



ORCA ENERGY GROUP INC.

SUPPORTING TANZANIA'S GROWTH SINCE 2001

Investor Presentation
January 2023



DISCLAIMER

The information in this presentation (the "Presentation") is provided as of January 2023 for internal purposes only, is not complete, is based (in part) on information prepared for internal evaluation purposes only and does not contain all material information about Orca Energy Group Inc. ("Orca" or the "Company"), including important disclosures and risk factors associated with the Company's business. This Presentation does not take into account the particular investment objectives or financial circumstances of any specific person who may receive it and does not constitute an offer to sell or a solicitation of an offer to buy any security in Canada, the United States or any other jurisdiction. The contents of this Presentation have not been approved or disapproved by any securities commission or regulatory authority in Canada, the United States or any other jurisdiction, and Orca expressly disclaims any obligation to make disclosure or any filings with any securities commission or regulatory authority, beyond that imposed by applicable laws. See "Advisories" and other important disclosures regarding forward-looking information, oil and gas information, and other important information.

Certain other information contained in this Presentation has been prepared by third-party sources, which information has not been independently audited or verified by Orca. No representation or warranty, express or implied, is made by Orca as to the accuracy or completeness of the information contained in this Presentation and nothing contained in this Presentation is, or shall be relied upon as, a promise or representation by Orca.



A SNAPSHOT OF ORCA

PROUD TO SUPPORT TANZANIA AND THE COUNTRY'S GROWTH OBJECTIVES

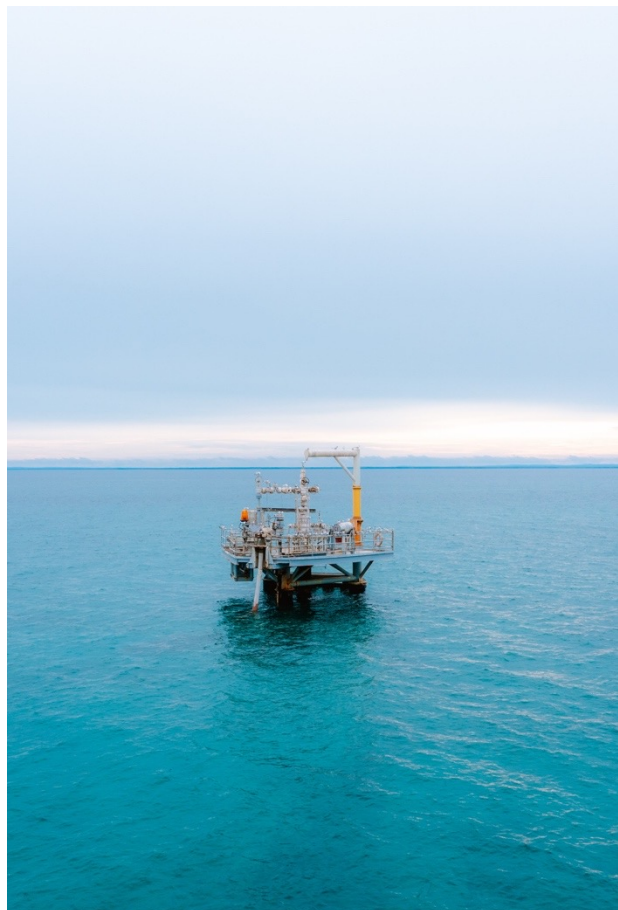
Operating in Tanzania

- Operator of the Songo Songo gas field offshore Tanzania
- Songo Songo has supplied >530 billion cubic feet ("BCF") of gas to Tanzania
- Actively investing in the field and has a work program in place to realize further value from the Songo Songo Gas Field
- Strong financial position and returned US\$114m to shareholders since 2018
- Aims to balance growth opportunities at Songo Songo with stakeholder returns via quarterly dividends and share buybacks
- Assisting Tanzania to develop a more diverse and robust industrialized economy
- Proud of its highly qualified and dedicated local workforce, a leading factor in the Company's operational delivery



2021 AND Q3 YTD 2022 HIGHLIGHTS

ORCA AIMS TO ACHIEVE OPERATIONAL EXCELLENCE, DELIVERING VALUE THROUGH GROWTH OPPORTUNITIES AND STAKEHOLDER RETURNS



Financial

Year to date revenue of \$86.2 million is 41% higher than the same period last year, and has already exceeded the total for 2021.

\$86.2m

2021: \$38.2 million of value returned to shareholders

Q3 2022:

\$4.7m

Quarterly dividends, 2021 Substantial Issuer Bid ("SIB") and Normal Course Issuer Bid ("NCIB")

2021 capital expenditure of \$26.6m

Q3 2022 YTD capital expenditure of

\$21.6m

Primarily focused on the well workover project



Operational

Conventional natural gas production of 61.1 million standard cubic feet per day ("MMcfd") in 2021

Q3 2022:

83.9 MMcfd

Careful management by operational team enabled the Company to maintain production during the COVID-19 pandemic

Onshore 3 well workover program completed in Q2 2022 at an estimated gross cost of

\$31.6m

Gas compression project successfully implemented in Q1 2022 at an estimated gross cost of

\$43.4m

2022 OUTLOOK

FINANCIAL

2022 planned capital program ~ US\$50 million is being funded from existing capital and forecast cashflows

Maintaining the quarterly dividend of C\$0.10 per Class A Common Shares and Class B Subordinated Voting Shares.
International Finance Corporation principal loan with US\$5.0 million being due in October 2022

Continue to progress and resolve outstanding payments from TANESCO

OPERATIONAL

Increased average production forecast of 80 – 86 MMcfd in 2022 ('Additional Gas')
Upper end previous 2022 production forecast of 70-76 MMcfd

\$20* million 3D Seismic program over the Songo Songo gas field and additional prospects over the Songo Songo license acreage in 22/23

Inlet compression and 3 well workover program completed in the first half of 2022
Coil tubing unit to unload the SS-4 well in the second half of 2022

FUELING ECONOMIC GROWTH

RESPONSIBLE FOR SUPPLYING NATURAL GAS TO 45% OF THE TOTAL POWER GENERATION DURING 2022



Power Sector

- Installed power generation capacity of approximately 1,600 MW gas fired and hydropower
- Power consumption averaging > 1000MW/day
- Significant expansion of power generation and distribution throughout the country

- National Power System Master Plan shows considerable increases in power demand through next 10-years
- Company continues to invest in Songo Songo to maintain current production and potentially grow additional gas supplies in the short to mid term

Industrial Sector

- 50 km low pressure distribution system constructed and operated by the Company
- >50 industrial customers connected; ongoing negotiations with several others
- Widely recognized as the most affordable, clean and dependable source of energy in industry

- Improved investment environment expected to accelerate industrial expansion
- Continuous expansion of the ring main distribution system targeting industrial customers

Compressed Natural Gas

- Transported to industries and hotels not connected to the pipeline system
- Transportation sector – supplying compressed natural gas (“CNG”) for cars
- Opportunity to supply CNG to haulage industry
- CNG presents considerable opportunity in assisting Tanzania to meet its environmental goals

- Significant demand potential beyond Dar es Salaam
- Accessible through virtual pipelines
- Growing government promotion of CNG in industry and transportation
- Increasingly recognized as an affordable, viable alternative fuel in transport sector

KEY FINANCIAL PERFORMANCE INDICATORS

FOCUSED ON MAINTAINING A STRONG FINANCIAL POSITION, DELIVERING SUSTAINABLE SHAREHOLDER RETURNS

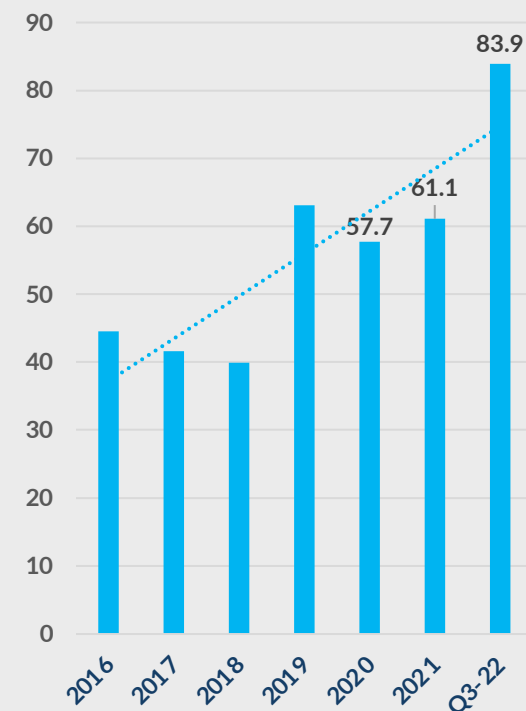
Maintaining a strong liquidity position remains a priority for the Company

Orca is fully funded for its 2022 work programs.

Growth of daily gas production over a multi-year period has helped deliver growth in net production revenue.

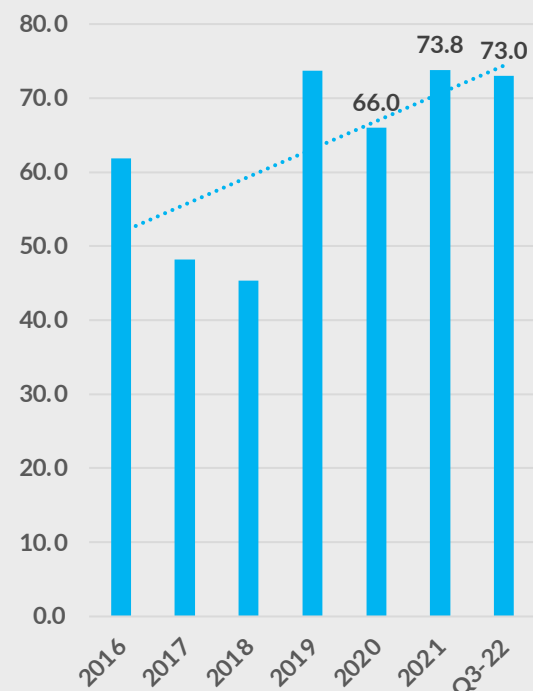
Gross daily sales volume average total

MMcfd



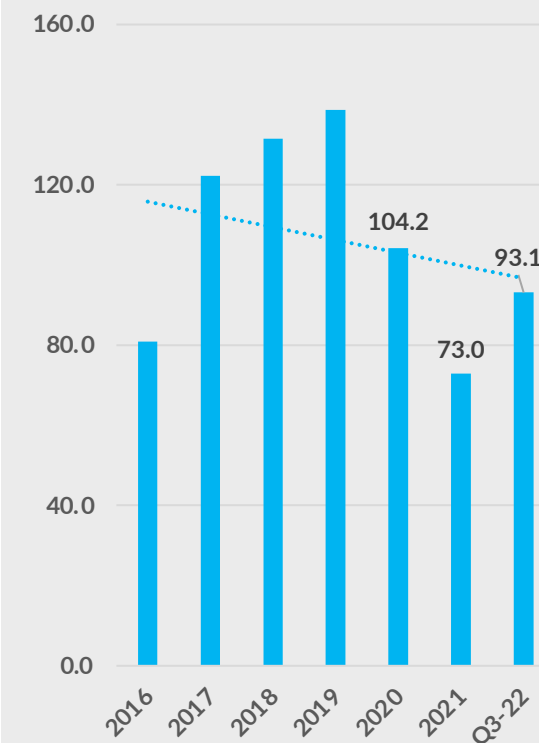
Net production revenue

\$m



Cash and cash equivalents

\$m



SUSTAINABLE SHAREHOLDER RETURNS

SHAREHOLDER RETURNS CONTINUE TO BE BALANCED⁴ WITH THE NEED TO INVEST IN THE FIELD TO INCREASE PRODUCTION CAPACITY

Since 2018 Orca has distributed shareholder returns totaling US\$114.0 million

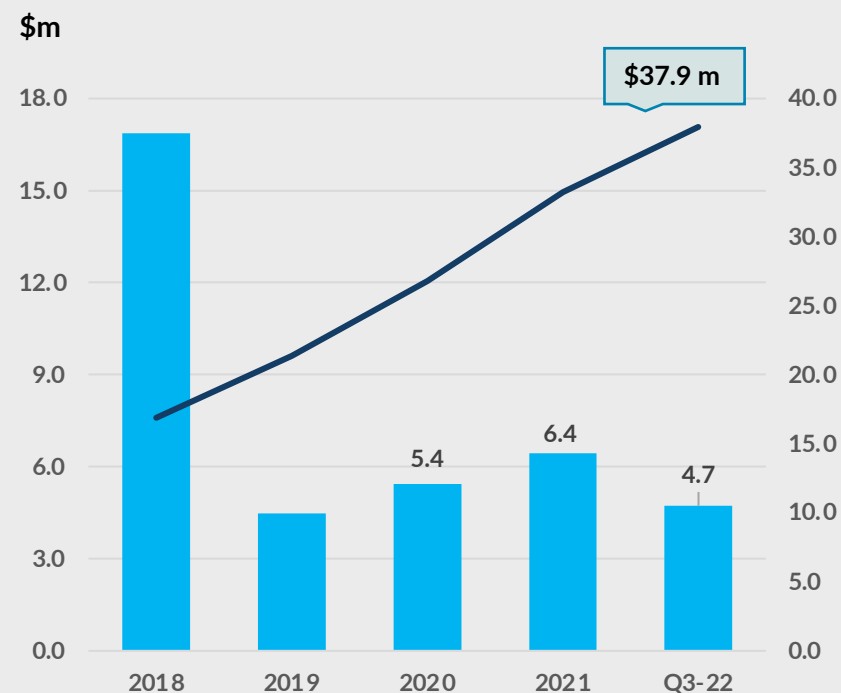
Quarterly dividends since 2018 have totaled US\$37.9 million

Fully funded for all existing and planned workstreams at the Songo Songo gas plant

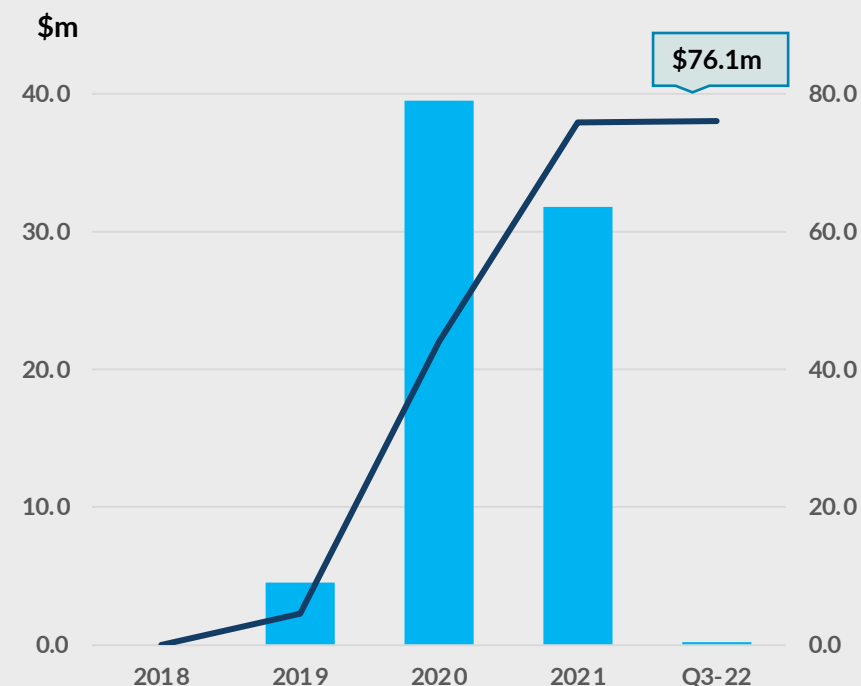
Dividend yield for 2021 of 7.04%* with a current yield of ca.8%¹

Since 2018, aggregate share buybacks of US\$76.1 million pursuant to the Company's NCIBs and SIB.

Cumulative Dividends



Cumulative Share Buy-backs



* Calculated by dividing the total C\$ per share paid in 2021 by the closing share price at December 31, 2021.

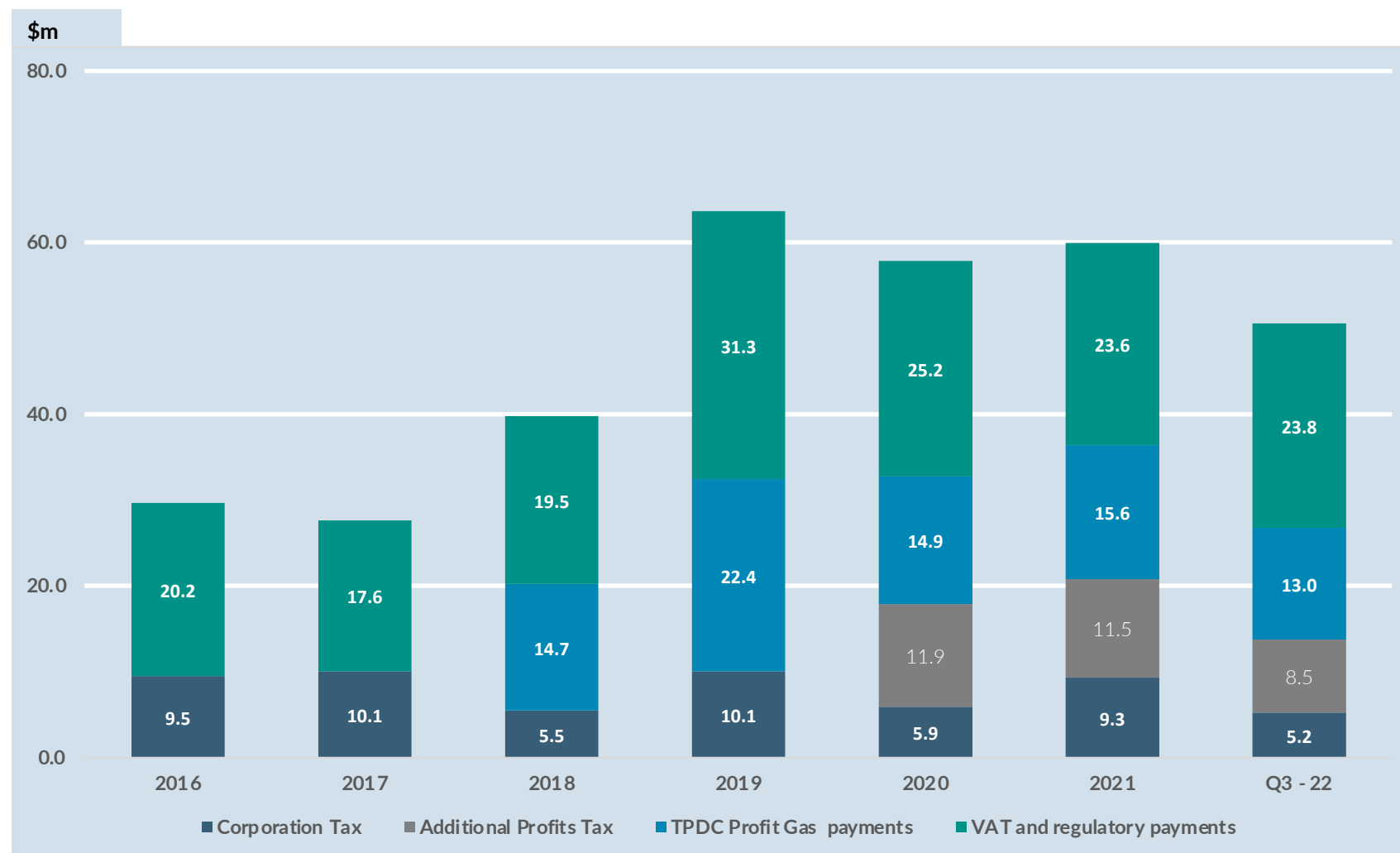
¹ See Non-GAAP financial measures in the advisories to this presentation for more information

RETURNS TO TANZANIAN STAKEHOLDERS (\$'000'S)

ORCA IS PROUD OF THE ROLE IT HAS PLAYED, GENERATING POSITIVE FINANCIAL AND EMPLOYMENT OPPORTUNITIES IN-COUNTRY

The Company has generated significant tax receipts for The Government of Tanzania since 2001

Orca remains a significant source of foreign direct investment for the country



SUSTAINABLE RETURNS TO STAKEHOLDERS

STAKEHOLDER CONSIDERATION PLAYS A FUNDAMENTAL ROLE IN HOW WE HAVE DEVELOPED OUR BUSINESS MODEL



NATURAL GAS DEVELOPMENT AND DELIVERY

ORCA IS ACTIVELY INVESTING TO FURTHER DEVELOP THE FIELD AND DELIVER ADDITIONAL GAS VOLUMES TO MEET TANZANIA'S DEMAND PROFILE



SONGO SONGO FIELD DEVELOPMENT

- **Proactive** development to contribute to growing domestic gas demand
- With further development, there is access to excess gas processing and downstream pipeline capacity
- Well workover and installation of compression significantly increased production potential to ~155MMcfd
- Current total production of 135-140MMcfd (Protected Gas and Additional Gas)

LICENCE CONTINUATION

- **Contingent** and prospective resource potential to support a licence continuation and to address a potential supply/demand deficit
- In order to deliver further value at Songo Songo, Orca will need to invest significant sums in the field. The Company will therefore look to engage with the Government of Tanzania on the matter of obtaining a revised licence beyond 2026

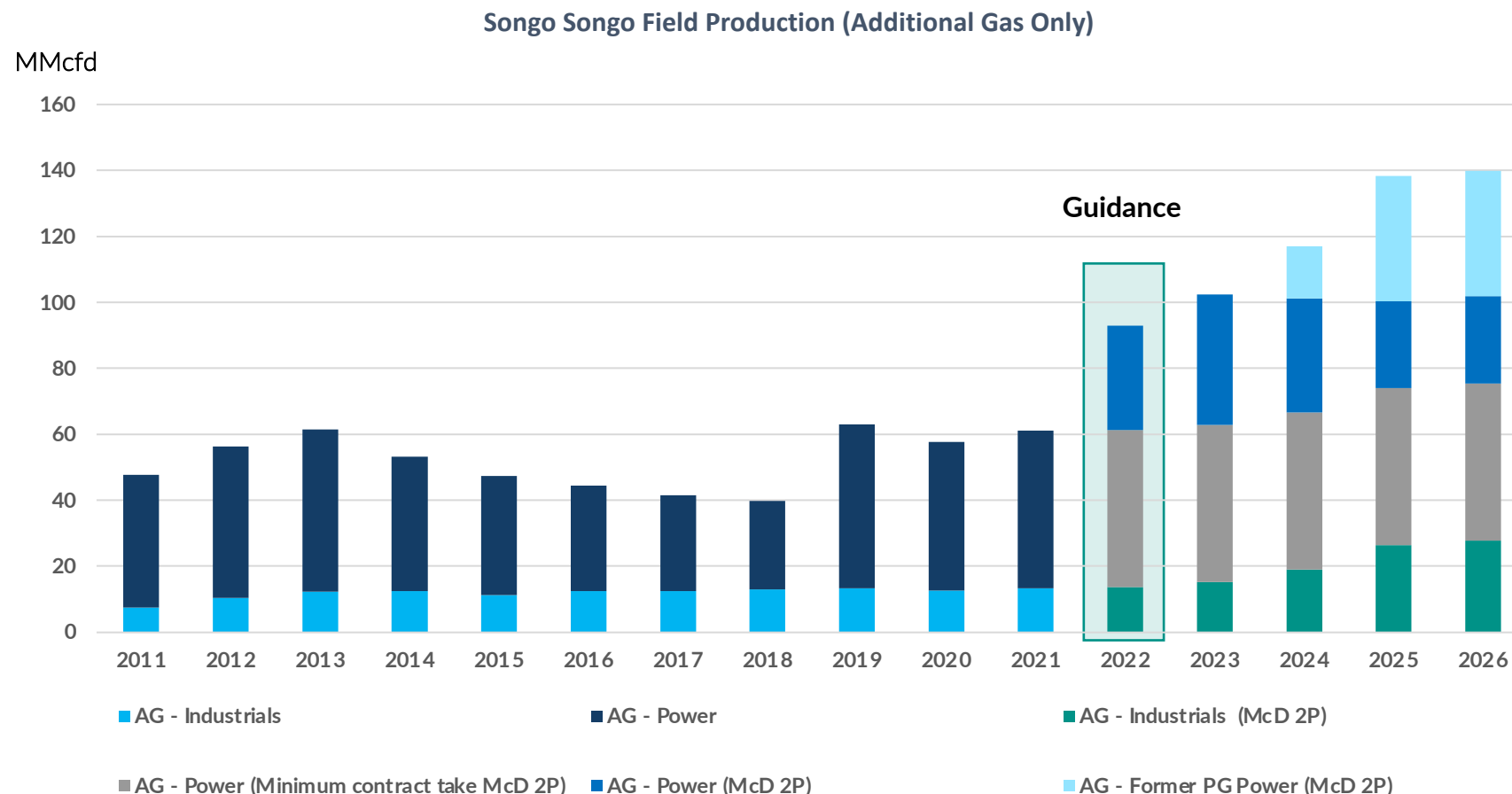
FURTHER GROWTH POTENTIAL

- **Contingent** resources at Songo Songo Main and Songo Songo North
- Large gas exploration prospects at Songo Songo West and Songo Songo Extreme North
- 3D seismic acquisition planned in Q4 2022/early 2023 to further define wider field development potential

GAS PRODUCTION GROWTH

POTENTIAL FOR A SIGNIFICANT INCREASE IN ORCA'S PRODUCTION PROFILE IN THE NEAR TO MEDIUM TERM

- Additional Gas production in 2019 surged to 63 MMcfd due to increased power generation.
- In 2020, Additional Gas production was slightly muted at 57 MMcfd due to increased hydropower availability.
- 2021 Additional Gas production averaged 61.1 MMcfd, with the increased hydropower availability continuing through to May, 2021. Additional Gas production averages 71.0 MMcfd in Q4, 2021.
- 2022 Additional Gas forecast of 80-86 MMcfd, increased due to new power demand.
- YTD 2022, production approaching upper end of guidance of 80-86MMcfd



* The PSA defines gas in the Songo Songo Field as "PG" or "Protected Gas" and "AG" or "Additional Gas". PG is owned and sold by TPDC under a 20-year gas agreement until July 2024. Under the PSA the Company has the right to market and sell gas in excess of the PG requirements. AG is all gas that is produced from the Songo Songo gas field in excess of the PG.

Note: Forecast based on Independent McDaniel Reserves Report at 31, December 2021 (end of licence 2026)

NATURAL GAS DEVELOPMENT AND DELIVERY

SONGO SONGO NATURAL GAS RESERVES AND RESOURCES

CONVENTIONAL NATURAL GAS RESERVES		
	1P	2P
As at December 31, 2021 (BCF)	160	188
NPV15 reserves (\$million)	158	187

Note - Independent McDaniel Reserves Report effective December 31, 2021

CONVENTIONAL NATURAL GAS RESOURCES (UNRISKED)			
As at March 31, 2021	Low	Best	High
Contingent (BCF)	250	297	346
Prospective (BCF)	118	611	1437

Note - Independent McDaniel Resource Report effective March 31, 2021

See attached advisory section for detailed Resource summary;

The reserves and resources information set forth above is based on the Company's 92.07 percent interest in the reserves and resources.

There is uncertainty that it will be commercially viable to produce any portion of the contingent resources. Further, there is no certainty that any portion of the prospective resources will be discovered. If discovered, there is no certainty that it will be commercially viable to produce any portion of the resources.

For further information in respect of the reserve and resource estimates set forth above, including applicable definitions, see "Advisories".

ADVANCING OUR ESG INITIATIVES

ORCA IS IMPLEMENTING AN ESG STRATEGY IN ORDER TO BUILD ON THE WORK COMPLETED BY THE COMPANY IN TANZANIA

As a natural gas operator, we are by nature a greenhouse gas emitter, and we recognize that as the business continues to operate and develop, our emissions are likely to increase. Nevertheless, we believe it is our duty to minimize our environmental impact, reduce the emissions intensity of our operations, and to significantly contribute to Tanzania's transition away from more carbon intensive sources of energy, such as coal, charcoal, and heavy fuel oil towards a lower carbon economy. We are committed to continued engagement with local regulators and stakeholders in order to ensure we are aware of and fully transparent about our contribution to global climate change and local environmental matters.

We have recently reviewed and clarified our priority issues in order to define our principles, policies, reporting and governance structure. In 2021, we included key employees and senior management as part of the sustainability strategy development process, which yielded the following material issues:



ENVIRONMENTAL

- Climate Change
- Biodiversity Impact
- Water and Waste Management
- Supply Chain Management

SOCIAL

- Community Relations
- Employee Wellbeing
- Human Capital Development
- Human Rights
- Supply Chain Management

GOVERNANCE

- Business Ethics
- Board Structure
- Cybersecurity
- ESG Oversight
- Remuneration

ADVANCING OUR ESG INITIATIVES

SIGNIFICANT INVESTMENT IN TANZANIAN COMMUNITIES OVER THE YEARS, WITH A CONTINUED FOCUS ON OUR LOCAL AREA

Orca is committed to supporting and sharing value within the local communities where the Company operates. Orca has made a positive contribution to these areas by direct investment, but also with employment, training and career opportunities.

For our communities, the key priorities are;

Education

Expanding access to primary and secondary education for the local community.

Health

Increase access to clean, well equipped and well-staffed medical facilities in the areas surrounding our operations.

Scholarships

Expanding access to higher education opportunities for the local community

Since 2018, the Company has funded over US\$4m in community initiatives and projects, with an emphasis on health and education.

In 2022, the Company has a number of new projects that we will be commencing, alongside the completion and handover of new medical facilities currently in the construction phase.



FOCUS AREAS

Our four focus areas



Education



Health



Scholarships



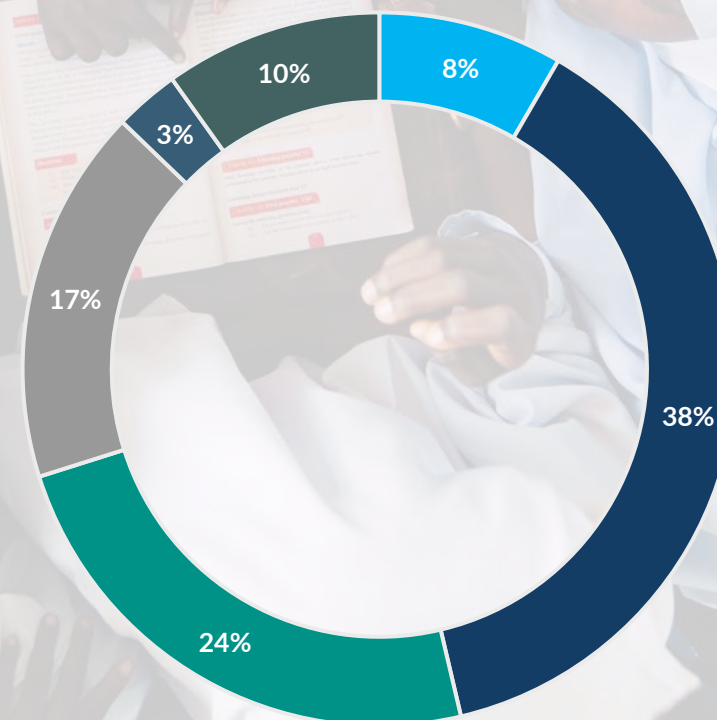
Life Skills Program

We work hard to ensure that the benefits of our operations are not only for our customers and employees, but also to surrounding communities. The Government of Tanzania recognizes that education is the cornerstone of achieving the country's development goals, and accordingly the Government of Tanzania invests heavily in education. The Company feels similarly and continues to focus on the community's educational and health requirements.

Our projects are selected based on our four focus areas;

- Educational Facilities in the Community (8%)
- Educational Support (38%)
- Medical Facilities Constructed for Community Use (24%)
- Medical Facilities - Under Construction (17%)
- Healthcare Support (3%)
- Scholarships (10%)

Community Projects US\$4m since 2018



INVESTMENT SUMMARY



- A proven asset with a long track record of safe and reliable operations
- Tanzanian economy is growing and as such Orca is seeing significant demand for domestic energy sources
- An active work program in place to further develop the field, that is fully funded
- Planned large 3D Seismic program mobilizing
- Review of existing production potential versus natural field decline versus demand, to inform field development plans to sustain supply to 2026, and potentially beyond
- Significant capital to explore and develop contingent and prospective resources to increase future gas supply



info@orcaenergygroup.com



www.orcaenergygroup.com

APPENDIX

Directors



David Ross
Non-Executive Chair

- Extensive experience in international tax law
- Partner in the Calgary-based law firm of Burnet Duckworth & Palmer LLP
- Secretary to the Board since the Company was formed in 2004



Jay Lyons
Executive Director and
Chief Executive Officer

- Joined the Company in May 2019 as Non-Executive Director
- Took on the role of Interim Chief Executive Officer in 2020, and Chief Executive Officer in 2021
- Private investor with considerable experience in the oil and gas industries in both Canada and the United States
- Worked in a range of roles for both private and public companies in the upstream and downstream sectors



Lisa Mitchell
Executive Director and Chief
Financial Officer

- 25 years experience in senior financial management roles
- Chief Financial Officer and Executive Director for San Leon Energy plc, Lekoil Limited, Nigerian focussed Aim quoted Oil and Gas companies
- Chief Financial Officer and Executive Director for Ophir Energy plc (FTSE 250 listed).
- Fellow of the Certified Practicing Accountants (Australia)



Dr. Frannie Leautier
Non-Executive Director
Chair of ESG Committee

- Extensive global and African development, infrastructure and project finance experience
- Chief Operating Officer for the Trade and Development Bank based in Nairobi
- Infrastructure Director, World Bank
- Vice President of the World Bank Institute
- Senior Vice President at the African Development Bank
- PhD in Infrastructure and Masters degree in Transportation from the Massachusetts Institute of Technology



Linda Beal
Non-Executive Director
Chair of Audit Committee

- Extensive tax advisory and accounting experience in the natural resources sector
- Tax partner at PriceWaterhouseCoopers and Grant Thornton UK LLP for 17 years
- Non-executive director at Kropz PLC and Hurricane Energy PLC.

Management



Jay Lyons
Executive Director and
Chief Executive Officer

- Joined the Company in May 2019 as Non-Executive Director
- Took on the role of Interim Chief Executive Office in 2020, and Chief Executive Officer in 2021
- Private investor with considerable experience in the oil and gas industries in both Canada and the United States
- Worked in a range of roles for both private and public companies in the upstream and downstream sectors



Lisa Mitchell
Executive Director and Chief
Financial Officer

- 25 years experience in senior financial management roles
- Chief Financial Officer and Executive Director for San Leon Energy plc, Lekoil Limited, Nigerian focussed Aim quoted Oil and Gas companies
- Chief Financial Officer and Executive Director for Ophir Energy plc (FTSE 250 listed).
- Fellow of the Certified Practicing Accountants (Australia)



Ewen Denning
Chief Operating Officer

- Thirty-five years of international energy industry experience
- Worked for BP, BG Group and Glencore and had assignments across five continents.
- Worked extensively in Africa on a variety of projects in Cameroon, Chad, Equatorial Guinea, Nigeria and Tunisia;
- Wide technical and commercial experience having held senior positions managing operational assets in established areas and commercialising new ventures in frontier areas.



Andrew Hanna (MBE)
Managing Director, Tanzania

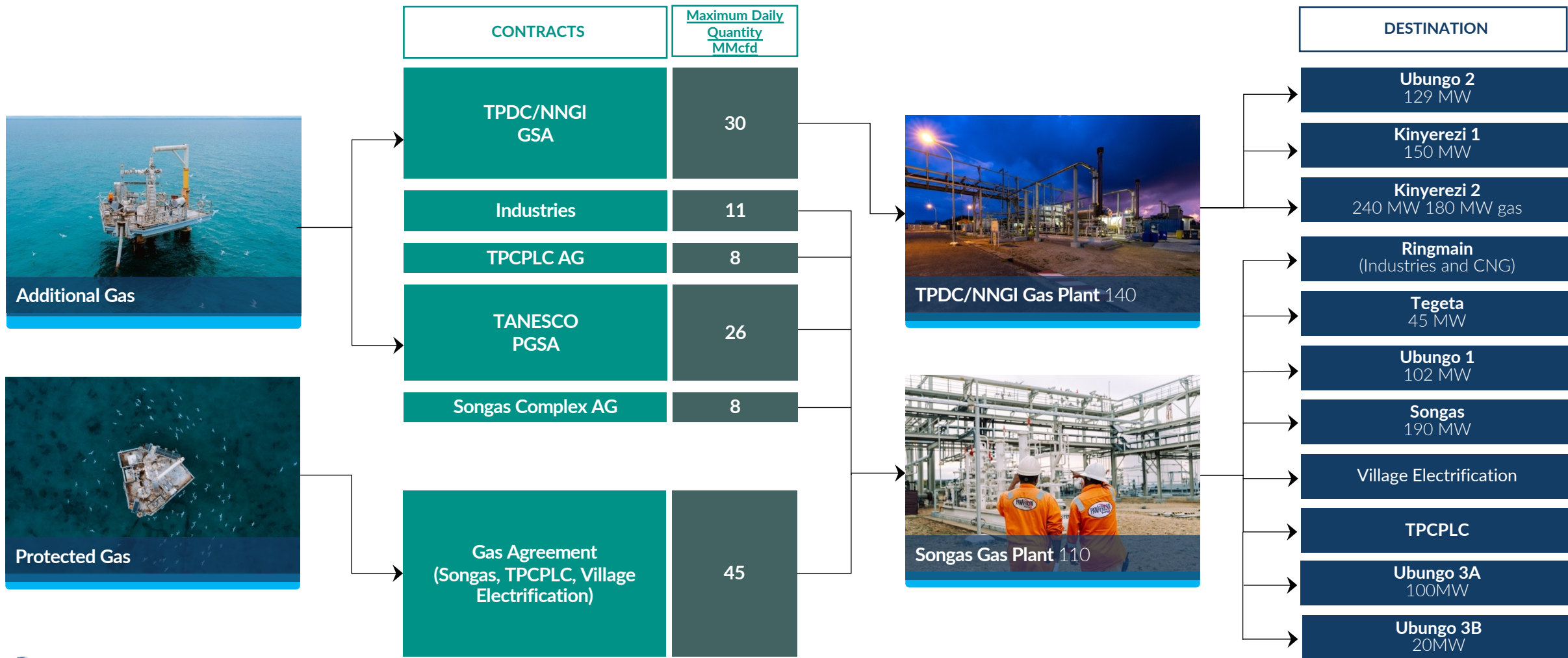
- 34 years in the public sector leading engineering, logistics and security projects around the world
- Ten years in Orca leading the development of strategic and operational development
- Masters Degree in Military Science from Cranfield University
- Fellow of the Chartered Management Institute and Member of the Institute of Royal Engineers



Lloyd Herrick
Advisor to the Board and
Management

- Four decades of international energy experience and following a 20 year career at TransGlobe Energy Corporation ("TransGlobe") where he was Vice President, COO, and Director.
- Prior to TransGlobe, he served as President, CEO and a member of the board of Moibus Resource Corporation, which was acquired by TransGlobe.
- During his time as a member of the TransGlobe executive team and board, Lloyd Herrick acquired a wealth of experience in direct government negotiations, including concession agreement amendments and extensions to achieve optimum resource development.

OPERATIONS



Glossary



TPDC	Tanzania Petroleum Development Corporation
GSA	Gas Sales Agreement
TPCC	Tanzania Portland Cement Company
AG	Additional Gas
PG	Protected Gas
NNGI	National Natural Gas Infrastructure
TANESCO	Tanzania Electric Supply Company
PGSA	Portfolio Gas Sales Agreement
ARGA	Amended and Restated Gas Agreement
Songas	Songas Limited
PSA	Production Sharing Agreement
YTD	Year to Date

ADVISORIES

Advisories

Certain information regarding Orca set forth in this presentation contains forward-looking 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's internal projections, estimates or beliefs concerning, among other things, future growth, results of operations, revenue and customer growth, future capital and other expenditures (including the amount, nature and sources of funding thereof), business prospects and opportunities, and the ability of Orca to drill additional wells and/or negotiate license extensions with the Tanzanian government.

More particularly, this presentation may contain, without limitation, forward-looking statements pertaining to the following: the Company's expectations regarding supply and demand of natural gas and power; the Company's belief that development of the Songo Songo field and the Company's 2022 planned capital program can be fully funded from existing working capital and internal cash flow; capital; the outcome of the Company's negotiations with TANESCO regarding outstanding payments; the Company's forecast for average gross conventional gas production in 2022; the data acquired from the 3D seismic program and the benefit obtained therefrom; the Company's expectations regarding timing and expenditures required to commence the 3D seismic program; expectations regarding amounts and frequency of future dividends; expectations regarding future development of resources and the Songo Songo gas field; the expected increase in demand for gas; the Company's belief that it is positioned to meet increases in demand; the Company's ability to enter into gas sales agreements with new industrial customers; outcome of negotiations with potential customers in the industrial sector; the Company's plans and ability to expand the ring main distribution system targeting industrial customers; the Company's ability to access new markets; the demand for CNG and its ability to displace the use of oil and coal; the Company's ability to expand into the CNG midstream business; ability to access excess gas processing and downstream pipeline capacity; current production potential as a result of the well workover program and installation of compression; the size and existence of gas exploration prospects at Songo Songo West and Songo Songo extreme North; negotiations with the Government of Tanzania regarding a licence extension beyond 2026; the Company's market share of increased natural gas demand; and other forward-looking statements. In addition, statements relating to "resources" and "reserves" are by their nature forward-looking statements, as they involve the implied assessment, based on certain estimates and assumptions that the resources and 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 involve substantial known and unknown risks and uncertainties, certain of which are beyond the Company's control, and many factors could cause the Company's actual results to differ materially from those expressed or implied in any forward-looking statements made by the Company, including, but not limited to: the impact of general economic conditions in the areas in which the Company operates; civil unrest; the susceptibility of the areas in which the Company operates to outbreaks of disease; 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 commodity prices, foreign exchange rates and/or interest rates; stock market volatility; competition for, among other things, capital, drilling equipment and skilled personnel; failure to obtain required equipment for drilling; delays in drilling plans; failure to obtain expected results from drilling of wells; changes in laws and regulations including the adoption of new environmental laws and regulations, impact of new local content regulations and changes in how they are interpreted and enforced; imprecision in reserve estimates; the production and growth potential of the Company's assets; obtaining required approvals from regulatory authorities; risks associated with obtaining an extension to the Songo Songo license; changes in income tax laws or tax rates; ability to access sufficient capital from internal and external sources; failure of counterparties to perform under the terms of their contracts; 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; risk that contract counterparties are unable to perform contractual obligations; the potential negative effect on the Company's rights under the PSA and other agreements relating to its business in Tanzania as a result of the Petroleum Act, passed in 2015 (the "Act"), and other recently enacted and future legislation, as well as the risk that such legislation will create additional costs and time connected with the Company's business in Tanzania; risks regarding the uncertainty around evolution of Tanzanian legislation; and unanticipated changes to legislation; the effect on the Company's operations, including, but not limited to, the Act and the Natural Gas Pricing Regulation made under Sections 165 and 258(l) of the Act; failure to complete the 3D seismic program and other capital programs on the timelines or at the costs anticipated; risk that the results of the 3D seismic program are not as lucrative or instructive as anticipated; failure to increase production volumes and capabilities; inability to obtain necessary environmental, governmental or partners approvals to complete the Company's planned capital program; inability to come to an agreement with TANESCO regarding outstanding payments; risk that the Company is unable to negotiate additional agreements with customers in the industrial sector; the Company's average gross gas sales and overall production in 2022 are lower than forecasted; and the Company is unable to fund its capital program through working capital. Readers are cautioned that the foregoing list of factors is not exhaustive.

Advisories

Such forward-looking statements are based on certain assumptions made by the Company in light of its experience and perception of historical trends, current conditions and expected future developments, as well as other factors the Company believes are appropriate in the circumstances, including, but not limited to, that the Company will have sufficient cash flow, debt or equity sources or other financial resources required to fund its capital and operating expenditures and requirements as needed; that the Company will have adequate funding to continue operations; that the Company will successfully negotiate agreements; receipt of required regulatory approvals; the ability of the Company to increase production at a consistent rate; infrastructure capacity; commodity prices will not further deteriorate significantly; the ability of the Company to obtain equipment and services in a timely manner to carry out exploration, development and exploitation activities; future capital expenditures; availability of skilled labour; timing and amount of capital expenditures; uninterrupted access to infrastructure; the impact of increasing competition; conditions in general economic and financial markets; effects of regulation by governmental agencies; that the enactment of the Act and new legislation in Tanzania will not impair the Company's rights under the PSA to develop and market natural gas in Tanzania; current or, where applicable, proposed industry conditions, laws and regulations will continue in effect or as anticipated as described herein; the actual costs and timeframes to complete the 3D seismic program are in line with estimates; the Company is able to come to an agreement with TANESCO on the outstanding payments; the Company's average gross gas sales and overall production in 2022 are in line with forecasts; demand for natural gas in Tanzania is in line with the Company's forecasts; and other matters.

Additionally, statements regarding resources are subject to the assumption that Orca will receive an extension of the Songo Songo license. Orca has not yet commenced discussion regarding such an extension and no guarantee can be made that: an application for an extension will be made; if such application is made, an extension will be granted; or if an extension is granted what the terms of such extension will be and their impact on Orca's business and operations (including the time period). Additionally, the forward-looking statements regarding the Company's expectations of future Tanzanian gas demand are based on certain assumptions made by the Company as discussed above as well as additional assumptions including, but not limited to the increase in industrial and residential demand; Tanzania's continued population and GDP growth; and other matters.

The amount of future cash dividends, if any, and repurchases of shares will be subject to the discretion of the Board of Directors and may vary depending on a variety of factors and conditions existing from time-to-time, including fluctuations in commodity prices, production levels, capital expenditures, debt service requirements, operating costs and other burdens, foreign exchange rates and the satisfaction of solvency tests imposed by the applicable corporate requirements.

Management has included the above summary of assumptions and risks related to forward-looking information provided in this presentation in order to provide stakeholders with a more complete perspective on the Company's current and future operations and such information may not be appropriate for other purposes. Orca'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 will derive. These forward-looking statements are made as of the date of this document and Orca 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 presentation are expressly qualified by this cautionary statement.

Oil and Gas Information-General

The estimates of the Company's December 31, 2021 reserves and March 31, 2021 resources set forth in this Presentation have been prepared by McDaniel & Associates Consultants Ltd. ("McDaniel"), an independent qualified reserves evaluator, in accordance with the definitions, standards and procedures contained in the Canadian Oil and Gas Evaluation Handbook ("**COGE Handbook**") and National Instrument 51-101 –Standards of Disclosure for Oil and Gas Activities ("**NI 51-101**"). The preparation dates of the independent reserves evaluation (the "**Reserves Report**") and the independent natural gas resource assessment report (the "**Resources Report**") each prepared by McDaniel were February 24, 2022 (effective as of December 31, 2021) and June 17, 2021 (effective as of March 31, 2021), respectively. The reserves estimates contained herein are based on McDaniel's forecast prices and costs as at December 31, 2021. Please see Orca's Form 51-101F1 –Statement of Reserves Data and Other Oil and Gas Information prepared on February 24, 2022 and effective December 31, 2021 for more information concerning the Reserves Report and the Company's press release dated June 17, 2021 titled "Orca Announces Updated Independent Natural Gas Resource Report" (the "**June 17 Press Release**") for more information concerning the Resources Report, each of which are available on www.sedar.com. All of the references to gas production in this Presentation are to conventional natural gas production, and all references to reserves, contingent resources and prospective resources, are to conventional natural gas reserves, contingent conventional natural gas resources and prospective conventional natural gas resources.

Advisories

There are numerous uncertainties inherent in estimating quantities of proved and probable reserves, quantities of contingent resources and prospective resources and future net revenues to be derived therefrom, including many factors beyond the Company's control. The reserves, contingent resources, prospective resources and estimated financial information with respect to certain of the Company's assets have been independently evaluated by McDaniel. These evaluations include a number of factors and assumptions made as of the date on which the evaluation is made such as geological and engineering estimates which have inherent uncertainties, the effects of regulation by governmental agencies such as initial production rates, production decline rates, ultimate recovery of reserves and contingent resources, timing and amount of capital expenditures, marketability of production, current and forecast prices of crude oil and natural gas, Orca's ability to transport its product to various markets, operating costs, abandonment and salvage values and royalties and other government levies that may be imposed over the producing life of the reserves and contingent resources. Many of these assumptions are subject to change and may not, over time, prove to be accurate. Actual production and cash flow derived from the Company's assets may vary from these evaluations, and such variations may be material. Estimates with respect to reserves and prospective resources that may be developed and produced in the future are often based upon volumetric calculations, probabilistic and deterministic methods and analogy to similar types of reserves and contingent and prospective resources, rather than upon actual production history. Estimates based on these methods generally are less reliable than those based on actual production history. Subsequent evaluation of the same reserves or prospective resources based upon production history will result in variations, which may be material, from current estimated reserves and prospective resources. reserves and prospective resources estimates may require revision based on actual production experience. Such figures have been determined based upon assumed commodity prices and operating costs. Market price fluctuations of crude oil and natural gas prices may render the recovery uneconomic.

"Proved" reserves (or 1P 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. "Probable" reserves (or 2P 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. 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, future capital expenditures, and well abandonment costs for only those wells assigned reserves by McDaniel. In this Presentation NPV15 represents the net present value of net income discounted at 15%. 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 or set forth in this presentation represent the fair market value of those reserves. Such amounts do not represent the fair market value of the Company's reserves. The recovery and reserve estimates of the Company's conventional 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.

Additional Information Concerning Resources

The Resource Report is based on the Company's 92.07 percent interest in the Songo Songo resources located within the southern area of the offshore Tanzanian Coastal basin. The Resource Report focused on the contingent and prospective natural gas resources identified in the Songo Songo Main, Songo Songo North, SS Extreme North and Songo Songo West structures assigned to the Neocomian and Cenomanian formations within the PSA. The following table contains certain additional information required by NI 51-101 in respect of the resource estimates contained in this presentation. For additional Information, see "Background to the 2021 Resource Evaluation", "Future Plans", "Further Information regarding the Company's Resources", "Risks and Significant Positive and Negative Factors" and "Factors regarding Development of Resources" in the June 17 Press Release.

Advisories

1 See definitions for “contingent resources”, prospective resources, “Low Estimate”, “High Estimate”, “Best Estimate”, “riskied”, “unriskied

Structure	Classification	Resources - Unriskied ⁽¹⁾⁽²⁾				Chance of Discovery % ⁽⁷⁾	Chance of Development % ⁽⁷⁾
		WI ⁽⁹⁾ (%)	Low MMcf	Best MMcf	High MMcf		
SSM/N - Neocomian	Contingent (Development Unclarified)	92.07	250,190	296,659	345,789	100.0	50.0
Sub-Total Contingent Resources⁽³⁾⁽⁴⁾⁽⁸⁾			250,190	296,659	345,789		
SSW - Cenomanian	Prospective	92.07	785	15,962	44,982	16.8	50.0
SSW - Neocomian	Prospective	92.07	22,206	333,035	900,521	31.6	50.0
SSN+Ext-N Cenomanian	- Prospective	92.07	2,317	11,841	26,475	27.0	50.0
SSExt-N Neocomian	- Prospective	92.07	93,521	249,947	465,424	41.0	50.0
Sub-Total Prospective Resources⁽⁴⁾⁽⁵⁾⁽⁶⁾⁽⁸⁾			118,829	610,785	1,437,402		

- (1) See definitions for "contingent resources", "prospective resources", "Low Estimate", "High Estimate", "Best Estimate", "riskied", "unriskied" developed unclarified" below.
- (2) The Songo Songo License expires October 11, 2026 and it is expected that a license extension would be required for development of the Songo Songo PSA. There is no certainty that a license extension will be granted and the volumes presented above assume that such extension is granted.
- (3) There is no certainty that it will be commercially viable to produce any portion of the resources.
- (4) The riskied resources have been riskied for chance of discovery and for the chance of development. The chance of development is the probability of a project being commercially viable. Quantifying the chance of development requires consideration of both economic conditions and other contingencies, such as legal, regulatory, market access, political, social license, internal and external approvals and commitment to finance and development timing. As many of these factors are extremely difficult to quantify, the chance of development is uncertain and should be used with caution. See "Risks and Significant Positive and Negative Factors" in the June 17 Press Release.
- (5) There is no certainty that any portion of the prospective resources will be discovered. If discovered, there is no certainty that it will be economically viable or technically feasible to produce any portion of the resources.
- (6) This volume is an arithmetic sum of multiple estimates of prospective resources, which statistical principles indicate may be misleading as that may actually be recovered. Readers should give attention to the estimates of individual classes of resources and appreciate the probabilities of recovery associated with each class as explained under "Chance of Discovery and Development Risk" in the June 17 Press Release.
- (7) As all contingent resources are considered to be discovered, the chance of commerciality for contingent resources is equal to the chance of development. The chance of commerciality for prospective resources is equal to the product of the chance of discovery and the chance of development. "Chance of discovery" is the estimated probability that exploration activities will confirm the existence of a significant accumulation of potentially recoverable petroleum. "Chance of development" is the estimated probability that, once discovered, a known accumulation of resources will be commercially developed.
- (8) The Unriskied Sub-Total is not representative of the Portfolio Unriskied Total and is provided to give an indication of the resources range across all the prospects are successful.
- (9) "WI" means working interest. Company gross resources are based on Orca's working interest share of the property gross resources. This Report was prepared based on Orca's effective ownership of 92.07 percent of the resources attributable to PAET.

Advisories

In this presentation, the following terms have the following meanings:

- "contingent resources" are those quantities of petroleum estimated, as of the given date, to be potentially recoverable from known accumulations using established technology or technology under development but which are not currently considered to be commercially recoverable due to one or more contingencies. Contingent resources may be divided into the following project maturity sub-classes: (1) "Development Pending" is assigned to contingent resources for a particular project where resolution of final conditions for development is being actively pursued (high chance of development); (2) "Development on Hold" is assigned to contingent resources for a particular project where there is a reasonable chance of development, but there are major non-technical contingencies to be resolved that are usually beyond the control of the operator; (3) "Development Unclassified" is assigned to contingent resources for a particular project where evaluation is incomplete and there is ongoing activity to resolve any risks or uncertainties; and (4) "Development Not Viable" is assigned to contingent resources for a particular project where no further data acquisition or evaluation is currently planned and there is a low chance of development.
- "economic" means those contingent resources that are currently economically recoverable.
- "prospective resources" are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from undiscovered accumulations by application of future development projects. Prospective resources have both an associated chance of discovery and a chance of development.
- "resources" encompasses all petroleum quantities that originally existed on or within the earth's crust in naturally occurring accumulations, including Discovered and Undiscovered (recoverable and unrecoverable) plus quantities already produced.
- "risked" means the applicable reported volumes or revenues have been risked (or adjusted) based on the chance of commerciality of such resources in accordance with the COGE Handbook. In accordance with the COGE Handbook for contingent resources, the chance of commerciality is solely based on the chance of development based on all contingencies required for the re-classification of the contingent resources as reserves being resolved. Therefore, risked reported volumes and values of contingent resources reflect the risking (or adjustment) of such volumes or values based on the chance of development of such resources.
- "Uncertainty Ranges" are described by the COGE Handbook as low, best, and high estimates for resources. The range of uncertainty of estimated recoverable volumes may be represented by either deterministic scenarios or a probability distribution. Resources are provided as low, best and high estimates, as follows: (1) Low Estimate –This is considered to be a conservative estimate of the quantity that will actually be recovered. It is likely that the actual remaining quantities recovered will exceed the low estimate. If probabilistic methods are used, there should be at least a 90 percent probability that the quantities actually recovered will equal or exceed the low estimate; (2) Best Estimate –This is considered to be the best estimate of the quantity that will actually be recovered. It is equally likely that the actual remaining quantities recovered will be greater or less than the best estimate. If probabilistic methods are used, there should be at least a 50 percent probability that the quantities actually recovered will equal or exceed the best estimate; and (3) High Estimate –This is considered to be an optimistic estimate of the quantity that will actually be recovered. It is unlikely that the actual remaining quantities recovered will exceed the high estimate. If probabilistic methods are used, there should be at least a 10 percent probability that the quantities actually recovered will equal or exceed the high estimate.
- "unrisked" means applicable reported volumes or values of resources have not been risked (or adjusted) based on the chance of commerciality of such resources. In accordance with the COGE Handbook for contingent resources, the chance of commerciality is solely based on the chance of development based on all contingencies required for the re-classification of the contingent resources as reserves being resolved. Therefore, unrisked reported volumes and values of contingent resources do not reflect the risking (or adjustment) of such volumes or values based on the chance of development of such resources.

Advisories

Non-GAAP Financial Measures and Ratios

In this presentation, the Company has disclosed the following non-GAAP financial measure [, **non-GAAP ratios and supplementary financial measures**]: capital expenditures.

These non-GAAP financial measures **[and ratios]** disclosed in this presentation do not have any standardized meaning under IFRS and may not be comparable to similar financial measures disclosed by other issuers. These non-GAAP financial measures **[and ratios]** should not, therefore, be considered in isolation or as a substitute for, or superior to, measures and ratios of Company's financial performance defined or determined in accordance with IFRS. These non-GAAP financial measures **[and ratios]** are calculated on a consistent basis from period to period.

Dividend Yield

Dividend yield is a non-GAAP financial measure, which is a useful measure as it provides our dividend expressed as a percentage of the share price. The dividend yield is a financial ratio that tells you the percentage of a company's share price that it pays out in dividends each year. It is calculated by dividing the total C\$ per share paid in 2021 by the closing share price at December 31, 2021.

Capital Expenditures

Capital expenditures is a non-GAAP financial measure, which is a useful measure as it provides an indication of our investment activities. The most directly comparable financial measure is net cash from (used in) investing activities. A reconciliation to the most directly comparable financial measure is as follows:

	Three Months ended September 30		Nine Months ended September 30	
\$'000	2022	2021	2022	2021
Pipelines, well workovers and infrastructure	1,214	3,711	18,521	14,102
Other capital expenditures	8	4	270	12
Capital expenditures	1,222	3,715	18,791	14,114
Right of use	51	–	51	–
Change in non-cash working capital	4,602	(2,879)	2,807	(2,758)
Net cash used by investing activities	5,875	836	21,649	11,356