



2010 Annual Report

A high-angle, vertical photograph of an offshore oil rig deck. The image shows a complex network of steel structures, including a large vertical pipe on the left and various yellow and black equipment on the right. A worker in a blue uniform and safety gear is visible on a platform. The background is a vast expanse of deep blue ocean under a clear sky. The text "Advancing Growth" is overlaid in white, with "Advancing" in a smaller font above the larger word "Growth".

Advancing
Growth

Orca Exploration Group Inc. is a well-financed, international public company engaged in hydrocarbon exploration, development and supply of gas in Tanzania, the establishment of a coastal gas pipeline network in East Africa, oil appraisal and gas exploration in Italy and the acquisition of high potential exploration opportunities in Europe and Africa.

Orca Exploration trades on the TSXV under the trading symbols ORC.B and ORC.A.

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GLOSSARY

<i>mcf</i>	Thousands of standard cubic feet	<i>3P</i>	Proven, probable and possible reserves
<i>MMcf</i>	Millions of standard cubic feet	<i>GIIP</i>	Gas initially in place
<i>Bcf</i>	Billions of standard cubic feet	<i>Kwh</i>	Kilowatt hour
<i>Tcf</i>	Trillions of standard cubic feet	<i>MW</i>	Megawatt
<i>MMcfd</i>	Millions of standard cubic feet per day	<i>US\$</i>	US dollars
<i>Mmbtu</i>	Millions of British thermal units	<i>Cdn\$</i>	Canadian dollars
<i>HHV</i>	High heat value	<i>Bar</i>	Fifteen pounds per square inch
<i>LHV</i>	Low heat value	<i>MMbbl</i>	Million barrels of oil
<i>1P</i>	Proven reserves	€	Euro
<i>2P</i>	Proven and probable reserves		

Financial and Operating Highlights

Years ended/as at 31 December	2010	2009	Change
FINANCIAL (US\$000 EXCEPT WHERE OTHERWISE STATED)			
FINANCIAL			
Revenue	38,808	25,317	53%
Profit before taxation	16,512	6,882	140%
Operating netback (US\$/MCF)	2.29	2.21	4%
Cash and cash equivalents	45,519	14,543	213%
Working capital	52,364	16,835	211%
Shareholders' equity	98,183	68,860	43%
Earnings per share - basic (US\$)	0.33	0.11	200%
Earnings per share - diluted (US\$)	0.31	0.11	182%
Funds flow from operating activities	20,836	12,332	69%
Funds per share from operating activities - basic (US\$)	0.68	0.42	62%
Funds per share from operating activities - diluted (US\$)	0.65	0.40	63%
Net cash flows from operating activities	15,534	12,007	29%
Net cash flows per share from operating activities - basic (US\$)	0.50	0.41	22%
Net cash flows per share from operating activities - diluted (US\$)	0.49	0.39	26%
OUTSTANDING SHARES ('000)			
Class A shares	1,751	1,751	0%
Class B shares	32,939	27,743	19%
Options	2,557	2,797	(9%)
OPERATING			
Additional Gas sold (MMCF) - industrial	2,504	2,096	19%
Additional Gas sold (MMCF) - power	10,940	8,326	31%
Additional Gas sold (MMCFD) - industrial	6.9	5.7	19%
Additional Gas sold (MMCFD) - power	30.0	22.8	31%
Average price per mcf (US\$) - industrial	8.76	8.36	5%
Average price per mcf (US\$) - power	2.60	2.40	8%
ADDITIONAL GAS GROSS RECOVERABLE RESERVES TO END OF LICENCE (BCF)			
Proved	369	385	(4%)
Probable	82	105	(22%)
Proved plus probable	451	490	(8%)
Proved plus probable plus possible	822	829	(1%)
PRESENT VALUE, DISCOUNTED AT 10% (US\$ MILLION)			
Proved	236	248	(5%)
Proved plus probable	278	291	(5%)
Proved plus probable plus possible	395	381	4%

This annual report contains certain forward-looking statements based on current expectations, but which involve risks and uncertainties. Actual results may differ materially. All financial information is reported in U.S. dollars (US\$), unless otherwise noted.



W. DAVID LYONS, CHAIRMAN AND CEO

Chairman and CEO's Letter to S

Orca ended 2010
debt-free,
with cash of
US\$45.5 million

Orca Exploration Group's 2010 story is simple but powerful.

- Our plans for asset growth have been materially advanced. We continue to focus on exploration targets with significant reserves potential and will move on these in 2011.
- We are working with other stakeholders to increase Songo Songo's gas production and meet Tanzania's urgent need for increased power generation.
- Our new infrastructure division, EastCoast Transmission and Marketing, allows Orca to lead where we have production and gas transmission experience and knowledge.
- Orca ended 2010 debt free, with cash of US\$45.5 million.

There are a number of potential developments in 2011:

- Orca is committed to drill the La Tosca gas exploration prospect in the Po Valley Basin in Italy in Q4 2011. The permit is surrounded by several large natural gas fields and the adjacent production infrastructure has available capacity.
- To increase deliverability from the Songo Songo field following the shut in of SS-5 in Q4 2010 as a result of tubing corrosion, Orca plans, subject to TPDC approval and rig availability, to drill a new development well in 2011 and to enhance the SS-10 well.
- There has been a significant increase in activity in East Africa following gas discoveries offshore Tanzania by British Gas/Ophir and the announcement that Statoil and Exxon Mobil intend to drill further prospects in 2011. Orca is positioned to play a significant role in meeting Tanzania's gas demand prior to the commercialization of these new gas reserves.
- Sales of Additional Gas to the Tanzania power sector, which increased by 31% during 2010, are expected to continue to increase in 2011 and are only constrained by the need to expand production and transmission of gas from Songo Songo.
- To meet the need for an immediate expansion of throughput from the Songo Songo field, Orca is negotiating with Songas to run the Songo Songo gas processing plant at up to 110 MMcfd until Q1 2013 when the Songas Expansion Project is expected to be operational.

Shareholders



FINANCIAL RESULTS

Orca achieved excellent financial results during 2010. Revenue grew by 53% from US\$25.3 million in 2009 to US\$38.8 million in 2010. Funds from operations before working capital changes increased by 69% to US\$20.8 million and the level of working capital grew from US\$16.8 million to US\$52.4 million. The Company finished the year with cash of US\$45.5 million with no debt, having raised US\$18.5 million by the completion of a successful rights issue in October 2010.

The Company's cost pool in Tanzania was substantially recovered in 2010 as a result of strong sales revenue and relatively low capital expenditure levels. This will result in a reduction in the percentage of net revenue attributable to the Company prior to any significant expenditure on drilling in 2011. Orca will also see a reduction in the net revenue allocated to the Company now that a significant proportion of production is coming from the deemed TPDC backed-in well (SS-10).

OPERATIONS RESULTS

The Company is the largest producer of gas in Tanzania and the only operator who is selling gas in Dar es Salaam. The Company has an excellent gas reservoir at Songo Songo that could deliver in excess of 60 MMcfd in addition to the average 2010 production of 76 MMcfd.

To meet increased demand, the Company took steps during 2010 to facilitate the development of the required infrastructure in Tanzania and to progress other growth strategies.

- Orca coordinated the technical evaluations that led to Lloyds Register certifying that the gas processing plant could be re-rated from 90 MMcfd to 110 MMcfd.
- Agreed to share the costs with Songas (up to a cap of US\$2.4 million) to develop a long-term expansion project with Songas ("Songas Expansion Project") that will see the infrastructure capacity increased to 140 MMcfd by Q1 2013 through the addition of new gas processing trains and pipeline compression.
- Established a team to plan for the construction of a new 207 kilometer onshore pipeline to Dar es Salaam that will initially increase infrastructure capacity to in excess of 200 MMcfd.
- Farmed into an oil appraisal well and a gas exploration prospect in Italy.

Deliverability from the main Songo Songo producing wells had to be reduced in Q4 2010 following the receipt of corrosion logging results. As detailed below, a work programme is now in place to ensure there is adequate production capacity as the infrastructure expands.

Revenue grew by **53%**
from US\$25.3 million in 2009 to US\$38.8 million in 2010



Orca is well
positioned
to expand its
reserve base

RESERVES AND WELL CORROSION

As at 31 December 2010, the independent reserve evaluator McDaniel and Associates Consultants Ltd. ("McDaniel") assessed that the Additional Gas gross proven (1P) and proven and probable (2P) Songo Songo reserves available to Orca to the end of the licence period are 369.2 Bcf (2009: 384.9 Bcf) and 450.8 Bcf (2009: 490.2 Bcf) respectively. This decrease over 2009 is primarily the result of the need to increase production from SS-10 and drill new wells on the Songo Songo field to sustain production following the discovery of tubing corrosion in the existing producing wells. TPDC has the right to back into these wells and earn a higher profit share.

Following a corrosion logging survey in Q4 2010, Orca suspended production from SS-5, reduced flow rates from the other wells and expedited the tie-in of SS-10, the new onshore well.

The corrosion study also recommended that SS-9 be taken out of production by the end of Q1 2012, subject to re-logging of the well in September 2011 to confirm its condition. Accordingly, the Company has determined that a new high producing onshore deviated well ("SS-A") should be drilled in 2011 to ensure adequate deliverability when SS-9 is taken off stream. In addition SS-10 will be upgraded to increase deliverability. The Company is currently looking to contract a land rig to undertake this work programme within a tight timeframe. The estimated capital cost is US\$35 million.

This may be followed by a work-over program on the offshore wells during 2012 utilizing the same jack up rig that is expected to be mobilized for the drilling of the Songo Songo West ("SSW") exploration well. McDaniel evaluated this prospect and assessed it to contain un-risked mean resources of 552 Bcf and an upside case in excess of 1 Tcf. The development plan for SSW, and any tie into existing processing capacity, will be reviewed once the results of the well are known.

Sales of Additional Gas to
the power sector increased by **31%**
during 2010 to 10,940 MMcf



TANZANIA

Growth in power demand

The sales of Additional Gas to the power sector increased by 31% during 2010 to 10,940 MMcf, mainly as a result of sales to the Tegeta 45 MW power plant which was commissioned in December 2009. The total gas fired generation in Tanzania, consuming Additional Gas, is currently 189 MWs. This leaves a shortfall of approximately 260 MWs according to Government of Tanzania estimates. The impact of this shortfall has been numerous controlled power outages in the last six months. There have been limited rains in early 2011 to allow the hydro generation capacity to alleviate this shortfall.

To address this problem, TANESCO has reached an agreement with Jacobsen, the Norwegian power turbine manufacturer, for the supply of three new 35 MW turbines (with a maximum demand of approximately 22 MMcfd). The turbines are scheduled to be fully operational in Q1 2012. In addition, TANESCO is in negotiation with Dowans to re-commission its 112 MW plant (maximum demand of approximately 24 MMcfd) during 2011.

In the longer term, TANESCO is looking to convert the IPTL 100 MW power plant to gas (maximum demand of approximately 22 MMcfd). In addition TANESCO plans to add a further 240 MW combined cycle plant at Kinyerezi in Dar es Salaam (maximum demand of approximately 36 MMcfd) by the end of 2014.

Infrastructure expansion

In September 2010 following technical evaluations, Lloyds Register approved the re-rating of the two gas turbines at Songo Songo Island to 110 MMcfd from 90 MMcfd. A Re-Rating Agreement is currently being negotiated with Songas and TANESCO.

The Songas Expansion Project consists of Songas financing two additional gas processing trains and installing pipeline compression. This will increase the overall infrastructure capacity to 140 MMcfd and is due to be operational by Q1 2013.



ITALY

New onshore Italian drilling project

In December 2010, Orca signed a contract with a subsidiary of Northern Petroleum Plc to farm in to between 70% and 75% of their Longastrino exploration block in the Po Valley, northern Italy.

Under the terms of the farm in, Orca will pay 100% of the costs of the La Tosca 1 well up to €4.3 million and 70% thereafter for the drilling phase of the well, together with back-in costs of €0.6 million.

The well is scheduled to be drilled in Q4 2011. If the well is tested and completed, Orca will earn an additional 5% (taking it to 75%) by paying 100% of the testing costs up to €1.3 million and 75% thereafter.

Low risk offshore Italian appraisal well

During Q2 2010, Orca signed a farm in agreement with Petroceltic International Plc to participate in the drilling of a low risk, high potential appraisal well offshore Italy in the Adriatic. The area has significant oil exploration upside and as part of the farm in Orca would earn the right to participate in 11 adjacent exploration blocks in the Central Adriatic.

Petroceltic had intended to spud the Elsa-2 well prior to 31 October 2010. However the Italian government passed a decree, following the blowout of the Macondo well in the U.S., preventing the drilling in the Italian seas within 5 nautical miles of the coastline and within 12 nautical miles around the perimeter of protected Marine Parks. In view of this, Petroceltic suspended the permit until such time as the Ministry of Environment issues a decree of environmental compatibility for the drilling program. The project is currently on hold and Orca is not liable to any costs associated with the drilling of Elsa-2 until a rig contract is signed.

EASTCOAST TRANSMISSION AND MARKETING

In July 2010, Orca announced the creation of its new infrastructure division, EastCoast Transmission and Marketing ("ECTM"). Orca intends to facilitate the monetisation of the Company's gas reserves by constructing a second 207-kilometer onshore pipeline to Dar es Salaam. The pipeline is intended to increase infrastructure capacity to 200 MMcfd by the end of 2013 when additional capacity will be needed for new power plants (IPTL and Kinyerezi).

It is anticipated that the new onshore pipeline to be developed by ECTM will be the first part of a coastal gas pipeline that could be used by the new gas operators in Tanzania to transport their gas to the main industrial hubs in East Africa including Mombasa in Kenya.

“We are committed to take Orca to the next level”



INCREASING BOARD AND MANAGEMENT STRENGTH

The Board of Directors was reorganised and a majority of independent directors was elected at the Company's Annual General Meeting in June 2010. Orca is very fortunate to have three new highly experienced directors join the Board: Lord Howard of Lympne, Robert (Bob) Wigley and Beer Van Straten. The new directors bring substantial experience in relation to the raising of capital, managing drilling campaigns and negotiations with foreign governments.

FINANCING

The Company's 2011 work programme principally includes the drilling of the new onshore deviated well, SS-A, the enhancement of SS-10, the drilling of La Tosca in the Po Valley and the purchase of long lead items for SSW. Whilst there should be sufficient funds to undertake this work programme in 2011, the Company will look to secure a financing facility and/or raise new equity to cover the 2012 exploration activity.

CREATING VALUE

The Company's strategy will be to drill up our exploration portfolio in Italy and Tanzania over the course of the next two years whilst continuing to build up our cash flow from the Songo Songo gas field. With exploration success, the Company will look to sell or farm out its interests in Italy prior to the need to finance any development.

There is significant upside potential. With the continued support of our loyal shareholders, the strength of our Board, the experience of our management team and the skills of our dedicated employees, we are committed to take Orca to the next level.



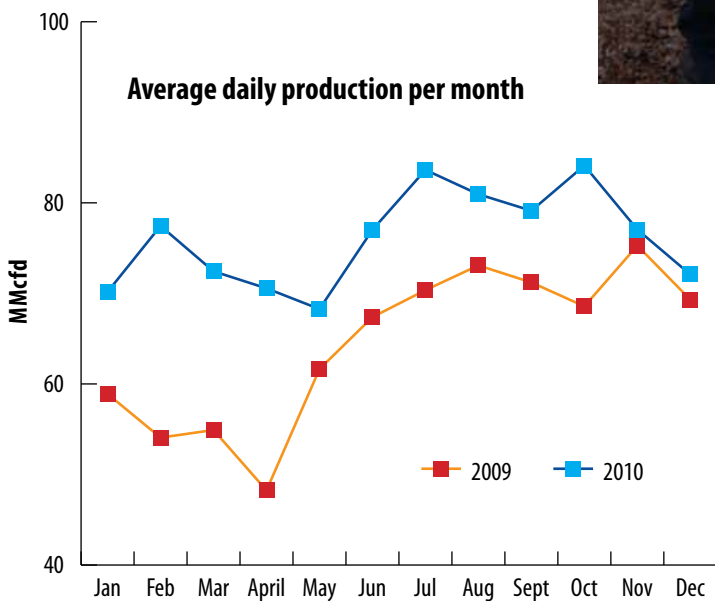
W. David Lyons
Chairman and CEO

April 28, 2011



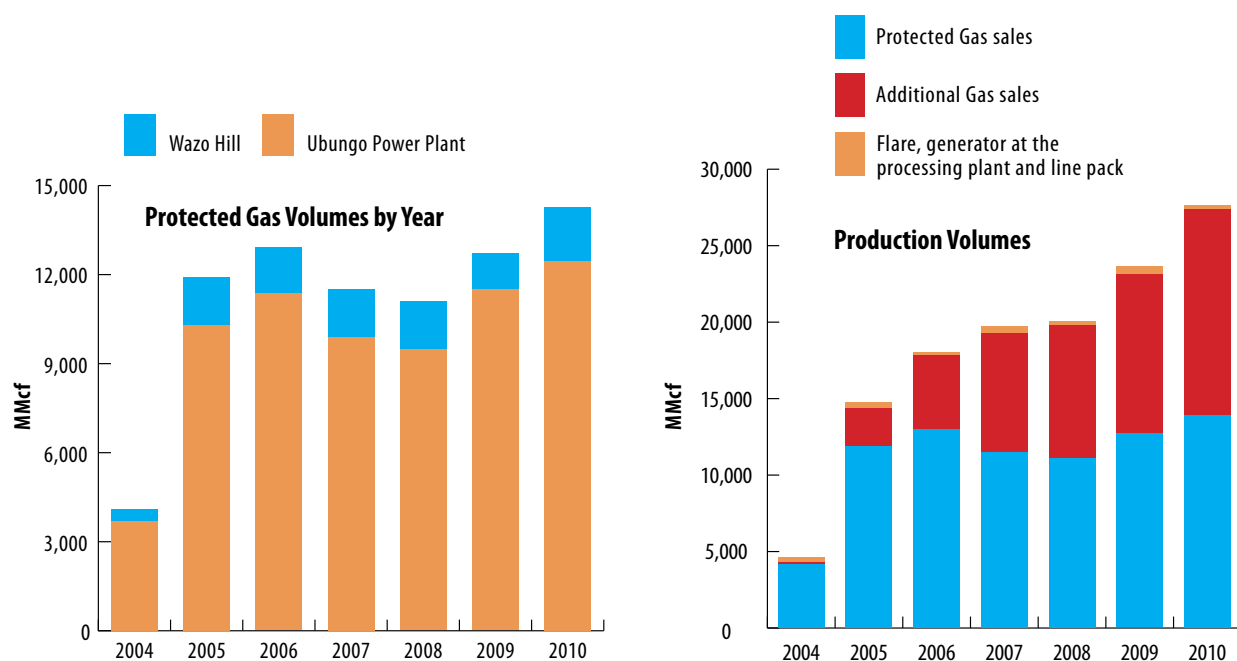
MMcfd

Operations Review



Production

During 2010, 27.9 Bcf (2009: 23.6 Bcf) of natural gas was produced from the Songo Songo field offshore Tanzania or an average of 76.4 MMcfd (2009: 64.8 MMcfd). This brings total production since commercial operations commenced on 20 July 2004 to 128.6 Bcf. The increase in production during the course of the year has mainly been the consequence of increased demand from the power sector.



SONGO SONGO PRODUCTION BY WELL

The production from the five Songo Songo wells between 2004 and 2010 has been as follows:

Well	2004	2005	2006	2007	2008	2009	2010	Total
	BCF	BCF	BCF	BCF	BCF	BCF	BCF	BCF
SS-3	0.8	1.3	1.5	1.9	1.5	2.3	3.4	12.7
SS-4	0.6	1.9	1.9	1.1	0.9	1.5	3.7	11.6
SS-5	1.7	3.9	8.9	8.5	7.1	8.4	6.1	44.6
SS-7	1.5	3.8	3.2	3.4	3.5	3.9	5.2	24.5
SS-9	–	3.8	2.5	4.8	7.1	7.5	9.4	35.1
Total	4.6	14.7	18.0	19.7	20.1	23.6	27.9	128.6

The total gas production from the Songo Songo field between 2004 and 2010 was allocated as follows:

	2004	2005	2006	2007	2008	2009	2010	Total
	BCF	BCF	BCF	BCF	BCF	BCF	BCF	BCF
Protected Gas sales	4.1	11.9	13.0	11.5	11.1	13.0	14.2	78.8
Additional Gas sales	0.1	2.5	4.8	7.7	8.7	10.4	13.5	47.7
Flare, generator at the processing plant and line pack	0.4	0.3	0.2	0.5	0.3	0.2	0.2	2.1
Total	4.6	14.7	18.0	19.7	20.1	23.6	27.9	128.6

PROTECTED GAS PRODUCTION

Under the terms of a Gas Agreement signed in 2001, the Protected Gas from Songo Songo is 100% owned by the Tanzanian Petroleum Development Corporation ("TPDC") and is sold to Songas under a 20 year Gas Agreement for:

1. The operation of five turbines at the Ubungo power plant;
2. Onward sale to the Tanzanian Portland Cement Company ("TPCC") for the operation of its cement kilns; and
3. Village electrification (at a rate not to exceed 1 MMcfd).

The Protected Gas was allocated as follows:

	2010			2009		
	Protected Gas consumed	Utilisation rate		Protected Gas consumed	Utilisation rate	
YEAR ENDED 31 DECEMBER	BCF	MMCFD	%	BCF	MMCFD	%
Protected Gas user						
Ubungo power plant	12.4	34.0	89%	11.8	31.5	82%
Wazo Hill cement plant	1.8	4.9	84%	1.2	4.2	71%
Village electrification programme	–	–	–	–	–	–
Total consumption	14.2	38.9	86%	13.0	36.7	81%

Protected Gas utilisation increased at the Ubungo power plant during 2010 due to the increased demand for electricity in Tanzania, with a greater reliance being placed on gas powered generation.

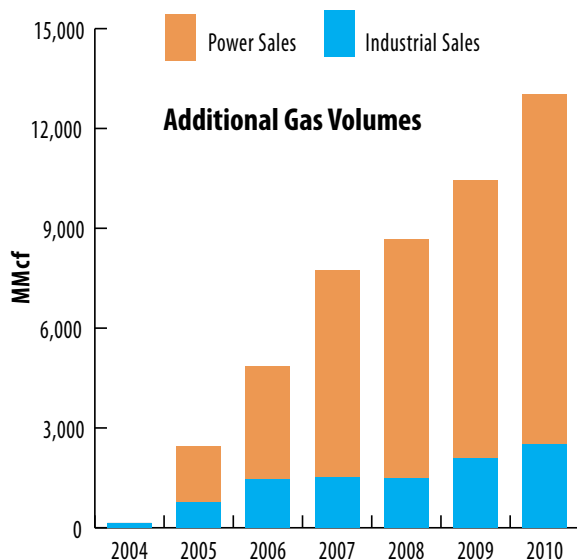
At the Wazo Hill cement plant, the 2010 utilisation rate averaged 84% (2009: 71%). The village electrification programme became operational from August 2010 with a total of 0.24 MMcf of gas consumed during 2010.

The maximum gas required for the Protected Gas users over the remaining 13 years and seven months of the Gas Agreement was 224 Bcf as at 31 December 2010. For the purposes of calculating the level of gas available as Additional Gas, an assumption has to be made as to the expected utilisation of the Protected Gas over the remaining term of the Gas Agreement. These assumptions are reviewed on an annual basis based on historic and projected usage.

The Protected Gas users and their forecast maximum and most likely demand are as follows:

	Theoretical maximum 100% load factor	Most likely	Utilisation in 2010
PROTECTED GAS DEMAND	MMCFD	MMCFD	MMCFD
Six gas turbines at the Ubungo power plant	47.4	40.8	42.2
Less gas supplied to the sixth turbine which is Additional Gas	(9.2)	(7.7)	(8.2)
Total Protected Gas at Ubungo	38.2	31.1	34.0
Wazo Hill cement plant	5.9	4.2	4.9
Village electrification programme	1.0	1.0	–
Total daily Protected Gas demand	45.1	38.3	38.9
Protected Gas reserves to end of the Songas power purchase agreement (BCF)	224	190	

The forecast theoretical maximum demand by the Protected Gas users is estimated to be 45.1 MMcf based on technical tests of the Ubungo turbines and the Wazo Hill cement plant, though there are variations during the year and over time depending on ambient temperature and degradation. The 'most likely' utilisation, including the village electrification programme, is forecast to be 80 - 85% over the remaining term of the Gas Agreement. This compares with an actual utilisation rate of 86% in 2010. The actual Protected Gas utilisation at the Ubungo power plant primarily depends on the availability of the Ubungo power units, the status of the water levels at the hydroelectricity dams and the capacity of the 'run of river' hydros. The run of river hydros can only generate when the rivers are flowing, typically during the short rains in November and December and the long rains in April and May.



ADDITIONAL GAS PRODUCTION

Under the terms of a Gas Agreement signed in 2001, the gas from the Songo Songo field in excess of the volume reserved as Protected Gas, is available to Orca Exploration to be marketed as Additional Gas. The details of the 2010 Additional Gas sales are reported in the 'Markets' section of this report.

FLARE, GENERATOR AND LINE PACK REQUIREMENTS

A relatively small amount of gas is used in local electricity generation on Songo Songo Island. Gas is also required to maintain the Songo Songo Island gas plant flare at all times. This leads to a small annual loss of gas.

There are also fluctuations in the line pack in the 232 kilometer high pressure pipeline to Dar es Salaam. The line is estimated to hold a maximum of 85 MMcf of gas. At current production levels the line pack holds sufficient gas for a few hours before it starts to impact Protected and Additional Gas sales in Dar es Salaam.

The Songo Songo Field

Summary of Orca Exploration's assessment of Gas Initially in Place (GIIP)

During 2010 no significant new geological or geophysical data was acquired to alter management's detailed evaluation of the potential reserves and resources in the two Tanzanian Licence Blocks ("Discovery Blocks") that was undertaken in 2009. The reserves and resources are assessed for the following areas:

1. The Songo Songo main producing field ("Songo Songo Field", "SS Field");
2. The northern section of the field that has gas reserves established by the drilling of SS-1, but no current production ("Songo Songo North", "SS North"); and
3. The exploration prospect west of the Songo Songo Field ("Songo Songo West", "SSW").

A summary of management assessment of the Mid Case GIIP for the Songo Songo Field and Songo Songo North discoveries and the forecast unrisked resources of Songo Songo West are illustrated below:

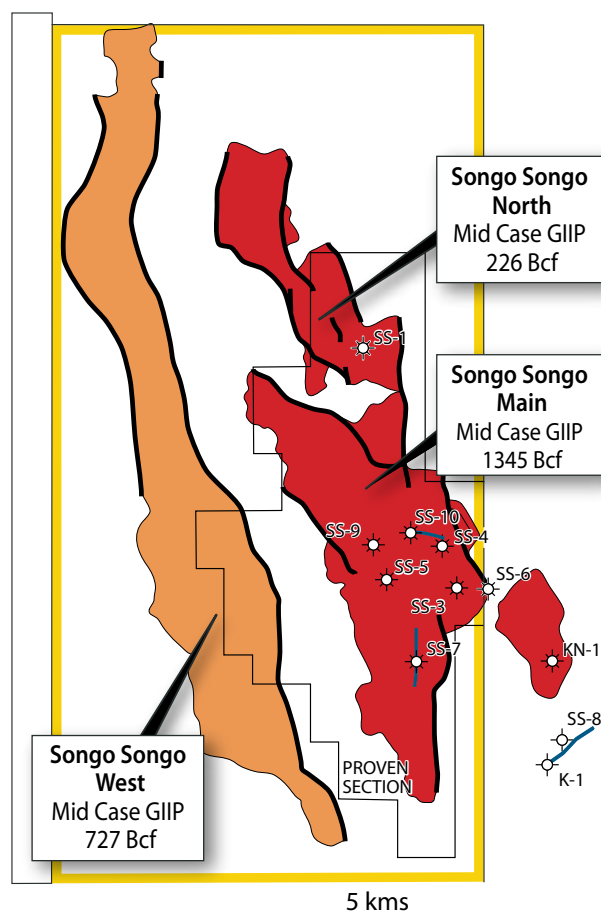
SONGO SONGO FIELD AND SONGO SONGO NORTH

Management's internal evaluation of the Mid Case GIIP for the combined Songo Songo Field and Songo Songo North discovery is 1,571 Bcf. The GIIP estimates are based on the top reservoir depth structure maps generated in 2008. The low and high GIIP range is based on volumetric structural mapping utilising the Petrel modelling software, which incorporates the reservoir properties derived from the 2008 petrophysical reservoir analysis.

Management's Mid Case GIIP of 1,571 Bcf for the Songo Songo Field and Songo Songo North compares with the McDaniel end 2010 GIIP estimates as presented below:

BCF	1P	2P	3P
McDaniels Songo Songo Field			
GIIP (BCF)	1,236	1,433	1,562

The McDaniel reserves evaluation are summarised in more detail below.

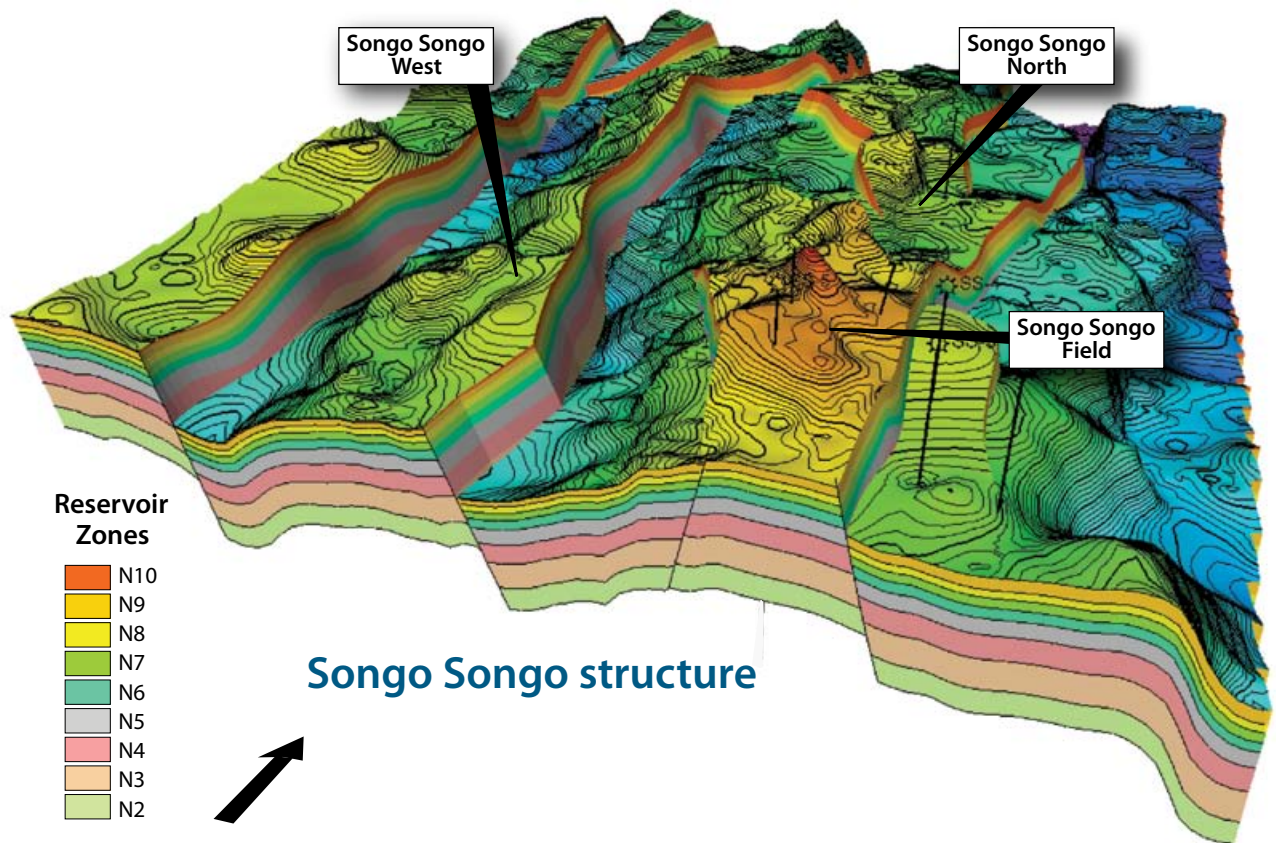


RESERVOIR MANAGEMENT AND SURVEILLANCE

Songo Songo Field reservoir development and management is evaluated through the static geologic and dynamic reservoir simulation models. Total cumulative production from the field of 128.6 Bcf to the end of 2010, represents 8.2% of Management's Mid Case GIIP. At this stage in field life, greater confidence continues to be placed in the volumetric estimate of GIIP from the Petrel static model, than from dynamic estimates of GIIP based on Material Balance calculations.

The reservoir simulation model is used to monitor and continuously evaluate the reserves of the Songo Songo Field and Songo Songo North in order to ensure that the Protected Gas deliverability requirements can be met and to manage forecast Additional Gas sales. The model has been used to predict well performance and identify the investments in wells and field compression that will be required to meet forecast gas demand. It is used to assess the likely well response to uncertainties such as aquifer size and extent of reservoir compartmentalisation, if any. During 2010, Orca began the process of combining the subsurface reservoir simulation model with a FORGAS™ model of the surface network to improve further its modeling capabilities.

The Company uses down hole pressure gauges to monitor and record bottom hole pressure. The recorded pressure data is used for a variety of purposes including near well formation parameter assessment, well deliverability and estimates of field GIIP. The data is also used to update and history match production data in the simulation model. The performance of each individual well is in addition monitored throughout the year through a scheduled programme of (multi-rate) well tests and build-up pressure tests.

Songo Songo
WestSongo Songo
NorthSongo Songo
FieldReservoir
Zones

N10
N9
N8
N7
N6
N5
N4
N3
N2

Songo Songo structure

The downhole pressure data is showing early signs for the presence of an aquifer, although this is not yet definitive and as yet no water breakthrough has occurred. The Material Balance p/Z analysis has been extended to include diagnostic analysis for the presence of an aquifer using Cole and Havlena Odeh plots. At this early stage of production the data remain inconclusive for the presence of, or strength of an aquifer, but management will continue to evaluate this as more pressure data is available, and by monitoring for the first signs of potential water production from the wells.

Material balance analysis using the down hole pressure gauge data continues to support the total field volumetric GIP estimate derived from the static geologic model, although at this early stage in field life material balance calculations give rise to a wide range in total field GIP from 1,125 to 2,005 Bcf. This range encompasses the Orca Management estimate of volumetric Mid Case GIP of 1,571 Bcf.

**WELL AND FIELD DELIVERABILITY:
CURRENT STATUS OF WELLS**

As part of the well intervention works carried out in October 2010, Orca conducted a multi-finger caliper logging survey in all the producing wells (excluding SS-10) for the purpose of corrosion monitoring of the production tubing. The results show corrosion of the tubing has occurred. A number of experts were engaged by Orca during Q4 2010 to interpret the data and analyse the potential cause of the corrosion and make recommendations on remedial solutions. The tubing integrity of SS-5 was deemed to be of such a nature that a decision was taken to shut-in the well in December. SS-9 shows signs of corrosion and modeling suggests it can be flowed at current levels until the end of Q1 2012, subject to re-logging of the well in September 2011 to confirm its condition. One of the recommendations of the expert consultant was to impose a rate limit on each well to reduce the potential for further corrosion, and these are shown in the table below.

During January 2011, well SS-10 was connected to the processing plant via the SS-4 flowline. Trials confirm that a combination of SS-4/SS-10 can be produced via the associated surface network. Provisions have been made to allow for the connection of SS-10 to the plant via its own flowline at a future date.

WELL DELIVERABILITY SUMMARY	31 January 2011 rate limited capacity (MMCFD)	Potential 31 December 2011 rate following completion of planned drilling campaign (MMCFD)
SS-3	12.0	12.0
SS-4	10.0	10.0
SS-5	Shut-in	Shut-in
SS-7	20.0	20.0
SS-9	30.0	Shut-in
SS-10	41.0	70.0
SS-A	–	60.0
Total	113.0	172.0
Maximum Protected Gas demand	(45.0)	(45.0)
Available for Additional Gas	68.0	127.0

During 2011, the Company is expected to drill a new onshore deviated well into the reservoir with the intention of adding up to 70 MMcfd of deliverability. In addition, the Company will use the same land rig to enhance the SS-10 well and increase deliverability. The forecast capital cost of this work programme in 2011 is approximately US\$35 million.

Orca will assess the various work-over options during 2011 in relation to the SS-5, SS-7 and SS-9 wells.

DEVELOPMENT OF THE SONGO SONGO FIELD AND SONGO SONGO NORTH

The Company's immediate objective is to maximise the sales of gas from the Songo Songo Field and Songo Songo North, as well as exploring for gas in the Songo Songo West prospect (see under EXPLORATION). In reviewing the potential of these reservoirs and the gas demand forecasts, it is assessed that the Company should develop the field to be able to deliver a maximum peak of 200 MMcfd (including Protected Gas) and a maximum average of 160 MMcfd (including Protected Gas). To achieve this and as detailed above, an additional main field development well ("SS-A") will be drilled from an onshore location on Songo Songo Island in 2011 and deviated to the north west where it will be landed as a high angle or horizontal producer at the top of the reservoir interval. The well will be tied back to the Songo Songo gas processing facilities (see under Infrastructure). In addition larger tubing will be installed in the SS-10 well to increase deliverability, using the same rig that will drill SS-A.

The current well stock will not drain the Songo Songo North reservoir. The reserves located in this area of the field are not required in the near term, and as a result there are no plans to drill this well before 2015. In addition to the above, field compression will need to be installed to maintain the deliverability of the wells. The first stage of compression will be installed along with the expanded gas processing facilities by Q1 2013.

GAS RESERVES

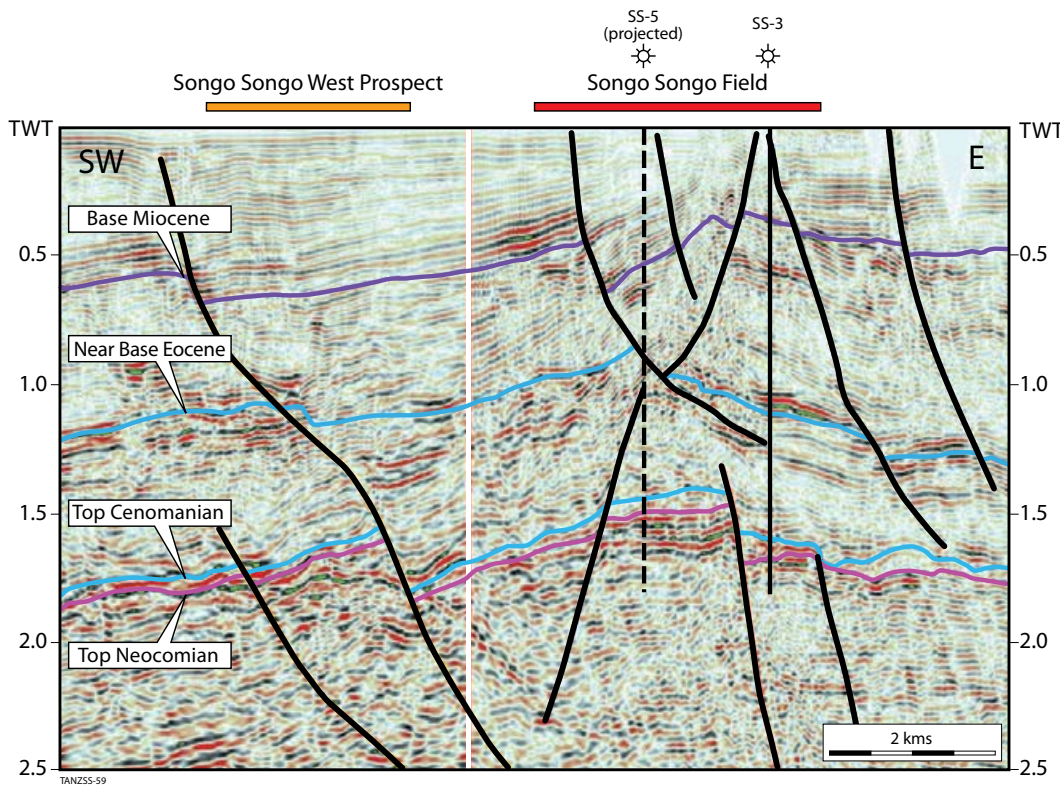
In accordance with National Instrument 51-101 Standards of Disclosure for Oil and Gas Activities, the independent petroleum engineers, McDaniel prepared a report dated April 2011 that assessed the Orca Exploration natural gas reserves based on information on the Songo Songo Field and Songo Songo North as at 31 December 2010 (the "McDaniel Report"). A summary of the remaining Additional Gas reserves on a life of license and life of field basis are presented in the tables on pages 14 and 15. The 1P and 2P reserves are based on production to the end of the license period (October 2026) while the 3P reserves assume that the license will be extended to the end of the field life, see page 16.

The new SS-10 well was connected to the gas processing plant in January 2011



Orca plans to drill a new onshore Songo Songo well in 2011

Total gas production from Songo Songo was **27.9** Bcf in 2010



During the course of 2010 no significant geological or geophysical data has been acquired on or close to the Songo Songo field that might allow a re-assessment of the volumetric GIIP and reserves. On a Gross Company basis there has been a 4% decline in Songo Songo's 1P Additional Gas reserves to the end of the license period, and a 7% decrease on a life of field basis, with a total Additional Gas production of 13.5 Bcf during the year. There has been a 8% decline in the 2P Additional Gas reserves on a Gross Company life of license basis from 490.2 Bcf to 450.8 Bcf. The decline is primarily due to the need to drill

new wells that TPDC can back into and the curtailment of production rates from the existing wells as a result of tubing corrosion.

Orca management estimates that the total recoverable Mid Case reserves (Protected Gas plus Additional Gas) from the Songo Songo Field and the Songo Songo North discovery is 1,079 Bcf at 31 December 2010.

The gross and net Company Additional Gas reserves to end of license are as follows:

Songo Songo	2010		2009	
	GROSS ⁽¹⁾	NET ⁽²⁾	GROSS	NET
Additional Gas reserves to October 2026 (BCF)				
Independent reserves evaluation				
Proved producing	289.5	191.2	300.7	169.2
Proved undeveloped	79.7	47.8	84.2	72.6
Total proved (1P)	369.2	239.0	384.9	241.8
Probable	81.6	50.1	105.3	65.2
Total proved and probable (2P)	450.8	289.1	490.2	307.0
Possible	370.9	234.1	338.6	215.0
Total proved, probable and possible (3P)	821.7	523.2	828.8	522.0

⁽¹⁾ Gross equals the gross reserves that are available for the Company after estimating the effect of the TPDC back in (see below).

⁽²⁾ Net equals the economic allocation of the Gross reserves to the Company as determined in accordance with the Production Sharing Agreement.



The gross and net Company Additional Gas reserves to end of field life are as follows:

Songo Songo	2010		2009	
	GROSS ⁽¹⁾	NET ⁽²⁾	GROSS	NET
Additional Gas reserves to end of field life (BCF)				
Independent reserves evaluation				
Proved producing	478.4	315.8	474.2	285.0
Proved undeveloped	(11.6)	(10.4)	(4.2)	15.8
Total proved ^(1P)	466.8	305.4	470.0	300.8
Probable	153.3	95.6	174.1	109.2
Total proved and probable ^(2P)	620.1	401.0	644.1	410.0
Possible	201.6	122.2	184.7	112.0
Total proved, probable and possible ^(3P)	821.7	523.2	828.8	522.0

⁽¹⁾ Gross equals the gross reserves that are available for the Company after estimating the effect of the TPDC back in (see below).

⁽²⁾ Net equals the economic allocation of the Gross reserves to the Company as determined in accordance with the Production Sharing Agreement.

The McDaniel Report has assumed that TPDC will exercise its right to 'back in' to the field development by contributing 20% of the costs of the future wells, including SS-10, and a proportion of the infrastructure and operating costs, in return for a 20% increase in the profit share for the production emanating from these wells. McDaniel has taken the view that this 'back in' right should be treated as a TPDC working interest and therefore the Gross reserves have been adjusted for the volumes of Additional Gas that are allocated to TPDC for their working interest share. The implications and workings of the 'back in' are currently being discussed with TPDC and may lead to future modifications in the way the Gross Company reserves are calculated.

For the purpose of calculating the Gross Additional Gas reserves, McDaniel has assumed in their 2P case that 190 Bcf (2009: 194 Bcf) or an average of 13.9 Bcf per annum will be required to meet the demands of the Protected Gas users from 1 January 2011 to 31 July 2024. During 2010, the Protected Gas users consumed 14.2 Bcf.

The principal assumptions used by McDaniel in its evaluation of the Tanzanian PSA are as follows:

YEAR	Additional Gas price	Gross Additional Gas volumes	Additional Gas price	Gross Additional Gas volumes
	1P US\$/MCF	1P MMCFD	2P US\$/MCF	2P MMCFD
2011	3.56	44.5	3.56	44.5
2012	3.98	48.4	3.98	48.4
2013	5.61	50.1	5.49	50.1
2014	5.61	61.8	5.49	64.7
2015	5.72	71.2	5.77	77.8
2016	5.84	79.9	5.89	90.0
2017	5.92	79.9	5.97	101.4
2018	5.99	79.9	6.05	101.4
2019	6.07	79.9	6.13	101.4
2020	6.15	79.9	6.21	101.4
2021	6.24	79.9	6.29	101.4
2022	6.32	79.9	6.38	101.4
2023-2026	6.37	62.7	6.44	84.4

PRESENT VALUE OF RESERVES

The estimated value of the Songo Songo reserves on a life of license basis based on the assumptions on production and pricing are as follows:

US\$ MILLIONS	2010			2009		
	5%	10%	15%	5%	10%	15%
Proved producing	267.2	180.7	128.2	223.5	157.1	118.2
Proved undeveloped	82.7	55.0	36.6	132.4	90.6	63.4
Total proved ^(1P)	349.9	235.7	164.8	355.9	247.7	181.6
Probable	71.3	41.9	25.2	77.0	43.4	25.6
Total proved and probable ^(2P)	421.2	277.6	190.0	432.9	291.1	207.2
Possible	269.6	117.0	56.3	215.8	90.0	41.4
Total proved, probable and possible ^(3P)	690.8	394.6	246.3	648.7	381.1	248.6

There has been a 5% decrease on the 2P present value at a 10% discount basis from US\$291.1 million to US\$277.6 million on a life of licence basis. The decrease is primarily due to the curtailment of production from the original wells following the tubing corrosion, with TPDC being able to back-in to a greater proportion of production than previously anticipated. It should be noted that McDaniel has assumed in the 3P case, that the Company receives an extension to the PSA. Hence for this category only, the reserves are not restricted to the life of the licence.

Exploration

TANZANIA

SONGO SONGO WEST

Orca Exploration has mapped and evaluated the Songo Songo West prospect adjacent to the Songo Songo Field and is in the early stages of planning to drill and test the prospect in 2012. The prospect lies approximately 2.5 kilometers west of the main field and the prognosis is that the prospect is very similar in terms of trap and reservoir presence to the Songo Songo Field. The seismic on Songo Songo West indicates closure on an elongate north-south oriented tilted fault block trap at the same reservoir interval as the main field. Songo Songo West lies entirely within the Company's Discovery Blocks.

As with the Songo Songo main field, two reservoirs are envisaged to be present within the SSW prospect; the Neocomian and the Cenomanian, although the primary exploration potential lies within the Neocomian interval. McDaniel conducted an independent assessment of natural gas resources in the Songo Songo West prospect in September 2008. Several cases were reviewed to estimate the size of the potential gas accumulation. The McDaniel's Neocomian and Cenomanian GIIP and resources are summarised in the tables below.

Neocomian (BCF)	P90	P50	Mean	P10
Unrisked OGIP	232	566	678	1,381
Unrisked resources	170	418	505	1,028
Risked mean resources	-	-	264	-

Cenomanian (BCF)	P90	P50	Mean	P10
Unrisked OGIP	12	43	62	158
Unrisked resources	9	32	46	118
Risked mean resources	-	-	16	-

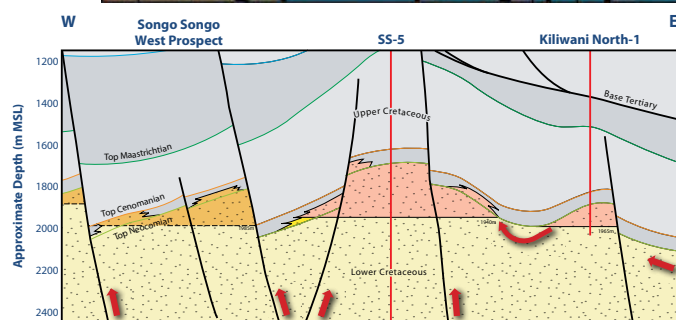
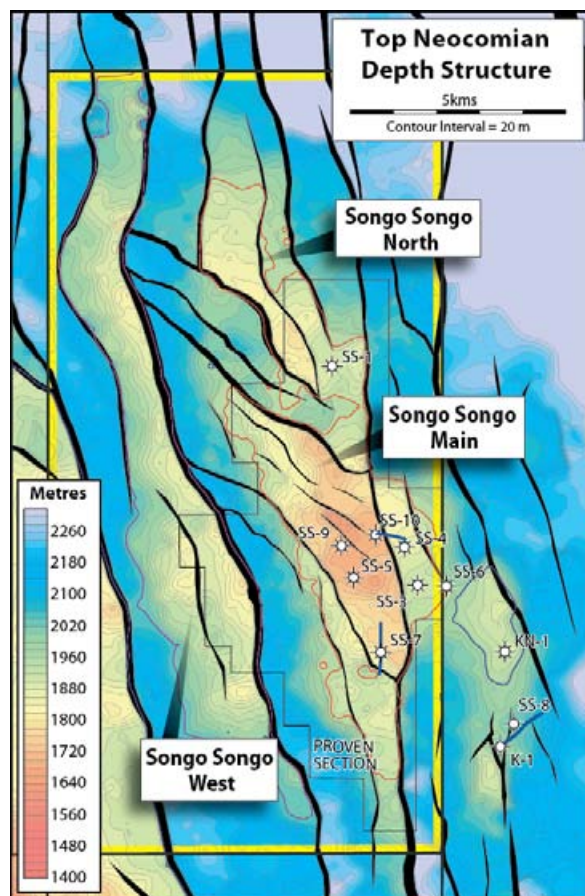
Source: McDaniel September 2008

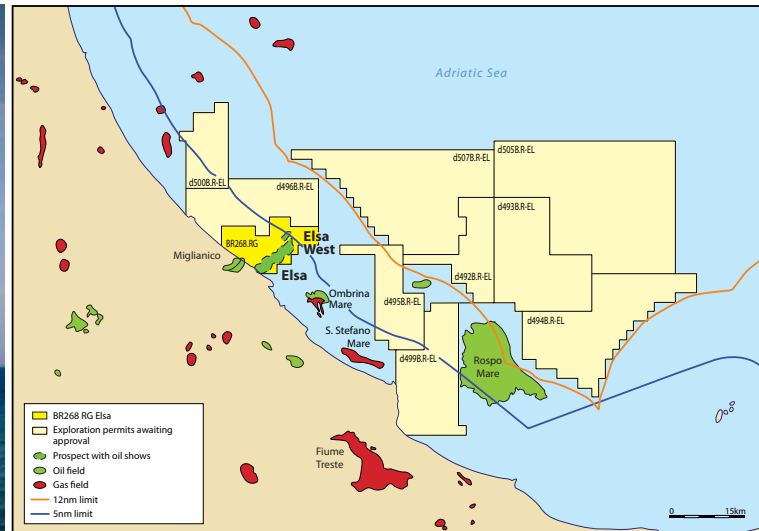
Songo Songo West is interpreted by McDaniel to be a low risk prospect with a 52% chance of success in the Neocomian and 35% in the Cenomanian. The chance of success is measured as the probability that a hydrocarbon accumulation exists that will demonstrate stabilised flow of hydrocarbons if tested. McDaniel assessed the P50, unrisked recoverable resources in the Songo Songo West prospect at 450 Bcf and the mean, unrisked recoverable resources at 551 Bcf. Management's unrisked mean GIIP for the Songo Songo West prospect of 810 Bcf compares with the McDaniel combined Neocomian and Cenomanian unrisked mean GIIP of 740 Bcf.

Songo Songo West represents a major potential source of reserves upside in the Songo Songo area, which could provide the resources to underwrite a significant expansion of the gas infrastructure and markets, both in Tanzania and beyond. Orca Exploration is planning to drill the initial exploration well ("Songo Songo West South") closer to Songo Songo Island towards the south of the Songo Songo West structure. If it is successful and can flow at commercial rates, the well will be suspended at the mudline as a potential future producer while a field development plan is worked up. In the case of development with high angle to horizontal wells a 3D seismic survey will be required. The most likely scenario is that the southern part of the field be developed first from a central hub tied back to the processing plant on the island, and while early field performance is monitored plans to drill up the northern sector of the field can be prepared.

Songo Songo West is located in water depths of approximately 18 – 35 meters and will require a jack-up drilling rig to explore the prospect. Rig availability is a key focus in well planning, and Orca Exploration is actively engaged with other operators in East Africa who have a requirement for a jack-up rig to drill in shallow water in a similar timeframe. The intent is to encourage a rig share opportunity which would reduce rig and support vessel mobilization and demobilization costs, as well as associated shared service costs.

Songo Songo West
represents a
major potential source
of new reserves



CENTRAL ADRIATIC
INTEREST AREA

ITALY

During November 2010, Orca Exploration signed an agreement with Northern Petroleum plc. to acquire between 70% and 75% of the Longastrino Block in the Po Basin onshore Italy. This acquisition was Orca's second entry into Italy during 2010. In May, Orca acquired a 15% interest in the Petroceltic operated B.R268.RG Permit in the offshore Central Adriatic.

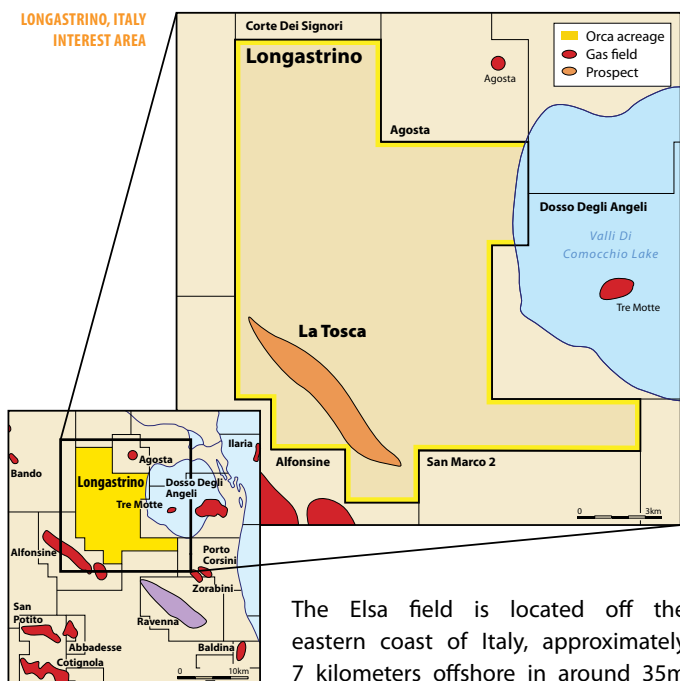
Under the terms of the farm in with Northern Petroleum, Orca will pay 100% of the costs of the La Tosca-1 well up to €4.3 million and 70% thereafter for the drilling phase of the well. If the well is tested and completed, then Orca will earn an additional 5% by paying 100% of the testing costs up to €1.3 million and 75% thereafter. The Company will also pay back costs of €0.6 million.

Earlier in 2010, Orca committed approximately US\$13 million to earn a 15% interest in the Petroceltic operated Elsa discovery block and 11 adjacent licenses. The Elsa field has a large volume of known oil in place, and an appraisal well was planned for Q4 2010 to determine the quality of the crude.

However, recent worldwide concerns about offshore drilling caused by the blowout of the Macondo well in the U.S. Gulf has led the Italian government to pass a law that excludes drilling in the Italian seas within 5 nautical miles of the coastline and 12 nautical miles in the region of protected marine parks. Petroceltic has submitted an application to the Ministry of Economic Development ("MSE") to suspend the license, and as a result all work towards the drilling of well Elsa-2 has ceased. Orca is not liable to any costs associated with the drilling of Elsa-2 until such time as a rig contract is signed.

CENTRAL ADRIATIC - B.R268.RG PERMIT

The B.R268.RG Permit containing Elsa is located on and at the northern margin of the Jurassic-Miocene Apulian Carbonate Platform. Several commercial discoveries of oil are in close proximity including the Rospo Mare and Ombrina Mare fields on the platform, and the Miglianico field on the platform margin. The Elsa discovery is analogous to the neighbouring Miglianico field, and numerous additional prospects and leads have been identified both on the platform and at the platform margin in the adjacent acreage.



The Elsa field is located off the eastern coast of Italy, approximately 7 kilometers offshore in around 35m water. The field was discovered by AGIP

in 1992 with well Elsa-1, which encountered an oil column of approximately 65m in the Lower Cretaceous Maiolica Formation at a depth of around 4,500m. Due to casing restrictions, a sub-optimal open hole drill stem test was attempted with both water and oil zones exposed to the wellbore. Oil samples, contaminated with water, recovered from the test string had a reported oil gravity of 15° API. Uncertainty remains over the oil gravity, especially in light of yellow-gold fluorescence reported while drilling through the reservoir, and close proximity to the Ombrina Mare and Miglianico fields, which lie at depths of around 2,900m and 4,800m respectively, but which have API gravities of 18° and 34° respectively. Both Orca and Petroceltic believe that the Elsa field will be commercial at 15° API oil, however several indications give rise to the expectation that the crude gravity may be higher than the 15° API.

The Elsa-2 appraisal well has the primary objective of confirming the commercial production potential of the reservoir. Positive results from Elsa-2 will be followed by a 3D seismic survey over the field.

The full field mid case stock tank oil initially in place ("STOIIIP") potential of Elsa is 410 MMbbl. The Operator's estimates of recoverable reserves are in the region of 100 MMbbl, depending on oil gravity and viscosity. Production would be to a floating production storage and offloading ("FPSO") and export via a shuttle tanker.

The farm in agreement with Petroceltic includes the ability to earn equity in a number of offshore exploration permits, some of which are within the area subject to the currently imposed drilling ban. A number of prospects and leads have been identified within the exploration acreage ranging in age from Jurassic, Cretaceous and Tertiary and having primarily oil and some gas potential. A further programme of seismic acquisition is planned to evaluate more fully the potential of these exploration permits.

PO BASIN - LONGASTRINO PERMIT

The Longastrino permit is situated onshore Italy in the Northern Apennine foredeep, commonly known as the Po Valley Basin. Numerous gas and gas-condensate fields are located close to the permit including Ravenna, Alfonsine, San Potito, Cotignola, Dosso degli Angeli and Baldina. Recent discoveries include Agosta and Abbadesse. There are a number of proven clastic reservoir horizons in the Pliocene and Upper Miocene. Offset well data indicates that these reservoir horizons have an average porosity of 20-25% (maximum

Orca has signed an agreement to farm in on the Longastrino block in the Po Basin, onshore Italy

34%) and permeability in the range 10-400mD. Intraformational clays, shales and marls act as seals, while the clays also have source potential to generate biogenic gas.

The principal target within the Longastrino Permit is the La Tosca prospect. A well defined amplitude anomaly seen on 3D seismic is present within mapped closure. The prospect is just 2 kilometers to the north-east of the Alfonsine gas field (300 Bcf) whose reservoir is the lower Pliocene Porto Corsini Formation. The Intra Lower Pliocene target reservoir is mapped as a 3-way dip closed structured trapped against a NW-SE trending thrust fault. While the primary reservoir objective is prognosed at -1,600m true vertical depth subsea ("TVDSS"), the La Tosca -1 well will be drilled to a prognosed total depth of approximately -2,500m TVDSS to test deeper secondary, probable Miocene, objectives.

The La Tosca prospect is estimated to contain 45 Bcf of gross mean prospective resource with an upside of 85 Bcf of 99.5% methane gas. Work is currently in progress to secure a site from which to drill the La Tosca-1 well, scheduled for Q4 2011.





Sales to
the industrial
sector averaged
approximately

6.9 MMcfd
in 2010

Infrastructure

The infrastructure that processes and transports the gas from the Songo Songo Field to Dar es Salaam was commissioned in July 2004.

The initial infrastructure for the Songo Songo gas to electricity project incorporated the following elements:

- Completion and tie back of the original five producing wells;
- Construction of a gas processing facility on Songo Songo Island (“SSI”) with two gas processing trains;
- Construction of a high pressure offshore and onshore pipeline system;
 - a) a 25 kilometer 12” offshore pipeline from the field to the Somanga Funga landfall;
 - b) a 207 kilometer 16” onshore pipeline to the Ubungo power plant;
 - c) a 16 kilometer 8” lateral pipeline to the Wazo Hill cement plant.
- Conversion of four existing turbines at the Ubungo power plant (2 x 19 MW and 2 x 34 MW) from diesel to gas.

Orca Exploration is the operator of the wells and the gas processing plant. Songas Limited (“Songas”) is the owner of the infrastructure and the operator of the high pressure pipeline system and the Ubungo power plant.

SSI gas processing plant

The two gas processing trains on Songo Songo Island were originally designed with a processing capacity of 35 MMcfd each (70 MMcfd in total). The raw gas produced a Songo Songo Island is relatively dry and requires a minimal amount of processing.

In 2008 the plant was certified by Lloyds Register to operate at 90 MMcfd after the Company installed two larger Joule-Thompson valves and modified the relief system on the two existing gas processing trains.

During September 2010 the Company undertook further technical analysis and Lloyds Register re-rated the plant to operate at 110 MMcfd.

Subsequent to the year end, the Company negotiated a Re-rating Agreement with TANESCO and Songas to run the gas processing plant at levels of up to 110 MMcfd for the period until the Songas Expansion Project is operational. If this agreement is signed and subsequently comes into force, the Company will effectively pay an additional tariff of US\$0.30/mcf for sales between 70 MMcfd and 90 MMcfd and US\$0.40/mcf for volumes above 90 MMcfd in addition to the tariff of US\$0.59/mcf payable to Songas as set by the energy regulator, EWURA.

The main pipeline from Songo Songo Island to the Ubungo power plant in Dar es Salaam including both the offshore section and the onshore section has an estimated maximum capacity in its current configuration of 105 MMcfd. Accordingly, this will be the forecast capacity of the infrastructure system.



Songas Expansion Project

During 2009, Orca Exploration designed a new long term expansion project ("Expansion Project") that combines enlarging the capacity of the gas processing plant and the high pressure pipeline.

In the initial phase of the Expansion Project, two new gas processing units will be installed that can initially process 200 MMcfd. This will be combined with the installation of compression downstream of the gas processing plant. The dual purpose of this compression is to allow there to be a drop in the pressure requirements for the gas at the inlet to the gas processing plant (initially down to 65 bar) that can be increased to the maximum design pressure of the pipeline at its outlet. In addition, by dropping the pressure requirements at Dar es Salaam to 30 bar (from 53 bar), the pipeline throughput can be increased to 140 MMcfd.

The Expansion Project was adopted by the owners of the infrastructure, Songas Limited, who made an application to the energy regulator, EWURA, in November 2010 in order to establish a new gas processing and tariff rate.

To facilitate the development of the Songas Expansion Project, the Company has agreed to fund 50% of the costs of getting the Expansion Project to financial up to a maximum of US\$2.4 million. This will be refunded following the successful completion of the project provided the funds have been accepted in the cost base by EWURA. The project is scheduled to be completed by the end of Q1 2013.



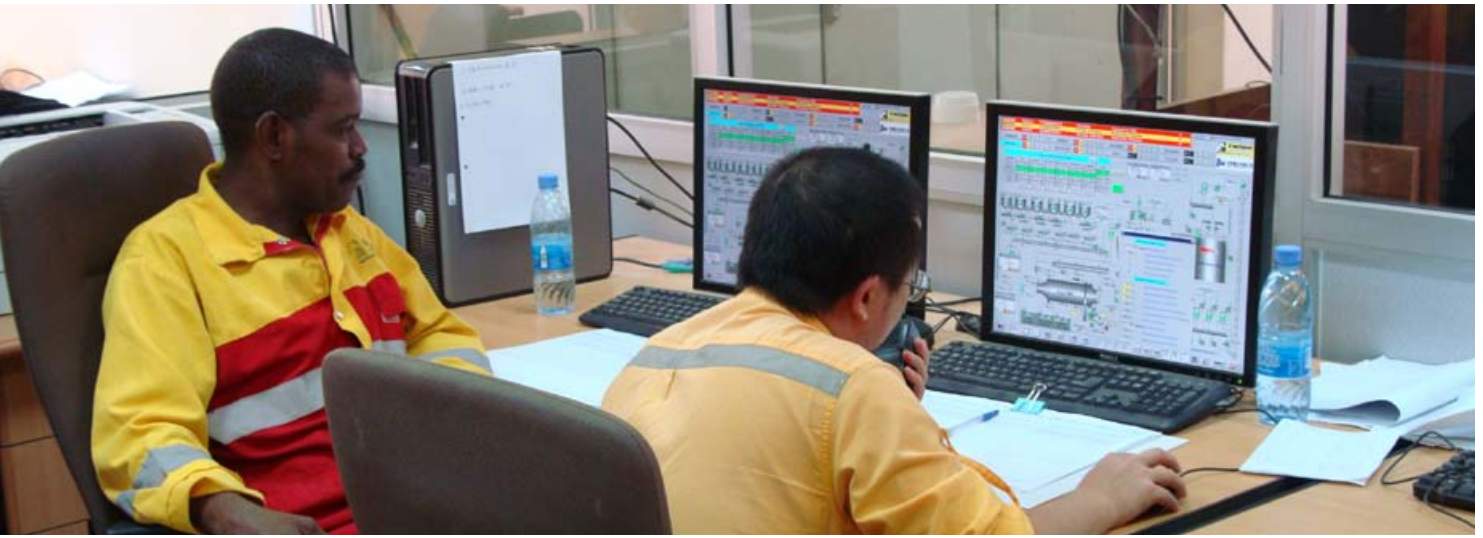
Future expansions

To increase the overall capacity of the infrastructure system to operate at 200 MMcfd, a twin onshore pipeline will need to be constructed. The timing of this will be dependent on the increase in gas demand, but it is forecast to be required by the end of 2013.

Low pressure distribution system

The low pressure distribution system has been designed so that there is significant spare capacity and security of supply. There are three pressure reduction stations ("PRS") and two separate connections to the 16" high pressure pipeline.

Since 2004, the Company has constructed in excess of 50 kilometers of low pressure pipeline in Dar es Salaam and 36 industrial customers were connected and consuming Additional Gas at the end of 2010.



Market Development

Additional Gas sales
to the power sector
averaged

30.0 MMcfd
in 2010

SUMMARY

The current target profile of 160 MMcfd for the sales of gas in Tanzania (including Protected Gas) is based on the forecast gas reserves in the Songo Songo Field and Songo Songo North. It is dependent on the investment in the drilling of two new wells (one well in the main Songo Songo Field (planned for 2011) and one at Songo Songo North), together with the work-over of some wells in the main Songo Songo Field and the expansion of the infrastructure system that transports the gas to Dar es Salaam.

In the event that gas is discovered in Songo Songo West, then there is assessed to be sufficient demand, especially from the power sector and the CNG market, to absorb the majority of the P50 resources.

POWER SECTOR

Sales to the power sector averaged 30.0 MMcfd in 2010. Until Q1 2013, the demand for gas from the power sector will be determined by the quantum of gas fired generation capacity in Tanzania and the availability of the hydro and infrastructure capacity. Thereafter, the take or pay provisions in the long term initialled power contracts will set a floor on the annual gas volumes sold to the power sector. There is expected to be significant growth in electricity demand in Tanzania and gas is likely to be the feedstock provided the right contractual terms can be agreed. This is discussed below.

DEMAND BY THE POWER SECTOR UNTIL THE END OF 2011

As at 31 December 2010, there was 189 MWs of installed gas fired generation in Tanzania that is being powered by Additional Gas (maximum demand of approximately 38 MMcfd).

The following lists the capacity of the gas fired generation consuming Additional Gas as at 31 December 2010 together with the expected growth in generation in the next 18 months.

Status	Power Plant	Installed capacity MWs
Operational	Ubungo power plant (Unit 6)	42
Operational	TANESCO at Ubungo	102
Operational	Tegeta	45
Total as at 31 December 2010		189
Awaiting re-commissioning	Dowans	112
Contract signed	Jacobsen at Ubungo	105
Total potential as at 30 June 2012		406

It is forecast that the maximum gas available for the power sector pre the Songas Expansion Project and assuming that the Re-rating Agreement is signed (increasing the infrastructure capacity to 105 MMcfd) is approximately 46 MMcfd, this compares with a potential demand at 30 June 2012 of 84 MMcfd.

DEMAND BY THE POWER SECTOR FROM 2011 UNDER THE ARGA AND PGSA

The supply of Additional Gas to the power sector is currently governed by two interim power agreements. It is forecast that these will be superseded by two long term contracts with Songas and TANESCO that were initialled in June 2008; the Amended and Restated Gas Agreement ("ARGA") and the Portfolio Gas Supply Agreement ("PGSA").

Under the ARGA, 19.5 % of the gas supplied to the six turbines at Ubungo is considered to be Additional Gas. Whilst there is no explicit take or pay in the agreement the utilisation at the Ubungo power plant is expected to be high given the low cost of the Protected Gas (Gas (US\$0.55/Mmbtu LHV escalating with US CPI) that makes up the remaining 80.5% of the supply to the plant. The maximum volume of Protected and Additional Gas delivered to the Ubungo power plant is capped at approximately 47.4 MMcfd. At an 84% utilisation rate, it is expected that 7.8 MMcfd will be supplied to the Ubungo power plant as Additional Gas until the termination of the agreement on 31 July 2024.

The PGSA covers the supply of Additional Gas to a portfolio of gas generation facilities (that currently consists of the TANESCO Ubungo 102 MW and Tegeta 45 MW power plants). Further delivery points may be added in the future subject to the consent of the Company and TPDC, and provided that the gas volumes do not exceed the maximum permissible under the contract as detailed below.

Under the terms of the initialled PGSA, it is forecast that in the periods prior to the installation of the third and fourth gas processing trains, the Company will supply TANESCO's existing gas fired generation as nominated subject to there being available gas processing capacity. The maximum daily quantity ("MDQ") that the Company has to supply under the initialled PGSA is approximately 37 MMcfd provided there is sufficient generation capacity in place to consume the gas.

GROWTH IN ELECTRICITY DEMAND AND THE POTENTIAL FOR FURTHER GAS FIRED GENERATION

As at 31 December 2010, there was approximately 1,144 MWs of available power generation in Tanzania though only 1,032 MWs was operational due to contractual disputes. In the last few years there has been a rebalancing of power generation mix in Tanzania resulting in hydro generation accounting for less than 50% of the available generation. The only major water storage is at the Mtera reservoir which supplies the 80 MW Mtera and 200 MW Kidatu hydro plants. The remaining 261 MWs of hydro generation is "run of river" which is only operational on average for 4-5 months in the year. Accordingly, the level of the Mtera reservoir is integral to the generation of 280 MWs of electricity.

It is estimated that under the base case assumptions of the TANESCO's power sector master plan ("PSMP") that peak demand (before adding in any capacity margin to provide a more normal level of security of supply) will be 1,700 MWs in 2016 and 4,800 MWs in 2031.

If gas is discovered in Songo Songo West, power demand is anticipated to absorb the majority of the new reserves



Based on the forecast availability at the end of 2010, there has to be an increase in excess of 100 MWs per annum to meet forecast demand. It is therefore reasonable to assume that an additional 20 MMcfd of peak demand will be required for each year between 2011 and 2016 to meet power sector demand in Tanzania in addition to the existing available generation.

Whilst the rate of growth slows marginally after 2016, there is still a requirement for in excess of 100 MWs per annum of new generation (adding 20 MMcfd of peak potential gas demand).

It is forecast that whilst there are sufficient gas reserves in the country, gas fired generation will be the preferred choice for new capacity. In addition, the current gas is priced at a level that makes gas fired generation competitive with the all-in-cost of coal generation.

TANESCO has indicated that they intend to construct a 240 MW generation plant at Kinyerezi, Dar es Salaam by 2014. The Company has commenced discussions to assess how gas may be made available for these units, recognising the need for additional drilling and infrastructure to be able to deliver the volumes contemplated for these units.

PROSPECTIVE INDUSTRIAL SALES

Sales to the industrial sector averaged approximately 6.9 MMcfd in 2010. There is currently limited opportunity to connect any new material customers and therefore growth in the short term will primarily be driven by organic growth from within the existing customer base.

With the extensive construction of new offices and accommodation currently being undertaken in Dar es Salaam, the demand for cement in Tanzania has increased over the last few years. This is forecast to lead to an increase in the gas consumption at the Wazo Hill cement plant. This plant is owned by Tanzania Portland Cement Company ("TPCC") a subsidiary of Heidelberg Cement.



COMPRESSED NATURAL GAS (CNG)

CNG is widely used around the world, including India and China.

Over the last couple of years there has been a strong focus by the Government of Tanzania to utilise CNG within Tanzania. During 2009 the Company installed a compressor and a vehicle dispenser adjacent to its pressure reduction station at a busy intersection at the Ubungu power plant. Two daughter stations were also constructed at the Movenpick hotel and the TPDC compound.

During 2010 a further daughter station was constructed in the Mikocheni area to enable the Company to supply two new industrial customers.

The CNG market is expected to grow gradually primarily fuelled by industries not located on the existing pipeline system and large vehicle users (e.g. Pepsi who has a large fleet of trucks). It is anticipated that once the market is established in the medium term, the local petrol retailers will retail the CNG. Accordingly there will be no need for significant capital after this time, but the price realised for the CNG will be reduced.

Corporate Social Responsibility

The Board of Directors regularly reviews the aims of the corporate social responsibility strategy and how this translates into practical and beneficial community relations support in Tanzania. A budget is established with agreed ongoing assistance covering education, health and the provision of water and power on Songo Songo Island. Particular emphasis is given to providing educational materials and equipment for the existing school, with support being given to the setting up of a new secondary school, a kindergarten and an adult learning centre. The overall aim is to improve the quality of life for all the local inhabitants and maintain good community relations.

Management's Discussion & Analysis

FORWARD LOOKING STATEMENTS

THIS MD&A OF FINANCIAL CONDITIONS AND RESULTS OF OPERATIONS SHOULD BE READ IN CONJUNCTION WITH THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS AND NOTES THERETO FOR YEAR ENDED 31 DECEMBER 2010. THIS MD&A IS BASED ON THE INFORMATION AVAILABLE ON 28 APRIL 2011.

CERTAIN STATEMENTS IN THIS MD&A INCLUDING (I) STATEMENTS THAT MAY CONTAIN WORDS SUCH AS "ANTICIPATE", "COULD", "EXPECT", "SEEK", "MAY", "INTEND", "WILL", "BELIEVE", "SHOULD", "PROJECT", "FORECAST", "PLAN" AND SIMILAR EXPRESSIONS, INCLUDING THE NEGATIVES THEREOF, (II) STATEMENTS THAT ARE BASED ON CURRENT EXPECTATIONS AND ESTIMATES ABOUT THE MARKETS IN WHICH ORCA EXPLORATION OPERATES AND (III) STATEMENTS OF BELIEF, INTENTIONS AND EXPECTATIONS ABOUT DEVELOPMENTS, RESULTS AND EVENTS THAT WILL OR MAY OCCUR IN THE FUTURE, CONSTITUTE "FORWARD-LOOKING STATEMENTS" AND ARE BASED ON CERTAIN ASSUMPTIONS AND ANALYSIS MADE BY ORCA EXPLORATION. FORWARD-LOOKING STATEMENTS IN THIS MD&A INCLUDE, BUT ARE NOT LIMITED TO, STATEMENTS WITH RESPECT TO FUTURE CAPITAL EXPENDITURES, INCLUDING THE AMOUNT, NATURE AND TIMING THEREOF, NATURAL GAS PRICES AND DEMAND.

SUCH FORWARD-LOOKING STATEMENTS ARE SUBJECT TO IMPORTANT RISKS AND UNCERTAINTIES, WHICH ARE DIFFICULT TO PREDICT AND THAT MAY AFFECT ORCA EXPLORATION'S OPERATIONS, INCLUDING, BUT NOT LIMITED TO: THE IMPACT OF GENERAL ECONOMIC CONDITIONS IN TANZANIA, ITALY AND CANADA; INDUSTRY CONDITIONS, INCLUDING THE ADOPTION OF NEW ENVIRONMENTAL, SAFETY AND OTHER LAWS AND REGULATIONS AND CHANGES IN HOW THEY ARE INTERPRETED AND ENFORCED; VOLATILITY OF OIL AND NATURAL GAS PRICES; OIL AND NATURAL GAS PRODUCT SUPPLY AND DEMAND; RISKS INHERENT IN ORCA EXPLORATION'S ABILITY TO GENERATE SUFFICIENT CASH FLOW FROM OPERATIONS TO MEET ITS CURRENT AND FUTURE OBLIGATIONS; INCREASED COMPETITION; THE FLUCTUATION IN FOREIGN EXCHANGE OR INTEREST RATES; STOCK MARKET VOLATILITY; AND OTHER FACTORS, MANY OF WHICH ARE BEYOND THE CONTROL OF ORCA EXPLORATION.

ORCA EXPLORATION'S ACTUAL RESULTS, PERFORMANCE OR ACHIEVEMENTS COULD DIFFER MATERIALLY FROM THOSE EXPRESSED IN, OR IMPLIED BY, THESE FORWARD-LOOKING STATEMENTS AND, ACCORDINGLY, NO ASSURANCE CAN BE GIVEN THAT ANY OF THE EVENTS ANTICIPATED BY THE FORWARD-LOOKING STATEMENTS WILL TRANSPIRE OR OCCUR, OR IF ANY OF THEM DO TRANSPIRE OR OCCUR, WHAT BENEFITS ORCA EXPLORATION WILL DERIVE THEREFROM. SUBJECT TO APPLICABLE LAW, ORCA EXPLORATION DISCLAIMS ANY INTENTION OR OBLIGATION TO UPDATE OR REVISE ANY FORWARD-LOOKING STATEMENTS, WHETHER AS A RESULT OF NEW INFORMATION, FUTURE EVENTS OR OTHERWISE. ALL FORWARD-LOOKING STATEMENTS CONTAINED IN THIS DOCUMENT ARE EXPRESSLY QUALIFIED BY THIS CAUTIONARY STATEMENT.

NON-GAAP MEASURES

THE COMPANY EVALUATES ITS PERFORMANCE BASED ON FUNDS FLOW FROM OPERATING ACTIVITIES AND OPERATING NETBACKS. FUNDS FLOW FROM OPERATING ACTIVITIES IS A NON-GAAP (GENERALLY ACCEPTED ACCOUNTING PRINCIPLES) TERM THAT REPRESENTS CASH FLOW FROM OPERATIONS BEFORE WORKING CAPITAL ADJUSTMENTS. IT IS A KEY MEASURE AS IT DEMONSTRATES THE COMPANY'S ABILITY TO GENERATE CASH NECESSARY TO ACHIEVE GROWTH THROUGH CAPITAL INVESTMENTS. ORCA EXPLORATION ALSO ASSESSES ITS PERFORMANCE UTILIZING OPERATING NETBACKS. OPERATING NETBACKS REPRESENT THE PROFIT MARGIN ASSOCIATED WITH THE PRODUCTION AND SALE OF ADDITIONAL GAS AND IS CALCULATED AS REVENUES LESS RINGMAIN TARIFF, GOVERNMENT PARASTATAL'S REVENUE SHARE, OPERATING AND DISTRIBUTION COSTS FOR ONE THOUSAND STANDARD CUBIC FEET OF ADDITIONAL GAS. THIS IS A KEY MEASURE AS IT DEMONSTRATES THE PROFIT GENERATED FROM EACH UNIT OF PRODUCTION, AND IS WIDELY USED BY THE INVESTMENT COMMUNITY. THE OPERATIONS IN ITALY ARE CURRENTLY IN THE EXPLORATION PHASE AND HAVE NO ASSOCIATED OPERATING REVENUE. THESE NON-GAAP MEASURES ARE NOT STANDARDISED AND THEREFORE MAY NOT BE COMPARABLE TO SIMILAR MEASUREMENTS OF OTHER ENTITIES.

ADDITIONAL INFORMATION REGARDING ORCA EXPLORATION GROUP INC IS AVAILABLE UNDER THE COMPANY'S PROFILE ON SEDAR AT www.sedar.com.

BACKGROUND

Tanzania

Orca Exploration's principal operating asset is its interest in a Production Sharing Agreement ("PSA") with the Tanzania Petroleum Development Corporation ("TPDC") in Tanzania. This PSA covers the production and marketing of certain gas from the Songo Songo gas field.

The gas in the Songo Songo field is divided between Protected Gas and Additional Gas. The Protected Gas is owned by TPDC and is sold under a 20-year gas agreement to Songas Limited ("Songas"). Songas is the owner of the infrastructure that enables the gas to be delivered to Dar es Salaam, namely a gas processing plant on Songo Songo Island, 232 kilometers of pipeline to Dar es Salaam and a 16 kilometer spur to the Wazo Hill Cement Plant.

Songas utilizes the Protected Gas (maximum 45.1 MMcfd) as feedstock for its gas turbine electricity generators at Ubungu, for onward sale to the Wazo Hill cement plant and for electrification of some villages along the pipeline route. Orca Exploration receives no revenue for the Protected Gas delivered to Songas and operates the field and gas processing plant on a 'no gain no loss' basis.

Orca Exploration has the right to produce and market all gas in the Songo Songo field in excess of the Protected Gas requirements ("Additional Gas").

Italy

During 2010 Orca Exploration farmed in to an oil appraisal block in the Adriatic in Italy and to a gas exploration prospect in the Po Valley in northeastern Italy.

PRINCIPAL TERMS OF THE TANZANIAN PSA AND RELATED AGREEMENTS

The principal terms of the Songo Songo PSA and related agreements are as follows:

Obligations and restrictions

- (a) The Company has the right to conduct petroleum operations, market and sell all Additional Gas produced and share the net revenue with TPDC for a term of 25 years expiring in October 2026.
- (b) The PSA covers the two licenses in which the Songo Songo field is located ("Discovery Blocks"). The Proven Section is essentially the area covered by the Songo Songo field within the Discovery Blocks.
- (c) No sales of Additional Gas may be made from the Discovery Blocks if in Orca Exploration's reasonable judgment such sales would jeopardise the supply of Protected Gas. Any Additional Gas contracts entered into are subject to interruption. Songas has the right to request that the Company and TPDC obtain security reasonably acceptable to Songas prior to making any sales of Additional Gas from the Discovery Block to secure the Company's and TPDC's obligations in respect of Insufficiency (see (d) below).

In June 2008, the Company initialled two long term power contracts with the electricity utility, Tanzania Electric Supply Company ("TANESCO"), the owner of the Ubungu power plant, Songas Limited and the Ministry of Energy and Minerals ("MEM") for the supply of approximately 30 - 45 MMcfd for power generation. The first of the contracts (Amended and Restated Gas Agreement ("ARGA")) covers the supply of gas to the sixth turbine at the Ubungu power plant and provides for a maximum of approximately 9 MMcfd until July 2024. The second initialled contract (Portfolio Gas Sales Agreement ("PGSA")) covers the supply of Additional Gas sales to a portfolio of gas fired generation in Tanzania.

The ARGA provides clarification of the Protected Gas volumes and removes all terms dealing with the security of the Protected Gas and the consequences of any insufficiency to a new Insufficiency Agreement ("IA"). The IA specifies terms under which Songas may demand cash security in order to keep them whole in the event of a Protected Gas insufficiency. Once the IA is signed, it will govern the basis for determining security. Under the provisional terms of the IA, when it is calculated that funding is required, the Company shall fund an escrow account at a rate of US\$2/Mmbtu on all industrial Additional Gas sales out of its and TPDC's share of revenue and TANESCO shall contribute the same amount on Additional Gas sales to the power sector. The funds provide security for Songas in the event of an insufficiency of Protected Gas. The Company is actively monitoring the reservoir and does not anticipate that a liability will occur in this respect.

- (d) "Insufficiency" occurs if there is insufficient gas from the Discovery Blocks to supply the Protected Gas requirements or is so expensive to develop that its cost exceeds the market price of alternative fuels at Ubungu.

Where there have been third party sales of Additional Gas by Orca Exploration and TPDC from the Discovery Blocks prior to the occurrence of the Insufficiency, Orca Exploration and TPDC shall be jointly liable for the Insufficiency and shall satisfy its related liability by either replacing the Indemnified Volume (as defined in (e) below) at the Protected Gas price with natural gas from other sources; or by paying money damages equal to the difference between: (a) the market price for a quantity of alternative fuel that is appropriate for the five gas turbine electricity generators at Ubungo without significant modification together with the costs of any modification; and (b) the sum of the price for such volume of Protected Gas (at US\$0.55/Mmbtu) and the amount of transportation revenues previously credited by Songas to the electricity utility, TANESCO, for the gas volumes.

- (e) The "Indemnified Volume" means the lesser of the total volume of Additional Gas sales supplied from the Discovery Blocks prior to an Insufficiency and the Insufficiency Volume. "Insufficiency Volume" means the volume of natural gas determined by multiplying the average of the annual Protected Gas volumes for the three years prior to the Insufficiency by 110% and multiplied by the number of remaining years (initial term of 20 years) of the power purchase agreement entered into between Songas and TANESCO in relation to the five gas turbine electricity generators at Ubungo from the date of the Insufficiency.

As discussed in (c) above an Insufficiency Agreement has been negotiated with TPDC, Songas and TANESCO that reduces these potential liabilities. The Insufficiency Agreement is expected to be signed at the same time as the long term power contracts.

Access and development of infrastructure

- (f) The Company is able to utilise the Songas infrastructure including the gas processing plant and main pipeline to Dar es Salaam. Access to the pipeline and gas processing plant is open and can be utilised by any third party who wishes to process or transport gas.

Songas is not required to incur capital costs with respect to additional processing and transportation facilities unless the construction and operation of the facilities are, in the reasonable opinion of Songas, financially viable. If Songas is unable to finance such facilities, Songas shall permit the seller of the gas to construct the facilities at its expense, provided that, the facilities are designed, engineered and constructed in accordance with good pipeline and oilfield practices.

Revenue sharing terms and taxation

- (g) 75% of the gross revenues less processing and pipeline tariffs and direct sales taxes in any year ("Net Revenues") can be used to recover past costs incurred. Costs recovered out of Net Revenues are termed "Cost Gas".

The Company pays and recovers costs of exploring, developing and operating the Additional Gas with two exceptions: (i) TPDC may recover reasonable market and market research costs as defined under the PSA; and (ii) TPDC has the right to elect to participate in the drilling of at least one well for Additional Gas in the Discovery Blocks for which there is a development program as detailed in the Additional Gas plans as submitted to the MEM ("Additional Gas Plan") subject to TPDC being able to elect to participate in a development program only once and TPDC having to pay a proportion of the costs of such development program by committing to pay between 5% and 20% of the total costs ("Specified Proportion"). If TPDC does not notify the Company within 90 days of notice from the Company that the MEM has approved the Additional Gas Plan, then TPDC is deemed not to have elected. If TPDC elects to participate, then it will be entitled to a rateable proportion of the Cost Gas and their profit share percentage increases by the Specified Proportion for that development program.

TPDC has indicated that they wish to exercise their right to 'back in' to the field development by contributing 20% of the cost of SS-10 and the cost of future wells in return for a 20% increase in the profit share percentage for the production emanating from these wells. The implications and workings of the 'back in' are currently being discussed with TPDC and there may be the need for reserve and accounting modifications once these discussions are concluded. For the purpose of the reserves certification as at 31 December 2010, it has been assumed that they will 'back in' for 20% for all future drilling activities and other developments and this is reflected in the Company's net reserve position.

- (h) The price payable to Songas for the general processing and transportation of the gas in 2009 was 17.5% of the price of gas delivered to a third party less any direct taxes payable by the customer that are included in the gas price less any tariffs paid for non-Songas owned distribution facilities ("Songas Outlet Price").

On 27 February 2009, the energy regulator, Energy and Water Utility Regulatory Authority ("EWURA"), issued an order that saw the introduction of a flat rate tariff of US\$0.59/mcf from 1 January 2010. The Company's long term gas price to the power sector as set out in the short term and initial long

term agreements is based on the price of gas at the wellhead. As a consequence, the Company is not impacted by the changes to the tariff paid to Songas in respect of sales to the power sector.

- (i) The cost of maintaining the wells and flowlines is split between the Protected Gas and Additional Gas users in proportion to the volume of their respective sales. The cost of operating the gas processing plant and the pipeline to Dar es Salaam is covered through the payment of the pipeline tariff.
- (j) Profits on sales from the Proven Section ("Profit Gas") are shared between TPDC and the Company, the proportion of which is dependent on the average daily volumes of Additional Gas sold or cumulative production.

The Company receives a higher share of the net revenues after cost recovery, the higher the cumulative production or the average daily sales, whichever is higher. The profit share is a minimum of 25% and a maximum of 55%.

Average daily sales of Additional Gas	Cumulative sales of Additional Gas	TPDC's share of Profit Gas	Company's share of Profit Gas
MMCFD	BCF	%	%
0 - 20	0 - 125	75	25
> 20 <= 30	> 125 <= 250	70	30
> 30 <= 40	> 250 <= 375	65	35
> 40 <= 50	> 375 <= 500	60	40
> 50	> 500	45	55

For Additional Gas produced outside of the Proven Section, the Company's profit share increases to 55%.

Where TPDC elects to participate in a development programme, their profit share percentage increases by the Specified Proportion (for that development programme) with a corresponding decrease in the Company's percentage share of Profit Gas.

The Company is liable to income tax. Where income tax is payable, there is a corresponding deduction in the amount of the Profit Gas payable to TPDC.

- (k) Additional Profits Tax is payable where the Company has recovered its costs plus a specified return out of Cost Gas revenues and Profit Gas revenues. As a result: (i) no Additional Profits Tax is payable until the Company recovers its costs out of Additional Gas revenues plus an annual return of 25% plus the percentage change in the United States Industrial Goods Producer Price Index ("PPI"); and (ii) the maximum Additional Profits Tax rate is 55% of the Company's Profit Gas when costs have been recovered with an annual return of 35% plus PPI return. The PSA is, therefore, structured to encourage the Company to develop the market and the gas fields in the knowledge that the profit share can increase with larger daily gas sales and that the costs will be recovered with a 25% plus PPI annual return before Additional Profits Tax becomes payable. Additional Profits Tax can have a significant negative impact on the project economics if only limited capital expenditure is incurred.

Operatorship

- (l) The Company is appointed to develop, produce and process Protected Gas and operate and maintain the gas production facilities and processing plant, including the staffing, procurement, capital improvements, contract maintenance, maintain books and records, prepare reports, maintain permits, handle waste, liaise with the Government of Tanzania ("GoT") and take all necessary safe, health and environmental precautions all in accordance with good oilfield practices. In return, the Company is paid or reimbursed by Songas so that the Company neither benefits nor suffers a loss as a result of its performance.
- (m) In the event of loss arising from Songas' failure to perform and the loss is not fully compensated by Songas, Orca Exploration, Commonwealth Development Corporation or insurance coverage, then Orca Exploration is liable to a performance and operation guarantee of US\$2.5 million when (i) the loss is caused by the gross negligence or wilful misconduct of the Company, its subsidiaries or employees, and (ii) Songas has insufficient funds to cure the loss and operate the project.

CONSOLIDATION

The companies that are being consolidated are:

Company

Orca Exploration Group Inc
Orca Exploration Italy Inc
Orca Exploration Italy Onshore Inc
PAE PanAfrican Energy Corporation
PanAfrican Energy Tanzania Limited

Incorporated

British Virgin Islands
British Virgin Islands
British Virgin Islands
Mauritius
Jersey

Results for the year ended 31 December 2010

OPERATING VOLUMES

The sales volumes for the year were 13,444 MMcf or 36.9 MMcfd. This represents an overall increase of 29% over the previous year. The Company's sales volumes were split between the industrial and power sectors as follows:

	2010	2009
GROSS SALES VOLUME (MMcf):		
Industrial sector	2,504	2,096
Power sector	10,940	8,326
<i>Total volumes</i>	13,444	10,422
GROSS DAILY SALES VOLUME (MMcfd):		
Industrial sector	6.9	5.7
Power sector	30.0	22.8
<i>Total daily sales volume</i>	36.9	28.5

Industrial sector

Industrial sales volume increased by 19% to 2,504 MMcf from 2,096 MMcf in 2009. Sales of Additional Gas to the Wazo Hill cement plant operated by the Tanzanian Portland Cement Company ("TPCC"), accounted for 17% of the increase, with the balance coming from organic growth from the existing customer base and new connections. Industrial sales for the year averaged 6.9 MMcfd (2009: 5.7 MMcfd).

Power sector

The power sector sales volumes increased by 31% to 10,940 MMcf compared to 8,326 MMcf in 2009.

The overall demand for Additional Gas increased as a result of the installation of the Tegeta 45 MW plant in November 2009 and a lower utilization of hydro generation as an alternative power source. The sales to the power sector averaged 30.0 MMcfd during the year compared to 22.8 MMcfd in 2009.

The allocation of the gas volumes between the different power generation units is as follows:

	2010	2009
MMcf		
PERMANENT GENERATION		
Ubungo power plant (42 MWS)	3,019	2,790
TANESCO Ubungo (102 MWS)	5,809	5,385
Tegeta (45 MWS)	2,112	151
<i>Total power sector volumes</i>	10,940	8,326

COMMODITY PRICES

	2010	2009
US\$/Mcf		
AVERAGE SALES PRICE		
Industrial sector	8.76	8.36
Power sector	2.60	2.40
<i>Weighted average price</i>	3.75	3.60

Industrial Sector

The average gas price for the year was US\$8.76/mcf (2009: US\$8.36/mcf). The overall increase in price achieved during the year is a consequence of the marginal increase in world oil prices experienced compared to 2009. This was partially offset by the increase of Additional Gas sales to the Wazo Hill cement plant which are priced by reference to imported coal, their alternative fuel supply. The sales to Wazo Hill accounted for 32% of the total industrial volumes sold in 2010 compared to 25% in 2009.

Power sector

The average sales price to the power sector was US\$2.60/mcf for the year, compared to US\$2.40/mcf in 2009. The increase in price is a consequence of the 2% annual indexation and an increase in the processing and transportation tariff.

OPERATING REVENUE

Under the terms of the PSA with TPDC, Orca Exploration is responsible for invoicing, collecting and allocating the revenue from Additional Gas sales.

Orca Exploration is able to recover all costs incurred on the exploration development and operations of the project out of 75% of the Net Revenues ("Cost Gas"). Any costs not recovered in any period are carried forward to be recovered out of future revenues.

As a consequence of the strong sales revenue and relatively low capital expenditure levels in 2010, the cost pool in Tanzania has been substantially recovered. This will result in a reduction in the net revenue percentage attributable to the Company especially in the first half of 2011 and prior to any significant expenditure on development or exploration drilling.

During 2010, Additional Gas sales volumes were in excess of 30 MMcfd for all quarters of the year. Consequently, the revenue less cost recovery share of revenue ("Profit Gas") was 35% all year. In 2009 the Profit Gas percentage was 30% for the first two quarters of the year and 35% for the last two quarters.

From January 2011, a significant proportion of the gas production is coming from a deemed TPDC backed in well (namely SS10). This will impact the proportion of the net revenue that is allocated to Orca Exploration in the future as TPDC's profit share increases by 20% for that production emanating from backed in wells. The Company is still to resolve the final details of the back in with TPDC.

Orca Exploration is assessed to have recoverable costs throughout 2010 and 2009 and accordingly was allocated 84.0% (2009: 82.9%) of the Net Revenues as follows:

	2010	2009
<i>FIGURES IN US\$'000</i>		
Gross sales revenue	50,348	37,475
Gross tariff for processing plant and pipeline infrastructure	(7,932)	(6,340)
Gross revenue after tariff	42,416	31,135
<i>Analysed as to:</i>		
Company Cost Gas	31,812	23,352
Company Profit Gas	3,853	2,488
Company operating revenue	35,665	25,840
TPDC Profit Gas	6,751	5,295
	42,416	31,135

The Company's total revenues for the year amounted to US\$38,808,000 after adjusting the Company's operating revenue of US\$35,665,000 by:

- i) US\$3,943,000 for income tax in the current year. The Company is liable for income tax in Tanzania, but the income tax is recoverable out of TPDC's Profit Gas when the tax is payable. To account for this, revenue is adjusted to reflect the current year income tax charge or loss.
- ii) US\$800,000 for the deferred effect of Additional Profits Tax. This tax is considered a royalty and is netted against revenue.

Revenue per the income statements may be reconciled to the operating revenue as follows:

	2010	2009
FIGURES IN US\$'000		
Industrial sector	21,933	17,526
Power sector	28,415	19,949
Gross sales revenue	50,348	37,475
Processing and transportation tariff	(7,932)	(6,340)
TPDC share of revenue	(6,751)	(5,295)
Company operating revenue	35,665	25,840
Additional Profits Tax	(800)	(489)
Current income tax adjustment	3,943	–
Provision for bad debts	–	(34)
Revenue	38,808	25,317

PROCESSING AND TRANSPORTATION TARIFF

A flat rate gas processing and transportation tariff of US\$0.59/mcf was introduced from 1 January 2010 that will enable Songas to make a rate of return on their investment as determined by EWURA. The Company will pass on any increase or decrease in the EWURA approved charges to TANESCO/Songas in respect of sales to the power sector. This protocol insulates Orca Exploration from any increases in the gas processing and pipeline infrastructure costs.

Under the terms of the project agreements, the 2009 tariff paid for processing and transporting the Additional Gas was calculated as 17.5% of the price of gas at the Songas main pipeline in Dar es Salaam ("Songas Outlet Price").

In calculating the Songas Outlet Price for the industrial customers, an average amount of US\$0.69/mcf ("Ringmain Tariff") was deducted from the achieved industrial sales price during 2009 to reflect the gas price that would be achievable at the Songas main pipeline. The Ringmain Tariff represents the amount that would be required to compensate a third party distributor of the gas for constructing the connections from the Songas main pipeline to the industrial customers.

PRODUCTION AND DISTRIBUTION EXPENSES

The production and distribution expenses are summarised in the table below:

	2010	2009
FIGURES IN US\$'000		
Share of well maintenance	775	601
Other field and operating costs	1,855	798
	2,630	1,399
Distribution costs	2,249	1,408
Production and distribution expenses	4,879	2,807

The well maintenance costs are allocated between Protected and Additional Gas based on the proportion of their respective sales during the year. The total costs for the maintenance for the year was US\$1,235,000 (2009: US\$1,124,000) of which US\$775,000 (2009: US\$601,000) was allocated for the Additional Gas.

Other field operating costs include an apportionment of the annual PSA license costs regulatory fees, the annual evaluation of reserves and the cost of personnel that are not recoverable from Songas. The increase in costs over 2009 is predominately the result of a 30% increase in the level of production and the re-rating fee that was payable to Songas in order for the gas processing plant to be operated at 90 MMcfd.

Distribution costs represent the direct cost of maintaining the ring-main distribution pipeline and pressure reduction station (security, insurance and personnel). The increase over 2009 is a result of higher insurance premiums, additional preventative maintenance and the commencement of CNG operations during the year.

TPDC and MEM have indicated that they wish Orca to unbundle the downstream business in Tanzania. The methodology for this is still to be discussed in detail with both TPDC and MEM.

OPERATING NETBACK

The operating netback per mcf before general and administrative costs, overheads, income tax and Additional Profits Tax may be analysed as follows:

	2010	2009
AMOUNTS IN US\$/MCF		
Gas price – industrial	8.76	8.36
Gas price – power	2.60	2.40
Weighted average price for gas	3.75	3.60
Tariff (after allowance for the Ringmain Tariff in 2009)	(0.59)	(0.61)
TPDC Profit Gas	(0.50)	(0.51)
Net selling price	2.66	2.48
Well maintenance and other operating costs	(0.20)	(0.13)
Distribution costs	(0.17)	(0.14)
Operating netback	2.29	2.21

The operating netback increased by 4% from US\$2.21/mcf to US\$2.29/mcf in 2010.

The rise in the weighted average sales price from US\$3.60/mcf to US\$3.75/mcf was a result of the increase in the sales price achieved in both the industrial and power sectors. There was no material change in the relative sales mix between 2009 and 2010, with the industrial sales accounting for 20% in 2009 and 19% in 2010. The increase in the price of power sales is in line with contractual arrangements. The rise in industrial sales is a consequence of the slight increase in global energy prices during 2010.

The decrease in the tariff rate from US\$0.61/mcf to US\$0.59/mcf is a consequence of the energy regulator having adopted a flat rate per mcf in 2010, as opposed to fixed percentage of revenue in 2009. The fall in the ratio of TPDC profit share to sales price during 2010 is a reflection of their lower profit gas entitlement as Additional Gas volumes increase against a background of a recovery of 75% of the net revenue as Cost Gas.

The increase in the well maintenance and other operating costs and the ring main distribution costs (as explained above) have led to a higher rate on a per mcf basis, though this is partially offset by the 30% increase in the volume of sales achieved compared to 2009.

GENERAL AND ADMINISTRATIVE EXPENSES

The general and administrative expenses ("G&A") may be analysed as follows:

	2010	2009
FIGURES IN US\$'000		
Employee costs	2,558	1,981
Consultancy	2,745	2,474
Travel & accommodation	883	667
Communications	113	83
Office	1,116	1,120
Insurance	323	250
Auditing & taxation	215	219
Depreciation	208	215
Reporting, regulatory and corporate finance	637	305
	8,798	7,314
Marketing and legal costs	1,876	2,511
New ventures	378	239
Stock based compensation	664	1,401
General and administrative expenses	11,716	11,465

The G&A primarily consists of costs of running the gas operations in Tanzania and the majority of it is recoverable as Cost Gas. G&A averaged approximately US\$0.98 million per month in 2010 (2009: US\$0.96 million). G&A per mcf was US\$0.87/mcf (2009: US\$1.10/mcf). The main variances are summarised below:

Employee costs

The increase reflects the rise in the costs associated with expats and the general rise in the level of social benefits payable in Tanzania. The Company also incurred costs on executive recruitment in Q4 2010 following the decision to build the strength of the management team in light of the growing level of development activities through 2011.

Consultancy

The increase in consultancy expenditure is mainly due to the increase in the time undertaken by management in identifying potential new venture acquisitions. The increased effort resulted in the acquisition of interests in two Italian exploration assets during the year. The US\$0.4 million new ventures expenditure relates to external third party costs and the acquisition of data.

Travel and accommodation

The increase in the level of travel and accommodation is a consequence of the increased number of business trips to Tanzania by Company officials and other marketing and legal professionals in relation to the negotiation of infrastructure developments, together with an increase in costs associated with new ventures.

Reporting, regulatory and corporate.

The increase in costs over 2009 is due to the appointment of three additional non-executive directors, together with the additional cost of the Chairman assuming the role of Chief Executive Officer in order to lead the company through its next stage of development.

Marketing and legal

These costs include marketing, legal, corporate promotion and costs of training Government officials in accordance with the terms of the PSA. The costs were significantly lower during 2010 as a result of the settlement of the claim against a third party contractor. The costs incurred on the negotiation of long term power and related contracts and in the continued preparation of applications to the regulatory authority, EWURA, have continued to be incurred at a rate similar to 2009.

Stock based compensation

The breakdown of the costs incurred in relation to stock based compensation is detailed in the table below:

	2010	2009
FIGURES IN US\$'000		
Stock options	607	1,052
Stock appreciation rights	57	279
Treasury stock	–	70
	664	1,401

A total of 2,557,000 stock options were issued and outstanding at the end of 2010 compared to 2,797,000 at the end of 2009. All of the outstanding options were fully expensed by the end of 2010. The decline in the charge from 2009 is a consequence of the IFRS-2 accounting treatment which sees the majority of the costs being charged in the first two years from the date of grant.

A total of 930,000 stock appreciation rights were outstanding at the end of 2010. A total of 105,000 stock appreciation rights expired in February 2010. In June 2010, 225,000 stock appreciation rights were issued to the new non-executive directors with an exercise price of Cdn\$4.20. The rights have a term of five years and vest in five equal instalments, the first fifth vesting on the anniversary of the grant date.

As stock appreciation rights are settled in cash, they are re-valued at each reporting date using the Black-Scholes option pricing model. As at 31 December 2010, the following assumptions were used; stock volatility between 55% and 71%, a risk free interest rate of 1.50% to 2.50% and a closing stock price of Cdn\$5.43. The decline in the charge in the year is a result of a fall in the volatility of the stock price and the fall in the remaining contractual life of the majority of the rights to just over one year.

In April 2007, 200,000 Class B treasury stock were awarded to a newly appointed officer. These shares were fully vested at the end of the first quarter of 2009.

NET FINANCING CHARGES

The loss on foreign exchange experienced in the year is a result of the strengthening US Dollar against the Tanzanian Shilling. Despite the gas sales price being denominated in US Dollars, the invoices are submitted in Tanzanian Shillings. Therefore, there is an exchange rate exposure between the time the invoices are submitted and the date the payment is received.

	2010	2009
FIGURES IN US\$'000		
FINANCE INCOME		
Interest income	40	44
Foreign exchange gain	–	105
	40	149
FINANCE CHARGES		
Overdraft charges	(12)	(23)
Foreign exchange loss	(890)	(279)
	(902)	(302)
Net financing charges	(862)	(153)

TAXATION**Income Tax**

Under the terms of the PSA with TPDC, the Company is liable for income tax in Tanzania at the corporate tax rate of 30%. However, where income tax is payable, this is recovered from TPDC by deducting an amount from TPDC's profit share. This is reflected in the accounts by adjusting the Company's revenue by the appropriate amount.

As at 31 December 2010, there were temporary differences between the carrying value of the assets and liabilities for financial reporting purposes and the amounts used for taxation purposes under the Income Tax Act 2004. Applying the 30% Tanzanian tax rate, the Company has recognised a deferred tax liability of US\$12.8 million which represents an additional deferred future income tax charge of US\$3.7 million for the year. This tax has no impact on cash flow until it becomes a current income tax at which point the tax is paid to the Commissioner of Taxes and recovered from TPDC's share of Profit Gas.

Additional Profits Tax

Under the terms of the PSA, in the event that all costs have been recovered with an annual return of 25% plus the percentage change in the United States Industrial Goods Producer Price Index, an Additional Profits Tax ("APT") is payable.

The Company provides for APT by forecasting the total APT payable as a proportion of the forecast Profit Gas over the term of the PSA license. The effective APT rate has been calculated to be 21%. Accordingly, US\$0.8 million (2009: US\$0.5 million) has been netted off revenue for the year ended 31 December 2010.

Management does not anticipate that any APT will be payable in 2011, as the forecast revenues will not be sufficient to cover the un-recovered costs brought forward as inflated by 25% plus the PPI percentage change and the forecast expenditures for 2011. The actual APT that will be paid is dependent on the achieved value of the Additional Gas sales and the quantum and timing of the operating costs and capital expenditure programme.

The APT can have a significant negative impact on the Songo Songo project economics as measured by the net present value of the cash flow streams. Higher revenue in the initial years leads to a rapid payback of the project costs and consequently accelerates the payment of the APT that can account for up to 55% of the Company's profit share. Therefore, the terms of the PSA reward the Company for taking higher risks by incurring capital expenditure in advance of revenue generation.

DEPLETION AND DEPRECIATION EXPENSE

The Natural Gas Properties are depleted using the unit of production method based on the production for the period as a percentage of the total future production from the Songo Songo proven reserves. As at 31 December 2010, the proven reserves as evaluated by the independent reservoir engineers McDaniel & Associates Consultants Ltd ("McDaniel") were 369.2 Bcf after TPDC 'back in' on a life of license basis. This leads to an average depletion charge of US\$0.36/mcf for the year (2009: US\$0.37/mcf).

Non-Natural Gas Properties are depreciated as follows:

Leasehold improvements	Over remaining life of the lease
Computer equipment	3 years
Vehicles	3 years
Fixtures and fittings	3 years

CARRYING VALUE OF ASSETS

Capitalised costs are periodically assessed to determine whether it is likely that such costs will be recovered in the future. To the extent that these capitalised costs are unlikely to be recovered in the future, they are written off and charged to earnings.

FUNDS GENERATED BY OPERATIONS

Funds from operations before working capital changes were US\$20.8 million for the year ended 31 December 2010 (2009: US\$12.3 million).

	2010	2009
FIGURES IN US\$'000		
Profit after taxation	10,011	3,324
Adjustments ⁽ⁱ⁾	10,825	9,008
Funds flow from operating activities	20,836	12,332
Working capital adjustments ⁽ⁱ⁾	(5,302)	(325)
Net cash flows from operating activities	15,534	12,007
Net cash flows used in investing activities	(2,923)	(8,029)
Net cash flows from/(used in) financing activities	18,705	(298)
Increase of cash and cash equivalents	31,316	3,680
Effect of change in foreign exchange	(340)	277
Net increase in cash and cash equivalents	30,976	3,957

⁽ⁱ⁾ SEE CONSOLIDATED STATEMENTS OF CASH FLOWS

The increase in cash and cash equivalents is primarily a consequence of the increased funding from the successful completion of the rights issue in October 2010 (net funding after costs of US\$18.5 million), together with record cash flows from operations as a consequence of the 29% rise in the volume of Additional Gas sold.

CAPITAL EXPENDITURES

Capital expenditures amounted to US\$3.4 million during the year (2009: US\$5.3 million). The capital expenditures may be analysed as follows:

	2010	2009
FIGURES IN US\$'000		
Geological and geophysical and well drilling	1,598	(199)
Pipelines and infrastructure	1,582	4,442
Power development	6	635
Other equipment	195	434
	3,381	5,312

Geological and geophysical and well drilling – US\$1.6 million

A total of US\$1.2 million was incurred on the tie in of the SS-10 well to the gas processing plant on Songo Songo Island. The tie in was completed during January 2011 and enabled the gas deliverability to be maintained above the infrastructure capacity.

In Q4 2010, some preliminary studies were undertaken on developing a well workover programme following the results of the corrosion logging that was run in Q4 2010.

A total of US\$0.1 million was incurred on reservoir studies. The aim of these studies is to get a better understanding of well deliverability and GIIP.

A total of US\$0.2 million was incurred on well preparation work for the future drilling of an exploration well on the Songo Songo West prospect.

Pipelines and infrastructure – US\$1.6 million

A total of US\$0.7 million was incurred during the year in connecting 6 new customers, 4 of which were consuming Additional Gas by the end of the year.

US\$0.2 million was incurred during the year on enhancing the metering capabilities for both the power and industrial sectors. This work is ongoing and will be completed during 2011. The installation of the meters will ultimately lead to a more efficient invoicing system and will enable an accurate measure of usage by customers to be obtained on a daily basis.

An additional US\$0.3 million was incurred during the year on the continued expansion of compressed natural gas ("CNG") facilities, with the installation of a daughter station at Mikocheni. The CNG facilities now include a mother station at the Ubungo power plant, two vehicle dispenser and two daughter stations. The initial CNG project is targeting local hotels and industries and the conversion of motor vehicles to CNG.

Orca Exploration incurred a total of US\$0.4 million on studies in relation to the expansion of the infrastructure that processes and transports the gas from Songo Songo Island to Dar es Salaam. Studies are being pursued on a number of different fronts from a potential early production facility to assisting Songas with its expansion project to install new processing capacity and downstream compression ("Songas Expansion Project"). A cost sharing agreement was signed with Songas at the start of 2011 which will see Orca contribute up to US\$2.4 million on getting the Songas Expansion Project to financial close.

WORKING CAPITAL

Working capital as at 31 December 2010 was US\$52.4 million (31 December 2009: US\$16.8 million) and may be analysed as follows:

	2010	2009
FIGURES IN US\$'000		
Cash and cash equivalents	45,519	14,543
Trade and other receivables	13,583	8,002
Taxation receivable	4,009	714
Prepayments	409	465
	63,520	23,724
Trade and other payables	9,156	6,889
Taxation payable	2,000	–
Working capital	52,364	16,835

The increase in working capital by US\$35.5 million during 2010 is primarily due to the generation of US\$15.5 million in net cash flows from operating activities and the raising of Cdn\$18.5 million from a fully subscribed 1 for 6 rights issue at Cdn\$3.90 in October 2010.

The majority of the cash is held in US and Cdn Dollars in Mauritius, and in Tanzanian Shillings in Tanzanian bank accounts. There are no restrictions in Tanzania for converting Tanzania Shillings into US Dollars. Any surplus cash is held in a fixed rate interest earning deposit account.

Trade and other receivables at 31 December 2010 represent US\$11.9 million of trade receivables (2009: US\$7.1 million), US\$1.7 million of other receivables (2009: US\$0.9 million) and taxation US\$4.0 million (2009: US\$0.7 million). The increase in other receivables is in relation to funds advanced for the purchase of a gas to gas exchanger on behalf of Songas. The increase in taxation is a consequence of the level of current taxation paid in the year, whereby any tax payable is recoverable from TPDC in accordance with the production sharing agreement.

Under the contract terms with the industrial customers, the Additional Gas payments must be received within 30 days of the month end. As at 31 December 2010, US\$4.2 million (2009: US\$4.2 million) was due from industrial customers, which has all subsequently been received. The balance of US\$7.7 million (2009: US\$2.9 million) is made up of amounts due from the two power customers, TANESCO and Songas.

The contracts with Songas and TANESCO accounted for 56% (2009: 53%) of the Company's operating revenue in 2010. Songas' financial security is, in turn, heavily reliant on the payment of capacity and energy charges by TANESCO. TANESCO is dependent on the Government of Tanzania for some of its funding. While some payments have been delayed, the Company has subsequently collected the majority of the amounts due from Songas and TANESCO as at 31 December 2010.

Of the trade and other payables, US\$0.6 million related to capital expenditure (2009: US\$0.6 million).

OUTSTANDING SHARE CAPITAL

There were 34.7 million shares outstanding as at 31 December 2010 which may be analysed as follows:

	2010	2009
NUMBER OF SHARES ('000)		
SHARES OUTSTANDING		
Class A shares	1,751	1,751
Class B shares	32,939	27,743
	34,690	29,494
CONVERTIBLE SECURITIES		
Options	2,557	2,797
Fully diluted Class A and Class B shares	37,247	32,291
WEIGHTED AVERAGE		
Class A and Class B shares	30,795	29,541
Convertible Securities		
Options	1,098	1,163
Weighted average diluted Class A and Class B shares	31,893	30,704

The movement in Class B shares during the year is analysed in the table below:

Number of shares ('000)	2010	2009
As at 1 January	27,743	27,863
Shares issued	4,956	–
Stock options exercised	240	–
Normal course issuer bid	–	(120)
As at 31 December	32,939	27,743

As at 28 April 2011, there were a total of 32,938,615 Class B shares and 1,751,195 Class A shares outstanding.

Stock Based Compensation

The stock option plan provides for the granting of stock options to directors, officers, employees and consultants. The exercise price of each stock option is determined as the closing market price of the common shares on the day prior to the day of grant. Each stock option granted permits the holder to purchase one common share at the stated exercise price. The Company records a charge to the profit and loss account using the Black-Scholes fair valuation option pricing model. The valuation is dependent on a number of estimates, including the risk free interest rate, the level of stock volatility, together with an estimate of the level of forfeiture. The level of stock volatility is calculated with reference to the historic closing share price at the date of issue.

The movement in stock options for the year is analysed in the table below:

Number of options ('000)	Options
As at 1 January 2010	2,797
Exercised	(240)
As at 31 December 2010	2,557

CONTRACTUAL OBLIGATIONS AND COMMITTED CAPITAL INVESTMENT

Contractual Obligations

Protected Gas

Under the terms of the original gas agreement for the Songo Songo project ("Gas Agreement"), in the event that there is a shortfall/insufficiency in Protected Gas as a consequence of the sale of Additional Gas, then the Company is liable to pay the difference between the price of Protected Gas (US\$0.55/Mmbtu) and the price of an alternative feedstock multiplied by the volumes of Protected Gas up to a maximum of the volume of Additional Gas sold (47.7 Bcf as at 31 December 2010).

The Gas Agreement has been amended by an initialled Amended and Restated Gas Agreement ("ARGA"). The ARGA provides clarification of the Protected Gas volumes and removes all terms dealing with the security of the Protected Gas and the consequences of any insufficiency to a new Insufficiency Agreement ("IA"). The IA specifies terms under which Songas may demand cash security in order to keep them whole in the event of a Protected Gas insufficiency. Once the Insufficiency Agreement is signed, it will govern the basis for determining security. Under the provisional terms of the IA, when it is calculated that funding is required, the Company shall fund an escrow account at a rate of US\$2/Mmbtu on all industrial Additional Gas sales out of its and TPDC share of revenue, and TANESCO shall contribute the same amount on Additional Gas sales to the power sector. The funds provide security for Songas in the event of an insufficiency of Protected Gas. The Company is actively monitoring the reservoir and does not anticipate that a liability will occur in this respect.

Back in

TPDC has indicated that they wish to exercise their right to 'back in' to the field development by contributing 20% of the costs of the future wells including SS-10 in return for a 20% increase in the profit share percentage for the production emanating from these wells. The implications and workings of the 'back in' are currently being discussed with TPDC and there may be the need for additional reserve and accounting modifications once these discussions are concluded. For the purpose of the reserves certification, it has been assumed that they will 'back in' for 20% for all future drilling activities and other developments and this is reflected in the Company's net reserve position.

Operating leases

The Company has two office rental agreements in Dar es Salaam, expiring on 30 November 2012 and 31 October 2013 at an annual rental of US\$122,000 and US\$110,000 per annum respectively.

Capital Investments

Italy

On 31 May 2010, the Company signed an agreement with Petroceltic International plc ("Petroceltic") to farm in to Petroceltic's Central Adriatic B.R268.RG Permit offshore Italy. The farm in commits the Company to fund 30% of the Elsa-2 appraisal well up to a maximum of US\$11.5 million to earn a 15% working interest in the permit. Thereafter, the Company will fund all future costs relating to the well and the permit in proportion to its participating interest. The Company has also agreed to pay Petroceltic fifteen per cent (15%) of the back costs in relation to the well up to a maximum of US\$0.5 million.

Petroceltic were due to spud the Elsa-2 well prior to 31 October 2010, but the Italian government passed a decree, following the blowout of the Macondo well in the U.S., that prevented the drilling in the Italian seas within 5 nautical miles of the coastline and within 12 nautical miles around the perimeter of protected Marine Parks. In view of this, Petroceltic suspended the permit until such time as the Ministry of Environment issues a decree of environmental compatibility for the drilling programme. The project is currently on hold and Orca is not liable to any costs associated with the drilling of Elsa-2 until a rig contract is signed.

In December 2010, the Company announced a farm in to Northern Petroleum (UK) Limited's Longastrino Block in the Po Valley Basin. Under the terms of the farm in, Orca will pay 100% of the costs of the La Tosca well up to a cap of approximately €4.3 million and 70% of the costs thereafter. If the well is tested and completed, Orca will earn an additional 5% (taking it to 75%) by paying 100% of the testing costs up to €1.3 million and 75% thereafter. The Company will also pay back past costs of €0.6 million.

Songo Songo

In Q4 2010 the Company reduced the deliverability from its Songo Songo wells following receipt of results of a corrosion logging survey. Orca suspended production from SS-5, reduced flow rates from the other wells and expedited the tie in of the new onshore well SS10. As of today, the Company can produce approximately 113 MMcfd though this is currently restricted by the infrastructure capacity to 90 MMcfd.

The corrosion model forecasts that the offshore well, SS-9 currently producing in the region of 30 MMcfd, will need to be taken out of production at the end of Q1 2012, subject to re-logging of the well in September 2011 to confirm its condition. Accordingly, the Company has determined that in 2011, subject to TPDC approval and rig availability a new onshore deviated well should be drilled followed by an enhancement of the SS-10 well. It is anticipated that the capital cost of this programme will be in the region of US\$35 million and could increase deliverability from the field to 172 MMcfd by the time SS-9 is taken out of production.

Songo Songo West

The Company is currently planning to drill one well on the Songo Songo West at a cost of US\$25 million. It is currently estimated that the well will be spud in the second quarter of 2012. Assuming the well is a success a substantial well test program will be undertaken before the well is suspended at the mudline as a potential future producer.

Cost Sharing Agreement

In January 2011, the Company signed a cost sharing agreement with Songas, whereby the Company will fund 50% of the costs of getting the Songas Expansion Project (installation of gas processing capacity and downstream compression to increase the infrastructure capacity to 140 MMcfd) to financial close. In the event that the costs are approved by the regulator, EWURA, the funds will be repaid by Songas at financial close. If the project is not successful, the costs will be recoverable by the Company under the terms of the PSA with TPDC.

Funding

The Company's 2011 work programme principally includes the drilling of the new onshore deviated well, SS-A, the enhancement of SS-10, the drilling of La Tosca in the Po Valley and the purchase of long lead items for SSW. Whilst there should be sufficient funds to undertake this work programme in 2011 through the use of existing cash balances and self generated cash flows, the Company will look to secure a financing facility by Q4 2011 and/or raise new equity to cover the 2012 exploration activity.

OFF-BALANCE SHEET TRANSACTIONS

As at 31 December 2010, the Company had no off-balance sheet arrangements.

RELATED PARTY TRANSACTIONS

One of the non executive Directors is a partner at a law firm. During the year, the Company incurred US\$276,000 to this firm for services provided. The transactions with this related party was made at the exchange amount.

SUMMARY QUARTERLY RESULTS

The following is a summary of the results for the Company for the last eight quarters:

	2010				2009			
	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
FIGURES IN US\$'000 EXCEPT WHERE OTHERWISE STATED								
FINANCIAL								
Revenue	10,557	10,975	9,017	8,259	7,837	7,536	5,501	4,443
Profit/(loss) after taxation	1,885	3,578	2,608	1,940	1,564	1,549	379	(168)
Operating netback (US\$/MCF)	2.28	2.32	2.37	2.19	2.29	2.17	2.17	2.18
Working capital	52,364	30,093	24,941	20,891	16,835	12,147	9,939	9,154
Shareholders' equity	98,183	77,827	73,942	70,955	68,860	67,159	65,477	64,684
Profit/(loss) per share – basic (US\$)	0.05	0.12	0.09	0.07	0.06	0.05	0.01	(0.01)
Profit/(loss) per share – diluted (US\$)	0.05	0.12	0.08	0.06	0.06	0.05	0.01	(0.01)
CAPITAL EXPENDITURES								
Geological and geophysical and well drilling	607	502	320	169	(890)	338	222	131
Pipeline and infrastructure	383	692	492	15	157	1,339	1,317	1,630
Power development	–	6	–	–	343	289	3	–
Other equipment	45	23	77	50	69	27	207	130
OPERATING								
Additional Gas sold – industrial (MMcf)	687	770	562	485	542	581	613	360
Additional Gas sold – power (MMcf)	2,926	2,918	2,440	2,656	2,570	2,493	1,693	1,570
Average price per mcf – industrial (US\$)	8.67	8.01	9.45	9.32	9.49	9.02	7.02	7.91
Average price per mcf – power (US\$)	2.63	2.63	2.56	2.56	2.41	2.41	2.36	2.39

The principal developments in Q4 were as follows:

- Achieved a quarterly sales volume of 3,613 MMcf or 39.3 MMcfd which represents the second best quarter since sales began in 2004, with the sales revenue at US\$10.6 million.
- The completion of a 1 for 6 rights offering, which resulted in the issuance of 4,955,687 shares with gross proceeds of Cdn\$19.3 million.
- In December 2010, the Company signed an agreement with Northern Petroleum (UK) Limited to farm in on its Longastrino Block in the Po Valley Basin, onshore Italy. Under the terms of the farm in with Northern Petroleum, Orca will pay 100% of the costs of the first well up to €4.3 million and 70% thereafter to complete the drilling phase. If the well is tested and completed, then Orca will earn an additional 5% by paying 100% of the testing costs up to €1.3 million and 75% thereafter. The Company will also pay back costs of €0.6 million.

- As part of the well intervention works carried out in October 2010, Orca conducted a multi-finger caliper logging survey in all the producing wells (excluding SS-10) for the purpose of corrosion monitoring of the production tubing. The results show corrosion of the tubing has occurred. A number of experts were engaged by Orca during Q4 2010 to interpret the data and analyse the potential cause of the corrosion and make recommendations on remedial solutions. The tubing integrity of SS-5 was deemed to be of such a nature that a decision was taken to shut-in the well in December.

VARIANCE ANALYSIS BETWEEN QUARTERS

Revenue

The Company commenced the sale of Additional Gas to industrial customers in September 2004. Since then, the volumes of Additional Gas sold to the industrial sector have increased from an average of 1.2 MMcfd in Q4 2004 to 7.5 MMcfd in Q4 2010 (Q4 2009: 5.9 MMcfd). Industrial sales peak in the third quarter of each year as textile customers take advantage of low cotton prices during the harvest season. The average sales in Q3 2010 were 8.4 MMcfd compared to 6.2 MMcfd in Q3 2009. The higher volume recorded in 2010 is primarily due to the sale of Additional Gas to the Wazo Hill cement plant. Excluding Wazo Hill average sales in Q4 were 4.6 MMcfd in both 2009 and 2010. The average sales price achieved in Q4 was US\$8.67/mcf compared to US\$9.49/mcf in Q4 2009. The decline is a result of the proportionate increase in the value of sales which have been derived from the sale of Additional Gas to the Wazo Hill cement plant. These sales accounted for 44% of industrial sales in Q4 2010 compared to 22% in Q4 2009.

The sale of Additional Gas to the power sector commenced in Q3 2005 and this contributed towards a significant step increase in revenue from that quarter. In Q4 2010, sales averaged 31.8 MMcfd compared to 27.9 MMcfd in Q4 2009. This represents the highest daily rate recorded. The increase is a result of the supply of gas to the Tegeta 45 MW power plant, which was commissioned in December 2009. The average price for power sales in Q4 2010 was US\$2.63/mcf compared to US\$2.41/mcf in Q4 2009. The increase is a consequence of annual inflationary price increases and a change in the regulated processing and transportation tariff.

Profit before tax

A profit of before taxation of US\$3.6 million was recorded in Q4 2010 compared to a profit of US\$2.8 million in Q4 2009. The increase in the gross profit attributable to the increase in Additional Gas sales has been eroded by the increase in general administrative expenses in the fourth quarter of 2010 due to the increased level of activity on new venture expenditure and the growth of the management platform through new hires and recruitment costs.

Working capital

The increase in working capital by US\$35.5 million during 2010 is primarily due to the generation of US\$15.5 million in cash flows after working capital adjustments and the raising of US\$18.5 million from a fully subscribed 1 for 6 rights issue at Cdn\$3.90 in October.

SELECTED FINANCIAL INFORMATION

Selected annual financial information derived from the audited consolidated financial statements for the years ended 31 December 2008, 2009 and 2010 is set out below:

	2010	2009	2008
FIGURES IN US\$'000 EXCEPT PER SHARE AMOUNT			
Revenue	38,808	25,317	23,782
Funds flow from operating activities	20,836	12,332	9,751
Profit/(loss) after taxation	10,011	3,324	(9,523)
Total assets	124,408	86,277	85,248
Profit/(loss) per share:			
Basic (US\$)	0.33	0.11	(0.32)
Diluted (US\$)	0.31	0.11	(0.32)

Revenue increased by 53% to US\$38.8 million in 2010 from US\$25.3 million in 2009. The sales volumes were 30% higher in 2010 than 2009, with the weighted average price increasing from US\$3.60/mcf to US\$3.75/mcf. In 2010, current taxation of US\$2.7 million was payable (2009: US\$ nil) which in accordance with the terms of the PSA is recoverable from TPDC. Consequently revenue in 2010 has been uplifted by the gross amount of US\$3.9 million.

The level of industrial volumes increased by 19% to 2,504 MMcf from 2,096 MMcf in 2009 mainly as a consequence of the increase in sales to the Wazo Hill cement plant. The level of power sales increased by 31% to 10,940 MMcf from 8,326 MMcf. The increase in power sales is attributable to the start up of the Tegeta 45 MW power plant in December 2009.

Revenue increased by 6% to US\$25.3 million in 2009 from US\$23.8 million in 2008. The increase was a result of an increase in production volumes of 20% set against a fall of 10% in the weighted average realized price from US\$4.01/mcf in 2008 to US\$3.60/mcf in 2009.

Funds from operations before working capital changes increased by 69% from US\$12.3 million in 2009 to US\$20.8 million in 2010 as a consequence of increased sales revenue, the impact of which has been slightly reduced by a 12% increase in the level of administrative expenses. The funds from operation grew from US\$9.8 million in 2008 to US\$12.7 million in 2009 mainly as a result of an increased level of sales. The 2008 loss after taxation of US\$9.5 million was due to the write off of US\$9.5 million in relation to the withdrawal from exploration activities in Uganda.

During 2010, the Company's assets increased by 44% to US\$124.4 million (2009: increased 1% to US\$86.3 million). The Company's assets are made up as follows:

	2010	2009	2008
FIGURES IN US\$'000			
CURRENT ASSETS			
Cash and cash equivalents	45,519	14,543	10,586
Trade and other receivables	13,583	8,002	13,025
Taxation receivable	4,009	714	–
Prepayments	409	465	171
	63,520	23,724	23,782
FIXED ASSETS			
Exploration and evaluation assets	942	760	648
Plant, property and other equipment	59,946	61,793	60,818
	60,888	62,553	61,466
Total assets	124,408	86,277	85,248

The increase in cash and cash equivalents is mainly the consequence of the proceeds of the rights issue and the increase in the level of operating revenue. The increase recorded in 2009 was a consequence of a reduction in the administrative costs against similar revenue levels in 2008.

The increase in trade and other receivables is a consequence of an increase of 166% in the level of receivables from the power sales in Tanzania from US\$2.9 million to US\$7.7 million that arose from a 43% rise in the level of power revenue from US\$20 million in 2009 to US\$28.4 million. The balance of the increase is due to the increase in the level of tax recoverable from TPDC to US\$4.0 million. The decrease in trade and other receivables in 2009 is due to the improved collection of receivables from the power sector, with the overall level of trading activity being consistent between 2009 and 2008.

Total capital expenditure of US\$3.4 million was incurred in 2010 against US\$5.3 million in 2009. The expenditure in 2009 was mainly incurred on pipelines and infrastructure in Tanzania (US\$4.4 million compared to US\$1.6 million in 2010). The balance of the 2010 expenditure was incurred on the evaluation of the Songo Songo West prospect and the connection of the SS-10 well to the gas processing infrastructure. The level of capital expenditure in 2009 has been similar to 2008. The focus in 2009 was on the development of the CNG market and its associated facilities, continued geological studies of the existing gas reservoir, increasing the overall processing capacity of the existing Songas facilities and connecting the Tegeta 45 MW power generation station.

BUSINESS RISKS

Operating Hazards and Uninsured Risks

The business of Orca Exploration is subject to all of the operating risks normally associated with the exploration for, and the production, storage, transportation and marketing of oil and gas. These risks include blowouts, explosions, fire, gaseous leaks, downhole design and integrity, migration of harmful substances and oil spills, any of which could cause personal injury, result in damage to, or destruction of, oil and gas wells or formations or production facilities and other property, equipment and the environment, as well as interrupt operations. In addition, all of Orca Exploration's operations will be subject to the risks normally incident to drilling of natural gas wells and the operation and development of gas properties, including encountering unexpected formations or pressures, premature declines of reservoirs, blowouts, equipment and tubing failures and other accidents, sour gas releases, uncontrollable flows of oil, natural gas or well fluids, adverse weather conditions, pollution and other environmental risks. Drilling conducted by Orca Exploration overseas will involve increased drilling risks of high pressures and mechanical difficulties, including stuck pipe, collapsed casing and separated cable. The impact that any of these risks may have upon Orca Exploration is increased due to the fact that Orca Exploration currently only has one producing property. Orca Exploration will maintain insurance against some, but not all, potential risks; however, there can be no assurance that such insurance will be adequate to cover any losses or exposure for liability. The occurrence of a significant unfavourable event not fully covered by insurance could have a material adverse effect on Orca Exploration's financial condition, results of operations and cash flows. Furthermore, Orca Exploration cannot predict whether insurance will continue to be available at a reasonable cost or at all.

Foreign Operations

Orca Exploration's operations and related assets are located in Italy and Tanzania which may be considered to be politically and/or economically unstable. Exploration or development activities in Tanzania and Italy may require protracted negotiations with host governments, national oil companies and third parties and are frequently subject to economic and political considerations, such as, the risks of war, actions by terrorist or insurgent groups, expropriation, nationalization, renegotiation or nullification of existing contracts and production sharing agreements, taxation policies, foreign exchange restrictions, changing political conditions, international monetary fluctuations, currency controls and foreign governmental regulations that favour or require the awarding of drilling contracts to local contractors or require foreign contractors to employ citizens of, or purchase supplies from, a particular jurisdiction. In addition, if a dispute arises with foreign operations, Orca Exploration may be subject to the exclusive jurisdiction of foreign courts.

In Tanzania, the state retains ownership of the minerals and consequently retains control of, the exploration and production of hydrocarbon reserves. Accordingly, these operations may be materially affected by host governments through royalty payments, export taxes and regulations, surcharges, value added taxes, production bonuses and other charges.

Orca's development properties and its current proved natural gas reserves located offshore on the Songo Songo Island in Tanzania, will be subject to regulation and control by the government of Tanzania and certain of its national and parastatal organizations including the energy regulator, EWURA. Orca Exploration and its predecessors have operated in Tanzania for a number of years and believe that it has reasonably good relations with the current Tanzanian government. However, there can be no assurance that present or future administrations or governmental regulations in Tanzania will not materially adversely affect the operations or future cash flows of Orca Exploration.

Additional Financing

Depending on future exploration, development, and marketing plans, Orca Exploration may require additional financing. The ability of Orca Exploration to arrange such financing in the future will depend in part upon the prevailing capital market conditions as well as the business performance of Orca Exploration. There can be no assurance that Orca Exploration will be successful in its efforts to arrange additional financing on terms satisfactory to Orca Exploration. If additional financing is raised by the issuance of shares from treasury of Orca Exploration, control of Orca Exploration may change and shareholders may suffer additional dilution.

From time to time Orca Exploration may enter into transactions to acquire assets or the shares of other companies. These transactions may be financed partially or wholly with debt, which may temporarily increase Orca Exploration's debt levels above industry standards.

Industry Conditions

The oil and gas industry is intensely competitive and Orca Exploration competes with other companies which possess greater technical and financial resources. Many of these competitors not only explore for and produce oil and natural gas, but also carry on refining operations and market petroleum, natural gas products and other products on an international basis. Oil and gas production operations are also subject to all the risks typically associated with such operations, including premature decline of reservoirs and invasion of water into producing formations. Currently, Orca Exploration operates the Songo Songo natural gas property and has interests in two permits in Italy. There is a risk that in the future either the operatorship could change and the property operated by third parties or operations may be subject to control by national oil companies, Songas, or parastatal organisations and, as a result, Orca Exploration may have limited control over the nature and timing of exploration and development of such properties or the manner in which operations are conducted on such properties.

The marketability and price of natural gas which may be acquired, discovered or marketed by Orca Exploration will be affected by numerous factors beyond its control. There is currently no developed natural gas market in Tanzania and no infrastructure with which to serve potential new markets beyond that being constructed by Orca Exploration and Songas. The ability of Orca Exploration to market any natural gas from current or future reserves in Tanzania may depend upon its ability to develop natural gas markets in Tanzania and the surrounding region, obtain access to the necessary infrastructure to deliver sales gas volumes, including acquiring capacity on pipelines which deliver natural gas to commercial markets. Orca Exploration is also subject to market fluctuations in the prices of oil and natural gas, uncertainties related to the delivery and proximity of its reserves to pipelines and processing facilities and extensive government regulation relating to prices, taxes, royalties, land tenure, allowable production, the export of oil and gas and many other aspects of the oil and gas business. Orca Exploration is also subject to a variety of waste disposal, pollution control and similar environmental laws.

The oil and natural gas industry is subject to varying environmental regulations in each of the jurisdictions in which Orca Exploration may operate. Environmental regulations place restrictions and prohibitions on emissions of various substances produced concurrently and oil and natural gas and can impact on the selection of drilling sites and facility locations, potentially resulting in increased capital expenditures.

Additional Gas

Orca Exploration has the right, under the terms of the PSA, to market volumes of Additional Gas subject to satisfying the requirements to deliver Protected Gas to Songas.

There is a risk that Songas could interfere in Orca Exploration's ability to produce, transport and sell volumes of Additional Gas if Orca Exploration's obligations to Songas under the Gas Agreement are not met. In particular, Songas has the right to request reasonable security on all Additional Gas sales.

Replacement of Reserves

Orca Exploration's natural gas reserves and production and, therefore, its cash flows and earnings are highly dependent upon Orca Exploration developing and increasing its current reserve base and discovering or acquiring additional reserves. Without the addition of reserves through exploration, acquisition or development activities, Orca Exploration's reserves and production will decline over time as reserves are depleted. To the extent that cash flow from operations is insufficient and external sources of capital become limited or unavailable, Orca Exploration's ability to make the necessary capital investments to maintain and expand its oil and natural gas reserves will be impaired. There can be no assurance that Orca Exploration will be able to find and develop or acquire additional reserves to replace production at commercially feasible costs.

Asset Concentration

Orca Exploration's natural gas reserves are currently limited to one producing property, the Songo Songo field, and the production potential from this field is limited to five wells. There has been limited production from the six wells in the Songo Songo field to date. There is no assurance that Orca Exploration will have sufficient deliverability through the existing wells to provide additional natural gas sales volumes, and that there may be significant capital expenditures associated with any remedial work, workovers, or new drilling required to achieve deliverability. In addition, any difficulties relating to the operation or performance of the field would have a material adverse effect on Orca Exploration. The Italian licences in which Orca has an interest are currently in the exploration phase of their cycle and it may be several years before Orca is able to obtain a revenue stream from these assets.

Environmental and Other Regulations

Extensive national, state, and local environmental laws and regulations in foreign jurisdictions will affect nearly all of Orca Exploration's operations. These laws and regulations set various standards regulating certain aspects of health and environmental quality, provide for penalties and other liabilities for the violation of such standards and establish in certain circumstances obligations to remediate current and former facilities and locations where operations are or were conducted. In addition, special provisions may be appropriate or required in environmentally sensitive areas of operation. There can be no assurance that Orca Exploration will not incur substantial financial obligations in connection with environmental compliance. Significant liability could be imposed on Orca Exploration for damages, cleanup costs or penalties in the event of certain discharges into the environment, environmental damage caused by previous owners of property purchased by Orca Exploration or non-compliance with environmental laws or regulations. Such liability could have a material adverse effect on Orca Exploration. Moreover, Orca Exploration cannot predict what environmental legislation or regulations will be enacted in the future or how existing or future laws or regulations will be administered or enforced. Compliance with more stringent laws or regulations, or more vigorous enforcement policies of any regulatory authority, could in the future require material expenditures by Orca Exploration for the installation and operation of systems and equipment for remedial measures, any or all of which may have a material adverse effect on Orca Exploration. As party to various licenses, Orca Exploration has an obligation to restore producing fields to a condition acceptable to the authorities at the end of their commercial lives.

While management believes that Orca Exploration is currently in compliance with environmental laws and regulations applicable to Orca Exploration's operations in Tanzania and Italy, no assurances can be given that Orca Exploration will be able to continue to comply with such environmental laws and regulations without incurring substantial costs.

Orca Exploration's petroleum and natural gas operations are subject to extensive governmental legislation and regulation and increased public awareness concerning environmental protection.

No provision has been recognised for future decommissioning costs in Tanzania which are anticipated to be minimal as it is forecast that there will still be commercial gas reserves once Orca Exploration relinquishes the license in 2026. Orca Exploration expects that the cost of complying with environmental legislation and regulations will increase in the future. Compliance with existing environmental legislation and regulations has not had a material effect on capital expenditures, earnings or competitive position of Orca Exploration to date. Although management believes that Orca Exploration's operations and facilities are in material compliance with such laws and regulations, future changes in these laws, regulations or interpretations thereof or the nature of its operations may require the Company to make significant additional capital expenditures to ensure compliance in the future.

Volatility of Oil and Gas Prices and Markets

Orca Exploration's financial condition, operating results and future growth will be dependent on the prevailing prices for its natural gas production. Historically, the markets for oil and natural gas have been volatile and such markets are likely to continue to be volatile in the future. Prices for oil and natural gas are subject to large fluctuations in response to relatively minor changes to the demand for oil and natural gas, whether the result of uncertainty or a variety of additional factors beyond the control of Orca Exploration. Any substantial decline in the prices of oil and natural gas could have a material adverse effect on Orca Exploration and the level of its natural gas reserves. Additionally, the economics of producing from some wells may change as a result of lower prices, which could result in a suspension of production by Orca Exploration.

No assurance can be given that oil and natural gas prices will be sustained at levels which will enable Orca Exploration to operate profitably. From time to time Orca Exploration may avail itself of forward sales or other forms of hedging activities with a view to mitigating its exposure to the risk of price volatility. The terms of the industrial gas supply contracts were extended in 2008 for a period of five years. These contracts contain pricing caps and floors that limit the industrial downside price to US\$7.38/mcf. The Company also entered into fixed price contracts with TANESCO and Songas for the supply of Additional Gas to the power sector. The steps taken by the Company in 2008 were very important steps in mitigating the exposure to price volatility.

The Songo Songo field was the first gas field to be developed in East Africa and was followed by a commercial gas discovery in the south of Tanzania at Mnazi Bay. The Company is the only supplier of gas into the main

demand centre of Dar es Salaam and has therefore been able to negotiate industrial gas sales contracts with gas prices that are at a discount to the lowest cost alternative fuels in Dar es Salaam, namely HFO and coal.

There has been an increase in exploration activity in Tanzania that could, if successful, lead to increased competition for gas markets and lower gas prices in the future.

In addition, various factors, including the availability and capacity of oil and gas gathering systems and pipelines, the effect of foreign regulation of production and transportation, general economic conditions, changes in supply due to drilling by other producers and changes in demand may adversely affect Orca Exploration's ability to market its gas production.

Uncertainties in Estimating Reserves and Future Net Cash Flows

There are numerous uncertainties inherent in estimating quantities of proved and probable reserves and cash flows to be derived therefrom, including many factors beyond the control of Orca Exploration. The reserve and cash flow information contained herein represents estimates only. The reserves and estimated future net cash flow from Orca Exploration's properties have been independently evaluated by McDaniel & Associates Consultants Ltd. These evaluations include a number of assumptions relating to factors such as initial production rates, production decline rates, ultimate recovery of reserves, timing and amount of capital expenditures, marketability of production, crude oil price differentials to benchmarks, future prices of oil and natural gas, operating costs, transportation costs, cost recovery provisions and royalties, TPDC "back-in" methodology and other government levies that may be imposed over the producing life of the reserves. These assumptions were based on price forecasts in use at the date of the relevant evaluations were prepared and many of these assumptions are subject to change and are beyond the control of Orca Exploration. Actual production and cash flows derived therefrom will vary from these evaluations, and such variations could be material.

Title to Properties

Although title reviews have been done and will continue to be done according to industry standards prior to the purchase of most oil and natural gas producing properties or the commencement of drilling wells, such reviews do not guarantee or certify that an unforeseen defect in the chain of title will not arise to defeat the claim of Orca Exploration which could result in a reduction of the revenue received by Orca Exploration.

Acquisition Risks

Orca Exploration intends to acquire natural gas infrastructure and possibly additional oil and gas properties. Although Orca Exploration performs a review of the acquired properties that it believes is consistent with industry practices, such reviews are inherently incomplete. It generally is not feasible to review in depth every individual property involved in each acquisition. Ordinarily, Orca Exploration will focus its due diligence efforts on the higher valued properties and will sample the remainder. However, even an in depth review of all properties and records may not necessarily reveal existing or potential problems, nor will it permit a buyer to become sufficiently familiar with the properties to assess fully their deficiencies and capabilities. Inspections may not be performed on every well, and structural or environmental problems, such as ground water contamination, are not necessarily observable even when an inspection is undertaken. Orca Exploration may be required to assume pre-closing liabilities, including environmental liabilities, and may acquire interests in properties on an "as is" basis. There can be no assurance that Orca Exploration's acquisitions will be successful.

Reliance on Key Personnel

Orca Exploration is highly dependent upon its executive officers and key personnel. The unexpected loss of the services of any of these individuals could have a detrimental effect on Orca Exploration. Orca Exploration does not maintain key life insurance on any of its employees or officers.

Controlling Shareholder

W David Lyons, the Company's Chairman, and Chief Executive Officer is the beneficial controlling shareholder of Orca Exploration and holds approximately 99.5% of the outstanding Class A shares and approximately 16.6% of the Class B shares. Consequently, Mr. Lyons is the beneficial holder of approximately 24.1% of the equity (22.0% fully diluted) and controls 59.3% of the total votes of Orca Exploration.

CRITICAL ACCOUNTING ESTIMATES

In applying the Company's accounting policies, which are described in note 1, management makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, vary to the actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below:

I) Reserves

There are numerous uncertainties inherent in estimating quantities of proved and probable reserves and cash flows to be derived therefrom, including many factors beyond the control of Orca Exploration. The reserve and cash flow information contained herein represents estimates only. The reserves and estimated future net cash flow from Orca Exploration's properties have been independently evaluated by McDaniel & Associates Consultants Ltd. These evaluations include a number of assumptions relating to factors such as initial production rates, production decline rates, ultimate recovery of reserves, timing and amount of capital expenditures, marketability of production, crude oil price differentials to benchmarks, future prices of oil and natural gas, operating costs, transportation costs, cost recovery provisions and royalties, TPDC "back-in" methodology and other government levies that may be imposed over the producing life of the reserves. These assumptions were based on price forecasts in use at the date of the relevant evaluations were prepared and many of these assumptions are subject to change and are beyond the control of Orca Exploration.

Reserves are integral to the amount of depletion charged to the profit or loss.

II) Exploration and evaluation assets

Under the Company's accounting policy expenditures incurred on the exploration for, and evaluation of, reserves are capitalized as intangible assets. These intangible assets are then assessed for impairment when circumstances suggest that the carrying amount may exceed its recoverable value. Such circumstances include but are not limited to:

- the period for which the Company has the right to explore in the specific area has expired during the period, or will expire in the near future, and is not expected to be renewed;
- no further expenditure on exploration and evaluation is budgeted or planned;
- no reserves have been encountered;
- the evaluation of seismic data indicates that the reserves are unlikely to be of a commercial quantity;
- the quantity of mineral reserves are deemed not to be of commercially viable quantities and the entity has decided to discontinue further activities; and
- sufficient data exists to indicate that, although a development in the specific area is likely to proceed, the carrying amount of the exploration and evaluation asset is unlikely to be recovered in full from successful development or by sale.

The assessment for impairment involves estimates as to (i) the likely future commerciality of the asset and when such commerciality should be determined, (ii) future revenues and costs associated with the asset, and (iii) the discount rate to be applied to such revenues and costs for the purpose of deriving a recoverable value.

Exploration and evaluation assets are assessed for impairment if (i) sufficient data exists to determine technical feasibility and commercial viability, or (ii) facts and circumstances suggest that the carrying amount exceeds the recoverable amount. For purposes of impairment testing, exploration and evaluation assets are grouped by concession.

The technical feasibility and commercial viability of extracting a resource is considered to be determinable based on several factors including the assignment of proven reserves. A review of each exploration license or field is carried out, at least annually, to ascertain whether the project is technically feasible and commercially viable. Upon determination of technical feasibility and commercial viability, intangible exploration and evaluation assets attributable to those reserves are first tested for impairment and then reclassified from exploration and evaluation assets to a separate category within property and equipment referred to as oil and natural gas interests.

III) Fair value of stock based compensation

All stock options issued or stock appreciation rights granted by the Company have to be valued at their fair value. In assessing the fair value of the equity based compensation, estimates have to be made as to i) the volatility in share price, ii) risk free rate of interest and iii) the level of forfeiture. In the case of stock options, this fair value is estimated at the date of issue and is not revalued, where as the fair value of stock appreciation rights is recalculated at each reporting period.

IV) Cost recovery

The Company is able to recover reasonable costs incurred on the development of the Songo Songo project out of 75% of the gross revenues less processing and pipeline tariffs ("Net Revenue). There are inherent uncertainties in estimating when costs have been recovered as the government has several years to review the reasonableness of the costs.

FORWARD LOOKING STATEMENTS

This disclosure contains certain forward-looking estimates that involve substantial known and unknown risks and uncertainties, certain of which are beyond Orca Exploration's control, including the impact of general economic conditions in the areas in which Orca Exploration operates, civil unrest, industry conditions, changes in laws and regulations including the adoption of new environmental laws and regulations and changes in how they are interpreted and enforced, increased competition, the lack of availability of qualified personnel or management, fluctuations in commodity prices, foreign exchange or interest rates, stock market volatility and obtaining required approvals of regulatory authorities. In addition there are risks and uncertainties associated with oil and gas operations, therefore Orca Exploration's actual results, performance or achievement could differ materially from those expressed in, or implied by, these forward-looking estimates and, accordingly, no assurances can be given that any of the events anticipated by the forward-looking estimates will transpire or occur, or if any of them do so, what benefits, including the amounts of proceeds, that Orca Exploration will derive therefrom.

For further information please contact:

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or visit the Company's web site at www.orcaexploration.com

Management's Report to Shareholders

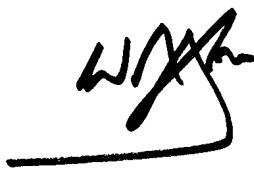
The accompanying consolidated financial statements of Orca Exploration Group Inc. are the responsibility of the Directors. The financial and operating information presented in this annual report is consistent with that shown in the consolidated financial statements.

The consolidated financial statements have been prepared by management, on behalf of the Board, in accordance with the accounting policies disclosed in the notes to the consolidated financial statements. Where necessary, management has made informed judgments and estimates in accounting for transactions which were not complete at the balance sheet date. In the opinion of management, the consolidated financial statements have been prepared within acceptable limits of materiality and are in accordance with International Financial Reporting Standards appropriate in the circumstances.

Management, with the participation of the Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of the Company's disclosure controls and procedures and has concluded that such disclosure controls and procedures are effective.

Management maintains appropriate systems of internal controls. Policies and procedures are designed to give reasonable assurance that transactions are properly authorised, assets are safeguarded and financial records are properly maintained to provide reliable information for the preparation of financial statements. An independent firm of Chartered Accountants, as appointed by the Shareholders, audited the consolidated financial statements in accordance with the International Standards on Auditing to enable them to express an opinion on the fairness of the consolidated financial statements in accordance with International Financial Reporting Standards.

The Board of Directors carries out its responsibility for the financial reporting and internal controls principally through an Audit Committee. The committee has met with external auditors and Management in order to determine if Management has fulfilled its responsibilities in the preparation of the consolidated financial statements. The consolidated financial statements have been approved by the Board of Directors on the recommendation of the Audit Committee.



W. David Lyons
Chairman & Chief Executive Officer

28 April 2011



Nigel Friend
Chief Financial Officer

28 April 2011

Auditors' Report

TO THE SHAREHOLDERS OF ORCA EXPLORATION GROUP INC.

We have audited the accompanying consolidated financial statements of Orca Exploration Group Inc. which comprise the consolidated statements of financial position as at December 31, 2010 and 2009, the consolidated statements of changes in shareholders' equity, comprehensive income and cash flows for the years then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

MANAGEMENT'S RESPONSIBILITY FOR THE CONSOLIDATED FINANCIAL STATEMENTS

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with International Financial Reporting Standards and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

AUDITORS' RESPONSIBILITY

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with Canadian generally accepted auditing standards and International Auditing Standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

OPINION

In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of Orca Exploration Group Inc. as at December 31, 2010 and 2009, and its consolidated results of operations and its consolidated cash flows for the years then ended in accordance with International Financial Reporting Standards.

KPMG LLP

Calgary, Canada

28 April 2011

Consolidated Statement of Comprehensive Income

YEARS ENDED 31 DECEMBER	NOTE	2010	2009
(THOUSANDS OF US DOLLARS EXCEPT PER SHARE AMOUNTS)			
Revenue	5	38,808	25,317
Cost of sales			
Production and distribution expenses		(4,879)	(2,807)
Depletion expense	12	(4,839)	(3,830)
Impairment of exploration and evaluation assets	11	–	(180)
		29,090	18,500
General and administrative expenses		(11,716)	(11,465)
Net financing charges	7	(862)	(153)
Profit before taxation		16,512	6,882
Taxation	8	(6,501)	(3,558)
Profit after taxation and comprehensive income for the year		10,011	3,324
Earnings per share			
Basic (US\$)	16	0.33	0.11
Diluted (US\$)		0.31	0.11

SEE ACCOMPANYING NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS.

Consolidated Statement of Financial Position

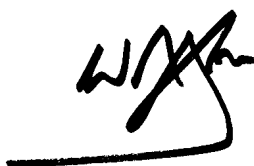
AS AT 31 DECEMBER	NOTE	2010	2009
(THOUSANDS OF US DOLLARS)			
ASSETS			
Current assets			
Cash and cash equivalents	9	45,519	14,543
Trade and other receivables	10	13,583	8,002
Taxation receivable	8	4,009	714
Prepayments		409	465
		63,520	23,724
Non-current assets			
Exploration and evaluation asset	11	942	760
Property, plant and equipment	12	59,946	61,793
		60,888	62,553
Total assets		124,408	86,277
EQUITY AND LIABILITIES			
Current liabilities			
Trade and other payables	13	9,156	6,889
Taxation payable	8	2,000	–
		11,156	6,889
Non-current liabilities			
Deferred income taxes	8	12,809	9,068
Deferred additional profits tax	8	2,260	1,460
		15,069	10,528
Total liabilities		26,225	17,417
Equity			
Capital stock	14	85,100	66,267
Contributed surplus	15	5,288	4,809
Accumulated income/(loss)		7,795	(2,216)
		98,183	68,860
Total equity and liabilities		124,408	86,277

SEE ACCOMPANYING NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS.
CONTRACTUAL OBLIGATIONS AND COMMITTED CAPITAL INVESTMENTS (NOTE 19)

The consolidated financial statements were approved by the Board of Directors on 28 April 2011.



Director



Director

Consolidated Statement of Cash Flows

YEARS ENDED 31 DECEMBER

NOTE

2010

2009

(THOUSANDS OF US DOLLARS)

CASH FLOWS FROM OPERATING ACTIVITIES

Profit after taxation		10,011	3,324
Adjustment for:			
Depletion and depreciation	12	5,046	4,045
Impairment of exploration and evaluation assets	11	–	180
Stock-based compensation		664	1,401
Deferred income taxes	8	3,741	3,558
Deferred additional profits tax	5 / 8	800	489
Interest income	7	(40)	(44)
Unrealised loss/(gain) on foreign exchange		614	(621)
		20,836	12,332
(Increase)/decrease in trade and other receivables		(6,166)	5,023
(Increase) in taxation receivable		(3,295)	(714)
Decrease/(increase) in prepayments		56	(294)
Increase/(decrease) in trade and other payables		2,103	(4,340)
Increase in taxation payable		2,000	–
Net cash flows from operating activities		15,534	12,007

CASH FLOWS USED IN INVESTING ACTIVITIES

Exploration and evaluation expenditures	11	(182)	(292)
Property, plant and equipment expenditures	12	(3,199)	(5,020)
Interest income		40	44
Increase/(decrease) in trade and other payables		418	(2,761)
Net cash used in investing activities		(2,923)	(8,029)

CASH FLOWS FROM/(USED IN) FINANCING ACTIVITIES

Normal course issuer bid	14 / 15	–	(298)
Shares issued	14	18,471	–
Proceeds from exercise of options		234	–
Net cash flow from/(used in) financing activities		18,705	(298)
Increase in cash and cash equivalents		31,616	3,680
Cash and cash equivalents at the beginning of the year		14,543	10,586
Effect of change in foreign exchange		(340)	277
Cash and cash equivalents at the end of the year	9	45,519	14,543

SEE ACCOMPANYING NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS.

Consolidated Statement of Changes in Shareholders' Equity

	Capital stock	Contributed surplus	Accumulated Income/(loss)	Total
(THOUSANDS OF US DOLLARS)				
Note	14	15		
Balance as at 1 January 2009	66,537	3,715	(5,540)	64,712
Stock-based compensation	–	1,122	–	1,122
Normal course issuer bid	(270)	(28)	–	(298)
Total comprehensive income for the year	–	–	3,324	3,324
Balance as at 31 December 2009	66,267	4,809	(2,216)	68,860
Shares issued	18,471	–	–	18,471
Stock options exercised	362	(128)	–	234
Stock-based compensation	–	607	–	607
Total comprehensive income for the year	–	–	10,011	10,011
Balance as at 31 December 2010	85,100	5,288	7,795	98,183

SEE ACCOMPANYING NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS.

Notes

to the Consolidated Financial Statements

GENERAL INFORMATION

Orca Exploration Group Inc. ("Orca Exploration" or the "Company") was incorporated on 28 April 2004 under the laws of the British Virgin Islands. The Company is a participant in a gas-to-electricity project in Tanzania and has gas and oil exploration interests in Italy.

The Company's operations at the Songo Songo gas field in Tanzania include the operation of five producing wells and two 45 MMcfd dehydration and refrigeration gas processing units on Songo Songo Island on behalf of Songas Limited ("Songas"). Gas produced and sold from the Songo Songo field is classified as either Protected Gas or Additional Gas. Protected Gas is 100% owned by Tanzania Petroleum Development Corporation ("TPDC") and is sold to Songas under a twenty year Gas Agreement primarily for use at the Ubungu power plant and the Wazo Hill cement plant. The Protected Gas is principally used as feedstock for specified turbines and kilns. Gas sales in excess of the Protected Gas users' requirements is classified as Additional Gas. The Company has the exclusive right to explore, develop, produce and market all Additional Gas. Revenues from the sale of Additional Gas, net of transportation tariff, are shared with TPDC in accordance with the terms of the Production Sharing Agreement ("PSA") until October 2026.

BASIS OF PREPARATION

These consolidated financial statements are measured and presented in US dollars as the main operating cash flows are linked to this currency through the commodity price. Management is required to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenue and expenses during the period. Actual results could differ from these estimates.

Some of the 2009 comparative numbers have been restated in order to be consistent with the 2010 presentation.

1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

a) Statement of compliance

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") issued by the International Accounting Standards Board ("IASB").

b) Basis of consolidation

i) Subsidiaries

The consolidated financial statements include the accounts of the Company and all its wholly owned subsidiaries (collectively, the "Company"). Subsidiaries are those enterprises controlled by the Company. The following companies have been consolidated within the Orca Exploration financial statements:

Subsidiary	Registered	Holding	Functional currency
Orca Exploration Group Inc	British Virgin Islands	Parent Company	US dollar
Orca Exploration Italy Inc	British Virgin Islands	100%	US dollar
Orca Exploration Italy Onshore Inc	British Virgin Islands	100%	US dollar
PAE PanAfrican Energy Corporation	Mauritius	100%	US dollar
PanAfrican Energy Tanzania Limited	Jersey	100%	US dollar

ii) Transactions eliminated upon consolidation

Inter-company balances and transactions, and any unrealised gains or losses arising from inter-company transactions, are eliminated in preparing the consolidated financial statements.

c) Foreign currency

Foreign currency transactions are recorded at the rate of exchange prevailing at the date of the transaction. Monetary assets and liabilities in foreign currencies are translated at period-end rates. Non-monetary items are translated at historic rates, unless such items are carried at market value, in which case they are translated using the exchange rates that existed when the values were determined. Any resulting exchange rate differences are recognized in the profit and loss.

d) Exploration and evaluation assets, property, plant and equipment**i) Exploration and evaluation assets**

Exploration and evaluation costs are capitalised as intangible assets. Intangible assets includes lease and license acquisition costs, geological and geophysical costs and other direct costs of exploration and evaluation which the directors consider to be unevaluated until reserves are appraised to be commercially viable and technologically feasible as commercial, at which time they are transferred to property, plant and equipment following an impairment review and depleted accordingly. Where properties are appraised to have no commercial value or are appraised at values less than book values, the associated costs are treated as an impairment loss in the period in which the determination is made.

ii) Property, plant and equipment

Property, plant and equipment comprises the Company's tangible natural gas assets, development wells, together with leasehold improvements, computer equipment, motor vehicles and fixtures and fittings and are carried at cost, less any accumulated depletion, depreciation and accumulated impairment losses. Cost includes purchase price and construction costs for qualifying assets. Depletion of these assets commences when the assets are ready for their intended use. Only costs that are directly related to the discovery and development of specific oil and gas reserves are capitalised. The cost associated with tangible natural gas assets are amortised on a field by field unit of production method based on commercial proven reserves. The calculation of the unit of production amortisation takes into account the estimated future development cost of the field.

iii) Impairment of exploration and evaluation assets, property, plant and equipment

At each balance sheet date, the Company reviews the carrying amounts of its property, plant and equipment and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. Individual assets are grouped together as a cash generating unit for impairment assessment purposes at the lowest level at which there are identifiable cash flows that are independent from other group assets. In the case of exploration and evaluation assets, this will normally be at the Company's field level. If any such indication of impairment exists, the Company makes an estimate of its recoverable amount. The recoverable amount is the higher of fair value less costs to sell and value in use. Where the carrying amount of a cash generating unit exceeds its recoverable amount, the cash generating unit is considered impaired and is written down to its recoverable amount. In assessing the value in use, the estimated future cash flows are adjusted for the risks specific to the cash generating unit and are discounted to their present value with a discount rate that reflects the current market indicators. Where an impairment loss subsequently reverses, the carrying amount of the asset cash-generating unit is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognised for the cash generating unit in prior years. A reversal of an impairment loss is recognised as income immediately.

e) Operatorship

The Company operates the gas field, flow lines and gas processing plant on behalf of Songas at cost. The cost of operating and maintaining the wells and flow lines is paid for by Orca Exploration and Songas in proportion to the respective volumes of Protected Gas and Additional Gas sales. The costs of operating and maintaining the wells and flow lines are reflected in the accounts to the extent that the costs were incurred to accomplish Additional Gas sales. The cost of operating the gas processing plant and pipeline to Dar es Salaam is paid by Songas. When there are Additional Gas sales, a tariff is paid to Songas as compensation for using the gas processing plant and pipeline. This tariff is netted against revenue.

f) Employment benefits**i) Pension**

The Company does not operate a pension plan, but it does make defined contributions to the statutory pension fund for employees in Tanzania. Obligations for contributions to the statutory pension fund are recognised as an expense in the income statement as incurred.

ii) Stock options

The share option plan allows Company officers, directors and key personnel to acquire shares at an exercise price determined by the market value at the date of grant. When the options are exercised, equity is increased by the amount of the proceeds received. The fair value of stock options is expensed in the profit or loss in accordance with the specific vesting periods. The fair value of the options is calculated, on the grant date, using the Black-Scholes option pricing model.

iii) Stock appreciation rights

Stock appreciation rights are issued to certain key managers, officers, directors and employees. The fair value of stock appreciation rights is expensed in the profit and loss in accordance with the service period. The fair value of the stock appreciation rights is revalued every reporting date with the change in the value recognized in the income statement.

g) Asset retirement obligations

No provision has been made for future site restoration costs in Tanzania since the Company has no legal or contractual obligation under the PSA to restore the fields at the end of their commercial lives.

h) Revenue recognition, production sharing agreements and royalties

The Company recognises revenue from natural gas sales when title passes to a customer. The Company conducts operations jointly with the Tanzanian government and "parastatal entities" in accordance with production sharing agreements ("PSA"). Under these agreements, the Company pays both its share and the parastatal's share of operating, administrative and capital costs. The Company recovers all reasonably incurred operating, administrative and capital costs including the parastatal's share of these costs from future revenues over several years ("Cost Gas"). The parastatal's share of operating and administrative costs, are recorded in operating and general and administrative costs when incurred and capital costs are recorded in 'Property, plant and equipment'. All recoveries are recorded as revenue in the year of recovery. The Company is entitled to a share of production in excess of the Cost Gas ("Profit Gas"). Operating revenue represents the Company's share of Cost Gas and Profit Gas during the period, net of the transportation tariff.

i) Additional profits tax

Under the terms of the PSA, in the event that all costs have been recovered with an annual return of 25% plus the percentage change in the United States Industrial Goods Producer Price Index, an additional profits tax ("APT") is payable to the Government of Tanzania. This tax is considered to be a royalty and is netted against revenue. APT is provided for by forecasting the total APT payable as a proportion of the forecast Profit Gas over the term of PSA license.

j) Taxation

Income tax on the profit for the year comprises current and deferred tax. The Company is liable for Tanzanian income tax, but this is recovered from TPDC through the profit-sharing arrangement. Where current income tax is payable, revenue is adjusted for the tax and the income tax is shown as current tax. Deferred tax is provided using the balance sheet method, providing for temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. The amount of deferred tax provided is based on the expected manner of realisation or settlement of carrying amounts of assets and liabilities using tax rates substantively enacted at the balance sheet date. A deferred tax asset is recognised only to the extent that it is probable that future taxable profits will be available against which the asset can be utilised. Deferred tax assets are reduced to the extent that it is no longer probable that the related tax benefits will be realised.

k) Segmental reporting

The Company has interests in Tanzania and Italy.

l) Depreciation

Depreciation for non-natural gas properties is charged to the income statement on a straight line basis over the estimated useful economic lives of each class of asset. The estimated useful lives are as follows:

Leasehold improvement	Over remaining life of the lease
Computer equipment	3 years
Vehicles	3 years
Fixtures and fittings	3 years

m) New accounting standards and interpretations

Certain new accounting standards and interpretations have been published that are not mandatory for the 31 December 2010 reporting period. The following standards are assessed not to have any impact on the Company's financial statements:

- IAS 24 Related Party Disclosure: effective for accounting periods commencing on or after 1 January 2011;
- IFRS 9 Financial Instruments: effective for accounting periods commencing on or after 1 January 2013;
- Amendments to IAS 12 Income taxes - Deferred Tax: Recovery of Underlying Assets: effective for annual periods beginning on or after 1 January 2012. Earlier application is permitted;
- Amendments to IFRS 7 Disclosures - Transfers of Financial Assets: effective for annual periods beginning on or after 1 July 2011. Earlier application is permitted.

n) Financial Instruments

Non-derivative financial instruments

Non-derivative financial instruments include cash and cash equivalents, trade and other receivables, and trade and other payables. Non-derivative financial instruments are recognized initially at fair value plus any directly attributable transaction costs.

The Company has reported cash and cash equivalents at fair value. Cash and cash equivalents are comprised of cash on hand, term deposits held with banks, and other short-term highly liquid investments with original maturities of three months or less. Bank overdrafts that are repayable on demand and form an integral part of the Company's cash management, whereby management has the ability and intent to net bank overdrafts against cash, are included as a component of cash and cash equivalents for the purpose of the statement of cash flows. The Company's trade and other receivables, trade and other payables, are classified as other non-derivative financial instruments. Subsequent to the initial recognition, other non-derivative financial instruments are measured at amortized cost using the effective interest method, less any impairment losses.

2 CRITICAL ACCOUNTING ESTIMATES

In applying the Company's accounting policies, which are described in note 1, management makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, vary to the actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below:

i) Reserves

There are numerous uncertainties inherent in estimating quantities of proved and probable reserves and cash flows to be derived therefrom, including many factors beyond the control of Orca Exploration. The reserve and cash flow information contained herein represents estimates only. The reserves and estimated future net cash flow from Orca Exploration's properties have been independently evaluated by McDaniel & Associates Consultants Ltd. These evaluations include a number of assumptions relating to factors such as initial production rates, production decline rates, ultimate recovery of reserves, timing and amount of capital expenditures, marketability of production, crude oil price differentials to benchmarks, future prices of oil and natural gas, operating costs, transportation costs, cost recovery provisions and royalties, TPDC "back-in" methodology and other government levies that may be imposed over the producing life of the reserves. These assumptions were based on price forecasts in use at the date of the relevant evaluations were prepared and many of these assumptions are subject to change and are beyond the control of Orca Exploration.

Reserves are integral to the amount of depletion charged to the profit or loss.

ii) Exploration and evaluation assets

Under the Company's accounting policy expenditures incurred on the exploration for, and evaluation of, reserves are capitalized as intangible assets. These intangibles assets are then assessed for impairment when circumstances suggest that the carrying amount may exceed its recoverable value. Such circumstances include but are not limited to:

- the period for which the Company has the right to explore in the specific area has expired during the period, or will expire in the near future, and is not expected to be renewed;
- no further expenditure on exploration and evaluation is budgeted or planned;
- no reserves have been encountered;
- the evaluation of seismic data indicates that the reserves are unlikely to be of a commercial quantity;
- the quantity of mineral reserves are deemed not to be of commercially viable quantities and the entity has decided to discontinue further activities; and
- sufficient data exists to indicate that, although a development in the specific area is likely to proceed, the carrying amount of the exploration and evaluation asset is unlikely to be recovered in full from successful development or by sale.

The assessment for impairment involves estimates as to (i) the likely future commerciality of the asset and when such commerciality should be determined, (ii) future revenues and costs associated with the asset, and (iii) the discount rate to be applied to such revenues and costs for the purpose of deriving a recoverable value.

Exploration and evaluation assets are assessed for impairment if (i) sufficient data exists to determine technical feasibility and commercial viability, or (ii) facts and circumstances suggest that the carrying amount exceeds the recoverable amount. For purposes of impairment testing, exploration and evaluation assets are grouped by concession.

The technical feasibility and commercial viability of extracting a resource is considered to be determinable based on several factors including the assignment of proven reserves. A review of each exploration license or field is carried out, at least annually, to ascertain whether the project is technically feasible and commercially viable. Upon determination of technical feasibility and commercial viability, intangible exploration and evaluation assets attributable to those reserves are first tested for impairment and then reclassified from exploration and evaluation assets to a separate category within property and equipment referred to as oil and natural gas interests.

iii) Fair value of stock based compensation

All stock options issued or stock appreciation rights granted by the Company have to be valued at their fair value. In assessing the fair value of the equity based compensation, estimates have to be made as to i) the volatility in share price, ii) risk free rate of interest and iii) the level of forfeiture. In the case of stock options, this fair value is estimated at the date of issue and is not revalued, where as the fair value of stock appreciation rights is recalculated at each reporting period.

iv) Cost recovery

The Company is able to recover reasonable costs incurred on the development of the Songo Songo project out of 75% of the gross revenues less processing and pipeline tariffs ("Net Revenue). There are inherent uncertainties in estimating when costs have been recovered as the government has several years to review the reasonableness of the costs.

3 RISK MANAGEMENT

The Company, by its activities in oil and gas exploration, development and production, is exposed to the risk associated with the unpredictable nature of the financial markets. The Company seeks to manage its exposure to these risks where ever possible.

i) Foreign exchange risk

Foreign exchange risk arises when transactions and recognised assets and liabilities of the Company are denominated in a currency that is not the U.S. dollar functional currency.

The Company operates internationally and is exposed to foreign exchange risk arising from currency exposures to U.S. dollars. The main currencies to which the Company has an exposure are: Tanzanian shillings, British pounds sterling and Canadian dollars.

The majority of the expenditure associated with the operation of the gas distribution system is denominated in Tanzanian shillings. The majority of the consultants' contracts are denominated in British pounds sterling. All of the capital stock, equity financing and any associated stock based compensation are denominated in Canadian dollars. All of the operational revenue and the majority of capital expenditure are denominated in US dollars.

There are no forward exchange rate contracts in place.

A 10% increase in the U.S. dollars against the relevant foreign currency would result in an overall reduction in working capital by US\$0.6 million to US\$51.7 million. The sensitivity includes only outstanding foreign currency denominated monetary items and adjusts their translation at period end for a 10% change in the foreign currency rates. A 10% sensitivity rate is used when reporting foreign currency risk internally to key management personnel and represents management's assessment of the reasonable possible change in foreign exchange rates.

ii) Commodity price risk

The Songo Songo gas field is the first gas field to be developed in East Africa. The Company has therefore been able to negotiate industrial gas sales contracts with gas prices that are at a discount to the lowest cost alternative fuels in Dar es Salaam, namely Heavy Fuel Oil ("HFO"). The price of HFO is exposed to the volatility in the market price of oil.

iii) Interest rate risk

The Company currently does not have any debt or borrowings so it is therefore not exposed to any interest rate risk.

iv) Credit risk

All of the Company's production is currently derived in Tanzania. The sales are made to the power sector and the industrial sector. In relation to sales to the power sector, the Company has a short term contract with Songas for the supply of gas to the Ubungo power plant and a contract with TANESCO to supply 147 MWs of power generation. The contracts with Songas and TANESCO accounted for 56% of the Company's operating revenue during 2010 and US\$7.8 million of the receivables at the year end. Songas itself is heavily reliant on the payment of capacity and energy charges by TANESCO for its liquidity. TANESCO is dependent on the Government of Tanzania for some of its funding. While some payments have been delayed, the Company has subsequently received all the amounts due from Songas. TANESCO has paid the majority of the amounts due. Sales to industrial sector are subject to an internal credit review to minimize the risk of non payment. The Company does not anticipate any default with these customers.

v) Liquidity risk

Liquidity risk is the risk that the Company will not have sufficient funds to meet its liabilities. Cash forecasts identifying liquidity requirements of the Company are produced on a quarterly basis. These are reviewed to ensure sufficient funds exist to finance the Company's current operational and investment cash flow requirements. The Company has no financial liabilities other than the trade and other payables identified in note 13 of which US\$5.9 million is due within one to three months, US\$4.8 million is due within three to six months, and US\$0.5 million is due within six to twelve months. Management forecasts that the Company will be able to meet its 2011 capital expenditure program through the use of existing cash balances, self-generated cash flows and new funding. The Company currently has no bank borrowings and there is scope for utilising debt funding.

vi) Capital risk management

The Company's objectives when managing capital are to safeguard the Company's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital. The Company currently has no borrowings.

4 SEGMENT INFORMATION

The Company has one reportable segment which is international exploration, development and production of petroleum and natural gas. The Company currently has operations in Tanzania and exploration interests in Italy having ceased its operations in Uganda during 2008.

	External revenue	Segment income/(loss)	Total assets	Total liabilities	Capital additions	Depletion & depreciation
FIGURES IN US\$'000						
2010						
Tanzania	38,808	10,057	124,408	26,225	3,381	5,046
Uganda	–	–	–	–	–	–
Italy	–	(46)	–	–	–	–
	38,808	10,011	124,408	26,225	3,381	5,046
2009						
Tanzania	25,317	3,504	86,277	17,237	5,132	4,045
Uganda	–	(180)	–	180	180	180
	25,317	3,324	86,277	17,417	5,312	4,225

The sales contracts with Tanesco and Songas accounted for 41% and 15% respectively of the company's operating revenue during 2010, compared to 35% and 18% respectively in 2009.

5 REVENUE

Years ended 31 December	2010	2009
FIGURES IN US\$'000		
Operating revenue	35,665	25,840
Current income tax adjustment	3,943	–
Deferred additional profits tax	(800)	(489)
Provision for bad debts	–	(34)
Revenue	38,808	25,317

The revenue reported is the Company's proportionate share of revenue as calculated in accordance with the accounting policy 1(h).

The Company's total revenues for the year amounted to US\$38,808,000 after adjusting the Company's operating revenue of US\$35,665,000 by:

- US\$3,943,000 for income tax for the current year. The Company is liable for income tax in Tanzania, but the income tax is recoverable out of TPDC's Profit Gas when the tax is payable. To account for this, revenue is adjusted to reflect the current income tax charge or loss.
- US\$800,000 for the deferred effect of additional profits tax. This tax is considered a royalty and is netted against revenue.

6 PERSONNEL EXPENSES

The average number of employees during the year was 36 (2009: 28). The costs are as follows:

Years ended 31 December	2010	2009
FIGURES IN US\$'000		
Wages and salaries	2,180	1,582
Social security costs	416	308
Other statutory costs	527	522
Stock based compensation	664	1,401
	3,787	3,813

7 NET FINANCING CHARGES

Years ended 31 December	2010	2009
FIGURES IN US\$'000		
FINANCE INCOME		
Interest income	40	44
Foreign exchange gain	–	105
	40	149
FINANCE CHARGES		
Overdraft charges	(12)	(23)
Foreign exchange loss	(890)	(279)
	(902)	(302)
NET FINANCING CHARGES	(862)	(153)

8 TAXATION

Under the terms of the Production Sharing Agreement with TPDC, the Company is liable to pay income tax at the corporate rate of 30% on profits generated in Tanzania. The amount paid is then recovered in full from TPDC by adjusting their share of profit gas.

The tax charge is as follows:

Years ended 31 December	2010	2009
FIGURES IN US\$'000		
Current tax	2,760	–
Deferred tax	3,741	3,558
	6,501	3,558

Tax Rate Reconciliation

Years ended 31 December	2,010	2009
FIGURES IN US\$'000		
Profit before taxation	16,512	6,882
Provision for income tax calculated at the statutory rate of 30%	4,954	2,065
Add the tax effect of non-deductible income tax items:		
Administrative and operating expenses	1,262	981
Stock- based compensation	199	420
Other income	(6)	(42)
Impairment of exploration and evaluation assets	–	54
Permanent differences	92	80
	6,501	3,558

As at 31 December 2010, there were temporary differences between the carrying value of the assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. Accordingly a deferred tax liability has been recognized for the year ended 31 December 2010.

The deferred income tax liability includes the following temporary differences:

As at 31 December	2010	2009
<i>FIGURES IN US\$'000</i>		
Differences between tax base and carrying value of property, plant and equipment	12,194	9,707
Income tax recoverable	1,349	167
Other liabilities	(56)	(54)
Additional profits tax	(678)	(435)
Tax losses	–	(317)
	12,809	9,068

Additional Profits Tax

Under the terms of the PSA, in the event that all costs have been recovered with an annual return of 25% plus the percentage change in the United States Industrial Goods Producer Price Index, an Additional Profits Tax ("APT") is payable.

The Company provides for APT by forecasting the total APT payable as a proportion of the forecast Profit Gas over the term of the PSA license. The effective APT rate has been calculated to be 21%. Accordingly, US\$0.8 million (2009: US\$0.5 million) has been netted off revenue for the year increasing the total liability recognized as at 31 December 2010 to US\$2.3 million.

Management does not anticipate that any APT will be payable in 2011, as the forecast revenues will not be sufficient to cover the un-recovered costs brought forward as inflated by 25% plus the PPI percentage change and the forecast expenditures for 2010. The actual APT that will be paid is dependent on the achieved value of the Additional Gas sales and the quantum and timing of the operating costs and capital expenditure program.

The APT can have a significant negative impact on the Songo Songo project economics as measured by the net present value of the cash flow streams. Higher revenue in the initial years leads to a rapid payback of the project costs and consequently accelerates the payment of the APT that can account for up to 55% of the Company's profit share. Therefore, the terms of the PSA reward the Company for taking higher risks by incurring capital expenditure in advance of revenue generation.

9 CASH AND CASH EQUIVALENTS

As at 31 December	2010	2009
<i>FIGURES IN US\$'000</i>		
Cash and cash equivalents	45,519	14,543

Included in the cash and cash equivalents is US\$159,000 advanced from Songas under the terms of the Operatorship Agreement to pay for the costs of operating these wells and gas processing plant. This amount is also included in trade and other payables.

10 TRADE AND OTHER RECEIVABLES

As at 31 December	2010	2009
<i>FIGURES IN US\$'000</i>		
Trade receivables	11,879	7,100
Other receivables	1,704	902
	13,583	8,002

11 EXPLORATION AND EVALUATION ASSETS

	Tanzania	Total
FIGURES IN US'000		
COSTS		
As at 1 January 2010	760	760
Additions	182	182
As at 31 December 2010	942	942
DEPLETION		
As at 1 January 2010	-	-
As at 31 December 2010	-	-
NET BOOK VALUES		
As at 31 December 2010	942	942
As at 31 December 2009	760	760

	Uganda	Tanzania	Total
FIGURES IN US'000			
COSTS			
As at 1 January 2009	-	648	648
Additions	180	112	292
As at 31 December 2009	180	760	940
DEPLETION			
As at 1 January 2009	-	-	-
Impairment	(180)	-	(180)
As at 31 December 2009	(180)	-	(180)
NET BOOK VALUE			
As at 31 December 2009	-	760	760

TANZANIA

The exploration and evaluation asset relates to initial evaluation of the Songo Songo West prospect which is pending the determination of proven and probable reserves.

UGANDA

It was decided in June 2008 not to progress with the drilling of two exploration wells in Uganda. Accordingly, the Company did not exercise its option to acquire a 50% working interest in Exploration Area 5 in Uganda and the investment was written off in full in the income statement. Subsequent to this write off, an additional charge of US\$180,000 was recorded in the last quarter of 2009 following the late receipt of an invoice in relation to a potential claim by the Ugandan tax authorities for withholding tax that was withheld by the operator during the seismic programme pending clarification of the tax regime. Accordingly, the full amount was recognized and written off in full to the income statement in Q4 2009.

ITALY

During 2010, the Company farmed in to two exploration licences in Italy. No capital costs were incurred on these assets during 2010 and all the costs associated with the farm in have been recognized in the statement of comprehensive income.

12 PROPERTY, PLANT AND EQUIPMENT

	Tanzania	Leasehold improvements	Computer equipment	Vehicles	Fixtures & Fittings	Total
FIGURES IN US'000						
COSTS						
As at 1 January 2010	77,319	265	455	161	92	78,292
Additions	3,004	55	54	70	16	3,199
As at 31 December 2010	80,323	320	509	231	108	81,491
DEPLETION/DEPRECIATION						
As at 1 January 2010	15,902	220	230	102	45	16,499
Charge for period	4,839	24	115	47	21	5,046
As at 31 December 2010	20,741	244	345	149	66	21,545
NET BOOK VALUES						
As at 31 December 2010	59,582	76	164	82	42	59,946
As at 31 December 2009	61,417	45	225	59	47	61,793

	Tanzania	Leasehold improvements	Computer equipment	Vehicles	Fixtures & Fittings	Total
FIGURES IN US'000						
COSTS						
As at 1 January 2009	72,732	185	207	122	52	73,298
Additions	4,587	80	248	65	40	5,020
Disposal	–	–	–	(26)	–	(26)
As at 31 December 2009	77,319	265	455	161	92	78,292
DEPLETION/DEPRECIATION						
As at 1 January 2009	12,072	156	126	85	41	12,480
Charge for period	3,830	64	104	43	4	4,045
Depreciation on disposals	–	–	–	(26)	–	(26)
As at 31 December 2009	15,902	220	230	102	45	16,499
NET BOOK VALUE						
As at 31 December 2009	61,417	45	225	59	47	61,793

In determining the depletion charge, it is estimated by the independent reserve engineers that future development costs of US\$115.2 million (2009: US\$57.5 million) will be required to bring the total proved reserves to production.

13 TRADE AND OTHER PAYABLES

As at 31 December	2010	2009
FIGURES IN US\$'000		
Trade payables	5,896	4,270
Accrued liabilities	3,260	2,594
Related party (NOTE 18)	–	25
	9,156	6,889

The Company's exposure to credit, currency and interest risk related to trade and other payables is disclosed in note 3.

14 CAPITAL STOCK

a) Authorised

50,000,000 Class A Common Shares	No par value
50,000,000 Class B Subordinate Voting Shares	No par value

The Class A and Class B shares rank pari passu in respect of dividends and repayment of capital in the event of winding-up. Class A shares carry twenty votes per share and Class B shares carry one vote per share. The Class A shares are convertible at the option of the holder at any time into Class B shares on a one-for-one basis. The Class B shares are convertible into Class A shares on a one-for-one basis in the event that a take-over bid is made to purchase Class A shares which must, by reason of a stock exchange or legal requirements, be made to all or substantially all of the holders of Class A shares and which is not concurrently made to holders of Class B shares.

b) Changes in the capital stock of the Company were as follows:

	2010			2009		
	Authorised	Issued	Amount	Authorised	Issued	Amount
THOUSANDS OF SHARES OR US\$'000						
Class A shares						
As at 1 January and 31 December	50,000	1,751	983	50,000	1,751	983
Class B shares						
As at 1 January	50,000	27,743	65,284	50,000	27,863	65,554
Shares issued net of costs	–	4,956	18,471	–	–	–
Stock options exercised	–	240	362	–	–	–
Normal course issuer bid	–	–	–	–	(120)	(270)
As at 31 December	50,000	32,939	84,117	50,000	27,743	65,284
Total Class A & B shares as at 31 December	100,000	34,690	85,100	100,000	29,494	66,267

All of the issued capital stock is fully paid.

A total of 240,000 stock options were exercised in July 2010 at a price of Cdn\$1.00 per share. On 5 October, 2010 the Company completed a one for six rights issue. The offering was fully subscribed. At closing, the Company issued 4,955,687 Class B Subordinated Voting shares at a price of Cdn\$3.90 per Class B Share for gross proceeds of Cdn\$19.3 million.

Stock-based compensation

The stock option plan provides for the granting of stock options to directors, officers and employees. The exercise price of each stock option is determined at the closing market price of the common shares on the day prior to the day of grant. Each stock option granted permits the holder to purchase one common share at the stated exercise price. The Company records a charge to the profit and loss account using the Black-Scholes fair valuation option pricing model. The valuation is dependent on a number of estimates, including the risk free interest rate, the level of stock volatility, together with an estimate of the level of forfeiture. The level of stock volatility is calculated with reference to the historic traded daily closing share price at the date of issue.

Stock Options

	2010		2009	
	Options	Exercise Price	Options	Exercise Price
THOUSANDS OF OPTIONS OR CDN\$				
Outstanding as at 1 January	2,797	1.00 to 13.55	2,814	1.00 to 13.55
Exercised	(240)	1.00	–	–
Forfeited	–	–	(17)	12.00
Outstanding as at 31 December	2,557	1.00 to 13.55	2,797	1.00 to 13.55

The weighted average remaining life and weighted average exercise prices of options at 31 December 2010 were as follows:

Exercise Price (CDN\$)	Number Outstanding as at 31 December 2010	Weighted Average Remaining Contractual Life (YEARS)	Number Exercisable as at 31 December 2010	Weighted Average Exercise Price (CDN\$)
1.00	1,422	3.67	1,422	1.00
8.00 - 13.55	1,135	1.36	1,135	11.36
	2,557		2,557	

There were no new stock options issued during the year. A total charge of US\$0.6 million has been recognised for the year in relation to the stock options.

Stock Appreciation Rights

	2010		2009	
	SAR	Exercise Price	SAR	Exercise Price
THOUSANDS OF STOCK APPRECIATION RIGHTS OR CDN\$				
Outstanding as at 1 January	810	8.0 to 13.55	810	8.0 to 13.55
Expired (i)	(105)	11.05	–	–
Granted (ii)	225	4.20	–	–
Outstanding as at 31 December (iii)	930	4.20 to 13.55	810	8.0 to 13.55

(i) A total of 105,000 capped stock appreciation rights expired in February 2010 with an exercise price of Cdn\$11.05.

(ii) A total of 225,000 stock appreciation rights were issued in June 2010 with an exercise price of Cdn\$4.20. These rights have a term of five years and vest in five equal instalments, the first fifth vesting on the anniversary of the grant date. There is no maximum liability associated with these rights.

(iii) A total of 705,000 stock appreciation rights have a term of five years. All of these options vested over a period of three years and are now fully vested. There is no maximum liability associated with these rights.

The Company records a charge to the income statement using the Black-Scholes fair valuation option pricing model every reporting period with a resulting liability being recognised in the balance sheet. In the valuation of these stock appreciation rights at the reporting date, the following assumptions have been made: a risk free rate of interest of 1.50% to 2.50%, stock volatility of 55% to 71%, 0% dividend yield and a range of forfeiture from 0% to 33% and a closing stock price of Cdn\$5.43 per share.

As at 31 December 2010, a total accrued liability of US\$0.5 million (2009: US\$0.4 million) has been recognised in relation to the stock appreciation rights. A total charge of US\$0.1 million has been recorded during 2010.

15 CONTRIBUTED SURPLUS

This is used to record two types of transactions:

- (i) To recognise the fair value of equity settled stock based compensation expensed in the year.
- (ii) To account for the difference between the aggregated book value of the shares purchased under the normal course issuer bid and the actual consideration.

16 EARNINGS PER SHARE

The calculation of basic earnings per share is based on the profit after taxation and comprehensive income for the year of US\$10.0 million (2009: US\$3.3 million) and a weighted average number of Class A and Class B shares outstanding during the period of 30,795,013 (2009: 29,540,339).

In computing the diluted earnings per share, the dilutive effect of the stock options was 1,098,391 (2009: 1,163,181) shares. These are added to the weighted average number of common shares outstanding during the year resulting in a diluted weighted average number of Class A and Class B shares of 31,893,404 for the year ended 31 December, 2010. No adjustments were required to the reported earnings from operations in computing diluted per share amounts.

17 OPERATING LEASES

The Company has two office rental agreements in Dar es Salaam, expiring on 30 November 2012 and 31 October 2013 at an annual rental of US\$122,000 and US\$110,000 per annum respectively.

As at 31 December	2010	2009
<i>FIGURES IN US\$'000</i>		
Less than one year	232	232
Between one and five years	314	546
	546	778

18 RELATED PARTY TRANSACTIONS

One of the non executive Directors is a partner at a law firm. During the year, the Company incurred US\$276,000 (2009: US\$168,000) to this firm for services provided. The transactions with this related party were made at the exchange amount.

19 CONTRACTUAL OBLIGATIONS AND COMMITTED CAPITAL INVESTMENTS**CONTRACTUAL OBLIGATIONS***Protected Gas*

Under the terms of the original gas agreement for the Songo Songo project ("Gas Agreement"), in the event that there is a shortfall/insufficiency in Protected Gas as a consequence of the sale of Additional Gas, then the Company is liable to pay the difference between the price of Protected Gas (US\$0.55/Mmbtu) and the price of an alternative feedstock multiplied by the volumes of Protected Gas up to a maximum of the volume of Additional Gas sold (47.7 Bcf as at 31 December 2010).

The Gas Agreement has been amended by an initialled Amended and Restated Gas Agreement ("ARGA"). The ARGA provides clarification of the Protected Gas volumes and removes all terms dealing with the security of the Protected Gas and the consequences of any insufficiency to a new Insufficiency Agreement ("IA"). The IA specifies terms under which Songas may demand cash security in order to keep them whole in the event of a Protected Gas insufficiency. Once the Insufficiency Agreement is signed, it will govern the basis for determining security. Under the provisional terms of the IA, when it is calculated that funding is required, the Company shall fund an escrow account at a rate of US\$2/Mmbtu on all industrial Additional Gas sales out of its and TPDC share of revenue, and TANESCO shall contribute the same amount on Additional Gas sales to the power sector. The funds provide security for Songas in the event of an insufficiency of Protected Gas. The Company is actively monitoring the reservoir and does not anticipate that a liability will occur in this respect.

Back in

TPDC has indicated that they wish to exercise their right to 'back in' to the field development by contributing 20% of the costs of the future wells including SS-10 in return for a 20% increase in the profit share percentage for the production emanating from these wells. The implications and workings of the 'back in' are currently being discussed with TPDC and there may be the need for additional reserve and accounting modifications once these discussions are concluded. For the purpose of the reserves certification, it has been assumed that they will 'back in' for 20% for all future drilling activities and other developments and this is reflected in the Company's net reserve position.

Capital Commitments

Italy

On 31 May 2010, the Company signed an agreement with Petroceltic International plc ("Petroceltic") to farm in on Petroceltic's Central Adriatic B.R268.RG Permit offshore Italy. The farm in commits the Company to fund 30% of the Elsa-2 appraisal well up to a maximum of US\$11.5 million to earn a 15% working interest in the permit. Thereafter, the Company will fund all future costs relating to the well and the permit in proportion to its participating interest. The Company has also agreed to pay Petroceltic fifteen per cent (15%) of the back costs in relation to the well up to a maximum of US\$0.5 million.

Petroceltic were due to spud the Elsa-2 well prior to 31 October 2010, but the Italian government passed a decree, following the blowout of the Macondo well in the U.S., that prevented the drilling in the Italian seas within 5 nautical miles of the coastline and within 12 nautical miles around the perimeter of protected Marine Parks. In view of this, Petroceltic suspended the permit until such time as the Ministry of Environment issues a decree of environmental compatibility for the drilling programme. The project is currently on hold and Orca is not liable to any costs associated with the drilling of Elsa-2 until a rig contract is signed.

In December 2010, the Company announced a farm in to Northern Petroleum (UK) Limited's Longastrino Block in the Po Valley Basin. Under the terms of the farm in, Orca will pay 100% of the costs of the La Tosca well up to a cap of approximately €4.3 million and 70% of the costs thereafter. If the well is tested and completed, Orca will earn an additional 5% (taking it to 75%) by paying 100% of the testing costs up to €1.3 million and 75% thereafter. The Company will also pay back past costs of €0.6 million.

Songo Songo

In Q4 2010 the Company reduced the deliverability from its Songo Songo wells following receipt of results of a corrosion logging survey. Orca suspended production from SS-5, reduced flow rates from the other wells and expedited the tie in of the new onshore well SS10. As of today, the Company can produce approximately 113 MMcfd though this is currently restricted by the infrastructure capacity to 90 MMcfd.

The corrosion model forecasts that the offshore well, SS-9 currently producing in the region of 30 MMcfd, will need to be taken out of production at the end of Q1 2012, subject to re-logging of the well in September 2011 to confirm its condition. Accordingly, the Company has determined that in 2011, subject to TPDC approval and rig availability a new onshore deviated well should be drilled followed by an enhancement of the SS-10 well. It is anticipated that the capital cost of this programme will be in the region of US\$35 million and could increase deliverability from the field to 172 MMcfd by the time SS-9 is taken out of production.

Songo Songo West

The Company is currently planning to drill one well on the Songo Songo West at a cost of US\$25 million. It is currently estimated that the well will be spud in the second quarter of 2012. Assuming the well is a success a substantial well test program will be undertaken before the well is suspended at the mudline as a potential future producer.

Cost Sharing Agreement

In January 2011, the Company signed a cost sharing agreement with Songas, whereby the Company will fund 50% of the costs of getting the Songas Expansion Project (installation of gas processing capacity and downstream compression to increase the infrastructure capacity to 140 MMcfd) to financial close. In the event that the costs are approved by the regulator, EWURA, the funds will be repaid by Songas at financial close. If the project is not successful, the costs will be recoverable by the Company under the terms of the PSA with TPDC.

Funding

The Company's 2011 work programme principally includes the drilling of the new onshore deviated well, SS-A, the enhancement of SS-10, the drilling of La Tosca in the Po Valley and the purchase of long lead items for SSW. Whilst there should be sufficient funds to undertake this work programme in 2011 through the use of existing cash balances and self generated cash flows, the Company will look to secure a financing facility and/or raise new equity to cover the 2012 exploration activity.

20 DIRECTORS AND OFFICERS EMOLUMENTS

					Outstanding	Stock appreciation rights
	Year	Base	Bonus	Total	Stock options	
USD'000 EXCEPT FOR NUMBER OF STOCK OPTIONS						
Directors						
W. David Lyons ⁽ⁱ⁾	2010	132	–	132	1,000,000	–
Chairman and CEO	2009	15	–	15	1,000,000	–
Peter R. Clutterbuck ⁽ⁱ⁾	2010	357	–	357	250,000	–
Deputy Chairman	2009	360	118	478	490,000	–
Nigel A. Friend ⁽ⁱ⁾	2010	273	50	323	265,000	90,000
Chief Financial Officer	2009	275	80	355	265,000	90,000
James Smith ⁽ⁱ⁾	2010	406	50	456	300,000	300,000
Vice President Exploration	2009	253	73	326	300,000	300,000
Pierre Raillard	2010	381	–	381	325,000	–
Vice President Operations	2009	397	76	473	325,000	–
David W. Ross	2010	–	–	–	75,000	–
Non Executive Director	2009	–	–	–	75,000	–
John Patterson ⁽ⁱ⁾	2010	71	–	71	125,000	–
Non Executive Director	2009	63	–	63	125,000	–
Michael Howard ⁽ⁱ⁾	2010	43	–	43	–	75,000
Non Executive Director	2009	–	–	–	–	–
Robert Wigley ⁽ⁱ⁾	2010	48	–	48	–	75,000
Non Executive Director	2009	–	–	–	–	–
Beer Van Straten ⁽ⁱ⁾	2010	195	–	195	–	75,000
Non Executive Director	2009	–	–	–	–	–

⁽ⁱ⁾ The 'Base compensation' for W.D. Lyons, P.R. Clutterbuck, N. Friend, J. Smith, J. Patterson, M. Howard, R. Wigley and B.V. Straten are in respect of consultancy fees.

Board of Directors

W. David Lyons
Chairman and
Chief Executive Officer
Winchester
United Kingdom

Lord Howard of Lympne
Non-Executive Director
London
United Kingdom

Robert Wigley
Non-Executive Director
Waterlooville, Hampshire
United Kingdom

Beer van Straten
Non-Executive Director
Molkerum
Netherlands

John Patterson
Non-Executive Director
Nanoose Bay
Canada

David Ross
Non-Executive Director
Calgary
Canada

Peter R. Clutterbuck
Non-Executive Director
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Lawyers

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& Palmer LLP
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Transfer Agent

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Trust Company
Toronto & Montreal, Canada



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