extended its maturity to 2017. In June 2013, the U.S.\$300 million bilateral credit facility was renewed for a four-year term to 2017. Interest rates on the credit facilities vary depending on the option selected; Canadian prime, bankers' acceptances, U.S. LIBOR, or U.S. base rate, in accordance with a pricing grid that is standard for such facilities. The Corporation also has \$240 million available in committed bilateral credit facilities, which was renewed in November 2013, for a two-year term to 2015.

Of the \$2.1 billion (2012 - \$2.0 billion) of committed credit facilities, \$0.9 billion (2012 - \$0.8 billion) is not drawn, and is available as of Dec. 31, 2013, subject to customary borrowing conditions. In addition to the \$0.9 billion available under the credit facilities, TransAlta also has \$42 million of available cash and cash equivalents.

**Debentures** bear interest at fixed rates ranging from 5.0 per cent to 7.3 per cent and have maturity dates ranging from 2014 to 2030. During 2013, the Corporation issued \$400 million of senior unsecured medium-term notes that carry a coupon rate of 5.00 per cent, payable semi-annually, at an issue price equal to 99.516 per cent of the principal amount of the notes.

**Senior notes** bear interest at rates ranging from 4.50 per cent to 6.65 per cent and have maturity dates ranging from 2015 to 2040. A total of U.S.\$850 million of the senior notes has been designated as a hedge of the Corporation's net investment in U.S. foreign operations. During 2013, the Corporation's U.S.\$300 million 5.75 per cent senior notes matured and were paid out.

**Non-recourse debt** consists of debentures issued by CHD that have maturity dates ranging from 2015 to 2018 and bear interest at rates ranging from 5.3 per cent to 7.3 per cent, and includes U.S.\$20 million of U.S.-denominated debt.

**Other** consists of notes payable for the Windsor plant that bear interest at a fixed rate of 7.4 per cent, mature in November 2014, and are recourse to the Corporation through a standby letter of credit; and an unsecured commercial loan obligation that bears interest at a rate of 5.9 per cent, matures in 2023, and requires annual blended payments of interest and principal.

TransAlta's debt contains terms and conditions, including financial covenants, that are considered normal and customary. As at Dec. 31, 2013, the Corporation was in compliance with all debt covenants.

#### **B.** Restrictions

Debt of \$7 million related to the Windsor plant, owned by the Corporation's TA Cogen subsidiary, include principal and interest funding provisions that restrict the Corporation's ability to access funds generated by the operations of the plant. The Corporation has provided a letter of credit in the amount of the funding requirements, thereby permitting it to access the funds.

Debentures of \$341 million issued by the Corporation's CHD subsidiary include restrictive covenants requiring the proceeds received from the sale of assets to be reinvested into similar renewables assets.

### C. Principal Repayments

						2019 and	
	2014	2015	2016	2017	2018 th	nereafter	Total
Principal repayments <sup>1</sup>	209	689	29	854	732	1,807	4,320

<sup>1</sup> Excludes impact of derivatives and includes drawn credit facilities that are currently scheduled to mature in 2015 and 2017.

### D. Letters of Credit

Letters of credit are issued to counterparties under various contractual arrangements with the Corporation and certain subsidiaries of the Corporation. If the Corporation or its subsidiary does not perform under such contracts, the counterparty may present its claim for payment to the financial institution through which the letter of credit was issued. Any amounts owed by the Corporation or its subsidiaries under these contracts are reflected in the Consolidated Statements of Financial Position. All letters of credit expire within one year and are expected to be renewed, as needed, in the normal course of business. The total outstanding letters of credit as at Dec. 31, 2013 was \$370 million (2012 – \$336 million) with no (2012 – nil) amounts exercised by third parties under these arrangements.

# 30. Deferred Credits and Other Long-Term Liabilities

The components of deferred credits and other long-term liabilities are as follows:

As at Dec. 31	2013	2012
Deferred coal revenues	52	51
Defined benefit obligations	200	220
Long-term incentive accruals	16	15
Other	72	15
Total deferred credits and other long-term liabilities	340	301

Deferred coal revenues consist of amounts received from the Corporation's Keephills Unit 3 joint venture for future coal deliveries. These amounts are being amortized into revenue over the life of the coal supply agreement, since commercial operations of Keephills Unit 3 began on Sept. 1, 2011.

Other includes a \$13 million reimbursement received for costs of the New Richmond terminal station, which will be amortized into revenue over the term of the related PPA, and \$28 million relating to the California claim (see Note 5).

# 31. Common Shares

### A. Issued and Outstanding

TransAlta is authorized to issue an unlimited number of voting common shares without nominal or par value.

As at Dec. 31	Dec. 31 2013		2012	
	Common shares (millions)	Amount	Common shares (millions)	Amount
Issued and outstanding, beginning of period	254.7	2,730	223.6	2,274
Issued under the dividend reinvestment and share purchase plan	13.5	186	9.7	159
Issued under share-based payment plans	-	-	0.1	1
Issued under the PSOP (Note 34)	-	-	0.1	1
Issued under public offering <sup>1</sup>	-	-	21.2	295
	268.2	2,916	254.7	2,730
Amounts receivable under Employee Share Purchase Plan	-	(3)	-	(4)
Issued and outstanding, end of year	268.2	2,913	254.7	2,726

<sup>1</sup> Net of after-tax issuance costs of \$9 million (\$12 million issuance costs, less tax-effects of \$3 million)

On Sept. 13, 2012, TransAlta completed a public offering of 19,250,000 common shares at a price of \$14.30 per common share. TransAlta granted the underwriters an over-allotment option to purchase up to an additional 2,887,500 common shares at the same price. On Sept. 20, 2012, the underwriters exercised in part their over-allotment option and purchased an additional 1,992,000 common shares at \$14.30 per common share for total gross proceeds of \$304 million.

### B. Shareholder Rights Plan

The primary objective of the Shareholder Rights Plan is to provide the Corporation's Board of Directors sufficient time to explore and develop alternatives for maximizing shareholder value if a takeover bid is made for the Corporation and to provide every shareholder with an equal opportunity to participate in such a bid. The Shareholder Rights Plan was originally approved in 1992, and has been revised since that time to ensure conformity with current practices. As required, the Shareholder Rights Plan must be put before the Corporation's shareholders every three years for approval, and was last approved on April 23, 2013.

When an acquiring shareholder commences a bid to acquire 20 per cent or more of the Corporation's common shares, other than by way of a Permitted Bid, where the offer is made to all shareholders by way of a takeover bid circular, the rights granted under the Shareholder Rights Plan become exercisable by all shareholders except those held by the acquiring shareholder. Each right will entitle a shareholder, other than the acquiring shareholder, to acquire an additional \$200 worth of common shares for \$100.

## C. Premium Dividend<sup>TM</sup>, Dividend Reinvestment, and Optional Common Share Purchase Plan

On Feb. 21, 2012, the Corporation added a Premium Dividend<sup>TM</sup> Component to its existing dividend reinvestment plan. The amended and restated plan was called the Premium Dividend<sup>TM</sup>, Dividend Reinvestment, and Optional Common Share Purchase Plan ("the Plan") and it provided eligible shareholders with two options: i) to reinvest dividends at a current three per cent discount to the average market price towards the purchase of new common shares of the Corporation (the Dividend Reinvestment Component) or; ii) to receive a premium cash payment equivalent to 102 per cent of the reinvested dividends (the Premium Dividend<sup>TM</sup> Component).

The Corporation suspended the Premium Dividend Component of the Plan following the payment of the quarterly dividend on July 1, 2013. The Corporation's Dividend Reinvestment and Optional Common Share Purchase Plan, separate components of the Plan, remain effective in accordance with their current terms.

On Jan. 1, 2014, 2.1 million common shares were issued for dividends reinvested.

There have been no other transactions involving common shares between the reporting date and the date of completion of these consolidated financial statements.

### D. Earnings per Share

Year ended Dec. 31	2013	2012	2011
Net earnings (loss) attributable to common shareholders	(71)	(615)	290
Basic and diluted weighted average number of common shares outstanding	264	235	222
Net earnings (loss) per share attributable to common shareholders, basic and diluted	(0.27)	(2.62)	1.31

The effect of the stock options, PSOP, and the Plan does not materially affect the calculation of the total weighted average number of common shares outstanding (see Note 34).

### E. Dividends

The following table summarizes the common share dividends declared in 2013, 2012, and 2011:

Date declared	Payment date	Dividend per share (\$)	Total dividends	Dividends paid in cash	Dividends paid in shares
2013		P 11 211111 ( )		F	
Oct. 30, 2013	Jan. 1, 2014	0.29	78	50	28
July 23, 2013	Oct. 1, 2013	0.29	77	51	26
Apr. 22, 2013	July 1, 2013 <sup>1</sup>	0.29	76	21	55
Jan. 28, 2013	Apr. 1, 2013	0.29	75	22	53
2012					
Oct. 24, 2012	Jan. 1, 2013	0.29	73	20	53
July 13, 2012	Oct. 1, 2012	0.29	67	18	49
Apr. 25, 2012	July 1, 2012	0.29	66	18	48
Jan. 25, 2012	Apr. 1, 2012	0.29	65	23	43
2011					
Oct. 27, 2011	Jan. 1, 2012	0.29	65	45	20
July 27, 2011	Oct. 1, 2011	0.29	65	48	17
Apr. 28, 2011	July 1, 2011	0.29	64	48	16

<sup>1</sup> Dividends of \$20 million were paid on June 28, 2013.

# 32. Preferred Shares

### A. Issued and Outstanding

TransAlta is authorized to issue an unlimited number of first preferred shares. The rights, privileges, restrictions, and conditions attaching to such shares are determined by the Board of Directors, subject to certain limitations.

As at Dec. 31	2013		2012	2		
Cumulative Redeemable Rate Reset First Preferred Shares	Number of shares (millions)	Amount	Number of shares (millions)	Amount	Dividend rate per share (\$)	Redemption price per share (\$)
Series A	12	293	12	293	1.15	25.00
Series C	11	269	11	269	1.15	25.00
Series E	9	219	9	219	1.25	25.00
Issued and outstanding, end of period	32	781	32	781		

On Aug. 10, 2012, TransAlta completed a public offering of 9 million Series E Cumulative Redeemable Rate Reset First Preferred Shares for gross proceeds of \$225 million. The holders of the preferred shares are entitled to receive fixed cumulative cash dividends at an annual rate of \$1.25 per share as approved by the Board of Directors, payable quarterly, yielding 5.0 per cent per annum, for the initial period ending Sept. 30, 2017. The dividend rate will reset on Sept. 30, 2017 and every five years thereafter to a yield per annum equal to the sum of the then five-year Government of Canada bond yield plus 3.65 per cent. The preferred shares are redeemable at the option of TransAlta on or after Sept. 30, 2017 and on Sept. 30 of every fifth year thereafter at a price of \$25.00 per share plus all declared and unpaid dividends.

The Series E preferred shareholders will have the right at their option to convert their shares into Series F Cumulative Redeemable Rate Reset First Preferred Shares on Sept. 30, 2017 and on Sept. 30 of every fifth year thereafter. The holders of Series F preferred shares will be entitled to receive quarterly floating rate cumulative dividends as approved by the Board of Directors at a yield per annum equal to the sum of the then three-month Government of Canada Treasury Bill rate plus 3.65 per cent.

### B. Dividends

The following table summarizes the preferred share dividends declared in 2013, 2012, and 2011:

		Series	A	Series C		Series E	
Date declared	Payment date	Dividend per share (\$)	Total dividends	Dividend per share (\$)	Total dividends	Dividend per share (\$)	Total dividends
2013							
Oct. 30, 2013	Dec. 31, 2013	0.2875	4	0.2875	3	0.3125	3
July 23, 2013	Sept. 30, 2013	0.2875	3	0.2875	4	0.3125	2
Apr. 22, 2013	June 30, 2013	0.2875	4	0.2875	3	0.3125	3
Jan. 28, 2013	March 31, 2013	0.2875	3	0.2875	3	0.3125	3
2012							
Oct. 24, 2012	Dec. 31, 2012	0.2875	3	0.2875	4	0.4897	4
July 13, 2012	Sept. 30, 2012	0.2875	4	0.2875	3	-	-
Apr. 25, 2012	June 30, 2012	0.2875	4	0.2875	3	-	-
Jan. 25, 2012	March 31, 2012	0.2875	3	0.38441	4	-	-
2011							
Oct. 27, 2011	Dec. 31, 2011	0.2875	4	-	-	-	-
July 27, 2011	Sept. 30, 2011	0.2875	4	-	-	-	-
Apr. 28, 2011	June 30, 2011	0.2875	3	-	-	-	-

<sup>1</sup> Includes dividends of \$0.0969 per share (\$1 million in total) for the period from Nov. 29, 2011 to Dec. 31, 2011, which were accrued at Dec. 31, 2011.

# 33. Accumulated Other Comprehensive Income (Loss)

The components of, and changes in, accumulated other comprehensive income (loss) are as follows:

	2013	2012
		(Restated)*
Currency translation adjustment		
Opening balance, Jan. 1	(38)	(28)
Gains (losses) on translating net assets of foreign operations	37	(23)
Gains (losses) on financial instruments designated as hedges of foreign operations, net of tax <sup>1</sup>	(35)	13
Balance, Dec. 31	(36)	(38)
Cash flow hedges		
Opening balance, Jan. 1	(37)	(28)
Gains (losses) on derivatives designated as cash flow hedges, net of tax <sup>2</sup>	41	(9)
Balance, Dec. 31	4	(37)
Employee future benefits		
Opening balance, Jan. 1	(61)	(38)
Net actuarial gains (losses) on defined benefit plans, net of tax <sup>3</sup>	31	(23)
Balance, Dec. 31	(30)	(61)
Accumulated other comprehensive loss	(62)	(136)

<sup>\*</sup> See Note 3 for prior period restatements.

# 34. Share-Based Payment Plans

At Dec. 31, 2013, the Corporation had two types of share-based payment plans and an employee share purchase plan.

The Corporation is authorized to grant employees options to purchase up to an aggregate of 13.0 million common shares at prices based on the market price of the shares as determined on the grant date. The Corporation has reserved 13.0 million common shares for issue.

### A. Stock Option Plans

### I. Canadian Employee Plan

This plan is offered to all full-time and part-time employees in Canada below the level of manager. Options granted under this plan may not be exercised until one year after grant and thereafter at an amount not exceeding 25 per cent of the grant per year on a cumulative basis until the fifth year, after which the entire grant may be exercised until the tenth year, which is the expiry date.

### II. U.S. Plan

This plan mirrors the rules of the Canadian plan and is offered to all full-time and part-time employees in the U.S.

### III. Australian Phantom Plan

This plan is offered to all full-time and part-time employees in Australia below the level of manager. Options under this plan are not physically granted; rather, employees receive the equivalent value of shares in cash when exercised. Options granted under this plan may not be exercised until one year after grant and thereafter at an amount not exceeding 25 per cent of the grant per year on a cumulative basis until the fifth year, after which the entire grant may be exercised until the tenth year, which is the expiry date.

<sup>1</sup> Net of income tax recovery of 5 for the year ended Dec. 31, 2013 (2012 - 2 expense).

<sup>2</sup> Net of income tax expense of 12 for the year ended Dec. 31, 2013 (2012 - 15 expense).

<sup>3</sup> Net of income tax expense of 11 for the year ended Dec. 31, 2013 (2012 - 8 recovery).

#### IV. Total Plan Information

The total options outstanding and exercisable under these stock option plans at Dec. 31, 2013 are outlined below:

	Options outstanding			Options exercisable	
Range of exercise prices (\$ per share)	Number outstanding at Dec. 31, 2013 (millions)	Weighted average remaining contractual life (years)	Weighted average exercise price (\$ per share)	Number exercisable at Dec. 31, 2013 (millions)	Weighted average exercise price (\$ per share)
15.41-22.46	0.8	4.8	19.84	0.7	20.70
31.97-35.05	0.6	4.1	32.41	0.6	32.41
10.85-35.05	1.4	4.5	25.71	1.3	26.11

The change in the number of options outstanding under the option plans is outlined below:

Year ended Dec. 31	2013		20	2012		2011	
	Number of share options (millions)	Weighted average exercise price (\$ per share)	Number of share options (millions)	Weighted average exercise price (\$ per share)	Number of share options (millions)	Weighted average exercise price (\$ per share)	
Outstanding, beginning of year	1.5	25.35	1.7	24.94	2.2	24.94	
Forfeited	(0.1)	25.45	(0.2)	22.81	(0.5)	25.35	
Outstanding, end of year	1.4	25.71	1.5	25.35	1.7	24.94	

The Corporation uses the fair value method of accounting for awards granted under its stock option plans. No stock options were granted in 2013, 2012, or 2011.

The expense recognized arising from equity-settled share-based payment transactions was nil (2012 - \$1 million, 2011 - \$2 million).

### B. Performance Share Ownership Plan

Under the terms of the PSOP, which commenced in 1997, the Corporation is authorized to award to employees and directors up to an aggregate of 4.0 million common shares. During 2010, the authorized amount was increased to 6.5 million common shares. The number of common shares that could be issued under both the PSOP and the share option plans, however, cannot exceed 13.0 million common shares. Participants in the PSOP receive grants that, after three years, make them eligible to receive a set number of common shares, including the value of reinvested dividends over the period, or cash equivalent up to the maximum of the grant amount plus any accrued dividends thereon. The ultimate awarding of PSOP in any year is at the discretion of TransAlta's Human Resource Committee ("HRC"). Once a participant's PSOP eligibility for an award has been established, 50 per cent of the shares may be released to the participant when the Board of Directors use share settlements on the awards, while the remaining 50 per cent will be held in trust for one additional year for employees below vice-president level, and for two additional years for employees at the vice-president level and above. If the awards are paid out in cash, they are paid immediately. The actual number of common shares or cash equivalent a participant may receive is determined by the percentile ranking of the total shareholder return over three years of the Corporation's common shares amongst the companies comprising the comparator group. The expense related to this plan is recognized during the period earned, with the corresponding payable recorded in liabilities. The liability is valued using the closing share price.

The granting of PSOP units was discontinued following the 2012 – 2014 grants. The plan will continue until the end of this last cycle.

Year ended Dec. 31 (millions)	2013	2012	2011
Number of grants outstanding, beginning of year	2.9	2.5	1.7
Granted	-	1.5	1.4
Awarded by HRC	-	(0.1)	-
Forfeited	(1.0)	(1.0)	(0.6)
Number of grants outstanding, end of year	1.9	2.9	2.5

In 2013, pre-tax PSOP compensation recovery was \$6 million (2012 – \$3 million expense, 2011 – \$9 million expense), which is included in operations, maintenance, and administration expense in the Consolidated Statements of Earnings (Loss). In 2013, no common shares (2012 – 55,418 common shares, 2011 – 50,560 common shares) were issued (2012 – \$15.12 per share, 2011 – \$21.15 per share).

### C. Employee Share Purchase Plan

Under the terms of the employee share purchase plan, the Corporation will extend an interest-free loan (up to 30 per cent of an employee's base salary) to employees below executive level and allow for payroll deductions over a three-year period to repay the loan. Executives are not eligible for this program in accordance with the Sarbanes-Oxley legislation. An agent will purchase these common shares on the open market on behalf of employees at prices based on the market price of the shares as determined on the date of purchase. Employee sales of these shares are handled in the same manner. At Dec. 31, 2013, amounts receivable from employees under the plan totalled \$3 million (2012 - \$4 million).

# 35. Employee Future Benefits

### A. Description

The Corporation sponsors registered pension plans in Canada and the U.S. covering substantially all employees of the Corporation in these countries and specific named employees working internationally. The pension plans are administered by TransAlta, the Plan sponsor, through its Pension Committee. These plans have defined benefit and defined contribution options, and in Canada there is an additional supplemental defined benefit plan for certain employees whose annual earnings exceed the Canadian income tax limit. Except for the newly acquired SunHills plans, the Canadian and U.S. defined benefit pension plans are closed to new entrants. The U.S. defined benefit pension plan was frozen effective Dec. 31, 2010, resulting in no future benefits being earned.

The latest actuarial valuations for accounting purposes of the Canadian and U.S. pension plans was at Dec. 31, 2013 and Jan. 1, 2013, respectively. The measurement date used to determine the fair value of plan assets and the present value of the defined benefit obligation was Dec. 31, 2013.

Funding of the registered pension plans complies with applicable regulations that require actuarial valuations of the pension funds at least once every three years in Canada, or more, depending on funding status, and every year in the United States. The last actuarial valuations for funding purposes of the Canadian registered plans were completed in early 2013 with an effective date of Dec. 31, 2012. The last actuarial valuation for funding purposes of the U.S. pension plan was Jan. 1, 2013.

The supplemental pension plan is solely the obligation of the Corporation. The Corporation is not obligated to fund the supplemental plan but is obligated to pay benefits under the terms of the plan as they come due. The Corporation has posted a letter of credit in the amount of \$63 million to secure the obligations under the supplemental plan.

The Corporation provides other health and dental benefits to the age of 65 for both disabled members and retired members through its other post-employment benefits plans. The latest actuarial valuation of the Canadian and U.S. plans was as at Dec. 31, 2013 and Jan. 1, 2013, respectively. The measurement date used to determine the present value of the defined benefit obligation for both plans was Dec. 31, 2013.

Effective Jan. 17, 2013, TransAlta assumed, through SunHills, operations and management control of the Highvale Mine from PMRL. SunHills assumed responsibility for both defined benefit and defined contribution pension plans and the required pension funding obligations (see Note 7).

# B. Costs Recognized

The costs recognized in net earnings during the year on the defined benefit, defined contribution, and other health and dental benefit plans are as follows:

Year ended Dec. 31, 2013	Registered	Supplemental	Other	Total
Current service cost	6	3	2	11
Administration expenses	2	-	-	2
Interest cost on defined benefit obligation	21	3	1	25
Interest on plan assets	(15)	-	-	(15)
Defined benefit expense	14	6	3	23
Defined contribution expense	18	-	-	18
Net expense	32	6	3	41
Year ended Dec. 31, 2012	Registered	Supplemental	Other	Total
Current service cost	2	2	1	5
Administration expenses	2	-	-	2
Interest cost on defined benefit obligation	18	3	2	23
Interest on plan assets	(13)	-	-	(13)
Defined benefit expense	9	5	3	17
Defined contribution expense	20	-	-	20
Net expense	29	5	3	37
Year ended Dec. 31, 2011	Registered	Supplemental	Other	Total
Current service cost	2	2	2	6
Administration expenses	1	-	-	1
Interest cost on defined benefit obligation	19	4	1	24
Interest on plan assets	(15)	-	-	(15)
Past service costs	-	1	-	1
Defined benefit expense	7	7	3	17
Defined contribution expense	19	-	-	19
Net expense	26	7	3	36

# C. Status of Plans

The status of the defined benefit pension and other post-employment benefit plans is as follows:

Registered	Supplemental	Other	Total
394	7	-	401
(517)	(74)	(27)	(618)
(123)	(67)	(27)	(217)
(12)	(4)	(1)	(17)
(111)	(63)	(26)	(200)
(123)	(67)	(27)	(217)
Registered	Supplemental	Other	Total
294	5	-	299
(424)	(77)	(34)	(535)
(130)	(72)	(34)	(236)
(9)	(5)	(2)	(16)
(121)	(67)	(32)	(220)
(130)	(72)	(34)	(236)
	(517) (123) (12) (111) (123)  Registered 294 (424) (130) (9) (121)	394 7 (517) (74) (123) (67)  (12) (4) (111) (63) (123) (67)  Registered Supplemental 294 5 (424) (77) (130) (72)  (9) (5) (121) (67)	394 7 - (517) (74) (27) (123) (67) (27)  (12) (4) (1) (111) (63) (26) (123) (67) (27)  Registered Supplemental Other 294 5 - (424) (77) (34) (130) (72) (34)  (9) (5) (2) (121) (67) (32)

## D. Plan Assets

The fair value of the plan assets of the defined benefit pension and other post-employment benefit plans are as follows:

	Registered	Supplemental	Other	Total
Fair value of plan assets as at Dec. 31, 2011	294	5	-	299
Interest on plan assets	13	-	-	13
Net return on plan assets	11	-	-	11
Contributions	3	6	2	11
Benefits paid	(26)	(6)	(2)	(34)
Administration expenses	(2)	-	-	(2)
Effect of translation on U.S. plans	1	-	-	1
Fair value of plan assets as at Dec. 31, 2012	294	5	-	299
Acquisition of SunHills pension plan	72	-	-	72
Interest on plan assets	15	-	-	15
Net return on plan assets	29	-	-	29
Contributions	18	7	3	28
Benefits paid	(33)	(5)	(3)	(41)
Administration expenses	(2)	-	-	(2)
Effect of translation on U.S. plans	1	-	-	1
Fair value of plan assets as at Dec. 31, 2013	394	7	-	401

The fair value of the Corporation's defined benefit plan assets by major category are as follows:

Year ended Dec. 31, 2013	Level I	Level II	Level III	Total
Equity securities				
Canadian	-	99	-	99
U.S.	-	47	-	47
International	-	70	-	70
Private	-	-	6	6
Bonds				
AAA	-	46	-	46
AA	-	58	-	58
A	-	46	-	46
BBB	-	13	-	13
Below BBB	-	2	-	2
Money market and cash and cash equivalents	14	-	-	14
Total	14	381	6	401

Year ended Dec. 31, 2012	Level I	Level II	Level III	Total
Equity securities				
Canadian	-	66	-	66
U.S.	-	41	-	41
International	-	36	-	36
Private	-	-	6	6
Bonds				
AAA	-	41	-	41
AA	-	48	-	48
A	1	37	-	38
BBB	-	11	-	11
Below BBB	-	2	-	2
Money market and cash and cash equivalents	10	-	-	10
Total	11	282	6	299

Plan assets do not include any common shares of the Corporation at Dec. 31, 2013 and Dec. 31, 2012. The Corporation charged the registered plan \$0.1 million for administrative services provided for the year ended Dec. 31, 2013 (2012 – \$0.1 million).

# E. Defined Benefit Obligation

The present value of the obligation for the defined benefit pension and other post-employment benefit plans is as follows:

	Registered	Supplemental	Other	Total
Present value of defined benefit obligation as at Dec. 31, 2011	396	71	32	499
Current service cost	2	2	1	5
Interest cost	18	3	2	23
Benefits paid	(26)	(6)	(2)	(34)
Actuarial loss arising from financial assumptions	32	8	2	42
Actuarial (gain) loss arising from experience assumptions	3	(1)	(1)	1
Effect of translation on U.S. plans	(1)	-	-	(1)
Present value of defined benefit obligation as at Dec. 31, 2012	424	77	34	535
Acquisition of SunHills pension plan	99	-	-	99
Current service cost	6	3	2	11
Interest cost	21	3	1	25
Benefits paid	(33)	(5)	(3)	(41)
Actuarial loss arising from demographic assumptions	20	3	-	23
Actuarial gain arising from financial assumptions	(28)	(5)	(3)	(36)
Actuarial gain (loss) arising from experience assumptions	6	(2)	(5)	(1)
Effect of translation on U.S. plans	2	-	1	3
Present value of defined benefit obligation as at Dec. 31, 2013	517	74	27	618

The weighted average duration of the defined benefit plan obligation as at Dec. 31, 2013 is 13.2 years.

### F. Contributions

The expected employer contributions for 2014 for the defined benefit pension and other post-employment benefit plans are as follows:

	Registered	Supplemental	Other	Total
Expected employer contributions	12	5	2	19

### G. Assumptions

The significant actuarial assumptions used in measuring the Corporation's defined benefit obligation for the defined benefit pension and other post-employment benefit plans are as follows:

	A	s at Dec. 31, 2013		As at Dec. 31, 2012		
(per cent)	Registered	Supplemental	Other	Registered	Supplemental	Other
Accrued benefit obligation						
Discount rate	4.6	4.5	4.5	4.0	4.0	3.9
Rate of compensation increase	3.0	3.0	-	3.0	3.0	-
Assumed health care cost trend rate						
Health care cost escalation	-	_	<b>7.7</b> <sup>1</sup>	-	-	7.43
Dental care cost escalation	-	_	4.0	-	-	4.0
Provincial health care premium escalation	-	_	5.0	-	-	3.5
Benefit cost for the year						
Discount rate	4.1	4.0	3.9	4.8	4.8	4.8
Rate of compensation increase	3.0	3.0	-	3.0	3.0	-
Assumed health care cost trend rate						
Health care cost escalation	-	_	<b>7.4</b> <sup>2</sup>	-	-	8.03
Dental care cost escalation	-	_	4.0	-	-	4.0
Provincial health care premium escalation	-	_	3.5	-	-	6.0

<sup>1</sup> Post-and pre-65 rates; decreasing gradually to 5 per cent by 2016-2019 and remaining at that level thereafter for the U.S. and decreasing gradually by 0.35 per cent per year to 5 per cent in 2024 for Canada.

### H. Sensitivity Analysis

The following table outlines the estimated increase in the net defined benefit obligation assuming certain changes in key assumptions:

	Canadian plans			U.S. plans	
Year ended Dec. 31, 2013	Registered	Supplemental	Other	Pension	Other
1% increase in the discount rate	64	11	2	3	1
1% increase in the salary scale	7	8	-	-	-
1% increase in the health care cost trend rate	-	-	2	-	1
10% improvement in mortality rates	15	2	-	1	_

<sup>2</sup> Post-and pre-65 rates; decreasing gradually to 5 per cent by 2016-2019 and remaining at that level thereafter for the U.S. and decreasing gradually by 0.5 per cent per year to 5 per cent in 2018 for Canada.

<sup>3</sup> Decreasing gradually to 5 per cent by 2018 for both the U.S. and Canadian plans.

# 36. Joint Arrangements

Joint arrangements at Dec. 31, 2013 included the following:

Joint operations	Ownership (per cent)	Description
Sheerness	50	Coal-fired plant in Alberta, of which TA Cogen has a 50 per cent interest, operated by ATCO Power
Fort Saskatchewan	60	Cogeneration plant in Alberta, of which TA Cogen has a 60 per cent interest, operated by TransAlta
McBride Lake	50	Wind generation facilities in Alberta operated by TransAlta
Goldfields Power	50	Gas-fired plant in Australia operated by TransAlta
Genesee Unit 3	50	Coal-fired plant in Alberta operated by Capital Power Corporation
Keephills Unit 3	50	Coal-fired plant in Alberta operated by TransAlta
Soderglen	50	Wind generation facilities in Alberta operated by TransAlta
Pingston	50	Hydro facility in British Columbia operated by TransAlta
TransAlta MidAmerican Partnership	50	Strategic partnership to develop, build, and operate new natural gas-fuelled electricity generation projects in Canada

	Ownership	
Joint ventures	(per cent)	Description
CE Gen	50	Geothermal and gas plants in the United States operated by CE Gen affiliates
Wailuku	50	A run-of-river generation facility in Hawaii operated by MidAmerican Energy Holdings Company
CalEnergy	50	Strategic partnership to market geothermal capacity
TAMA Transmission LP	50	Strategic partnership to develop and operate transmission projects in Alberta

# 37. Changes in Non-Cash Operating Working Capital

Year ended Dec. 31	2013	2012	2011
(Use) source:			
Accounts receivable	125	(22)	(131)
Prepaid expenses	(7)	3	3
Income taxes receivable	(14)	(10)	13
Inventory	15	(3)	(26)
Accounts payable, accrued liabilities, and provisions	(51)	(8)	15
Income taxes payable	6	(16)	7
Change in non-cash operating working capital	74	(56)	(119)

# 38. Capital

TransAlta's capital is comprised of the following:

As at Dec. 31	2013	2012	Increase/ (decrease)
Current portion of long-term debt	209	607	(398)
Less: available cash and cash equivalents <sup>1</sup>	(42)	(25)	(17)
	167	582	(415)
Long-term debt	4,113	3,610	503
Equity			
Common shares	2,913	2,726	187
Preferred shares	781	781	-
Contributed surplus	9	9	-
Deficit	(735)	(362)	(373)
Accumulated other comprehensive loss	(62)	(136)	74
Non-controlling interests	517	330	187
	7,536	6,958	578
Total capital	7,703	7,540	163

<sup>1</sup> The Corporation includes available cash and cash equivalents as a reduction in the calculation of capital as capital is managed internally and evaluated by management using a net debt position. In this regard, these funds may be available, and used to facilitate repayment of debt.

Changes in the balances of the components of capital are as follows:

**Long-term debt (including current portion)** increased primarily due to unfavourable changes in foreign exchange rates (see Note 29).

**Common shares** increased in 2013 as a result of the issuance of 13.5 million shares for \$186 million under the dividend reinvestment and share purchase plan (see Note 31).

**AOCI** increased in 2013 primarily due to the recognition of gains on derivatives designated as hedging instruments and net actuarial gains on defined benefit plans (see Note 33).

Non-controlling interests increased primarily due to the formation of TransAlta Renewables (see Note 4).

TransAlta's overall capital management strategy and its objectives in managing capital have remained unchanged from Dec. 31, 2012 and are as follows:

## A. Maintain an Investment Grade Credit Rating

The Corporation operates in a long-cycle and capital-intensive commodity business, and it is therefore a priority to maintain an investment grade credit rating as it allows the Corporation to access capital markets at reasonable interest rates. TransAlta monitors key credit ratios similar to those used by key rating agencies. While these ratios are not publicly available from credit agencies, TransAlta's management has defined these ratios and seeks to manage the Corporation's capital in line with the following targets:

As at Dec. 31	2013	2012	Target
Adjusted cash flow to interest coverage (times) <sup>1,2</sup>	4.0	4.4	4 to 5
Adjusted cash flow to debt (%) <sup>1,2</sup>	16.9	19.0	20 to 25
Debt to comparable earnings before interest, taxes, depreciation, and amortization (times)	4.2	4.1	4 to 5

<sup>1</sup> Last 12 months.

Adjusted cash flow to interest coverage is calculated as cash flow from operating activities before changes in working capital plus net interest expense divided by interest on debt less interest income. Adjusted cash flow to interest coverage decreased in 2013 compared to 2012 primarily due to higher interest on debt. The Corporation's goal is to maintain this ratio in a range of four to five times.

<sup>2</sup> Adjusted for the impacts associated with the California claim in 2013 and the Sundance Units 1 and 2 arbitration in 2012.

**Adjusted cash flow to debt** is calculated as cash flow from operating activities before changes in working capital divided by average total debt less average cash and cash equivalents. Adjusted cash flow to debt decreased in 2013 compared to 2012 due to higher average debt levels in 2013. The Corporation's goal is to maintain this ratio in a range of 20 to 25 per cent.

**Debt to comparable earnings before interest, taxes, depreciation, and amortization ("EBITDA")** is calculated as net debt (current and long-term debt less available cash and cash equivalents) divided by comparable EBITDA. Comparable EBITDA is calculated as earnings before interest, taxes, depreciation, and amortization and is adjusted for transactions and amounts that the Corporation believes are not representative of business operations. The Corporation's goal is to maintain this ratio in a range of four to five times.

At times, and over a short-term period, the credit ratios may be outside of the specified target ranges while the Corporation realigns the capital structure. During 2013, the Corporation took several steps to strengthen its financial position and reduce debt, using the approximate \$221 million in gross proceeds from the initial public offering of TransAlta Renewables (see Note 4) to pay down debt, and utilizing the proceeds from dividends reinvested under the DRASP plan as a continued source of equity. Participation in the dividend reinvestment plan during the fourth quarter of 2013 was approximately 30 to 35 per cent.

TransAlta routinely monitors forecasted net earnings, cash flows, capital expenditures, and scheduled repayment of debt with a goal of meeting the above ratio targets and to meet dividend and property, plant, and equipment expenditure requirements.

## B. Ensure Sufficient Cash and Credit is Available to Fund Operations, Pay Dividends, and Invest in Property, Plant, and Equipment

For the year ended Dec. 31, 2013 and 2012, net cash outflows, after cash dividends and property, plant, and equipment additions, are summarized below:

Year ended Dec. 31	2013	2012	Increase (decrease)
Cash flow from operating activities	765	520	245
Dividends paid on common shares	(116)	(104)	(12)
Property, plant, and equipment expenditures	(561)	(703)	142
Acquisition of Wyoming Wind farm (Note 8)	(109)	-	(109)
Acquisition of finance lease	-	(312)	312
Inflow (outflow)	(21)	(599)	578

TransAlta maintains sufficient cash balances and committed credit facilities to fund periodic net cash outflows related to its business. At Dec. 31, 2013, \$0.9 billion (2012 - \$0.9 billion) of the Corporation's available credit facilities were not drawn.

Periodically, TransAlta accesses capital markets, as required, to help fund some of these periodic net cash outflows, to maintain its available liquidity, and to maintain its capital structure and credit metrics within targeted ranges.

During 2013, the Corporation issued \$400 million of senior unsecured medium-term notes that carry a coupon rate of 5.00 per cent, payable semi-annually, at an issue price equal to 99.516 per cent of the principal amount of the notes.

During 2013, the Corporation's U.S.\$300 million 5.75 per cent senior notes matured and were paid out.

During 2012, the Corporation issued 31.1 million common shares for total gross proceeds of \$456 million. The Corporation also issued 9 million Series E Preferred Shares for total gross proceeds of \$225 million.

During 2012, the Corporation's U.S.\$300 million 6.75 per cent senior notes matured and were paid out. In addition, during 2012, the Corporation issued senior notes in the amount of U.S.\$400 million, bearing interest at a rate of 4.5 per cent and maturing in 2022.

Dividends on the Corporation's common shares are at the discretion of the Board of Directors. In determining the payment and level of future dividends, the Board of Directors considers the Corporation's financial performance, its results of operations, cash flow and needs with respect to financing ongoing operations and growth, balanced against returning capital to shareholders.

## 39. Related Party Transactions

Details of the Corporation's principal operating subsidiaries are as follows:

		Ownership	
Subsidiary	Country	(per cent)	Principal activity
TransAlta Generation Partnership	Canada	100	Generation and sale of electricity
TransAlta Cogeneration, L.P.	Canada	50.01	Generation and sale of electricity
TransAlta Centralia Generation, LLC	U.S.	100	Generation and sale of electricity
TransAlta Energy Marketing Corp.	Canada	100	Energy trading
TransAlta Energy Marketing (U.S.), Inc.	U.S.	100	Energy trading
TransAlta Energy (Australia), Pty Ltd.	Australia	100	Generation and sale of electricity
TransAlta Renewables Inc.	Canada	80.7	Generation and sale of electricity

Transactions between the Corporation and its subsidiaries have been eliminated on consolidation and are not disclosed.

### **Transactions with Key Management Personnel**

TransAlta's key management personnel include the President and CEO, the Chief Officers, the Executive Vice Presidents, and the President – U.S. Operations, all who report directly to the President and CEO, and the Board of Directors. Key management personnel compensation is as follows:

Year ended Dec. 31	2013	2012	2011
Total compensation	15	12	12
Comprised of:			
Short-term employee benefits	7	8	6
Post-employment benefits	2	1	1
Other long-term benefits	1	1	1
Termination benefits	2	-	-
Share-based payment	3	2	4

## 40. Commitments

In addition to commitments disclosed elsewhere in the financial statements, the Corporation has entered into a number of fixed purchase and transportation contracts, transmission and electricity purchase agreements, coal supply and mining agreements, long-term service agreements, and agreements related to growth and major projects either directly or through its interests in joint ventures. Approximate future payments under these agreements are as follows:

	Natural gas, transportation, and other purchase contracts	Transmission and power purchase agreements	Coal supply and mining agreements	Long-term service agreements	Total
2014	39	11	172	42	264
2015	14	12	123	26	175
2016	13	9	126	25	173
2017	13	3	41	20	77
2018	12	3	41	27	83
2019 and thereafter	103	6	501	174	784
Total	194	44	1,004	314	1,556

## A. Natural Gas, Transportation, and Other Purchase Contracts

Several of the Corporation's plants have fixed price natural gas purchase and related transportation contracts in place. Other fixed price purchase contracts relate to commitments for services at certain facilities.

#### B. Transmission and Power Purchase Agreements

TransAlta has several agreements to purchase 400 MW of Pacific Northwest transmission network capacity. Provided certain conditions for delivering the service are met, the Corporation is committed to the transmission at the supplier's tariff rate whether it is awarded immediately or delivered in the future after additional facilities are constructed.

#### C. Coal Supply and Mining Agreements

Centralia Thermal has various coal supply and associated rail transport contracts to provide coal for use in production. The coal supply agreements allow TransAlta to take delivery of coal at fixed volumes and prices, with dates extending to 2025.

Commitments related to mining agreements include the Corporation's share of commitments for mining agreements related to its Sheerness and Genesee Unit 3 joint operations.

#### D. Long-Term Service Agreements

TransAlta has various service agreements in place, primarily for repairs and maintenance that may be required on turbines at various wind facilities as well as an agreement, entered into in 2013, for inspections and parts replacement at two natural gas facilities.

### E. TransAlta Energy Bill Commitments

As part of the Bill and Memorandum of Agreement ("MoA") signed into law in the State of Washington, the Corporation has committed to fund \$55 million over the life of the Centralia coal plant to support economic development, promote energy efficiency, and develop energy technologies related to the improvement of the environment. The MoA contains certain provisions for termination and in the event of the termination of the MoA this funding will no longer be required.

#### F. Other

A significant portion of the Corporation's electricity and thermal production are subject to PPAs and long-term contracts. The majority of these contracts include terms and conditions customary to the industry in which the Corporation operates. The nature of commitments related to these contracts includes: electricity and thermal capacity, availability, and production targets; reliability and other plant-specific performance measures; specified payments for deliveries during peak and off-peak time periods; specified prices per MWh; risk sharing of fuel costs; and retention of heat rate risk.

## 41. Contingencies

TransAlta is occasionally named as a party in various claims and legal proceedings that arise during the normal course of its business. TransAlta reviews each of these claims, including the nature of the claim, the amount in dispute or claimed, and the availability of insurance coverage. There can be no assurance that any particular claim will be resolved in the Corporation's favour or that such claims may not have a material adverse effect on TransAlta.

## 42. Segment Disclosures

### A. Description of Reportable Segments

The Corporation has three reportable segments as described in Note 1.

Each segment assumes responsibility for its operating results to operating income (loss). Generation expenses include Energy Trading's intersegment charge for energy marketing. Energy Trading's operating expenses are presented net of these intersegment charges.

The accounting policies of the segments are the same as those described in Note 2. Intersegment transactions are accounted for on a cost-recovery basis that approximates market rates.

### B. Reported Segment Earnings and Segment Assets

#### I. Earnings Information

Year ended Dec. 31, 2013	Generation	<b>Energy Trading</b>	Corporate	Total
Revenues	2,213	79	-	2,292
Fuel and purchased power	926	-	-	926
Gross margin	1,287	79	-	1,366
Operations, maintenance, and administration	418	32	66	516
Depreciation and amortization	501	1	23	525
Asset impairment charges (reversals)	(18)	-	-	(18)
Inventory writedown	22	-	-	22
Restructuring provision	(2)	-	(1)	(3)
Taxes, other than income taxes	26	-	1	27
Intersegment cost allocation	14	(14)	-	-
Operating income (loss)	326	60	(89)	297
Finance lease income	46	-	-	46
Equity loss	(10)	-	-	(10)
California claim	-	(56)	-	(56)
Sundance Units 1 and 2 return to service	(25)	-	-	(25)
Gain on sale of assets	-	-	12	12
Insurance recovery	8	-	-	8
Foreign exchange gain				1
Loss on assumption of pension obligations				(29)
Net interest expense				(256)
Loss before income taxes				(12)

rading	Corporate	Total
3	-	2,210
-	-	753
3	-	1,457
29	82	499
-	20	509
-	-	324
-	-	44
-	8	13
-	1	28
(13)	-	-
(13)	(111)	40
-	-	16
-	-	(15)
-	-	(254)
-	-	3
15	-	15
		1
		(9)
		(242)
		(445)

 $<sup>^{\</sup>star}$  See Note 3 for prior period restatements.

Year ended Dec. 31, 2011 (Restated)*	Generation	Energy Trading	Corporate	Total
Revenues	2,481	137	-	2,618
Fuel and purchased power	895	-	-	895
Gross margin	1,586	137	-	1,723
Operations, maintenance, and administration	424	44	84	552
Depreciation and amortization	460	1	21	482
Asset impairment charges	17	-	-	17
Taxes, other than income taxes	27	-	-	27
Intersegment cost allocation	8	(8)	-	-
Operating income (loss)	650	100	(105)	645
Finance lease income	8	-	-	8
Equity gain	14	-	-	14
Gain on sale of assets	16	-	-	16
Reserve on collateral	-	(18)	-	(18)
Other income				2
Foreign exchange loss				(3)
Net interest expense				(215)
Earnings before income taxes				449

 $<sup>^{\</sup>star}$  See Note 3 for prior period restatements.

Included in the Generation Segment results is \$22 million (2012 - \$23 million, 2011 - \$24 million) of incentives received under a Government of Canada program in respect of power generation from qualifying wind and hydro projects.

#### II. Selected Consolidated Statements of Financial Position Information

As at Dec. 31, 2013	Generation <sup>1</sup>	<b>Energy Trading</b>	Corporate	Total
Goodwill (Note 25)	430	30	-	460
Total segment assets	9,252	244	287	9,783

1 Total Generation Segment assets include \$192 million related to investments in joint arrangements accounted for by the equity method.

As at Dec. 31, 2012	Generation <sup>2</sup>	<b>Energy Trading</b>	Corporate	Total
Goodwill (Note 25)	417	30	-	447
Total segment assets	8,994	262	247	9,503

<sup>2</sup> Total Generation Segment assets include \$172 million related to investments in joint arrangements accounted for by the equity method.

## III. Selected Consolidated Statements of Cash Flows Information

Year ended Dec. 31, 2013	Generation	Energy Trading Corporate		Total
Additions to non-current assets:				
Property, plant, and equipment	554	-	7	561
Intangible assets	5	6	21	32
Year ended Dec. 31, 2012	Generation	Energy Trading	Corporate	Total
Additions to non-current assets:				
Property, plant, and equipment	684	-	19	703
Intangible assets	7	1	31	39
Year ended Dec. 31, 2011	Generation	Energy Trading	Corporate	Total
Additions to non-current assets:				
Property, plant, and equipment	445	-	8	453
Intangible assets	7	1	22	30

#### IV. Depreciation and Amortization on the Consolidated Statements of Cash Flows

The reconciliation between depreciation and amortization reported on the Consolidated Statements of Earnings (Loss) and the Consolidated Statements of Cash Flows is presented below:

Year ended Dec. 31	2013	2012	2011
Depreciation and amortization expense on the Consolidated Statements of Earnings	525	509	482
Depreciation included in fuel and purchased power (Note 11)	58	41	40
Gain on disposal of property, plant, and equipment	2	14	10
Depreciation and amortization on the Consolidated Statements of Cash Flows	585	564	532

## C. Geographic Information

#### I. Revenues

Year ended Dec. 31	2013	2012	2011
Canada	1,898	1,789	1,826
U.S.	287	300	674
Australia	107	121	118
Total revenue	2,292	2,210	2,618

### II. Non-Current Assets

	Property,	plant, and							
	equipment			ole assets	Othe	er assets	Goodwill		
As at Dec. 31	2013	<b>2013</b> 2012		2012	2013	2012	2013	2012	
Canada	6,538	6,437	295	276	57	59	417	417	
U.S.	517	443	24	4	21	8	43	30	
Australia	138	164	4	4	19	23	-	-	
Total	7,193	7,044	323	284	97	90	460	447	

## 43. Subsequent Events

#### A. Sale of CE Gen, Blackrock Development Project, and Wailuku

On Feb. 20, 2014, TransAlta announced an agreement to sell the Corporation's 50 per cent ownership of CE Gen, the Blackrock development project ("Blackrock"), and Wailuku to MidAmerican Renewables for proceeds of U.S.\$193.5 million. MidAmerican Renewables holds the other 50 per cent interest in CE Gen, Blackrock, and Wailuku.

#### B. Dividend

On Feb. 20, 2014, the Corporation announced the resizing of its dividend to a quarterly dividend of \$0.18 per common share (or \$0.72 per common share on an annualized basis) to align with our growth and financial objectives.

## C. Sundance Unit 6 Agreement

On Feb. 19, 2014, TransAlta reached an agreement with the PPA Buyer related to the dispute on Sundance Unit 6. The Corporation does not expect any material impact to the financial statements as a result of the agreement.

#### D. Keephills Unit 2

On Jan. 31, 2014, an outage has commenced on Unit 2 of the Corporation's Keephills facility to perform a rewind of the generator stator as a result of the generator event in 2013 at Keephills Unit 1. The Corporation gave notice of a High Impact Low Probability event and claimed force majeure relief under the PPA.

#### E. Fort McMurray Transmission Project

On Jan. 17, 2014, the Corporation announced that the strategic partnership with MidAmerican Transmission, TAMA Transmission, which was formed on May 9, 2013, successfully qualified to participate as a proponent in the Fort McMurray West 500 kilovolt Transmission Project. The Alberta Electric System Operator announced its selection of a short-list of companies, identifying that TAMA Transmission will participate in the next stage of its competitive process for the project.

### F. Australia Natural Gas Pipeline

On Jan. 15, 2014, the Corporation announced that, through a wholly owned subsidiary, an unincorporated joint venture named Fortescue River Gas Pipeline was formed, of which the Corporation has a 43 per cent interest. The first project of the new joint venture will be to build, own, and operate a \$178 million natural gas pipeline from the Dampier to Bunbury Natural Gas Pipeline to the Corporation's Solomon power station.

## Eleven-Year Financial and Statistical Summary

(in millions of Canadian dollars, except where noted)

Year ended Dec. 31	2013	2012	2011	
Financial Summary				
Statement of Earnings				
Revenues	2,292	2,210	2,618	
Operating income	297	40	645	
Net earnings (loss) attributable to common shareholders	(71)	(615)	290	
Statement of Financial Position		(0.0)		
Total assets	9,783	9,503	9,780	
Current portion of long-term debt, net of cash and cash equivalents	167	582	284	
Long-term debt	4,113	3,610	3,721	
Non-controlling interests	517	330	358	
Preferred securities	517	550	-	
Equity attributable to shareholders	2,906	3,018	3,274	
Total invested capital	7,703	7,540	7,637	
Cash Flows	7,703	7,540	7,037	
	765	F20	600	
Cash flow from operating activities	765	520	690	
Cash flow used in investing activities	(703)	(1,048)	(608)	
Common Share Information (per share)	(0.07)	(0.40)	4.04	
Net earnings (loss)	(0.27)	(2.62)	1.31	
Comparable earnings <sup>1</sup>	0.31	0.50	1.05	
Dividends paid on common shares	1.16	1.16	1.16	
Book value (at year-end)	7.92	10.00	12.08	
Market price:	44.04	04.07	00.04	
High	16.86	21.37	23.24	
Low	12.91	14.11	19.45	
Close (Toronto Stock Exchange at Dec. 31)	13.48	15.12	21.02	
Ratios (percentage except where noted)				
Debt to invested capital	55.6	55.6	52.5	
Debt to invested capital excluding non-recourse debt	53.3	53.3	50.0	
Debt to invested capital including finance lease obligation and non-recourse debt	55.7	55.6	-	
Debt to comparable EBITDA (times) <sup>1</sup>	4.2	4.1	3.8	
Return on equity attributable to common shareholders	(3.1)	(23.7)	10.6	
Comparable return on equity attributable to common shareholders <sup>1</sup>	3.6	4.5	8.4	
Return on capital employed	2.8	(3.1)	8.3	
Comparable return on capital employed <sup>1</sup>	5.2	5.3	7.0	
Price to comparable earnings	43.5	30.2	20.2	
Earnings coverage (times)	0.9	(1.1)	2.7	
Dividend payout ratio based on net earnings	(431.0)	(44.1)	66.9	
Dividend payout ratio based on comparable earnings <sup>1</sup>	377.8	231.6	84.3	
Dividend payout ratio based on funds from operations <sup>1,2</sup>	42.0	34.4	24.0	
Comparable EBITDA (in millions of Canadian dollars) <sup>1</sup>	1,023	1,015	1,044	
Dividend coverage (times)	6.5	6.7	3.5	
Dividend yield	8.6	7.7	5.5	
Adjusted cash flow to debt <sup>2</sup>	16.9	19.0	20.1	
Adjusted cash flow to interest coverage (times) <sup>2</sup>	4.0	4.4	4.4	
Weighted average common shares for the year (in millions)	264	235	222	
Common shares outstanding at Dec. 31 (in millions)	268	255	224	
Statistical Summary				
Number of employees	2,772	2,084	2,235	
Generating Capacity (net MW) <sup>3</sup>				
Coal	4,916	4,352	4,325	
Gas	1,532	1,532	1,532	
Renewables	1,970	1,974	1,974	
Finance lease	35	35	35	
Equity investments	396	390	390	
Total generating capacity	8,849	8,283	8,256	
Total generating capacity  Total generation production (GWh)	42,482	38,750	41,012	
iotal generation production (GWII)	44,404	30,/30	41,012	

Financial data presented is based on IFRS. Financial data for 2009 and prior is based on Canadian GAAP. Prior year figures that appear within the MD&A have been restated to conform with the current year's presentation. All other prior year figures have not been restated.

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Debt to invested capital = long-term debt including current portion – cash and cash equivalents / long-term debt including current portion + non-controlling interests + equity attributable to shareholders – cash and cash equivalents

Debt to comparable EBITDA = long-term debt including current portion - cash and cash equivalents / comparable EBITDA

Return on equity attributable to common shareholders = net earnings attributable to common shareholders excluding gain on discontinued operations or earnings on a comparable basis / average equity attributable to common shareholders excluding Accumulated Other Comprehensive Income ("AOCI")

These ratios were calculated using non-IFRS measures. Periods for which the non-IFRS measure was not previously disclosed have not been calculated.
 2013 has been adjusted for the impacts associated with the California claim. 2012 has been

adjusted for the impacts associated with Sundance Units 1 and 2 arbitration.

Represents TransAlta's ownership.

2010	2009	2008	2007	2006	2005	2004	2003
2,673	2,770	3,110	2,775	2,677	2,664	2,838	2,509
487	378	533	541	157	421	478	554
255	181	235	309	45	199	170	234
9,635	9,762	7,815	7,157	7,460	7,741	8,133	8,420
202	(51)	194	600	296	(66)	(103)	(35)
3,823	4,411	2,564	1,837	2,221	2,605	3,058	3,162
431	478	469	496	535	559	616	478
-	-	-	-	175	175	175	451
3,120	2,929	2,510	2,299	2,428	2,543	2,473	2,460
7,576	7,767	5,737	5,232	5,655	5,756	6,061	6,516
838	580	1,038	847	490	619	613	757
(765)	(1,598)	(581)	(410)	(261)	(242)	(65)	(535)
		, , , , , , , , , , , , , , , , , , ,		X - 7			
1.16	0.90	1.18	1.53	0.22	1.01	0.88	1.26
0.97	0.90	1.46	1.31	1.16	0.88	0.70	0.69
1.16	1.16	1.08	1.00	1.00	1.00	1.00	1.00
12.85	13.41	12.70	11.39	11.99	12.80	12.74	12.90
23.98	25.30	37.50	34.00	26.91	26.66	18.75	19.55
19.61	18.11	21.00	23.79	20.22	17.67	15.25	15.36
 21.15	23.48	24.30	33.35	26.64	25.41	18.05	18.53
53.1	56.1	48.1	46.8	44.5	43.9	47.4	47.9
50.7	52.6	45.6	44.0	41.0	39.9	42.5	42.9
-	-	-	-	-	-	-	-
-	-	-	-	-	_	-	_
9.6	6.9	9.4	13.1	1.8	7.0	6.5	10.3
8.0	6.9	11.6	10.5	9.2	6.8	5.1	5.6
6.6	5.7	7.7	9.8	2.4	7.1	7.5	9.1
6.0	5.8	9.6	9.7	9.0	7.4	-	-
21.8	26.1	20.6	21.8	121.1	26.7	21.7	14.7
2.2	1.9	2.8	3.3	0.5	2.3	1.9	2.0
125.1	129.8	91.5	65.6	447.7	113.0	120.0	79.0
149.8	129.8	74.1	76.4	86.0	113.3	150.4	143.7
39.6	-	-	-	-	-	-	-
955	888	1,006	980	-	-	-	-
4.0	2.6	4.8	4.2	2.4	3.1	3.2	4.1
5.5	4.9	4.4	3.0	3.8	3.9	5.5	5.4
19.6	20.5	31.7	30.7	26.2	23.0	18.5	17.9
4.6	4.9	7.2	6.6	5.5	4.7	4.1	3.3
219	201	199	202	201	197	193	185
220	218	198	201	202	199	194	191
2,389	2,343	2,200	2,201	2,687	2,657	2,505	2,563
2,307	2,545	2,200	2,201	2,007	2,031	2,303	2,303
4,688	4,967	4,942	4,942	4,887	4,885	4,778	4,777
1,613	1,843	1,913	1,960	1,953	1,933	2,444	2,499
1,950	1,965	1,218	1,122	1,122	1,117	1,115	1,046
35	-	-	-	-	-	-	-
390		_				-	-
8,676	8,775	8,073	8,024	7,962	7,935	8,337	8,322
48,614	45,736	48,891	50,395	48,213	51,810	54,560	53,134
-				0.1			

Earnings coverage = net earnings attributable to shareholders + income taxes + net interest Price to comparable earnings ratio = current year's close price / comparable earnings per share expense / interest income

Return on capital employed = earnings before non-controlling interests and income taxes + net interest expense or comparable earnings before non-controlling interests and income taxes + net interest expense / average annual invested capital excluding AOCI

Dividend yield = dividend per common share / current year's close price

Dividend payout ratio = common share dividends  $\prime$  net earnings attributable to common shareholders excluding gain on discontinued operations or earnings on a comparable basis or funds from operations

Adjusted cash flow to interest coverage = cash flow from operating activities before changes in working capital + interest on debt - interest income - capitalized interest / interest on debt

Dividend coverage = cash flow from operating activities / cash dividends paid on common shares

Adjusted cash flow to debt = cash flow from operating activities before changes in working capital / two-year average of total debt - average cash and cash equivalents

Comparable EBITDA = operating income + depreciation and amortization per the Consolidated Statements of Cash Flows +/- non-comparable items

## Shareholder Information

## **Annual and Special Meeting**

The Annual and Special Meeting of Shareholders will be held at 11:00 a.m. MST, on Tuesday, April 29, 2014 at the Metropolitan Conference Centre 333 4th Avenue S.W., Calgary, Alberta.

#### **Transfer Agent**

CST Trust Company\*
P.O. Box 700 Station "B"
Montreal, Quebec H3B 3K3

#### Phone

North America: 1.800.387.0825 toll-free Toronto/outside North America: 416.682.3860

#### E-mail

inquiries@canstockta.com

#### Fax

514.985.8843

#### Website

www.canstockta.com

### Exchanges

Toronto Stock Exchange (TSX) New York Stock Exchange (NYSE)

#### **Ticker Symbols**

TransAlta Corporation common shares:

TSX: TA, NYSE: TAC

TransAlta Corporation preferred shares:

TSX: TA.PR.D, TA.PR.F, TA.PR.H

## Special Services for Registered Shareholders Service Description

Service	Description					
Dividend reinvestment and optional share purchase plan <sup>1</sup>	Conveniently reinvest your TransAlta dividends and purchase common shares without brokerage costs					
Direct deposit for dividend payments	Automatically have dividend payments deposited to your bank account					
Account consolidations	Eliminate costly duplicate mailings by consolidating account registrations					
Address changes and share transfers	Receive tax slips and dividends without the delays resulting from address and ownership changes					

To use these services please contact our transfer agent.

### Stock Splits and Share Consolidations

Date	Events
May 8, 1980	Stock split
Feb. 1, 1988	Stock split <sup>2</sup>
Dec. 31, 1992	Reorganization – TransAlta Utilities shares exchanged for TransAlta Corporation shares <sup>3</sup> 1:1

The valuation date value of common shares owned on Dec. 31, 1971, adjusted for stock splits, is \$4.54 per share.

- 2 The adjusted cost base for shares held on Jan. 31, 1988, was reduced by \$0.75 per share following the Feb. 1, 1988 share split.
- 3 TransAlta Utilities Corporation became a wholly owned subsidiary of TransAlta Corporation as a result of this reorganization.

#### **Dividend Declaration for Common Shares**

Dividends are paid quarterly as determined by the Board. Dividends on our common shares are at the discretion of the Board. In determining the payment and level of future dividends, the Board considers our financial performance, our results of operations, cash flow and needs, with respect to financing our ongoing operations and growth, balanced against returning capital to shareholders. The Board continues to focus on building sustainable earnings and cash flow growth. The Board continues to focus on building sustainable earnings and cash flow growth.

#### Common Share Dividends Declared

Payment Date	Record Date	<b>Ex-Dividend Date</b>	Dividend
Jan. 1, 2013	Nov. 30, 2012	Nov. 28, 2012	\$0.29
April 1, 2013	March 1, 2012	Feb. 27 2012	\$0.29
July 1, 2013	May 31, 2013	May 29, 2013	\$0.29
Oct. 1, 2013	Aug. 30, 2013	Aug. 28, 2013	\$0.29
Jan. 1, 2014	Nov. 29, 2013	Nov. 27, 2013 <sup>4</sup> Nov. 26, 2013 <sup>4</sup>	\$0.29

Dividends are paid on the first of the month in January, April, July and October. When a dividend payment date falls on a weekend or holiday, the payment is made on the following business day. Only dividend payments that have been approved by the Board of Directors are included in this table.

4 The dividend payment has two Ex-Dividend dates due to the American Thanksgiving holiday. The Toronto Stock Exchange (TA) Ex-Dividend date is Nov. 27, 2013. The New York Stock Exchange (TAC) Ex-Dividend date is Nov. 26, 2013.

<sup>1</sup> Also available to non-registered shareholders.

<sup>\*</sup> CST Trust Company has succeeded CIBC Mellon Trust Company as our transfer agent. On Nov. 1, 2010, CIBC Mellon Trust Company sold its issuer services business to Canadian Stock Transfer Company Inc., which operated the business on their behalf until Aug. 30, 2013, at which time CST Trust Company an affiliate of Canadian Stock Transfer Company Inc., received federal approval to commence business.

#### **Dividend Declaration for Preferred Shares**

**Series A:** Fixed cumulative preferential cash dividends are paid quarterly when declared by the Board at the annual rate of \$1.15 per share from the date of issue Dec. 10, 2010 to but excluding March 31, 2016.

**Series C:** Fixed cumulative preferential cash dividends are paid quarterly when declared by the Board at the annual rate of \$1.15 per share from the date of issue Nov. 29, 2011 to but excluding June 30, 2017.

**Series E:** Fixed cumulative preferential cash dividends are paid quarterly when declared by the Board at the annual rate of \$1.25 per share from the date of issue Aug. 10, 2012 to but excluding Sept. 30, 2017.

### Preferred Share Dividend Declared

#### Series A

Payment Date	Record Date	<b>Ex-Dividend Date</b>	Dividend
Dec. 31, 2012	Nov. 30, 2012	Nov. 28, 2012	\$0.2875
March 31, 2013	March 1, 2013	Feb. 27, 2013	\$0.2875
June 30, 2013	May 31, 2013	May 29, 2013	\$0.2875
Sept. 30, 2013	Aug. 30, 2013	Aug. 28, 2013	\$0.2875
Dec. 31, 2013	Nov. 29, 2013	Nov. 27, 2013	\$0.2875

#### Series C

Payment Date	Record Date	Ex-Dividend Date	Dividend
Dec. 31, 2012	Nov. 30, 2012	Nov. 28, 2012	\$0.2875
March 31, 2013	March 1, 2013	Feb. 27, 2013	\$0.2875
June 30, 2013	May 31, 2013	May 29, 2013	\$0.2875
Sept. 30, 2013	Aug. 30, 2013	Aug. 28, 2013	\$0.2875
Dec. 31, 2013	Nov. 29, 2013	Nov. 27, 2013	\$0.2875

#### Series E

Payment Date	Record Date	Ex-Dividend Date	Dividend
Dec. 31, 2012	Nov. 30, 2012	Nov. 28, 2012	\$0.48975
March 31, 2013	March 1, 2013	Feb. 27, 2013	\$0.3125
June 30, 2013	May 31, 2013	May 29, 2013	\$0.3125
Sept. 30, 2013	Aug. 30, 2013	Aug. 28, 2013	\$0.3125
Dec. 31, 2013	Nov. 29, 2013	Nov. 27, 2013	\$0.3125

Dividends are paid on the last day of the month in March, June, September, and December. When a dividend payment date falls on a weekend or holiday, the payment is made on the following business day. Only dividend payments that have been approved by the Board of Directors are included in this table.

# Submission of Concerns Regarding Accounting or Auditing Matters

TransAlta has adopted a procedure for employees, shareholders or others to report concerns or complaints regarding accounting or other matters on an anonymous, confidential basis to the Audit and Risk Committee of the Board of Directors. Such submissions may be directed to the Audit and Risk Committee c/o the Vice-President and Corporate Secretary of the Corporation.

### **Voting Rights**

Common shareholders receive one vote for each common share held.

#### **Additional Information**

Requests can be directed to:

## Investor Relations TransAlta Corporation

P.O. Box 1900, Station "M" 110 - 12th Avenue S.W. Calgary, Alberta T2P 2M1

#### Phone

North America: 1.800.387.3598 toll-free 403.267.2520 Calgary/outside North America

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#### Fax

403.267.7405

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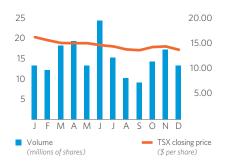
www.transalta.com

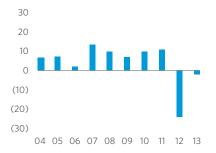
<sup>5</sup> The first quarterly dividend payable is based on a longer period, starting from the issue date of Aug. 10, 2012 to Dec. 31, 2012.

## Shareholder Highlights









## Total Shareholder Return vs. S&P/TSX Composite Index

Year ended Dec. 31 (\$)

	04	05	06	07	08	09	10	11	12	13
TransAlta	100	177	193	251	189	193	183	193	148	144
TSX/S&P Composite	100	170	195	209	136	178	203	181	186	205

This chart compares what \$100 invested in TransAlta and the S&P/TSX Composite at the end of 2004 would be worth today, assuming the reinvestment of all dividends.

Source: Thompson Financial

## Ten-Year Trading Range and Market Value vs. Book Value

Year ended Dec. 31 (\$ per share)

	04	05	06	07	08	09	10	11	12	13
Market Value	18.05	25.41	26.64	33.35	24.30	23.48	21.15	21.02	15.12	13.48
Book Value	12.74	12.80	11.99	11.39	12.70	13.41	12.85	12.08	10.00	8.00

Amounts presented or included in calculations prior to 2010 represent Canadian Generally Accepted Accounting Principles (GAAP) figures and have not been restated under International Financial Reporting Standards (IFRS).

Source: Thompson Financial and TransAlta (MD&A)

## Monthly Volume and Market Prices (2013)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Volume (millions)	13	12	18	19	13	24	15	10	9	14	17	13
TSX closing price	16.04	15 40	14 85	14 81	14 81	14 41	14 15	13 54	13 38	14 03	14 15	13 48

Source: Thompson Financial

## Return on Common Shareholders' Equity

	04	05	06	07	08	09	10	11	12	13
ROE	6.5	7.0	1.8	13.1	9.4	6.9	9.6	10.6	(23.7)	(1.7)

Amounts presented or included in calculations prior to 2010 represent GAAP figures and have not been restated under IFRS.

Source: TransAlta (MD&A)

## **Corporate Information**

## Corporate Governance: New York Stock Exchange Disclosure Differences

TransAlta's Corporate Governance Guidelines, Board Charter, Committee Charters, position descriptions for the Chair, Committee Chair, President & CEO, and codes of business conduct and ethics are available on our website at www.transalta.com. Also available on our website is a summary of the significant ways in which TransAlta's corporate governance practices differ from those required to be followed by U.S. domestic companies under the New York Stock Exchange's listing standards. Currently there are no differences between our governance practices and those of the New York Stock Exchange.

#### **Ethics Help-Line**

The Audit and Risk Committee of the Board of Directors has established an anonymous and confidential toll-free telephone number, fax line and e-mail address for employees, contractors, shareholders and other stakeholders to call with respect to accounting irregularities, ethical violations, or any other matters they wish to bring to the attention of the Board.

The Ethics Help-Line number is 1.888.806.6646

Fax: 403.267.7985

E-mail: ethics\_helpline@transalta.com

Any communications to the Board of Directors may also be sent to **corporate\_secretary@transalta.com** 

### TransAlta Corporate Officers

#### Dawn L. Farrell

President and Chief Executive Officer

#### Paul H.E. Taylor

President, U.S. Operations and Executive Vice-President, Canadian Coal

#### John H. Kousinioris

Chief Legal and Compliance Officer

#### Brett M. Gellner

Chief Financial Officer and Chief Investment Officer

#### Dawn de Lima

Chief Human Resources and Communications Officer

#### Robert L. Schaefer

Executive Vice-President, Trading and Marketing

#### **Cynthia Johnston**

Executive Vice-President, Corporate Services, TransAlta; President, TAMA Transmission

#### Robert (Bob) Emmott

Chief Engineer

#### David J. Koch

Vice-President, Controller

#### Maryse C.C. St.-Laurent

Vice-President and Corporate Secretary

#### Todd J. Stack

Vice-President and Treasurer

## Glossary

**Air Emissions:** Substances released to the atmosphere through industrial operations. For the fossil-fuel-fired power sector, the most common air emissions are sulphur dioxide, oxides of nitrogen, mercury, and greenhouse gases.

**Alberta Power Purchase Arrangement (PPA):** A long-term arrangement established by regulation for the sale of electric energy from formerly regulated generating units to PPA buyers.

**Availability:** A measure of time, expressed as a percentage of continuous operation 24 hours a day, 365 days a year, that a generating unit is capable of generating electricity, regardless of whether or not it is actually generating electricity.

**Boiler:** A device for generating steam for power, processing or heating purposes, or for producing hot water for heating purposes or hot water supply. Heat from an external combustion source is transmitted to a fluid contained within the tubes of the boiler shell.

**Btu (British Thermal Unit):** A measure of energy. The amount of energy required to raise the temperature of one pound of water one degree Fahrenheit, when the water is near 39.2 degrees Fahrenheit.

**Capacity:** The rated continuous load-carrying ability, expressed in megawatts, of generation equipment.

Carbon Capture and Storage (CCS): An approach to mitigating the contribution of greenhouse gas emissions to global warming, which is based on capturing carbon dioxide emissions from industrial operations and permanently storing them in deep underground formations.

**CO<sub>2</sub> Emissions Intensity:** Amount of carbon dioxide emitted per MWh produced.

**Coal Gasification:** The conversion of solid fuel to gaseous form, for subsequent conversion into power, synthetic gas, hydrogen, or a variety of other chemical products.

**Cogeneration:** A generating facility that produces electricity and another form of useful thermal energy (such as heat or steam) used for industrial, commercial, heating, or cooling purposes.

Combined Cycle: An electric generating technology in which electricity is produced from otherwise lost waste heat exiting from one or more gas (combustion) turbines. The exiting heat is routed to a conventional boiler or to a heat recovery steam generator for use by a steam turbine in the production of electricity. This process increases the efficiency of the electric generating unit.

**Derate:** To lower the rated electrical capability of a power generating facility or unit.

**Expected Capability:** Plant capacity after consideration of station service use, planned outages, forced and maintenance outages, and derates.

Flue Gas Desulphurization Unit (Scrubber): Equipment used to remove sulphur oxides from the combustion gases of a boiler plant before discharge to the atmosphere. Chemicals, such as lime, are used as the scrubbing media.

**Force Majeure:** Literally means "greater force". These clauses excuse a party from liability if some unforeseen event beyond the control of that party prevents it from performing its obligations under the contract.

**Geothermal Plant:** A plant in which the prime mover is a steam turbine. The turbine is driven either by steam produced from hot water or by natural steam that derives its energy from heat found in rocks or fluids at various depths beneath the surface of the earth. The energy is extracted by drilling and/or pumping.

**Gigajoule (GJ):** A metric unit of energy commonly used in the energy industry. One GJ equals 947,817 Btu.

**Gigawatt (GW):** A measure of electric power equal to 1,000 megawatts.

**Gigawatt Hour (GWh):** A measure of electricity consumption equivalent to the use of 1,000 megawatts of power over a period of one hour.

**Greenhouse Gas (GHG):** Gases having potential to retain heat in the atmosphere, including water vapour, carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, and perfluorocarbons.

**Heat Rate:** A measure of conversion, expressed as Btu/MWh, of the amount of thermal energy required to generate electrical energy.

**Megawatt (MW):** A measure of electric power equal to 1,000,000 watts.

**Megawatt Hour (MWh):** A measure of electricity consumption equivalent to the use of 1,000,000 watts of power over a period of one hour.

Merchant Assets: TransAlta uses the term merchant to describe assets that have contracts with terms less than five years. Given our low-to-moderate risk profile, TransAlta contracts a significant portion of its merchant capability through short- and medium-term contracts.

**Net Maximum Capacity:** The maximum capacity or effective rating, modified for ambient limitations, that a generating unit or power plant can sustain over a specific period, less the capacity used to supply the demand of station service or auxiliary needs.

**Renewable Power:** Power generated from renewable terrestrial mechanisms including wind, geothermal, solar, and biomass with regeneration.

**Reserve Margin:** An indication of a market's capacity to meet unusual demand or deal with unforeseen outages/ shutdowns of generating capacity.

**Run Rate:** The result of extrapolating financial data collected from a period of time less than one year to a full year.

**Spark Spread:** A measure of gross margin per MW (sales price less cost of natural gas).

**Supercritical Technology:** The most advanced coal-combustion technology in Canada employing a supercritical boiler, high-efficiency multi-stage turbine, flue gas desulphurization unit (scrubber), bag house, and low nitrogen oxide burners.

**Target Zero:** TransAlta's initiative designed to drive health, safety and environmental performance to zero lost-time, medical aid, and environmental incidents.

**Turbine:** A machine for generating rotary mechanical power from the energy of a stream of fluid (such as water, steam, or hot gas). Turbines convert the kinetic energy of fluids to mechanical energy through the principles of impulse and reaction or a mixture of the two.

**Turnaround:** Periodic planned shutdown of a generating unit for major maintenance and repairs. Duration is normally in weeks. The time is measured from unit shutdown to putting the unit back on line.

**Unplanned Outage:** The shutdown of a generating unit due to an unanticipated breakdown.

**Uprate:** To increase the rated electrical capability of a power generating facility or unit.

**Value at Risk (VaR):** A measure to manage earnings exposure from energy trading activities.

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