FORM 51-101F1
STATEMENT OF RESERVES DATA
AND OTHER OIL AND GAS INFORMATION

Oil and Gas Reserves and Net Present Value of Future Net Revenue

In accordance with National Instrument 51-101 – Standards of Disclosure for Oil and Gas Activities, McDaniel & Associates Consultants Ltd. ("**McDaniel**"), independent petroleum engineering consultants, prepared a report (the "**McDaniel Report**") dated February 24, 2023. This statement of reserves data and other oil and gas information (this "**Statement**") uses the information provided in the McDaniel Report. All financial information in this Statement is in US dollars ("$"). This Statement was prepared on February 24, 2023 and is effective December 31, 2022.

The McDaniel Report evaluated, as at December 31, 2022, Orca Energy Group Inc.'s (the "**Company**" or "**Orca Energy**") Tanzanian conventional natural gas reserves for the period to the end of its license in October 2026. The tables below are a summary of the conventional natural gas reserves of the Company and the net present value of future net revenue attributable to such reserves as evaluated in the McDaniel Report utilizing forecast price and cost assumptions. The tables summarize the data contained in the McDaniel Report and as a result may contain slightly different numbers due to rounding. The net present value of future net revenue attributable to the Company's reserves is stated without provision for interest costs and out of country general and corporate administrative costs, but after providing for estimated royalties, production costs, development costs, other income, and future capital expenditures. It should not be assumed that the undiscounted or discounted net present value of future net revenue attributable to the Company's reserves estimated by McDaniel represent the fair market value of those reserves. Other assumptions and qualifications relating to costs, prices for future production and other matters are summarized herein. The recovery and reserve estimates of the Company's natural gas reserves provided herein are estimates only and there is no guarantee that the estimated reserves will be recovered. Actual reserves may be greater than or less than the estimates provided herein.

The McDaniel Report is based on certain factual data supplied by the Company and McDaniel's opinion of reasonable practice in the industry. The extent and character of ownership and all factual data pertaining to the Company's petroleum properties and contracts (except for certain information residing in the public domain) were supplied by Orca Energy to McDaniel and accepted without any further investigation. McDaniel accepted this data as presented and neither title searches nor field inspections were conducted.

Reserves Data – Forecast Prices and Costs

Summary of Oil and Gas Reserves

	Company Gross Reserves			**Company Net Reserves**		
	Light and Medium Crude Oil	**Natural Gas Liquids**	**Convent. Natural Gas**	**Light and Medium Crude Oil**	**Natural Gas Liquids**	**Convent. Natural Gas**
	Mbbl	*Mbbl*	*MMcf*	*Mbbl*	*Mbbl*	*MMcf*
Proved						
Developed Producing	-	-	123,776	-	-	74,671
Developed Non-Producing	-	-	-	-	-	-
Undeveloped	-	-	16,786	-	-	15,294
Total Proved	**-**	**-**	**140,561**	**-**	**-**	**89,964**
Probable	-	-	26,851	-	-	16,943
Total Proved plus Probable	**-**	**-**	**167,413**	**-**	**-**	**106,907**

Net Present Value of Future Net Revenue of Oil and Gas Reserves

	Before Future Income Tax Expenses (9) Discounted at					Unit Value Before Tax at 10%
	0%	5%	10%	15%	20%	$/Mcf
($'000)						
Proved						
Developed Producing	177,820	162,583	149,599	138,435	128,760	2.00
Developed Non-Producing	-	-	-	-	-	-
Undeveloped	2,094	(408)	(2,357)	(3,882)	(5,081)	(0.15)
Total Proved	**179,914**	**162,172**	**147,241**	**134,553**	**123,679**	**1.64**
Probable	29,916	26,372	23,447	21,010	18,960	1.38
Total Proved plus Probable	**209,830**	**188,546**	**170,689**	**155,563**	**142,639**	**1.59**

	After Future Income Tax Expenses (9) Discounted at				
	0%	5%	10%	15%	20%
($'000)					
Proved					
Developed Producing	177,820	162,583	149,599	138,435	128,760
Developed Non-Producing	-	-	-	-	-
Undeveloped	2,094	(408)	(2,357)	(3,882)	(5,081)
Total Proved	**179,914**	**162,174**	**147,241**	**134,553**	**123,679**
Probable	29,916	26,372	23,447	21,010	18,960
Total Proved plus Probable	**209,830**	**188,546**	**170,689**	**155,563**	**142,639**

Notes:

1. The crude oil and natural gas reserves estimates presented in the McDaniel Report have been based on the definitions and guidelines prepared by the Standing Committee on Reserves Definitions of the CIM (Petroleum Society) as presented in the Canadian Oil and Gas Evaluation (the "**COGE Handbook**"). A summary of those definitions is presented below.
2. Reserves are estimated remaining quantities of oil and natural gas and related substances anticipated to be recoverable from known accumulations, from a given date forward, based on (i) analysis of drilling, geological, geophysical and engineering data; (ii) the use of established technology; and (iii) specified economic conditions, which are generally accepted as being reasonable, and shall be disclosed.
3. Reserves are classified according to the degree of certainty associated with the estimates:
   (a) Proved reserves are those reserves that can be estimated with a high degree of certainty to be recoverable. It is likely that the actual remaining quantities recovered will exceed the estimated proved reserves.
   (b) Probable reserves are those additional reserves that are less certain to be recovered than proved reserves. It is equally likely that the actual remaining quantities recovered will be greater or less than the sum of the estimated proved plus probable reserves.
   (c) Other criteria that must also be met for the categorization of reserves are provided in Section 1.4.7.2.1of the COGE Handbook.
4. Each of the reserves categories (proved and probable) may be divided into developed and undeveloped categories:
   (a) Developed reserves are those reserves that are expected to be recovered from existing wells and installed facilities or, if facilities have not been installed, that would involve a low expenditure (for example, when compared to the cost of drilling a well) to put the reserves on production. The developed category may be subdivided into producing and non-producing.
   (b) Developed producing reserves are those reserves that are expected to be recovered from completion intervals open at the time of the estimate. These reserves may be currently producing or, if shut in, they must have previously been on production, and the date of resumption of production must be known with reasonable certainty.
   (c) Developed non-producing reserves are those reserves that either have not been on production, or have previously been on production, but are shut in, and the date of resumption of production is unknown.
   (d) Undeveloped reserves are those reserves expected to be recovered from known accumulations where a significant expenditure (for example, when compared to the cost of drilling a well) is required to render them capable of production. They must fully meet the requirements of the reserves classification (proved, probable) to which they are assigned.

5. The qualitative certainty levels referred to in the definitions above are applicable to individual reserves entities (which refers to the lowest level at which reserves calculations are performed) and to reported reserves (which refers to the highest level sum of individual entity estimates for which reserves estimates are presented). Reported reserves should target the following levels of certainty under a specific set of economic conditions:
   (a) at least a 90 percent probability that the quantities actually recovered will equal or exceed the estimated proved reserves; and
   (b) at least a 50 percent probability that the quantities actually recovered will equal or exceed the sum of the estimated proved plus probable reserves.

   Additional clarification of certainty levels associated with reserves estimates and the effect of aggregation is provided in Section 5 of the COGE Handbook.
6. "Company Gross Reserves" are the total of the Company's working and/or royalty interest share after Tanzania Petroleum Development Corporation ("**TPDC**") back-in and before deduction of royalties owned by others. It represents the Company's percentage effective ownership interest in the property gross reserves.
7. "Company Net Reserves" are the total of the Company's working interest share in reserves after deducting the amounts attributable to royalties and Profit Gas owned by others, as defined in the Songo Songo Production Sharing Agreement with TPDC and the Government of Tanzania ("**PSA**") covering the Tanzanian conventional natural gas reserves, plus the Company's royalty interests in such reserves. The PSA defines the gas produced from the Songo Songo gas field as "**Protected Gas**" and "**Additional Gas**". The Protected Gas is owned by TPDC and is sold under a 20-year gas agreement (until July 31, 2024) to Songas Limited ("**Songas**") and Tanzania Portland Cement PLC. Additional Gas is all gas that is produced from the Songo Songo gas field in excess of Protected Gas.
8. Company Gross and Net Reserves are based on the Company's 92.07 percent ownership interest in the reserves following the Swala Transaction described in Note 14 below.
9. See "Tax Horizon" for details of tax treatment.
10. There are no state royalties in the PSA.
11. The separation of the downstream assets was raised by the Ministry Energy and Minerals ("**MEM**") (now the Ministry of Energy ("**ME**")) in the National Natural Gas Policy issued in 2013, which contemplates TPDC as monopoly aggregator and distributor of gas. In the context of the gas policy, TPDC and MEM have indicated that they wish the Company to unbundle the downstream distribution business in Tanzania. The potential unbundling of the Company's downstream business will be addressed at such time as there is a conflict between new legislation and the Company's right under the PSA. The provisions of the PSA are such that the Company is to be kept economically whole if any legislation affects the Company's economic benefits under the PSA.
12. During the third quarter of 2015, The Petroleum Act, 2015, (the "**Petroleum Act**") was passed into law by Presidential decree. The Petroleum Act repeals earlier legislation, provides a regulatory framework over upstream, midstream and downstream gas activity, and as well consolidates and puts in place a single, effective and comprehensive legal framework for regulating the oil and gas industry in the country. The Petroleum Act also provides for the creation of an upstream regulator, the Petroleum Upstream Regulatory ("**PURA**"). Midstream and downstream petroleum and natural gas activities are proposed to be regulated by the current authority, the Energy and Water Utilities Regulatory Authority ("**EWURA**"). The Petroleum Act also confers the status of the National Oil Company on TPDC and mandates it with the task of managing Tanzania's commercial interest in petroleum operations as well as midstream and downstream natural gas activities. The Petroleum Act vests TPDC with exclusive rights in the entire petroleum upstream value chain and the entire natural gas midstream and downstream value chain. However, the exclusive rights of TPDC do not extend to midstream and downstream petroleum supply operations. The Company is uncertain of the potential impact of the Petroleum Act on its business in Tanzania. The Petroleum Act contains grandfathering provisions upholding the rights of the Company under the PSA as it was signed prior to the passing of the Petroleum Act.
13. On October 7, 2016, the Government of Tanzania issued the Petroleum (Natural Gas Pricing) Regulation made under Sections 165 and 258 (1) of the Petroleum Act (the "**Natural Gas Pricing Policy**"). Article 260 (3) of the Petroleum Act preserves the Company's pre-existing right with TPDC to market and sell natural gas together or independently on terms and conditions (including prices) negotiated with third party natural gas customers. To date, the Natural Gas Pricing Policy has not impacted the Company's ability to market and sell natural gas at prices freely negotiated with natural gas customers. The future impact of the Natural Gas Pricing Policy, if any, cannot be determined at this time.
14. On January 16, 2018 Orca Energy sold (the "**Swala Transaction**") 7.933 percent of the Class A common shares (7,933 Class A common shares) of its wholly owned subsidiary PAE PanAfrican Energy Corporation ("**PAEM**"), a Mauritius registered Company and sole shareholder of PanAfrican Energy Tanzania Limited ("**PAET**"), a Jersey registered company, to a wholly owned subsidiary of Swala Oil & Gas (Tanzania) plc ("**Swala**"). The PSA is held by PAET. While Swala has no management or control of PAEM and no shareholding in, or management or control of, PAET, the McDaniel Report was prepared based on Orca Energy's ownership of 92.07 percent of PAET's gross reserves. Swala's 7.933 percent interest in PAEM is referred to as the "**Swala Interest**".

Additional Information Concerning Future Net Revenue – (Undiscounted)

($'000)	Revenue [1]	Royalties	Operating Costs	Development Costs	Abandonment and Reclamation Costs	Future Net Revenue Before Income Taxes	Income Taxes	Future Net Revenue After Income Taxes
Total Proved Reserves	293,289	-	58,885	54,490	-	179,914	-	179,914
Total Proved plus Probable	339,376	-	60,969	68,577	-	209,830	-	209,830

Notes:

1. Revenue is shown net of Additional Profits Tax. For further information on Orca Energy's revenue, net revenue and Additional Profits Tax please refer to the PSA filed on SEDAR at www.sedar.com.

Future Net Revenue by Production Group

($'000)	Future Net Revenue Before Future Income Tax Expenses Discounted at 10%	Net Unit Value Before Income Taxes Discounted at 10% ($/Mcf)
Proved		
Light and Medium Crude Oil [1]	-	-
Conventional Natural Gas [2]	147,241	1.64
Proved plus Probable		
Light and Medium Crude Oil [1]	-	-
Conventional Natural Gas [2]	170,689	1.59

Notes:

1. Including solution gas and other by-products.
2. Including by-products but excluding solution gas from oil wells.

Pricing Assumptions – Forecast Prices, Costs and Gas Sales

McDaniel employed the following gas sales, pricing and inflation rate assumptions as of December 31, 2022 in estimating the Company's reserves data using forecast prices and costs. The Company received an average gas price of $4.38/Mcf in 2022 and $4.00/Mcf net of the transportation tariff imposed by Songas as determined by the energy regulator, EWURA.

		Songo Songo gas prices		
	Brent crude	Proved	Proved plus probable	Annual inflation
Year	$/bbl	$/Mcf	$/Mcf	%
2023	84.00	3.91	3.83	2
2024	80.58	3.96	3.89	2
2025	79.59	4.05	3.92	2
2026	78.53	4.02	3.86	2
2027[1]	80.10	4.19	3.95	2

Note: (1) The PSA expires upon the expiry of TPDC's Songo Songo licence in respect of the Songo Songo gas field (the "**Songo Songo Licence**") in October 2026.

The price of natural gas for the power sector is set by reference to a base price of $1.87/MMBTU in 2008 escalated at 2% per annum plus an estimation of the Songas transportation tariff as determined by the energy regulator, EWURA. The base price of the gas to the power sector increased to $2.50/MMBTU on July 1, 2012 which is the equivalent of $2.76/MMBTU after the annual 2% escalation pursuant to the terms of the long-term power agreements.

The National Natural Gas Infrastructure Gas Processing Facility on Songo Songo Island was commissioned in 2016 ("**NNGI Gas Facility**" and together with its infrastructure, including a pipeline to Dar es Salaam, the "**NNGI**"). Gas sales to the Tanzania Electricity Supply Company Limited ("**TANESCO**") can be made via both the NNGI and "**Songas Infrastructure**" (which includes the Songas gas processing facility on Songo Songo Island (the "**Songas Gas Facility**") and its infrastructure including the main pipeline to Dar es Salaam). The SS-12 well is connected and flowing gas to the NNGI. The SS-10 and SS-11 wells are connected to both the Songas Infrastructure and the NNGI. SS-10 and SS-11 flow primarily through the Songas Infrastructure; provided in periods of high demand, when the Songas facility is operating at capacity or to overcome certain operating constraints such as maintenance outages, these wells may be realigned to the NNGI.

Gas sales to TANESCO via the Songas Infrastructure are priced according to the Portfolio Gas Supply Agreement ("**PGSA**") wellhead price, which was $2.76/MMBTU on July 1, 2012 (escalating 2% per annum), plus the EWURA regulated Songas tariff.

On December 22, 2018, a side letter agreement was entered into between PAET, TPDC and TANESCO, whereby the parties agreed to nominate the NNGI Gas Facility as a temporary delivery point for certain volumes sold to TANESCO under the PGSA. The terms of the side letter agreement provided for volumes of gas up to 35 MMscfd of processed gas, measured at the export meter of the NNGI Gas Facility, to be priced in accordance with the wellhead price, established under the existing terms of the PGSA detailed above. Any volumes sold above 35 MMscfd would be priced at $3.10/Mcf and payable to the Company by TPDC. The side letter agreement was established on a 1-month term, extendable 1-month at a time up to a limit of 6-months, to enable the delivery of gas to sustain power generation by TANESCO until the Long-Term Gas Sales Agreement ("**LTGSA**") between PAET and TPDC was approved.

On May 14, 2019 the Company and TPDC signed the LTGSA for an initial delivery of 20 MMscfd to the NNGI, at a price of $3.10/MMBTU as at January 1, 2019, (escalating 2% per annum) exclusive of any processing and transportation tariff associated with the NNGI. The LTGSA was amended on September 24, 2019 to increase the volumes supplied through the NNGI up to a maximum daily quantity ("**MDQ**") of 30 MMscfd. All volumes above 20 MMscfd are supplied on a best endeavours basis until the installation of compression at the Songas Infrastructure. More recently, the Company and TPDC agreed to more flexible, short-term arrangements on the LTGSA MDQ, allowing TPDC to take increased volumes on an ad-hoc basis to overcome insufficient supply from Mnazi Bay, without incurring a permanent increase in the MDQ and suffering the resultant take or pay charges should the short-term demand not endure.

The price of natural gas sold to Wazo Hill is based on the contracted prices as set out in the Amendment Agreement No 2 to the 2008 gas sales agreement with Tanzania Portland Cement Company agreed to in October 2017 plus an estimation of the Songas transportation tariff as determined by the energy regulator, EWURA.

The industrial contracts have caps and floors with regards to gas prices. The industrial gas prices are determined by approved discounts to heavy fuel oil unless this price is above the cap or below the floor price stipulated in the contract.

RECONCILIATIONS OF CHANGES IN RESERVES AND FUTURE NET REVENUE

Reserves Reconciliation

The following table sets forth a reconciliation of Company gross reserves as at December 31, 2022 against the Company's gross reserves as at December 31, 2021.

	Company Gross Reserves Conventional Natural Gas [2] (Bcf)		
	Proved	Probable	Proved plus Probable
Reserves at December 31, 2021	**159.8**	**28.3**	**188.1**
Extensions	-	-	-
Improved recovery	-	-	-
Technical revisions [1]	10.0	(1.4)	8.6
Discoveries	-	-	-
Acquisitions	-	-	-
Dispositions	-	-	-
Economic factors	-	-	-
Production	(29.2)	-	(29.2)
Reserves at December 31, 2022	**140.6**	**26.9**	**167.5**

Notes:

1. The proved technical revisions have been made because the gas sales forecast prior to license expiry is expected to be higher than previously reported.
2. On a Company Gross Reserve basis there has been a 12% decline in Songo Songo's proved conventional natural gas reserves to the end of the license period with total conventional natural gas production of 29.2 Bcf during the year. There has been an 11% decline in the proved plus probable conventional natural gas reserves on a Company gross reserve basis from 188.1 Bcf to 167.5 Bcf.

UNDEVELOPED RESERVES

The following table sets forth the Company's undeveloped reserves for the years ended December 31, 2020, 2021 and 2022.

	As of December 31, 2020 Conventional Natural Gas	
Proved Undeveloped	1st Attributed (MMcf)	Booked [1] (MMcf)
2020	-	-
2021	-	-
2022	16,786	16,786

Probable Undeveloped	1st Attributed (MMcf)	Booked (MMcf)
2020	-	-
2021	-	-
2022	-	-

Notes:

1. Booked refers to reserves assigned as undeveloped in the McDaniel's report.

The following discussion generally describes the basis on which the Company attributes proved and probable undeveloped reserves.

Proved Undeveloped Reserves

The Company attributed and booked proved undeveloped reserves associated with the planned installation of the low low pressure (2nd stage) inlet gas compression facilities required to supply forecasted increased gas sales.

Probable Undeveloped Reserves

All probable reserves are assigned either on a producing or non-producing basis. The Company does not have any probable undeveloped reserves.

SIGNIFICANT FACTORS OR UNCERTAINTIES AFFECTING RESERVES DATA

The process of estimating reserves is complex. It requires significant judgments and decisions based on available geological, geophysical, engineering, and economic data. These estimates may change substantially as additional data from ongoing development activities and production performance becomes available and as economic conditions impacting oil and gas prices and costs change. The reserve estimates contained herein are based on current production forecasts, prices and economic conditions. The Company's reserves are evaluated by McDaniel, an independent petroleum engineering firm.

As circumstances change and additional data become available, reserve estimates also change. Estimates made are reviewed and revised, either upward or downward, as warranted by the new information. Revisions are often required due to changes in well performance, prices, economic conditions and governmental restrictions.

Although every reasonable effort is made to ensure that reserve estimates are accurate, reserve estimation is an inferential science. As a result, the subjective decisions, new geological or production information and a changing environment may impact these estimates. Revisions to reserve estimates can arise from changes in year-end oil and gas prices, and reservoir performance. Such revisions can be either positive or negative.

The separation of the downstream assets was raised by MEM (now the Ministry of Energy ("**ME**")) in the National Natural Gas Policy issued in 2013, which contemplates TPDC as monopoly aggregator and distributor of gas. In the context of the gas policy, TPDC and MEM have indicated that they wish the Company to unbundle the downstream distribution business in Tanzania. The potential unbundling of the downstream business will be addressed at such time as there is a conflict between new legislation and the Company's rights under the PSA. The provisions of the PSA are such that the Company is to be kept economically whole if any legislation affects the Company’s economic benefits under the PSA.

During the third quarter of 2015, the Petroleum Act was passed into law by Presidential decree. See Note 12 on page 3 above. The Company believes the potential impact on its business in Tanzania will not be significant as the PSA was signed prior to passing of the Petroleum Act and there are grandfathering provisions within the Petroleum Act upholding the rights of the Company under the PSA.

On October 7, 2016, the Government of Tanzania issued the Natural Gas Pricing Policy. See Note 13 on page 3 above. To date, the Natural Gas Pricing Policy has not impacted the Company's ability to market and sell natural gas at prices freely negotiated with natural gas customers.

FUTURE DEVELOPMENT COSTS

The table below sets out Orca Energy's share of the development costs deducted in the estimation of future net revenue attributable to proved and probable reserves using forecast prices and costs.

	Future Development Costs	
	Forecast Prices and Costs	
	Proved	Proved plus Probable
($'000)		
2023	31,537	31,537
2024	22,610	36,696
2025	192	192
2026	152	152
2027(1)	-	-
Total Undiscounted	54,490	68,577

Note: (1) The PSA expires upon the expiry of the Songo Songo Licence in October 2026.

The 2022 proved future development costs include the balance of costs associated with: (a) the installation of the low low pressure (2nd stage) inlet gas compression facility; (b) the purchase of two desanding units; and (c) the repair of the SS-5 and SS-9 flowlines.

In addition to the proved future development costs, the proved plus probable future development costs include the provision for the intervention on the SS-7 well to return the SS-7 well to production. All future development costs can be funded out of existing working capital and future cash flow.

Land Holdings

The following table sets out the developed and undeveloped land holdings in acres of the Company as at December 31, 2022:

	Developed		Undeveloped		Total	
	Gross (1)	**Net** (2)	**Gross** (1)	**Net** (2)	**Gross** (1)	**Net** (2)
Songo Songo	53,623	49,371	-	-	53,623	49,371
Total Tanzania	53,623	49,371	-	-	53,623	49,371

Notes:

1. "Gross" refers to the total acres of the property held by PAET or in which PAET has an interest.
2. "Net" refers to the total acres of the property held by PAET or in which PAET has an interest, multiplied by Orca Energy and its subsidiaries 92.07 percent ownership interest in PAET, and further multiplied by PAET's effective working interest percentage in the property.

OIL AND GAS PROPERTIES AND WELLS

The following table summarizes the Company's interest as at December 31, 2022 in wells that are producing and non-producing in Tanzania.

	Producing Wells		Non-Producing Wells	
	Natural Gas		Natural Gas	
	Gross	**Net**	**Gross**	**Net**
Songo Songo	**6.0**	**5.5**	**2.0**	**1.8**
Total Tanzania	**6.0**	**5.5**	**2.0**	**1.8**

Notes:

1. "Gross" refers to the aggregate number of wells in which PAET has an interest.
2. "Net" refers to PAET's aggregate working interest in each of its gross wells, multiplied by Orca Energy and its subsidiaries' 92.07 percent ownership interest.

Producing Wells.

As at December 31, 2022, there were six producing wells, three offshore wells (SS-5, SS-9, SS-12) and three onshore wells (SS-3, SS-10 and SS-11). The SS-10 well drilled in 2007 was tied into the Songas Gas Facility in January 2011. The SS-11 well was completed in June 2012 and was tied into the Songas Gas Facility in

September 2012. The SS-5, SS-7 and SS-9 wells were worked over as part of the Phase I development program between September and November 2015 and were put back into production from October to December 2015. The SS-7 well was subsequently shut-in in January 2019 due to excessive water production, and later in the year it was also identified as a source of sand production. The SS-11 well was tied into the Songas Gas Facility via the SS-3 offshore flowline, and the SS-10 well was tied into the same facility via the SS-4 flowline. However, in 2020, the Company undertook a flowline decoupling project to construct dedicated 6-inch flowlines for SS-10 and SS-11 wells, which are now tied in directly to the Songas Gas Facility. The SS-11 well is also tied into the NNGI, having the ability to dual flow to both the NNGI and/or the Songas Infrastructure depending on demand. The offshore SS-12 well was successfully completed in February 2016. It was tied into the NNGI plant and started to flow gas to the NNGI in December 2018. Throughout 2021 and 2022 a three well (SS-3, SS-4 and SS-10) onshore remedial workover programme was conducted to install corrosion resistant tubing in the three wells as well as to sidetrack SS-4 to a new bottom hole location. The SS-3 and SS-10 workovers were successfully recompleted and the wells placed on production in 2022. Since completing the sidetrack of SS-4, the well has been unable to flow stably to sustain gas production due to associated water production and it is currently shut in and not producing.

The installation of the low pressure inlet gas compression facilities was completed in Q1 2022 along with the completion of the 2021/2022 onshore well workover program. This increased field production potential to approximately 155 MMscfd. Compression was designed to be able to meet a production plateau of 115 MMscfd to the end of the license period in 2026 as wellhead pressures decline, split across the NNGI and the Songas Gas Facilities. However, during 2022 gas demand exceeded forecasts and production rates increased to record levels above 130 MMscfd for 3Q and 4Q. As a result field decline is now forecast before 2026 and this has created the need for investment in the second stage low low pressure inlet gas compression facilities. This will further reduce the plant inlet operating pressure and sustain deliverability at c.130 MMscfd until 2026. Subject to approvals being obtained from the Government of Tanzania the Company has budgeted capital for this to be completed in 2023/24.

Non-Producing Wells

As at December 31, 2022, there were two non-producing wells SS-4 located onshore, and SS-7 located offshore. The SS-4 well was suspended in 2015 due to corrosion and excessive water production and following the sidetrack in 2022 remains shut in as described above. The SS-7 well was shut-in in January 2019 for reason described above. Subject to approvals being obtained from Songas, the Company plans to remediate the SS-7 offshore well in 2023/24.

As at December 31, 2022, the Company had a well production potential of approximately 150 MMscfd from the operating well stock comprising SS-3, SS-5, SS-9, SS-10, SS-11 and SS-12. Up to 105 MMscfd can flow through the Songas Gas Facility and the balance can be flowed to the NNGI facility. The SS-12 well is permanently aligned to the NNGI facility and the SS-10 and SS-11 wells can be flowed to either the Songas Infrastructure or the NNGI to balance production to meet demand.

Infrastructure

The Songas Gas Facility is owned by Songas and is operated by PAET on behalf of Songas (on a no loss/no profit basis). The Songas Gas Facility, as originally designed, consisted of 2 x 35 MMscfd raw gas trains.

In June 2011, the Company installed Joule Thomson valves at the Songas Gas Facility and subsequently signed a re-rating agreement with Songas and TANESCO (the "**Re-Rating Agreement**") to increase the gas processing capacity from 90 MMscfd to 110 MMscfd (the Songas Gas Facility was re-rated and certified at these rates). This increased the overall capacity of the system to 102 MMscfd (operated to a maximum of 97 MMscfd) with the export pipeline being the bottleneck. The Re-Rating Agreement expired on December 31, 2012 and, although it was initially extended to December 31, 2013, no new agreement is currently in place. Without the Re-Rating Agreement, the Songas Gas Facility could be de-rated to 70 MMscfd (the capacity originally agreed to) if there were any technical or safety reasons to do so, however the plant is inspected each year and certified to produce at 110 MMscfd. Similarly, following the ME's and Songas' approval of Additional Gas Plan 2 in 2017, which approves development and production of volumes through Songas

Infrastructure above 100 MMscfd, the risk of the Songas Gas Facility being unnecessarily de-rated is significantly diminished. If, however, the Songas Gas Facility was de-rated on the grounds of technical or safety reasons this would result in a material reduction in the Company's sales volumes of Additional Gas. In the event of such a de-rating, there would be some curtailment of a very small amount of industrial volumes contracted after the PGSA was effective; the sales made to TANESCO under the PGSA and potentially Additional Gas sales made to Songas, would be the first to be curtailed. Consequently, it is likely that the TANESCO and Songas curtailed volumes would be diverted through the NNGI, with sales made by the Company to TPDC at the wellhead, or directly to TANESCO.

The gas is transported to Dar es Salaam via a 25 km 12-inch offshore pipeline to Somanga Funga landfall then via a 207 km 16-inch onshore pipeline to Ubungo Power Plant, and a 16 km 8-inch lateral pipeline to the Wazo Hill cement plant. These pipelines are owned and operated by Songas.

Sales of Additional Gas to industrial customers are made via the Company's low-pressure distribution system in Dar es Salaam. There are three pressure reduction stations and two separate connections to the 16-inch high pressure pipeline. Since 2004, the Company has constructed over 50 km of low-pressure pipeline in Dar es Salaam and over 50 industrial contracts have been established with customers consuming Additional Gas at the end of 2022.

The NNGI at Songo Songo Island was commissioned in 2016. The NNGI Gas Facility includes 2 x 70 MMscfd raw gas trains. Gas is transported via a 16-inch offshore pipeline (twinned with the Songas Infrastructure) to Somanga Funga landfall then via a 207 km stretch of the 550 km 36-inch offshore pipeline that runs from Madimba in southern Tanzania to Dar-es-Salaam. These pipelines are owned and operated by TPDC.

PROPERTIES WITH NO ATTRIBUTED RESERVES

The Company does not have any interests in unproved properties in Tanzania and there are no properties in which the Company's rights to explore, develop or exploit will, absent further action, expire within one year in Tanzania.

EXPLORATION AND DEVELOPMENT ACTIVITY

The Company did not conduct any drilling activities for the year ended December 31, 2022.

ADDITIONAL INFORMATION CONCERNING ABANDONMENT AND RECLAMATION COSTS

There are no estimates of well abandonment costs included in the McDaniel Report in arriving at future net revenue.

Under the terms of the PSA, Orca Energy is not currently liable for abandonment and reclamation costs as it is envisaged that the field will remain economically viable and the wells will continue to produce beyond the current license period. Whilst there is currently no amendment to the PSA, the Government of Tanzania has stated a desire for the Company to contribute towards an escrow account for future abandonment costs based on a per unit of production basis. If necessary, the Company will provide for abandonment costs once an agreement is reached with TPDC and the PSA is amended accordingly.

TAX HORIZON

Under the terms of the PSA, the Company is required to pay Tanzanian income tax, but this is recovered by the Company through the profit sharing arrangements with TPDC. Where income tax is accrued, the Company's revenue will be grossed up by the tax due and the tax will be shown as a tax in the Company's accounts. However, the income tax has no material impact on the cash flows emanating from the PSA and accordingly it has not been identified as a separate cash flow stream in the analysis of the net present values.

The Company does not pay any royalties. However, 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 ("**PPI**"), an Additional Profits Tax ("**APT**") is payable at a rate of 25% of the Company's profit share. This rate can increase to 55% of the Company's profit share where all costs have been recovered with an annual return of 35% plus the PPI.

The APT can have a significant impact on the project economics as measured by the net present value of the cash streams emanating under the PSA. Higher revenue in the initial years leads to a rapid payback of the project costs and consequently accelerates the payment of the APT. Therefore, the terms of the PSA reward the Company for taking higher risks by incurring capital expenditure in advance of revenue generation.

The APT has been netted off against revenue rather than identified as a separate cash flow stream in the analysis of the net present values under both the constant and forecast price cases, as its payment and calculation is determined by the terms of the PSA and is applicable only to reserves within the Songo Songo PSA rather than as income tax expense as are most corporate income taxes.

COSTS INCURRED

The following table summarizes the Company's property acquisition costs, exploration costs and development costs for the year ended December 31, 2022.

	Year ended December 31, 2022
($'000)	
Lease acquisition and retention	-
Geological and geophysical	-
Drilling and completion	13,874
Production equipment	-
Infrastructure	6,572
Capitalized general and administrative	-
Development	1,945
Decommissioning asset	-
Property Gross	**22,391**
Swala Interest (See Note 14 on page 3 above**)**	**(1,776)**
Company Gross	**20,615**
Cost by category	
Acquisition of proved properties	-
Acquisition of unproved properties	-
Exploration costs	-
Development costs	22,391
Other costs	-
Property Gross	**22,391**
Swala Interest (See Note 14 on page 4 above**)**	**(1,776)**
Company Gross	**20,615**

Further analysis of capital expenditures

The tables below summarize the Company's quarterly capital expenditures for the year ended December 31, 2022.

	Quarter ended			
	December 31	**September 30**	**June 30**	**March 31**
($'000)	**2022**	**2022**	**2022**	**2022**
Property acquisitions and retention	-	-	-	-

Geological and geophysical including drilling and completion and production equipment	485	(84)	3,154	10,319
Development and facilities	3,122	1,303	149	3,943
Power development	-	-	-	-
Swala Interest (See Note 14 on page 3 above)	(286)	(97)	(262)	(1,131)
	3,321	1,122	3,041	13,131

Personnel

As at December 31, 2022, the Company had a complement of 114 full-time personnel, excluding consultants and contract personnel who devoted the majority of their time to the Company. In addition, the Company employs 47 employees who are recharged to Songas for the operation of the Songas Gas Facility.

Location	**Number of full time personnel**
Tanzania – Head office	61
Tanzania – Songo Songo Island (Operatorship)	47
London – Service office	5
	113

PRODUCTION ESTIMATES

The following table discloses for each product type the total volume of production estimated by McDaniel for 2023 in the estimates of future net revenue from proved and proved plus probable reserves disclosed above under the heading "*Net Present Value of Future Net Revenue of Oil and Gas Reserves*". Such volumes below reflect estimated production from Company Gross Reserves (see Note 6 on page 3 above).

2023 Forecast Production

(MMcfpd)	**Proved**	**Proved plus Probable**
Songo Songo conventional natural gas – Company Gross	89.4	101.2

PRODUCTION HISTORY

The following tables disclose the Company's share of quarterly average gross daily production and the Company's net production (after TPDC profit share and the Swala Interest) for the year ended December 31, 2021.

Average Daily Production

	Quarter Ended			
Production Songo Songo	**Dec 31, 2022**	**Sept 30, 2022**	**June 30, 2022**	**Mar 31, 2022**
Gross Property (MMscfd)	95.5	92.1	85.6	73.6
Gross Company (MMscfd)	87.9	84.8	78.8	67.7
Net Company (MMscfd)	58.0	56.0	54.1	56.5
Prices $/Mcf				
Industrials	8.21	8.79	8.43	8.70
Power	3.60	3.60	3.61	3.52

Average prices received	4.33	4.33	4.41	4.50
TPDC share of revenue	(1.36)	(1.35)	(1.27)	(0.68)
Production, distribution and transportation costs	(0.55)	(0.57)	(0.62)	(0.53)
Resulting netback $/Mcf	2.42	2.41	2.52	3.29

Production Volume by Field

The following table discloses for each important field, and in total, the Company's share of gross production volumes for the year ended December 31, 2022.

(MMcf)	**Conventional Natural Gas**
Songo Songo gas field	31,701
Gross Company	29,187

FORWARD LOOKING STATEMENT ADVISORY

*Certain information regarding Orca Energy set forth in this Statement contains forward-looking information or statements as defined in applicable securities laws (collectively, "**forward-looking statements**" or "**statements**") that involve substantial known and unknown risks and uncertainties. The use of any of the words "plan", "expect", "prospective", "project", "intend", "believe", "should", "anticipate", "estimate" or other similar words, or statements that certain events or conditions "may" or "will" occur are intended to identify forward-looking statements. Such statements represent Orca Energy's internal projections, estimates or beliefs, which are only predictions and actual events or results may differ materially. Although management believes that the expectations reflected in the forward-looking statements are reasonable, it cannot guarantee future results, levels of activity, performance or achievement since such expectations are inherently subject to significant business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause Orca Energy's actual results to differ materially from those expressed or implied in any forward-looking statements made by, or on behalf of, Orca Energy.*

More particularly, this Statement may contain, without limitation, statements pertaining to the following: the Company's expectations regarding supply and demand of natural gas; the expected terms of future agreements with TPDC and ME; anticipated changes to legislation and the effect on the Company's operations, including, but not limited to, the implementation and interpretation of the Petroleum Act and the impact of the Natural Gas Pricing Policy; the Company's beliefs regarding the impact of the Petroleum Act on the Company's business in Tanzania; the potential impact of the Natural Gas Pricing Policy on the Company's ability to market and sell natural gas; expected timing of and costs associated with the installation of compression at the Songas Infrastructure; the current and potential production capacity through the NNGI and Songas Gas Facility; the Company's ability to access additional processing and transportation capacity; the Company's ability to locate and bring online additional supply in the future; forecast costs (including operating costs) and the expectation that future development costs can be funded out of existing working capital and future cash flow; the Company's intention to remediate the SS-7 offshore well; the Company's intention to repair the SS-5 and SS-9 flowlines; the expectation that production can be sustained through the installation of compression at the Songas Infrastructure; expectations regarding the effect of de-rating the Songas Gas Facility; the Company's expectations regarding the likelihood of the Songas Gas Facility being de-rated; the expectation that the field will remain economically viable and wells will continue to produce after Orca Energy's PSA has expired; the gas sales forecasts prior to the expiry of the Company's license; the timing and amounts of the Company's contributions for future abandonment costs; and other forward-looking statements. In addition, statements relating to "reserves" are by their nature forward-looking statements, as they involve the implied assessment, based on certain estimates and assumptions that the reserves described can be profitably produced in the future. The recovery and reserve estimates of the Company's reserves provided herein are estimates only and there is no guarantee that the estimated reserves will be recovered. As a consequence, actual results may differ materially from those anticipated in the forward-looking statements. Although management believes that the expectations reflected in the forward-looking statements are reasonable, it cannot guarantee future results, levels of activity, access to resources and infrastructure, performance or achievement since such expectations are inherently subject to significant business, economic, operational, competitive, political and social uncertainties and contingencies.

These forward-looking statements are subject to numerous risks and uncertainties, including but not limited to risks and uncertainties regarding or associated with:

- *drilling wells, including the costs of drilling and whether development drilling results in commercially productive quantities of oil and gas;*
- *the terms of Orca Energy's future petroleum contracts, including potential obligations to drill wells and declare discoveries in order to retain Orca Energy's exploration and production rights;*
- *Orca Energy's local operational dependence and focus of its existing contracts;*
- *Orca Energy's future control over its license areas and facilities, including its status as operator thereof, and the timing and extent of costs in association therewith;*
- *estimations of reserves and the present value of future net revenues derived from them;*
- *the Company's dependency on its management and technical team;*
- *the Company's business plan including the additional capital required to execute on it;*
- *commercializing Orca Energy's interests in any hydrocarbons produced from future license areas;*
- *Orca Energy's ability to access appropriate equipment and infrastructure in a timely manner;*
- *the exploration and production of oil and natural gas, including but not limited to drilling and other operational and environmental risks and hazards;*
- *severe weather including but not limited to tropical storms and hurricanes;*
- *disagreements with TPDC regarding certain of Orca Energy's rights and responsibilities under the PSA;*
- *the geographic location of Orca Energy's current and future licenses in Africa and factors generally associated with foreign operations or arising from factors specifically affecting the areas in which Orca Energy operates or may operate;*
- *the political and economic circumstances in the countries in which the Company operates;*
- *technological development;*
- *activism against oil and exploration and development;*

- *limitations on insurance coverage;*
- *Orca Energy's operations in a litigious environment;*
- *global populism;*
- *Orca Energy's future capitalization which may include additional indebtedness;*
- *acquisitions and the integration of any target entity or business into Orca Energy's current business;*
- *cybersecurity and data breaches;*
- *disease;*
- *share price volatility and dilution;*
- *Orca Energy's controlling shareholder and its control over key decision making as a result of its control of a majority of the voting rights attached to the Company's issued and outstanding securities;*
- *Orca Energy's status as a holding company that's ability to declare and pay dividends and purchase its own securities is dependent upon the receipt of funds from Orca Energy's subsidiaries by way of dividends, fees, interest, loans or otherwise;*
- *the impact of general economic conditions, including global and local oil and gas prices;*
- *reservoir performance of the Songo Songo gas field;*
- *industry conditions including changes in laws and regulations, and changes in how they are interpreted and enforced;*
- *competition;*
- *lack of availability of qualified personnel;*
- *risks related to obtaining required approvals of regulatory authorities;*
- *risks associated with negotiating with governments and other counterparties;*
- *fluctuations in foreign exchange or interest rates;*
- *risks associated with obtaining an extension to the PSA and related license or successfully renegotiating them;*
- *changes in income tax laws or tax rates;*
- *ability to access sufficient capital from internal and external sources;*
- *associated with the failure of counterparties to perform under the terms of their contracts, including collectability of Orca Energy's receivables from such parties;*
- *reduced global economic activity as a result of the COVID-19 pandemic, including lower demand for natural gas and a reduction in the price of natural gas;*
- *the potential impact of the COVID-19 pandemic on the health of the Company's employees, contractors, suppliers, customers and other partners and the risk that the Company and/or such persons are or may be restricted or prevented (as a result of quarantines, closures or otherwise) from conducting business activities for undetermined periods of time;*
- *the impact of actions taken by Governments to reduce the spread of COVID-19, including declaring states of emergency, imposing quarantines, border closures, temporary business closures for companies and industries deemed non-essential, significant travel restrictions and mandated social distancing, and the effect on the Company's operations, access to customers and suppliers, availability of employees and other resources;*

and other factors, many of which are beyond the control of the Company. Readers are cautioned that the foregoing list of factors is not exhaustive.

Although the forward-looking statements contained in this Statement are based upon assumptions which management believes to be reasonable, Orca Energy cannot assure investors that actual results will be consistent with these forward-looking statements. Readers are cautioned not to place undue reliance on forward-looking statements included in this Statement, as there can be no assurance that the plans, intentions or expectations upon which the forward-looking statements are based will occur. By their nature, forward-looking statements involve numerous assumptions, known and unknown risks and uncertainties that contribute to the possibility that the predictions, forecasts, projections and other forward-looking statements will not occur. With respect to forward-looking statements contained in this Statement, Orca Energy has made assumptions regarding, among other things: continued and timely development of infrastructure in areas of new production; obtaining an extension to the PSA and related license on terms acceptable to the Company; accuracy of estimates of Orca Energy's resource volumes; the timing of and costs associated with the installation of compression at the Songas Infrastructure are in line with the Company's expectations; the impact of the COVID-19 pandemic on the demand for and price of natural gas, volatility in financial markets, disruptions to global supply chains and the Company's business, operations, access to customers and suppliers, availability of employees to carry out day-to-day operations, and other resources; commodity prices will not further deteriorate significantly; availability of skilled labour; availability of transactions to facilitate Orca Energy's growth strategy; growth of demand and consumption of natural gas in Tanzania and throughout Africa; timing and amount of capital expenditures; the impact of increasing competition; conditions in general economic and financial markets; effects of regulation by governmental agencies; receipt of partner, regulatory and community approvals; future operating costs; effects of regulation by governmental agencies; that Orca Energy will have sufficient cash flow or equity sources or other financial resources required to fund its capital and operating expenditures and requirements as needed including pursuant to its growth strategy; that the Company's conduct and results of operations will be consistent with its expectations; current or, where applicable, proposed industry conditions, laws and regulations will continue in effect or as anticipated as described herein; and other matters. There are a number of assumptions associated *with the development of the evaluated areas, including continued performance of existing wells, future drilling programs and performance from new wells, the growth of infrastructure, well density per section, and recovery factors and development necessary involves known and unknown risks and uncertainties, including those risks identified in this Statement. Orca Energy believes the material factors, expectations and assumptions reflected in the forward-looking information are reasonable but no assurance can be given that these factors, expectations and assumptions will prove to be correct.*

Management has included the above summary of assumptions and risks related to forward-looking information provided in this Statement in order to provide investors with a more complete perspective on the Company's current and future operations and such information may not be appropriate for other purposes. Orca Energy's actual results, performance or achievement 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, what benefits Orca Energy will derive. These forward-looking statements are made as of the date of this Statement and the Company disclaims any intent or obligation to update publicly any forward-looking statements, whether as a result of new information, future events or results or otherwise, other than as required by applicable securities laws. The forward-looking statements contained in this Statement are expressly qualified by this cautionary statement.