

#### Welcome

Orca Energy Group Inc. ("Orca" or the "Company") operates the Songo Songo natural gas field and associated production and processing facilities on behalf of the Government of Tanzania and Songas Limited, under the **Operatorship Agreement** on a "no gain no loss basis". Orca has the right to produce and market gas in accordance with the terms of the Songo **Songo Production Sharing Agreement** ("PSA"), signed with the Government of Tanzania and the Tanzania **Petroleum Development** Corporation ("TPDC").

The Songo Songo natural gas field can be found approximately 200km south of Tanzania's economic hub, Dar es Salaam, and approximately 25km offshore of the mainland, in the Kilwa District of Lindi Region. The field sits on and offshore Songo Songo Island.

Our main goal is to continue growing our sustainable business around the asset in Tanzania, generating long-term value through prudent governance of business risk and financial resources. Orca believes that a combination of strong governance practices, our sustainable business model and a diverse talented workforce gives us the ability to create value for our stakeholders while contributing to a lower carbon-based future.

# WE ARE ORCA

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## **Our Website**

For more information on our business and operations, please visit our website:

www.orcaenergygroup.com



not be comparable to similar financial measures disclosed by other issuers. (See Page 54 MD&A).

#### Inside this Report

## **Strategic Report**

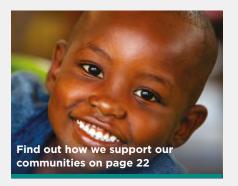
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At a Glance

# PARTNERING TO CREATE OPPORTUNITY IN TANZANIA

Orca is the operator of the world class Songo Songo integrated gas project in Tanzania, through its subsidiary PanAfrican Energy **Tanzania Limited** ("PAET"). Growing production from the Songo Songo gas field is a core focus for the Company, working with its partners and Stakeholders to ensure that affordable gas remains a significant proportion of the energy mix for Tanzania's expanding population and industrial economy.



Size

950,000km<sup>2</sup>

Population

62,000,000



# Producing Gas in Tanzania since 2004

The Company is proud of its operating history in Tanzania and works closely with Tanzanian Government entities and formed long-term relationships with a number of in-country partners. The Company strives to be a best in class employer in Tanzania, which can be seen with the in-country workforce being comprised of 99% local Tanzanians. The Company continually strives to have a positive social and economic contribution and takes its role as a major power supplier in Tanzania very seriously, supplying gas that fuels more than 45% of Tanzania's total power generation and sustains more than 50 major industries in Dar es Salaam.

Read more on page 06.





# 1. Significant resource remains in place

In addition to the 188.1 billion cubic feet ("Bcf") of Proved plus Probable reserves (2P) independently assigned to the Songo Songo gas field at year end 2021, considerable contingent and prospective resource has been independently evaluated for potential future exploration and development.



# 2. Powering Tanzania's growing economy

Gas production from the Songas gas processing facility on Songo Songo Island continues to play a significant role in Tanzania's energy infrastructure. The Songo Songo gas field is responsible for delivering approximately 45% of all the electrical power generated in Tanzania

Read more on page 06.

# 3. Orca remains focused on Tanzania

The Company has refined its understanding of the complexities on the Songo Songo gas field through extensive studies and improved modeling. This will be further improved through its plans to conduct 3D seismic acquisition in Q3 2022.



Read more on page 10.

# 4. Generating value for all stakeholders

Delivering value by the sustainable development of the Songo Songo gas field remains a core priority.

Read more on page 08.

# 5. Achieving operational excellence

Ensuring safe and reliable operations, coupled with delivering on the milestones we set for ourselves will ensure that value is created for all involved in the license.

Read more on page 10.

# 6. Supporting the region

Despite the challenging environment in 2021, the Company maintained its incountry community programs.



#### CEO's Statement

# A BUSINESS THAT PROVIDES FOR THE **FUTURE**

"The Company's commitment to supporting Tanzania with the provision of power, but also by making a positive impact to the economic and social fabric of the country, remains at the heart of our core ethos."



2021 was the second year where the global financial markets continued to be impacted by the COVID-19 pandemic. However, with the development and rollout of the vaccine, along with additional precautionary measures we were able to both protect our workforce and also ensure safe and reliable operations. This was critical as it allowed the Company to continue to achieve safe and reliable operations at the Songo Songo natural gas field. The Company remains committed to making a continued contribution to the Tanzanian economy through the supply of natural gas for both the generation of electrical power and to the country's industrial markets. Ultimately, this aligns the Company with Tanzanian industrial policy, facilitating the growth of a more diverse and robust industrialized economy, for the benefit of all stakeholders.

The Global economy rebounded during 2021 and given the supportive macroeconomic backdrop, coupled with the Company's commitment to realising further value from the license for all stakeholders, the Company is progressing on an approximately \$50 million capital expenditure program, that will underpin production and add additional incremental output in 2022, that can be directed towards Tanzania's domestic market. These investments in the field are critical to the long-term success of the gas field and will play an important role in its ongoing development as the Company looks to achieve a license renewal beyond 2026.

The Company's commitment to supporting Tanzania with the provision of power, but also by making a positive impact to the economic and social fabric of the country, remains at the heart of our core ethos. As in previous years, we are very proud of our employment record in Tanzania. The work we do as a business would not be possible without our highly qualified and dedicated workforce, as it is their contribution that enables us to deliver operationally. Throughout this report, you will see that safety is a key theme for us and further details of our pledge to be a leading operator in Environmental, Social and Governance ("ESG") practices. We continue to prioritize our position as an ethical operator in Tanzania, ensuring the Songo Songo gas field is run safely and for the ultimate benefit of all Tanzanians.

In 2021, our average sales volume was 61.1 MMcfd, representing a 6% increase from 2020 where we achieved average sales volumes of 57.7 MMcfd. In addition to expanding our industrial gas distribution to displace higher carbon based and more expensive energy alternatives, we recognize the responsibility of providing reliable natural gas to the power sector.

#### Our People and Culture

Read more on page 08.

#### Introduction to Governance

Read more on page 10.

#### **Company Operations**

Read more on page 18.

Over the last three years we have laid the foundations for our inlet compression project at the Songo Songo gas plant, which will underpin our production going forward. At a cost of \$42 million it ensures that the gas field has sufficient gas deliverability to meet current gas demand. The installation of this project was completed in March 2022, following a formal testing and commissioning process. With the compression system in place, the gas plant's current productive output is expected to increase by 30%.

Additionally, we now expect to complete the workover of three gas wells (SS-3, SS-4 and SS-10) by the end of April 2022, which will increase production capacity from the gas field to approximately 160 MMcfd, representing a 60% increase in productive capacity since early 2022.

With regard to the well workovers, both the SS-3 and SS-4 wells were completed in recent months, with the SS-3 well being placed on production in February 2022, with the potential to produce at a rate of 15 MMcfd. The workover of the SS-4 well followed, with works anticipated to continue on this well. However, the rig was released and moved to the SS-10 well, which was placed on production in April 2022. The workover program has enabled the Company to further its understanding of the underlying Songo Songo gas reservoir, in addition to ensuring the structural integrity of the wells remains sound, while adding to the field's overall production capacity.

The Company is also working hard towards the planned 2022 3D seismic acquisition program, which remains on track to commence in Q3 2022. As with the workover program, the purpose of this campaign is to increase our knowledge base on the sub-surface geology and looking to de-risk future development drilling in the gas field. Enhancing our understanding of this will help us ascertain the potential for further exploration drilling activity on the license.

We continue to balance our growth objectives with delivering sustainable material cash returns to shareholders, from inception the Company has paid out a total of \$38.2 million via its quarterly dividend and selective share buybacks. The Company continues to benefit from being in a financially robust position, with cash and cash equivalents of \$73.0 million and loans of \$54.6 million as at December 31, 2021.

We have made a positive start in 2022, with gross gas sales averaging 74.4 MMcfd (up to and including March 2022), with the Company forecasting average gross gas sales of 70-76 MMcfd for the year. This is an increase on our previous forecasts and is primarily driven by our discussions with the Ministry of Energy, TPDC and Tanzania Electric Supply Company Limited ("TANESCO"), all of which want to increase gas supply to new power generation facilities expected to be commissioned this year.

In closing, I would like to thank all of our stakeholders, in particular the Government of Tanzania, our partners in country, our dedicated workforce and our shareholders for their continued support, during what has been a turbulent time globally over the last two years. We believe that 2022 has the potential to be another busy and exciting period for the Company and we look forward to updating the market on our progress over the coming months.

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**Jay Lyons**Chief Executive Officer
April 20, 2022

# Welcoming our new CFO, Lisa Mitchell

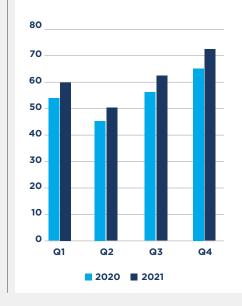


Lisa Mitchell joined the Company as Chief Financial Officer ("CFO"), effective November 1, 2021.

Lisa was most recently the CFO and Executive Director of San Leon Energy plc (AIM: LSE), a Nigeria focused oil and gas Company listed in London, and before that was CFO and Executive Director of Lekoil Limited (AIM: LEK), an Africa focused oil and gas Company with interests in Nigeria. Lisa has also held senior roles at Ophir Energy plc (LSE: OPHR), a former FTSE 250 energy Company, CSL Limited (ASX top 50) and Mobil Oil Australia.

Lisa is a FCPA (Australia) and holds a Bachelor of Economics (major in Accounting) from La Trobe University, Melbourne and a Graduate Diploma in Applied Corporate Governance from the Governance Institute of Australia.

#### **Additional Gas MMcfd**



#### Our History

# GROWING WITH TANZANIA THROUGH THE YEARS

The Songo Songo Gas
Field was discovered by
Azienda Generale Italiana
Petroli ("AGIP") in 1974.
Between 1976 to 1982,
TPDC drilled a further
eight wells, three of
which were plugged and
abandoned.

In July 1991, PAET entered into an agreement with TPDC to evaluated the economic viability of developing the Songo Songo gas field to generate electricity.

In 1997 an extensive five well testing program was undertaken and the results were used to prepare a full field reservoir model. Further studies confirmed sufficient quantities of gas to supply a gas to electricity project. The Government of Tanzania approved the project in 1999.

In 2001 the Songo Songo gas to electricity project reached financial closure. Gas production commenced in June 2004 from the five wells originally drilled by TPDC (SS-3, SS-4, SS-5, SS-7 and SS-9).

1974

The Songo Songo gas field was discovered by AGIP

1991

PAET acquires the Songo Songo license

1997

Completion of a five-well testing program

1999

Government of Tanzania approves the Songo Songo gas to electricity project

2001

Songo Songo gas to electricity project achieves financial closure

2003

Tanzanian workforce recruited and trained to operate the Songo Songo gas plant

2004

First gas produced from the Songas gas processing plant on Songo Songo Island

Construction and commissioning of the downstream distribution network in Dar es Salaam to serve industrial customers

2005

Marine seismic program identifies Songo Songo West drilling prospects

2006

Drought increases demand for gas-fired generation in Dar es Salaam

Long-term gas sales contract negotiated with TANESCO for power generation

2007

Downstream expansion program increases supply of natural gas to more industries

PAET drills SS-10, the first Songo Songo well in 25 years

2009

Debottlenecking of the Songo Songo gas plant allows production to increase to 110 MMcfd

PAET constructs new pressure reduction station to serve Wazo Hill Cement Plant

PAET completes construction of Compressed Natural Gas ("CNG") facilities in Dar es Salaam



2010

PAET funds study to increase production to a minimum of 140 MMcfd

PAET introduces scholarships and provides increased aid to schools on Songo Songo Island

2011

Tanzania announces plans for \$1.3 billion 532km coastal pipeline and infrastructure expansion

PAET announces plans for expansion program to further increase gas production

2012

PAET drills and completes SS-11 to increase gas production

2013

PAET provides English language training for secondary school students in Kilwa District

Find out more on our history at: https://orcaenergygroup.com/aboutorca/history/timeline/

# 2014

PAET signs transportation agreement with TPDC to deliver gas to five industries at Mikocheni

# 2015

- Tanzania introduces the Petroleum Act. 2015
- TPDC commences \$1.2 billion National Natural Gas Infrastructure ("NNGI") project to process and transport gas from the south of Tanzania and Songo Songo Island to Dar es Salaam
- PAET completes the workover of three offshore wells (SS-5, SS-7 and SS-9) to restore field deliverability
- President Kikwete inaugurates the 210 MMcfd Madimba processing plant

# 2016

PAET drills and completes offshore well SS-12

- PAET signs Additional Gas Plan 2 with Songas and the Government of Tanzania
- Tanzania introduces Permanent Sovereignty Act 2017
- TPDC commence limited processing of gas at 140 MMcfd from the NNGI gas processing plant on Songo Songo Island

# 2018

- PAET ties-in well SS-11 and well SS-12 to the NNGI
- PAET produces first gas from SS-12 to the NNGI to meet increased demand for power production
- PAET assumes full technical responsibility for management of the downstream network, supplying gas to over 40 industrial customers
- PAET concludes high impact English language training across all schools in Kilwa District, training more than 220 local teachers and over 15.000 students

# 2019

- PAET signs long-term gas sales agreement with TPDC setting the conditions to significantly increase gas production and sales
- PAET completes installation of refrigeration on Songas' processing plant to restore and sustain deliverability
- PAET obtains investment approval and enters into negotiations for the installation of compression to sustain production through the Songas facilities

# 2020

#### March

The Company imposes strict protective measures to preserve operational capability through the COVID-19 pandemic

## April

PAET makes a charitable donation to local child cancer charity to enable stockpiling of medical supplies through the COVID-19 pandemic

# **August**

The Company signed a lump sum turnkey for design, supply, installation and commissioning of feed gas compression on the Songas gas processing facility

# September

Flowline debottlenecking completed to increase production potential by approximately 10 MMcfd



# 2021

# **February**

The SS-10 well is the third well to be tied into the NNGI and the Songas processing plant, giving far greater flexibility in production management



#### March

Compression project enters construction phase

#### Mav

The Company obtains Songas approval to workover two Songas onshore wells (SS-3 and SS-4) alongside the preapproved workover of the PAET well SS-10

#### November

Workover campaign begins with the SS-3; well successfully worked over and returned to production for the first time since 2012

#### December

PAET received approval to conduct full fold 3D seismic across >200km² of the Songo Songo gas field, to commence in 2022

#### The Orca Difference

## **Our Purpose**

We exist to provide reliable natural gas to support Tanzania's power and industrial growth, and transition towards a lower carbon economy. This guides everything we do and as such our main goal is to create long-term sustainable and accretive value for our investors, partners, communities, and employees. We believe it is our responsibility to minimize the environmental impact of our operations and maximize our positive contribution to all our stakeholders and the local communities that we serve.

#### Responsibility:

We have an opportunity to play a pivotal role in Tanzania's development and achievement of its sustainability goals. We aspire to leave Tanzania in a better condition for future generations to inherit.

#### Authenticity:

We strive to be genuine and transparent about our ambitions and not contribute to greenwashing.

#### Ethics:

Strong business ethics is non-negotiable and is embedded throughout all facets of the Company.

#### **Our Stakeholders**

We believe it is fundamental that our business strategy considers what our stakeholders' needs and priorities are, and that we engage with different stakeholder groups to address these in the best way possible. In 2021, we undertook an exercise to map out our key stakeholders and their primary requirements, which we look to embed as part of our strategy.



# We keep our stakeholders at the heart of everything we do.

#### **Our Environment**

Read more on page 20.

## **Our Local Community**

Read more on page 22.

#### **Our Employees**

Read more on page 26.



## **Our Investors**

Being transparent and engaging with our investors is a key priority for the Company. We keep investors updated and engaged in the strategic direction and operational plans of the Company via a range of regular reporting, press releases, and discussions. We listen to our shareholders carefully, value their support, and seek to address their concerns where they exist. Our long-term goal is to maximize the social and economic potential of our asset in Tanzania in a sustainable way, whilst maintaining a regular dividend. We actively seek investors that believe in growing our asset in Tanzania, which will reward both them and our Tanzanian stakeholders. We are looking to provide more regular online updates as both our development and ESG strategies continue to evolve.



## **Our Customers**

Given our business model and location of operations, it is important for us to ensure a stable supply of natural gas, with fair and competitive pricing. We want to be transparent with our customers and engage with them through active dialogue. In 2021, we engaged with some customers on topics such as how we could contribute to lower emissions and ensuring a high product quality.



## **Our Employees**

Our employees are our core asset. We aim to inspire, protect, and nurture our people. Our key priorities relating to our employees are:

- · Employee engagement
- · Safe work environments
- Right to form or join trade unions
- · Training and development
- "Tanzanian first"
- · Employee health and wellbeing
- · Inclusive work culture

We engage with our employees through being transparent about our business strategies, involving employees in business decisions, and maintaining an open dialogue around areas of improvement.



# **Our Local Community**

We believe it is important that we provide support and shared value for the local communities that we serve and have an opportunity to positively contribute. For our communities, the key priorities are providing access to a reliable energy source, affordable and cleaner energy, as well as employment opportunities, education, health and empowerment.



#### **Our Environment**

As a natural gas operator, we will by nature be a Greenhouse Gas ("GHG") emitter and we recognize that as the business grows, our emissions are likely to continue 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 ("HFO") towards a lower carbon economy.

We are committed to continue engaging with local regulators and stakeholders in order to ensure that we are aware and fully transparent about our contribution to global climate change and local environmental matters.



# Our Government and Regulators

Our local teams proactively engage with Tanzanian local regulators. We believe it is important to build strong relationships with government and regulators in order to ensure that our activities are in line with, and accelerating, local development plans. These engagements also help ensure that all local regulations are adhered to.

**Company Operations** 

# FULLY INTEGRATED GAS DEVELOPER IN TANZANIA

The Songo Songo Gasto-Electricity Project is an integrated project that spans the breadth of exploration, development and production of gas, followed by processing, transportation and distribution of gas for power generation, and includes sales of gas to industrial users and CNG users. The Songo Songo **Gas-to-Electricity Project** is a major energy supplier to the Dar es Salaam area, producing approximately 45% of the Tanzanian electricity supply.

# **Upstream Operations**

What we do:

The Company operates the Songo Songo natural gas field and associated production and processing facilities on behalf of the Government of Tanzania and Songas, under the Songo Songo PSA and the Operatorship Agreement respectively.

The Songo Songo natural gas field sits approximately 200km south of Tanzania's economic hub, Dar es Salaam, and approximately 25km offshore of the mainland itself, in the Kilwa District of Lindi Region. The gas field sits on and offshore Songo Songo Island. Production facilities include eight gas wells: four onshore and four offshore in relatively shallow water. The Songas processing facility operated by the Company has a nameplate capacity of 110 MMcfd, however three of the eight wells are also tied into the adjacent NNGI gas processing facility with a name plate capacity of 140 MMcfd, affording access to increased processing capacity and considerable flexibility and redundancy in its ability to sustain gas supply.

Read more on page 12.



# **Upstream Operations Highlights**

The upstream operational focus in 2021 centered on four areas: significant sub-surface studies designed to reduce uncertainty in the Songo Songo natural gas reservoir and support future field development planning; progression of the installation of feed gas compression on the Songo Songo gas processing facility; planning for and commencement of the workover of three onshore gas wells; and planning for execution of 3D seismic acquisition in 2022. Alongside this and routine operations and maintenance, also progressed plans for installation of sand control facilities in 2022, alongside smart pigging of the gas well flowlines.

\$26.6m 2021 \$26.6m 2020 \$27.1m

Operating Netback (1)	+3%
\$2.93/	mcf
2021	\$2.93/mcf
2020	\$2.85/mcf

On These non-GAAP financial measures and ratios do not have any standardized meaning under IFRS and may not be comparable to similar financial measures disclosed by other issuers. (See Page 54 MD&A).



## **Downstream Operations**

What we do:

#### **Industrial Sales**

The Company owns and operates a lowpressure downstream distribution network that receives gas from the Songo Songo gas processing facility and distributes it to more than 50 large industries across almost every industrial sector in Dar es Salaam.

The breadth of industries supplied by the Company means that almost every day most of the local population is positively impacted by the products borne of Songo Songo gas.

#### **Power Generation**

During 2021 the Company sold 47.7 MMcfd of Additional Gas for power generation.

The Company supplies gas to TANESCO and Songas via the Songas infrastructure and to TPDC via the NNGI infrastructure. The gas supplied by the Company was responsible for approximately 45% of the total power generation during 2021.

In addition the Company supplied 30.6 MMcfd of Protected Gas to Songas for power generation.

Read more on page 13.

# **Downstream Operations Highlights**

The Company's downstream team has worked tirelessly throughout the year to maintain, expand and realign our ever-increasing distribution network to ensure uninterrupted gas supply to our existing customers, and to establish connections to several new customers. In conjunction with this, the team has supported field development planning, undertaking considerable market research to identify potential new customers reachable via virtual pipelines, and has been heavily involved in the assessment of expansion options to meet future demand.

Sales Volumes - Power

+6%

Sales Volumes - Industrials

**47.7** MMcfd

47.7 MMcfd 45.0 MMcfd

**13.4** MMcfd

13.4 MMcfd 12.7 MMcfd

+6%

#### **Case Study**

# **East Coast Oils and Fats** Limited ("ECO").

ECO is a state-of-the-art facility for the manufacture of edible oils, fats and soaps, it is the largest plant of its kind in Tanzania. ECO has been in production since October 2006, attracting approximately 60% of the Tanzanian market. The plant, in Dar es Salaam, consists of refinery, dry-fractionation plant and soap manufacturing, cooking fat and margarine production. ECO utilizes natural gas from PAET.

ECO's primary use of natural gas is for steam generation using boilers. The Company converted to natural gas, having previously used HFO for boiler firing.

Speaking about the benefits of using natural gas, ECO's Chief Executive Officer commented:

"Natural gas proves to be very reliable to us, it is environment friendly and burning without releasing smoke to the environment. HFO is now only used on the very rare occasion in the absence of natural gas. Over the past four years we have only experienced one unplanned shutdown due to a pipe leaking at Buguruni following some unexpected damaged during road excavation".

ECO plans to double its production capacity to 1,200,000 metric tons of oil, fats and soaps per annum. The plant will also introduce new product lines including palm oil, sunflower oil, soya oil, margarine and soap.

'We intend to increase our natural gas usage to captive power by generating 9.3MW in the future providing it is cost effective to the business." stated ECO's Chief Executive Officer.



#### Company Operations cont.

## **Upstream Operations**

The Company employs a team of around 50 local staff to operate the plant in two equal rotations, ably supported by up to 70 local contractors providing security, camp maintenance and catering, and several casual laborers providing general support to operational staff.

The gas produced and processed from the Songo Songo natural gas field is transported to Dar es Salaam via 16-inch and 36-inch pipelines owned and operated by Songas Ltd. and TPDC respectively. On arrival in Dar es Salaam the gas from the 16-inch line enters a downstream distribution network owned and operated by the Company, supporting national power generation and industries across the city. The gas from the 36-inch line enters the gas receiving station at Kinyerezi, operated by Songas and supplied to the power industry, among others.

The compression project was a complex undertaking which has significantly increased the gas plant production potential, as well as its physical footprint, each by around 30%,

The project was delivered successfully and ahead of time, with construction carried in and around a live gas processing plant on a remote island, in the middle of a global pandemic, with very little engineering services available in-country.

Planning had to be meticulous to ensure personnel and equipments were in the right place at the right time to allow ontime delivery of the project, without any unplanned gas supply interruptions.

## **Highlights**

2021 was an exceptionally intensive year for upstream operations and the Company's sub-surface team. Alongside annual calliper logging and data retrieval, the Company also undertook further sand tagging, with no noticeable change to previously recorded Hold Up Depth. Having previously identified that the once considered homogenous field actually comprised at least four compartments, Orca also undertook multi-tank modeling to match pressure data to better understand recent p/Z behaviour, with promising results that we expect to be substantiated through 3D seismic acquisition in 2022.

Installation of feed gas compression at the Songas gas processing plant progressed well through 2021 and by the end of the year Orca and its contractor China Petroleum Technology and Development Corporation ("CPTDC") were ready to commence the mechanical tie-in of the compression equipment to the Songas gas processing facility, the final step before commissioning and what would have been a very early handover of the project. Unfortunately, requiring a 10-day gas processing plant shutdown to facilitate the tie-in, coincided with an unusually dry period in Tanzania that reduced hydro power production, increasing demand for gas production that could not have been met. Consequently, at the request of the Government of Tanzania the tie-in was delayed to early 2022 and project handover occurred one month in advance during March 2022

The long-planned workover of three onshore wells, delayed due to the ongoing pandemic, was finally approved through 2020/21. 2021 itself saw the Company work tirelessly to secure a rig and support services in an extremely scant and challenging market. Of 21 invitations to tender for a land rig, only seven responded positively, and ultimately only one, from Exalo Drilling S.A, was available in the timeframe required. Support services were similarly hard to contract, with pricing and conditioning of tools and materials reflecting the recent downturn in the industry and the limited activity and support bases in East Africa.

Nonetheless, by November 18 work had commenced on SS-3, with the well successively completed and placed on production on February 15, 2022.

The rig immediately moved across to SS-4, a more technically challenging well that had been shut in 2019 due to sand and water production. SS-4 was side-tracked into a more consolidated part of the Neocomian reservoir, completed with 13% chrome tubing and sand screens to mitigate further deterioration of the formation. The workover commenced on December 17, however considerable delays at the Port of Dar es Salaam and associated logistical issues significantly slowed progress, in addition to several technical challenges through the course of the program.

Regrettably, delays and open borehole deterioration in the new sidetrack portion of the wellbore led to the open hole logging program being abandoned.

The SS-4 well remains shut in following the drilling and completion of a planned side-track wellbore which is unable to flow naturally, due to suspected excessive liquid loading associated with extensive circulating time while waiting on necessary services and equipment. The Company is sourcing a coiled nitrogen unit to safely unload the excess liquid, allowing the well to potentially flow naturally. Subject to logistics and transportation, it is expected the equipment could be on location by Q3, 2022.

Following SS-4 the rig was moved to SS-10 to remove the existing corroded production tubing, install internal casing patches to mitigate sand production and install new corrosion resistance 13% chrome tubing. SS-10 has been placed back on production on April 18, following the removal of the rig equipment.

Alongside routine operations, maintenance, detailed field development and asset management planning, the approvals obtained, the projects delivered, and the progress made through 2021 were exceptional. They were the result of a highly coordinated and collaborative team effort across Orca, PAET, its contractors, the Tanzanian Government and other project partners. When COVID-19 threatened to derail several initiatives, the team rapidly implemented solutions to deliver results that today have reinforced the Company's position as Tanzania's foremost gas producer, well placed to meet and sustain anticipated increases in demand in the near term.

# **Downstream Operations**

Whether it is the bottle that holds a cold beer at the end of the day, the steel that forms the structure of Tanzania's homes or roofs, the concrete that forms the bridges and roads, tissues, or the textiles we wear, much of it comes from industries supplied by the Company.

Alongside this, the Company also operates the high-pressure spur lines, pressure reducing stations, and filtering and metering skids of the downstream network that ultimately feed the power generation facilities that constitute around 45% of all power generated in Tanzania. So, alongside the everyday products from industry, much of the lighting under which the local population reads or dines, the electricity that powers our computers and televisions, or charges our phones is also borne of Songo Songo gas and the Company's operations. Separately, the Company runs a natural gas to CNG operation that supports growing demand from the transportation and hospitality sectors, among others.

## **Highlights**

While upstream operations and projects dominated 2021, such efforts would have been futile without a reliable and efficient downstream distribution business. This interface with the customer is where the Company's reputation is made or lost, and as Tanzania's only fully integrated gas developer that manages an expansive upstream through midstream to downstream operation, the Company has excelled again. In 2021, the Company has signed three new industrial customer contracts, adding an additional steel manufacturer and a pharmaceutical manufacturer to its portfolio, further integrating itself and the gas the Company produces into the fabric of Tanzanian society.

Additionally, the Company signed a contract with its first independent CNG retailer to the transportation sector. One of many companies seeking to enter this space in Tanzania, its establishment and accessibility in Dar es Salaam will generate further exposure and proof of concept. Aligned with the Minister of Energy's directive that all new fuel stations shall be constructed with CNG distribution facilities, we believe further expansion of the CNG arm of the business will be seen in the next one to three years. Indeed, the Company is already in discussions with several potential large developers and existing fuel retailers that may see the number of CNG fuel stations reach double figures in that period.

Tanzania, and in particular Dar es Salaam, is developing infrastructure at an extraordinary pace, while its population growth rate is amongst the highest in the world. Such development has led for space in recent years, to competing demand for space and as such the Company has been required frequently to realign its downstream distribution network to clear the way for national projects such as the Standard Gauge Railway and the Bus Rapid Transportation system, both of which carve through Dar es Salaam. Recognizing the strategic importance of these projects, in recent years the Company's Downstream team has worked hand in hand with local Government contractors to ensure progress is not delayed, while gas supply is not interrupted. 2021 was no different, and it is a credit to the team that through construction of intricate bypasses and control systems no industry or power generation plant experienced any supply interruptions this year.

#### **Case Study**

# Aluminium Africa ("ALAF") Limited.

ALAF Limited was established in 1960 and is a leading supplier of steel roofing and related products in Tanzania. The Company began using natural gas in 2010 for furnacing and for captive power in 2019.

ALAF's primary uses of natural gas is for both the heating system and for its power generation which has displaced the use of HFO. Since the Company started using natural gas it has seen a marked improvement with downtime reduced and power reliability for continuous production maintained. The Electrical Department Manager at ALAF commented "the quality of service offered by PAET has been excellent, notably on reliability, communication during maintenance and timely responses in case of potential emergencies. Natural gas has been a positive change for the Company compared to using HFO. We have seen a reduction in running costs including, logistics, inventory costs and theft, improved reliability and availability whilst being more environmental friendly and energy saving".





Gas Generator pipe inlet

#### Company Operations cont

The maintenance of gas deliverability as pressure in the reservoir declines.

# Songo Songo Island Facilities

The Songo Songo Island gas processing facility was originally designed with a 70 MMcfd gas send-out capacity, which was subsequently re-rated to 110 MMcfd in 2010 (2 x 55 MMcfd dew-pointing trains). The maximum facility send-out rate was constrained to 96 MMcfd based on the export pipeline operating envelope of 87.5bar(g) send-out pressure and a 52bar(g) arrival pressure at Songas' LM6000 GTs at the Ubungo Power plant.

The original Songas infrastructure (Songo Songo gas processing facility and pipeline) is typical in its type for such conventional hydrocarbon resources, where the reservoir pressure declines as the resource is produced

The arrival pressure at the gas processing facility is currently at 80bar(g), which is below the 110bar(g) minimum required by design, hence constrained in production potential. To address the declining pressure, the Company began phase 2 compression.

# Phase 2 - Compression Project Overview

Design studies verified a combination of mechanical refrigeration and compression to be the most cost-effective way to ensure the gas processing facilities could continue to function effectively to meet gas demand, as pressure in the reservoir declines.

Following the completion of the phase 1 plant upgrade (refrigeration project) in 2020, CPTDC progressed the detailed engineering of the phase 2 plant upgrade (Compression project) during the same year. CPTDC completed this in good order despite engineering reviews having to be conducted remotely, across several time zones and in various languages, due to the ongoing negative impact on the movement of personnel due to COVID-19 restrictions.

2021 saw rapid progression to the procurement and construction phases of the project, with both completed successfully, largely due to the professionalism and dedication of PAET and CPTDC personnel. Mechanical tie-in of the project equipment ahead of schedule during the required shutdown period in February 2022 further demonstrated the excellent levels of cooperation between parties. The project, which main units consists of three compressor trains with gas engine driver sets, was completed and handed over in March 2022.

## **Highlights**

## Capital Expenditure

\$42m

#### Compliance

Strict adherence to Local Content Legislation

#### **Contract Personnel**

- CPTDC 45
- Subcontractors 134 (57% Tanzanian subcontractors)

## Challenges

Steady increases in the cost of logistics relating to sea freighting were a continued concern to the project. The selection of a major engineering, procurement and construction contractor, with extensive logistics support, proved a decisive factor in limiting impairment to both cost and schedule.

The attention to detail applied during the challenging contract negotiations also proved beneficial when the decision was taken to establish a "lump sum turnkey" model agreement. These forward-looking mitigations were warranted.

"The completed \$42 million compression project which was over three years in the planning and execution phase, ensures that Tanzania continues to benefit from a reliable supply of natural gas. Increasing access to electricity, enabling the country



#### Gas Reserves

# 2021 Independent Evaluation

The Company's natural gas reserves as at December 31, 2021 and December 31, 2020 for the period to the end of its license in October 2026 were evaluated by McDaniel & Associates Consultants Ltd. ("McDaniel") independent petroleum engineering consultants in accordance with the definitions, standards and procedures contained in the Canadian Oil and Gas Evaluation Handbook and National Instrument 51-101 - Standards of Disclosure for Oil and Gas Activities ("NI 51-101"). The 2021 independent reserves evaluation prepared by McDaniel (the "McDaniel Report") is dated February 24, 2022 with the effective date of December 31, 2021 and the 2020 independent reserves evaluation prepared by McDaniel is dated February 23, 2021 with an effective date of December 31, 2020.

A Reserves Committee of the Board of Directors reviews the qualifications and appointment of the independent reserves evaluator and reviews the procedures for providing information to the evaluators.

Reserves included herein are stated on a Company gross basis (92.07%) unless noted otherwise.

All the Company's reserves are conventional natural gas reserves and are located in Tanzania. Additional reserves information required under NI 51-101 are included in Orca's reports relating to reserves data and other oil and gas information under NI 51-101, which have been filed on its profile on SEDAR at www.sedar.com.

On a gross Company basis there has been a 21% decrease in 1P reserves, and a 18% decrease in the 2P reserves compared to 2020. Total gas production in 2021 was 22.3 Bcf and taking this into account results in a 11% decrease in 1P reserves and a 9% decrease in 2P reserves.

There has been a 13% decrease in the 2P present value at a 10% discount basis from \$241.3 million to \$209.9 million compared to 2020. This represents an effective decrease of 6% after taking the 2021 results into consideration. The decrease is predominately a consequence of lower 2P reserves to the end of the license.

		2021		2020
Company Conventional Natural Gas Reserves (Bcf)	Gross <sup>1</sup>	Net <sup>2</sup>	Gross	Net
Independent reserves evaluation				
Proved producing	159.8	97.3	202.6	124.7
Proved developed non-producing	-	-	-	-
Proved undeveloped	-	-	-	-
Total proved (1P)	159.8	97.3	202.6	124.7
Probable	28.3	18.3	26.9	16.8
Total proved and probable (2P)	188.1	115.6	229.5	141.5

- 1 Gross equals the gross reserves that are available for the Company based on its effective ownership interest.
- Net equals the economic allocation of the gross reserves to the Company as determined in accordance with the PSA

			2021			2020
Company share of Net Present Value (\$'millions)	5%	10%	15%	5%	10%	15%
Proved producing	201.4	177.8	158.4	252.4	216.4	187.7
Proved developed non-producing	-	-	-	-	-	-
Proved undeveloped	-	-	-	-	-	-
Total proved (1P)	201.4	177.8	158.4	252.4	216.4	187.7
Probable	36.4	32.1	28.6	30.5	24.9	20.6
Total proved and probable (2P)	237.8	209.9	187.0	282.9	241.3	208.3



# Background to the 2021 year end reserves evaluation

The Company continued the comprehensive review of the Songo Songo subsurface field mapping, reservoir simulation modeling and well performance in 2021, which was initiated in 2020 to better understand the remaining potential of the Songo Songo (SS) field to the end of the license and assess the remaining resource potential beyond October 2026.

The 2021 studies included a slick line campaign, to monitor sand production and to retrieve downhole pressure data, a Multi Well Pressure Test Analysis ("PTA") to match the well pressure data with the well performance up to 2021, together with the development of a multi tank reservoir model.

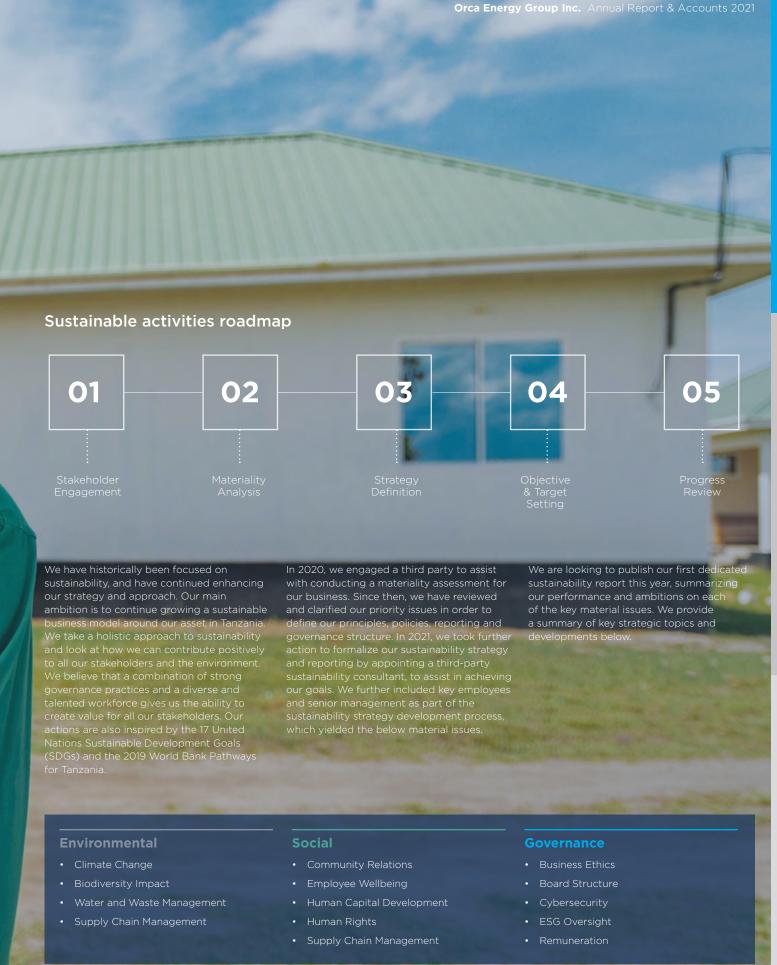
#### Forecast Gas Prices and Sales Volumes<sup>1</sup>

2P Gross Gas Volumes MMcfd	2P Weighted Average Gas Price \$/mcf	1P Gross Gas Volumes MMcfd	1P Weighted rage Gas Price \$/mcf	Avera
92.90	3.94	77.10	4.07	2022
102.30	4.02	85.30	4.06	2023
117.10	4.15	101.90	4.11	2024
138.40	4.30	120.90	4.15	2025
139.90	4.42	115.90	4.26	2026

The weighted average gas price, reflects the well head price received for power generation the delivered price for industrial customers after the processing and transportation tariffs.







#### Sustainability & Responsibility cont

#### **Environment**

The need to accelerate the global transition to clean, renewable, and sustainable energy sources is undeniable, and nations and companies are increasingly committing to net-zero targets to limit global warming below a 2°C increase compared to pre-industrial levels. The quest for global reduction in GHG emissions places pressure on emerging economies, where a high proportion of economic activity is based on extractive and carbon intensive industries. At the same time, African economies have very low historic and current emissions per capita and low access to electricity. This conundrum places countries like Tanzania at a crossroads between the need for development and action on climate change mitigation.

The development versus climate debate often ignores the role that gas can and needs to play as a lower-emissions alternative to traditional fossil fuels in developing countries, and also misses the opportunity to foster a market for carbon-neutral or "green" Liquid Natural Gas ("LNG"). As such, we believe that our business is vital in assisting Tanzania in its development goals while also advancing towards a lower carbon economy.

The Tanzanian government has pledged to:

- Strengthen the availability and reliability of electrical power by increasing generation capacity, transmission, and distribution networks.
- Construct and strengthen natural gas supply infrastructure for domestic, industrial and transport use.
- Develop renewable energy technologies and projects particularly for rural households.
- **4.** Strengthen sustainable use and management of oil and natural gas.
- **5.** Develop renewable energy sources for cooking to mitigate climate change.
- **6.** Strengthen the availability of oil and natural gas by enhancing petroleum exploration and development.

#### Climate Change

When we think about climate change as a business, we aim to understand both how our activities have an impact on climate change, and how climate change has the potential to impact our business.

#### **United Nations SDG 13 Climate Action**

- 13.1 Strengthen resilience and adaptive capacity to climate related disasters
- 13.2 Integrate climate change measures into policies and planning
- 13.3 Build knowledge and capacity to meet climate change



As a natural gas producer and operator, we are exposed to both physical and transitional climate change risks, while we acknowledge that our operations have the potential to exacerbate these risks over the long term.





#### **Physical Risk**

We utilize a third-party 207km onshore pipeline that transports gas from Songo Songo Island to Dar es Salaam. We also operate a 50km downstream high and low pressure gas distribution network. However, the vast majority of all pipelines are buried and protected in vulnerable areas. Thus they are not particularly exposed to climate change induced extreme weather events.

Other physical infrastructure such as offshore and onshore wells may be more vulnerable to extreme weather events.

We are committed to ensuring all onshore gas transportation pipelines, rigs, and wells are assessed for their ability to withstand extreme weather events by 2026.

#### **Transition Risk**

Since Tanzania's five-year development plan references the need to "strengthen the availability of natural gas by enhancing petroleum exploration and development activities", the Company is unlikely to be impacted by this risk directly. Nevertheless, sentiment around fossil fuels generally is changing and there is a risk of losing access to financing if the Company fails to demonstrate how it is working towards alignment with a low-carbon economy. As such, we want to ensure that we are transparent about our impact and contribution.

We are committed to reducing our negative environmental impact as much as possible while focusing on business growth. We see natural gas as a transitional fuel that will further reduce Tanzania's overall GHG emissions.

#### **Innovation and Partnerships**

We are in the process of examining opportunities to support local universities in research directed at innovative solutions around the climate related impacts of natural gas. Similarly, we are investigating options to produce LPG, small scale LNG and CNG alongside our existing gas production operations.

While this would not reduce the amount of natural gas that we produce, it would reduce the amount of  $\mathrm{CO}_2$  produced as a result of reduced flaring, whilst also further reducing Tanzania's reliance on coal and imported products.

#### **GHG Emissions**

We are committed to further measure and improve our reporting of our GHG emissions during the next reporting year and will assess the possibility of setting net-zero ambitions and creating an action plan to align with the Paris Agreement.

#### Sustainability & Responsibility cont.

## Supporting our community

Our business strives to improve access to affordable, reliable, and modern energy services in Tanzania. We believe we contribute positively to the following targets:

# United Nation's SDG 7 Affordable and Clean Energy

7.1 Universal access to modern energy

7.3 Double the improvement in energy efficiency

7.A Promoting access to research technology and investments in clean energy

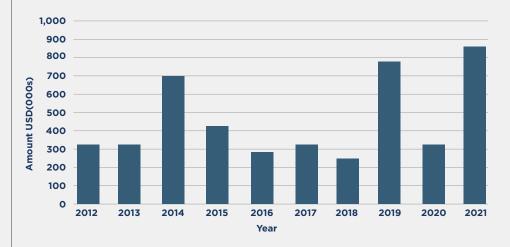
7.B Expand and upgrade energy services for developing countries

Given that we operate a natural gas business, we do not directly contribute to 'Target 7.2 Increase Global Percentage of Renewable Energy', as set out in the SDGs. However, our business contributes to reducing Tanzania's reliance on coal, and heavy liquid fuels and thereby to the movement towards a lower carbon economy.

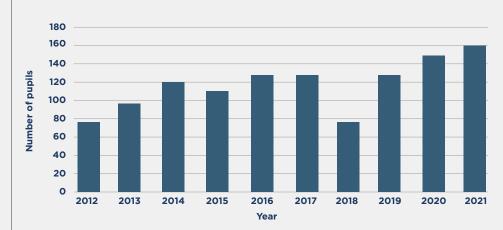
Focus Area: Kilwa District, Songo Songo Island.



**Graph 1: Amount Invested in Community Related Development Projects** 



Graph 2: Pupils enrolled at Songo Songo Island Kindergarten



#### Our four focus areas





Education

8



Scholarships

Life Skills Program

Year	Number of students using Science Lab at the Songo Songo Island Secondary School
2015	66
2016	74
2017	71
2018	74
2019	114
2020	193
2021	194
Total	786

Year	Number of female students using the Songo Songo Island girls dormitory
2015	20
2016	32
2017	28
2018	36
2019	42
2020	29
2021	52
Total	239

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. PAET feels similarly and the Company continues to focus on the community's educational and health requirements.

#### Education

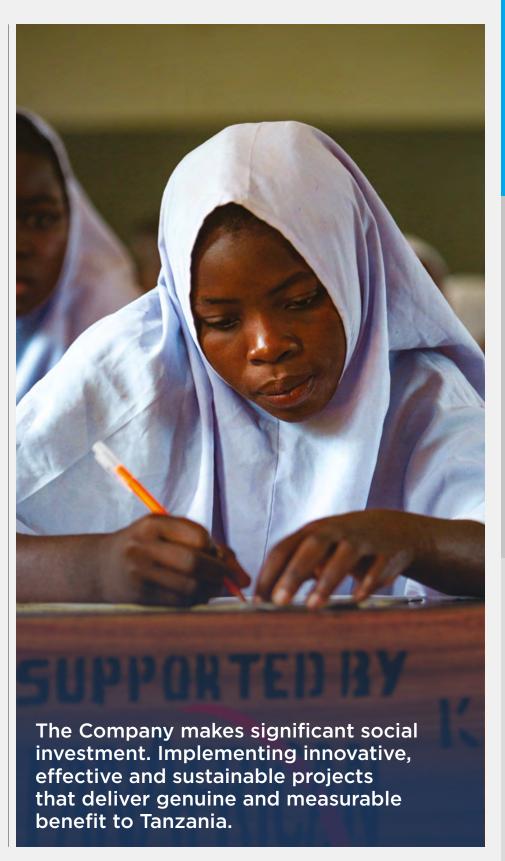
#### Investing in early childhood development

The Company funded the construction of the kindergarten on the Songo Songo Island which opened in September 2011. Since opening, we have continued to provide support with books and other items to enhance learning. The kindergarten proves to be a fundamental first step in improving the educational prospect for children within Songo Songo Island's remote community, delivering a significant increase in the availability of first stage education. To date, over 1,200 of the island's children have attended, with record attendance figures throughout 2021.

#### Secondary Education

The Company continues to support the girl's dormitory, able to accommodate 55 students within a learning orientated environment. The dormitory was opened in 2013 and has seen over 200 students utilize this facility.

In 2015 PAET funded the construction of a multi-purpose science laboratory for the SSI secondary school. The facility has helped the district achieve the national target, which requires every secondary school to have a science laboratory. To date we have seen over 750 students using this laboratory.



#### Sustainability & Responsibility cont.

#### Health

The Company has continued to make significant investment to develop accessible, clean, well equipped and well staffed medical facilities in the areas surrounding our operations.

Kilwa is one of the five districts of the Lindi Region of Tanzania. It is bordered to the north by the Pwani Region, to the east by the Indian Ocean, to the south by the Lindi Rural District and to the west by the Liwale District.

# Tumaini La Maisha (Hope for Life)

The Company continues to support Tumaini La Maisha ("TLM"), TLM is a Tanzanian based NGO who provide care for children with cancer. TLM aim to reach every child in Tanzania who develops cancer, and provides high quality cancer treatment free of charge with the hope for a continued and healthy life. The charity is dedicated to caring for not only the children with cancer, but also supporting their families.

In collaboration with TLM, the Company provided support for the expansion of childhood cancer services in Sokoine Referral Hospital in Lindi Region, funding a new treatment, contributing to the improving survival rates of children suffering with cancer.

In October 2021 TLM began the second intake of paediatric oncology fellows at Muhimbili National Hospital ("MNH") and has added two more sites to its network.

In 2021, the Company's support has enabled the following:

- 28 children treated with childhood cancer from Lindi
- 500 arc lights to aid early diagnosis of children with certain cancers
- 250 courses of chemotherapy supplied to Sokoine Lindi Regional Hospital
- Purchase and delivery of personal protective equipment, including gloves, N95 masks and gowns at MNH and Sokoine Hospital in Lindi
- · Bone marrow aspirate needles and bone marrow biopsy needles provided for every child
- Diagnostic testing at alternative medical centres, when not accessible at the treatment center
- Provision of antibiotics and other essential medication
- $\bullet\,\,$  Transport provided for children and their families for journeys to and from the hospital
- · Computers and software licenses
- 189 health professionals given training on childhood cancer treatment in the Lindi Region



PAET Managing Director, Andy J Hanna (right) and TLM Board Chairman, Gerald Mongella (left) signing the MOU

Survival Rate +55%

60%

Current 60%

2005 5%

People Treated +730

Source: www.wearetlm.org

2005 120

#### **Case Study**

## Construction of Songo Songo Island Health Centre

Songo Songo Island has a population of approximately 7,000. Currently, the Island has one dispensary that provides primary health care services lacking specialist services such as surgery, cardiologists, dermatologists, urologists and other specialists.

The nearest referral facility for the islanders is on the mainland at Kinyonga District Hospital, some 27km and a boat ride away.

The Company is currently funding the construction of an outpatient department, maternity ward, surgical theatre, laboratory, mortuary, and laundry facilities on Songo Songo Island.

Once completed in Q2 2022, the facility will be equipped and staffed to provide transformative primary and secondary health care to the Songo Songo islanders, across a broad and vital range of medical capabilities.

#### New medical center feature

# Construction of Dispensary Building at Nahama Village, Namayuni Ward

The Namayuni ward comprises five villages with a population of approximately 10,000. The area has no public health facility and the nearest hospital is at Kipatimu, some 30km away.

The Company has funded the construction of a building that will include

- Out-Patients Department,
- Maternal & Child Health Ward,
- Maternity Wing,
- Incinerator

This facility will ensure more immediate medical support is available to the village, along with other surrounding communities. The completed building will be handed over to Kilwa District Council for use in 2022.



Dispensary Building at Nahama Village

#### **Case Study**

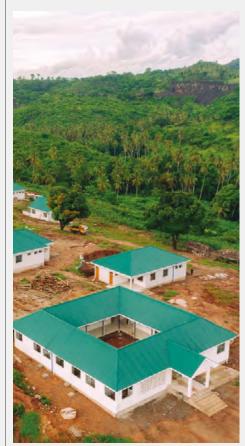
## Construction of Chumo Health Centre in Kilwa

Chumo is one of the most densely populated wards in Kilwa District. The area has five villages with a population of around 14,000.

The construction of a health centre will allow community members to access high quality health care. Due for completion in Q2 2022, the facility will ensure more immediate medical support is available to community members, and surrounding communities.

The facility will be constructed with the same capabilities of the health center completed by the Company in Somanga.

The Company is utilizing a local contractor who has employed local artisans in completing the project. All building materials and the logistical delivery is being procured through local Tanzanian suppliers. For example, cement, a key construction material is being procured from a local factory in Mtwara.



Construction in progress at Chumo Health Center

#### Sustainability & Responsibility cont

## **Our People**

#### **Our Workforce**

Our employees are our core asset. We aim to inspire, protect, and nurture exceptional people. Additionally, we believe it is important that we provide support and shared value for the local communities that we serve. Given that our focus is on Tanzania, we have a great opportunity to contribute positively to the local communities and economy.

# SDG 8 Decent Work and Economic Growth

We are proud that our workforce and leadership teams reflect the community and culture where we operate. Our approach to material social issues is tied to the contribution towards SDG 8 and its underlying targets. We have identified the following targets that our business contributes to positively:

- 8.4 Improve resource efficiency in consumption and production
- 8.5 Full employment and decent work with equal pay
- 8.6 Promote youth employment, education and training
- 8.7 End modern slavery, trafficking and child labor
- 8.8 Protect labor rights and promote safe working environments



## **Employee Wellbeing**

At present, our employee wellbeing strategy consists of three key dimensions: physical wellbeing, mental wellbeing, and our COVID-19 response. We recognise that the success of our business hinges on our employees, thus all dimensions must be adequately addressed.

#### **Physical Wellbeing**

To ensure physical wellbeing, we have conducted a variety of training programs to inform our employees on key topics such as emergency preparedness and response, as well as health and safety.

We have a zero-tolerance attitude towards discrimination on the grounds of sex, political affiliation, gender, religion and promotes an inclusive culture in all areas, which is covered in our Employee Handbook. As a result, we have not recorded any incidents of discrimination throughout 2018-2021. This is an area we will continue to monitor going forward, and will ensure all new employees are fully aware of our zero-tolerance attitude.

#### Mental Wellbeing

Mental health is a topic that we take seriously. In 2021, we sent a questionnaire around mental wellbeing which received a 99% employee response rate. As mental health has been identified as a strategic priority of ours, we are committed to launch a campaign around mental health in 2022, whilst also introducing confidential mental health counselling for our employees.

# Case Study Revocatus Kasheshi Reservoir Engineer - PAET, Tanzania



Revocatus has a bachelor's degree in chemical and process engineering from the University of Dar es Salaam and a master's degree in petroleum engineering from the Norwegian University of Science and Technology. Revocatus joined PAET in September 2015, as a trainee reservoir engineer and began working closely with the well service engineer on a downhole data retrieval campaign and well test analysis. PAET quickly identified Revocatus' capabilities and potential, and the Company sought to expand on these and provided further international training to advance his knowledge and help him obtain additional skills.

Revocatus has progressed through the Company, having been promoted to reservoir engineer. Revocatus uses his skills to monitor and develop the Company's assets, maintain long-term surveillance plans, and supports the annual reserves audit. Additionally, Revocatus provides support to the operations team on various tasks and participates on workover and drilling projects.

Revocatus commented: "When a well has finished being drilled, I ensure that it is monitored carefully, particularly in the first few days to make sure the amount of gas extracted meets expectations. When these sorts of project come to life and contribute positively to the organization and community, I feel a lot of career satisfaction".

Revocatus is an extremely valued member of the team. Revocatus commented: "The Company provides a safe and happy working environment. Individuals within the organization are very welcoming, collaborative and at times go above and beyond to make things happen. I am given space to lead and take as much responsibility as needed, this gives me joy and confidence at work".

#### COVID-19

Throughout the COVID-19 pandemic, we have taken action to ensure the safety of our workforce in both operational and office-based capacities. In 2020, for our office workers, initially we moved to a 50:50 home office split before moving to a 100% working from home policy.

For our operational workers, we rigidly enforced personal hygiene and other protective measures, social distancing and compulsory quarantine for 13 days for anyone returning to work or who visit the island. We deferred several projects, including the workovers of three onshore wells, and all non-essential maintenance tasks were delayed whenever a consultant or service company was unable to travel or adhere to our defensive posture. Staff who had to go into the office were also provided with sanitized Company transport allowing them to avoid public transportation.

The COVID-19 Omicron variant saw a number of personnel return positive or inconclusive tests. The impact on operations was minimal, although several staff were required to work unexpected overtime to back-fill resultant personnel gaps. We will continue to provide free lateral flow test kits for all employees when required.

# Q&A Stella Ndossi



"PAET provides opportunities to develop its employees skills by investing in training, inhouse coaching and the Company has internal policies to promote within where possible."

#### Stella Ndossi

Logistics Manager, PAET Tanzania April 20, 2022

# When did you join PAET and what experience did you have prior to joining?

I joined PAET in March 2011. I previously worked in the telecommunications industry at Vodacom Tanzania and prior to that in the mining industry at Barrick Gold.

# What attracted you to the role and the Company?

PAET's mission and plans attracted me to the Company. Being involved in the contribution to national power generation and being a part of the Company's success story.

I love being challenged and I am a passionate problem solver. It feels refreshing getting things done in a timely manner, whilst continuing to learn.

# How long have you worked for PAET and how have you progressed through the Company?

I am in my 11th year since joining PAET. Despite the number of years working for the Company, I still feel motivated, every day feels like the first day.

PAET provides opportunities to develop its employees skills by investing in training, in-house coaching and the Company has internal policies to promote within where possible. I am a living example of this. Over the past 11 years I have had the opportunity to work in three different job roles. I joined as an Executive Assistant, responsible for administrative activities such as taking minutes at meetings, creating action points and following up on these points until completion, amongst various other tasks.

In 2012, an Office Administration Manager role became available, I felt that my skills had developed, and I was well suited to the role. I was successful and promoted to this position which came with additional responsibilities, including further administrative tasks, a responsibility to manage office supplies along with a logistical element; looking after expats' housing, flights, hotels and vehicle and driver management.

In 2013, PAET had a change in management, which lead to an internal restructure. A new Logistics Manager role was created. The exposure that I had in my previous two roles along with my work ethic pushed me to apply for the post, I was successful.

In each role, PAET has given me the opportunity to progress both within the Company and at a personal level. I am grateful for the trust and willingness that the Company has given me, to invest in myself.

# Can you give an example of your daily activities?

My daily activities start with toolbox meetings with the operations team where I identify logistical needs against projected projects, along with reviewing what is in the pipeline. The planning process of this includes advising departmental managers on the best modes of transport based on the environment and cost efficiency versus the needs at the field. Lalso coordinate the collection and shipping of PAET orders and the movement of personnel, whilst adhering to the rules and regulations governing the imports and exports of both. I am able to manage all activities, which is also down to the highly skilled and cooperative team around me.

# What is the most enjoyable part of your role?

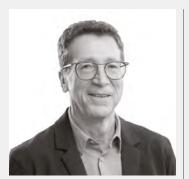
- Challenge Every task comes with a new challenge, which ultimately leads to new knowledge, improving my skills and growing with each. These challenges make me look forward to coming to work each day.
- Fitting pieces of the puzzle together and accomplishing tasks in a timely manner. These make my job enjoyable and satisfying.
- · Working as part of a team.

# Do you feel supported and valued by the Company?

Yes, I do feel trusted, valued and supported.

This trust has given me the opportunity to lead the Logistics Department. I feel valued when listened to, particularly in my area of expertise. Decisions are made based on the guidance I provide.

#### Our Workforce



Jay Lyons
Executive Director
Chief Executive Officer

Appointed 2019

#### Experience

Jay Lyons joined the Company in May 2019 as a Non-Executive Director and took on the role of Interim Chief Executive Office in 2020 and Chief Executive Officer in June 2021. Jay is a private investor with considerable experience in the oil and gas industries in both Canada and the United States. He has worked in a range of roles for both private and public companies in the upstream and downstream sectors. Jay has a strong familiarity and understanding of the Songo Songo project and the Tanzanian operating environment.



Lisa Mitchell
Chief Financial Officer

Appointed 2021

#### Experience

Lisa Mitchell joined the Company as Chief Financial Officer in November, 2021. Lisa was the CFO and Executive Director of San Leon Energy plc (AIM: LSE), a Nigeria focused oil and gas company listed in London, and previously the CFO and Executive Director of Lekoil Limited (AIM: LEK), an Africa focused oil and gas Company with interests in Nigeria. Lisa has also held senior roles at Ophir Energy plc (LSE: OPHR), a former FTSE 250 energy Company, CSL Limited (ASX top 50) and Mobil Oil Australia.

Lisa is a FCPA (Australia) and holds a Bachelor of Economics from La Trobe University, Melbourne and a Graduate Diploma in Applied Corporate Governance from the Governance Institute of Australia.



Andrew Hanna MBE
Managing Director
PanAfrican Energy Tanzania
Limited

Appointed 2012

#### Experience

Andrew Hanna has worked with Orca and PAET in various management roles for the past ten years, being appointed Managing Director of PAET in 2019. He joined the Company following a career in the public sector where he led engineering, logistics and security projects around the world. Since joining, he has played an integral role in the development and delivery of strategic and operational plans for PAET, while taking a lead role in the management of complex senior stakeholder issues in Tanzania. Andrew has a strong background in electronic and civil engineering and has a Master's Degree in Military Science from Cranfield University. He is a Fellow of the Chartered Management Institute and a Member of the Institute of Royal Engineers.

Andrew is pursuing a Master's in Business Administration, specializing in Oil and Gas Management, through Robert Gordon University, Aberdeen.



Lloyd Herrick Advisor to the Board and Management

Appointed 2020

#### Experience

Lloyd Herrick brings over four decades of international energy experience following a 20 year career at TransGlobe Energy Corporation ("TransGlobe") where he was Vice President, Chief Operating Officer and Director. Prior to TransGlobe, he served as President, Chief Executive Officer and member of the board of Moiibus Resource Corporation, which was acquired by TransGlobe. Earlier in his career, Lloyd worked at Ranger Oil Limited, holding technical, management and executive positions, and was a petroleum engineer with Rupertsland Resources Ltd. and Hudson's Bay Oil & Gas Ltd.

During his time as a member of the TransGlobe executive team and board, Lloyd acquired a wealth of experience in direct government negotiations, including concession agreement amendments and extensions to achieve optimum resource development.

# **Tanzanian Management Team**

#### We remain focused on ensuring our workforce and leadership teams reflect the community and culture where we operate.

Our operational workforce in 2021 remained at 99% local staff, with 27% of our in-country management team being female. We are proud of our continued progress in diversifying our workforce, something that we monitor regularly.

We celebrate our workers and their dedication to achieving excellence, which has led to the success of PAET and the Songo Songo Gas to Electricity Project. It is through their professionalism, skill and diligence that we are able to continue to raise our standards and quality.

#### Welcoming Mwinshehe Said to the PAET Board of Directors

CPA Mwinshehe Said has been the Finance Director of PanAfrican Energy Tanzania Limited since he joined the Company in 2004. He is a professional accountant, having spent over 29 years in the fields of accounting, assurance, taxation and advisory services. Before joining PanAfrican Energy, Mwinshehe was privileged to have worked with a multinational assurance and accounting firm, and later a telecom company in different territories including Mauritius, Saudi Arabia, Botswana and, of course, at home in Tanzania. As a Finance Director, he is responsible for the day to day running of the finance operations of PAET, which include ensuring compliance to all statutory, IFRS and contractual requirements and financial stewardship. His role involves working with several stakeholders, including government regulators, tax authorities, contracting partners, statutory auditors and contractors amongst others. Mwinshehe holds first degrees in Accounting and Law, and a Master of Science degree in Finance from the University of Strathclyde. He is also a Certified Public Accountant in Public Practice by the Tanzanian National Board of Accountants and Auditors (NBAA).

Mwinshehe has a passion in delivering quality work in all his engagements and responsibilities. He is achieving this by developing and empowering his team members to deliver their best whilst also ensuring full compliance to applicable laws, standards and regulations. He sets time for his family and friends and for his interest in walking, reading and watching football.

# The Company is proud to maintain an in-country workforce of 99% local Tanzanian staff



**Bizimana Ntuyabaliwe** Deputy Managing Director



**Mwinshehe Said** Finance Director



Shuli Mrengo HSE Manager



Stella Ndossi Logistics Manager



Rehema Shija Local Content Compliance Manager



**Gasper Mkomba** HR/Office Manager



**Peter Sololo** Operations Manager



Andrew Kashangaki CSR/ESG Manager



Sabas Oisso Downstream Manager



**Ritha Mohele** Legal and Document Control Manager



John Samwel Downstream Stakeholder Relations

#### **Board of Directors**



David W. Ross
Chairman
Non-Executive Director and
Chair of Remuneration/
Compensation Committee

#### Appointed 2004

#### Experience

David Ross has extensive experience in international tax law and is a partner in the Calgary-based law firm of Burnet Duckworth & Palmer. He has served as Secretary to the Board since the Company was formed in 2004.



Jay Lyons
Executive Director
Chief Executive Officer and
Chair of Reserves Committee

#### Appointed 2019

#### Experience

Jay Lyons joined the Company in May 2019 as a Non-Executive Director and took on the role of Interim Chief Executive Office in 2020 and Chief Executive Officer in June 2021. Jay is a private investor with considerable experience in the oil and gas industries in both Canada and the United States. He has worked in a range of roles for both private and public companies in the upstream and downstream sectors. Jay Lyons has a strong familiarity and understanding of the Songo Songo project and the Tanzanian operating environment.



Dr Frannie Léautier
Non-Executive Director
Chair of ESG Committee

#### Appointed 2019

#### Experience

Dr Léautier is a globally respected development expert and has extensive African and global experience in the public and private sectors. Dr Léautier is a Senior Partner at SouthBridge Group, she is also the Founder and Managing Partner of the Fezembat Group and was previously Senior Vice President of the African Development Bank, where she led efforts to improve the bank's overall operational effectiveness. Other roles include: Chief Operating Officer for the Trade and Development Bank based in Nairobi, Infrastructure Director, World Bank Vice President and Head of the World Bank Institute.

Dr Léautier holds a PhD in Infrastructure Systems and a Master's in Transportation from the Massachusetts Institute of Technology.

Linda Beal
Non-Executive Director
Chair of Audit and Risk
Committee

#### Appointed 2019

#### Experience

Linda Beal was a tax partner with PricewaterhouseCoopers in the UK for 16 years and then with Grant Thornton UK LLP. Linda has significant experience of advising natural resources groups operating in Africa and internationally.

# Committee Membership A RC R

#### Committee membership key

- A Audit and Risk Committee
- E ESG Committee
- Remuneration/

Compensation Committee

R Reserves Committee

# Committee Membership

R E

## Experience

- Oil & Gas
- Finance
- Developing Economies
- Engineering

# Committee Membership

A E

#### **Committee Membership**



# Infrastructure

- Management
- Mergers & Acquisitions
- Project Finance

## How we manage our Company

#### The Board

- Provides independent oversight that ensures the integrity of the business
- Provides the Company with strategic direction
- Responsible for monitoring risk management framework for the Company

## **Executive Management**

- Responsible for managing the Company's core operation at the Songo Songo field
- Delivering value for all stakeholders
- Ensure the successful implementation of the Company's corporate strategy

#### Audit and Risk Committee

- Responsible for providing oversight of the financial reporting process
- Provide independent assessment of audit process
- Ensure compliance with laws and regulations
- Responsible for overseeing the management of internal controls and risk management

#### **ESG Committee**

- Ensures best in class ESG principles are adopted
- Provides guidance for the implementation of ESG principles
- Provides a systems check on safety, environmental and governance associated risks

#### Remuneration/ Compensation Committee

 Reviews and decides the overall remuneration of Executive Management and other key employees

#### **Reserves Committee**

- Reviews the Company's procedures to ensure that disclosure of reserves complies with security regulation
- Meets with the independent reserves evaluator to determine there have been no restrictions placed by management on the ability to report the reserves and associated valuations
- Ensure oversight of the Songo Songo gas field reserves and to review associated reservoir and technical risk associated with extraction of reserves and the ability to report the reserves and associated valuations

#### Board structure and diversity

We believe our Board and management have a critical role to play in driving our sustainability strategy and the solutions to meet the expectations of our stakeholders.

#### **ESG** oversight

Given the combination of our local presence, global leadership, and exposure to complex sustainability factors, having oversight of ESG from the Board is fundamental for driving our strategy. We have a dedicated ESG Committee that is responsible for overseeing the Company's strategies, policies and practices when it comes to sustainability. The Committee's responsibilities and primary duties are outlined in the Mandate and Terms of Reference for Orca's ESG Committee, which are available on request. The responsibilities of the Committee include the review and oversight of ESG and sustainability related matters as it relates to:

- Policies and strategies.
  - Performance, communications, and engagement.
- Oversight of ESG risk management as well as proper interface with other committees.

The committee is headed by Dr Frannie Léautier.

#### Forward Looking Information Statement

This annual report contains forward-looking statements or information (collectively, "forward looking statements") within the meaning of applicable securities legislation.

More particularly, this annual report contains, without limitation, forward looking statements pertaining to: the Company's expectations regarding timing for commencing the 3D seismic acquisition program; the Company's ability to obtain a license renewal beyond 2026; the expected expenditures required to complete the installation of the compression on the Songas infrastructure; increased production potential as a result of the installation of compression on the Songas infrastructure; the expected increase in demand for gas; the expected timing for completing the three well workover program; increased production potential as a result of the well workover program; the Company's expectations regarding average gross gas sales; the Company's expectations regarding timing for the commissioning of new power generation facilities; the Company's targets and ability to reduce its environmental impact and the emission intensity of its operations; the Company's belief that it is positioned to meet increases in demand; the Company's beliefs regarding its position for growth; the Company's ability to maintain a regular dividend; the Company's ability to access infrastructure and increase processing capacity; the role of natural gas in achieving Tanzania's goal of a low carbon economy; the impact of the COVID-19 pandemic on the demand for and price of natural gas, volatility in the 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; the Company's beliefs regarding its position to overcome current macroeconomic challenges; the Company's ability to enter into gas sales agreements with new industrial customers; Tanzania's growth plans; the increase in CNG fuel stations over the next one to three years; and the Company's plans to consider setting net-zero GHG emission goals. 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 therein 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, 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. Additionally, 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. Please see the disclosure under the headings "Business Risks" and "Forward Looking Statements" in the Company's Management's Discussion & Analysis ("MD&A") for the year ended December 31, 2021 filed on www.sedar.com and contained in the Company's annual report for a discussion of such risks, uncertainties, and assumptions.

The forward-looking statements contained in this annual report are made as of the date hereof and the Company undertakes no obligation to update publicly or revise any forward-looking statements or information, whether as a result of new information, future events or otherwise, unless so required by applicable securities laws.

#### Oil and Gas Advisory

The recovery and reserves 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. All of the reserves presented herein are conventional natural gas reserves. "BOEs" may be misleading, particularly if used in isolation. A BOE conversion ratio of six thousand cubic feet of natural gas to one barrel of oil equivalent (6 Mcf: 1 Bbl) is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead. As the value ratio between natural gas and crude oil based on the current prices of natural gas and crude oil is significantly different from the energy equivalency of 6:1, utilizing a conversion on a 6:1 basis may be misleading as an indication of value. 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. Such amounts do not represent the fair market value of the Company's reserves. All of the reserves referenced herein are based on McDaniel's forecast pricing as at December 31, 2021 and December 31, 2020, as applicable. For certainty, all references herein to "production", "gross daily sales", "gas sales", "Additional Gas sales" and "Protected Gas Sales" are references to conventional natural gas production, conventional natural gas daily sales, conventional natural gas sales and conventional natural gas sales, which are classified as Additional Gas or Protected Gas in accordance with the PSA, respectively. The PSA defines the gas produced from the SS 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 and Tanzania Portland Cement PLC. Songas is the owner of the infrastructure that enables the gas to be processed and delivered to Dar es Salaam, which includes a gas processing plant on SS Island. Additional Gas is all gas that is produced from the SS gas field in excess of Protected Gas.

#### Non-GAAP Measures

This annual report contains non-GAAP financial measures, non-GAAP ratios and supplementary financial measures. Readers are cautioned that this annual report should be read in conjunction with the disclosure contained under the heading "Non-GAAP Financial Measures and Ratios", included in the MD&A, which information is incorporated by reference herein.



#### Management's Discussion & Analysis

#### THIS MANAGEMENT'S DISCUSSION AND ANALYSIS ("MD&A") OF OUR FINANCIAL CONDITION AND RESULTS OF OPERATIONS

SHOULD BE READ IN CONJUNCTION WITH THE AUDITED CONSOLIDATED FINANCIAL STATEMENTS AND NOTES FOR THE YEAR ENDED DECEMBER 31, 2021. THIS MD&A IS BASED ON THE INFORMATION AVAILABLE ON APRIL 20, 2022. ALL AMOUNTS ARE REPORTED IN US DOLLARS ("\$") UNLESS OTHERWISE NOTED.

THIS MD&A CONTAINS NON-GAAP FINANCIAL MEASURES AND RATIOS AND FORWARD-LOOKING INFORMATION. READERS ARE CAUTIONED THAT THIS MD&A SHOULD BE READ IN CONJUNCTION WITH THE DISCLOSURE BELOW UNDER THE HEADINGS "NON-GAAP FINANCIAL MEASURES AND RATIOS", "FORWARD-LOOKING STATEMENTS" AND "GLOSSARY" INCLUDED AT THE END OF THIS MD&A.

#### **Nature of Operations**

The principal asset of Orca Energy Group Inc. ("Orca" or the "Company") is its interest in the Production Sharing Agreement ("PSA") with the Tanzanian Petroleum Development Corporation ("TPDC") and the Government of Tanzania ("GoT") in the United Republic of Tanzania. This PSA covers the production and marketing of natural gas from the Songo Songo license offshore Tanzania. 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 ("TPCPLC"). Songas is the owner of the infrastructure that enables the gas to be treated and delivered to Dar es Salaam, which includes a gas processing plant on Songo Songo Island (collectively, the "Songas Infrastructure").

Songas utilizes the Protected Gas as fuel for its gas turbine electricity generators and for onward sale to customers while TPCPLC uses the Protected Gas to fire kilns for the production of cement. A small amount of Protected Gas is also reserved for village electrification. The Company receives no revenue for the Protected Gas delivered to Songas or other recipients and operates the original wells and gas processing plant on a 'no gain no loss' basis. Under the PSA, the Company has the right to produce and market all gas in the Songo Songo gas field in excess of the Protected Gas requirements set forth in the PSA ("Additional Gas") until the PSA expires in October 2026.

The Tanzanian Electric Supply Company Limited ("TANESCO") is a parastatal organization wholly owned by the GoT with oversight by the Ministry of Energy ("MoE"). TANESCO is responsible for the majority of electricity generation, transmission and distribution throughout Tanzania. Natural gas has become an integral component of TANESCO's power generation fuel mix as a more reliable source of supply over seasonal hydropower as well as a more cost-effective and lower CO2 intensive alternative to liquid fuels. The Company and TPDC as joint sellers currently supply Additional Gas directly to TANESCO by way of the Portfolio Gas Supply Agreement ("PGSA") and indirectly through the supply of Protected Gas and Additional Gas to Songas, which in turn generates and sells power to TANESCO. The Company also supplies Additional Gas to TPDC through a long-term gas sales agreement ("LTGSA") utilizing the National Natural Gas Infrastructure ("NNGI"). The gas the Company supplied during 2021 to Songas, TANESCO and TPDC generated approximately 45% (2020: 40%) of the electrical power and approximately 63% (2020: 66%) of all gas utilized for power generation in Tanzania.

In addition to supplying gas to TPDC, Songas and TANESCO, the Company has developed over 50 contracts to supply gas to Dar es Salaam's industrial market and is in the process of negotiating several more.

#### Outlook - COVID-19

There has been no significant change in the Company's business during 2021 as a result of the ongoing coronavirus pandemic ("COVID-19"). The Tanzanian government introduced new restrictions and started a vaccination program in an effort to control the spread of COVID-19 however given the steps already taken by the Company, while logistic supply chains have been stretched and delays incurred no significant impact on our operations or business results were experienced as a result of the new restrictions. The current situation is dynamic and the ultimate duration and magnitude of the impact on the Tanzanian economy and the financial effect on the Company are not known at this time.

There was a decrease in industrial sales in 2020 during the commencement of COVID-19 however there has not been a significant impact on Company operations in 2021. The Company took precautions including testing before allowing workers on site and limiting the number of people in the office at any one time and allowing employees to work from home. More recently the Company has returned to normal working practices, although lateral flow testing remains in place for visitors to the operational site on Songo Songo Island.

Estimates and judgments made by management in the preparation of these consolidated financial statements are subject to a higher degree of measurement uncertainty during this volatile period. The current volatility in commodity prices and uncertainty regarding the timing for recovery creates inherent challenges with the preparation of financial forecasts (see "Business Risks").

# Financial and Operating Highlights for the Three Months and Year Ended December 31, 2021

	Three Mo		% Change	Year ended December 31		% Change
-			Q4/21 vs			Ytd/21 vs
(Expressed in \$'000 unless indicated otherwise)	2021	2020	Q4/20	2021	2020	Ytd/20
OPERATING						
Daily average gas delivered and sold (MMcfd)	71.1	62.8	13%	61.1	57.7	6%
Industrial	14.9	12.4	20%	13.4	12.7	6%
Power	56.2	50.4	12%	47.7	45.0	6%
Average price (\$/mcf)						
Industrial	8.58	7.56	13%	8.09	7.44	9%
Power	3.41	3.52	(3)%	3.47	3.47	0%
Weighted average	4.50	4.32	4%	4.48	4.34	3%
Operating netback (\$/mcf) <sup>1</sup>	3.08	3.22	(4)%	2.93	2.85	3%
FINANCIAL						
Revenue	24,819	21,980	13%	86,022	77,874	10%
Net income attributable to shareholders	1,548	7,375	(79)%	16,370	27,761	(41)%
per share - basic and diluted (\$)	0.08	0.28	(71)%	0.81	1.00	(19)%
Net cash flows from operating activities	18,521	19,369	(4)%	40,110	46,505	(14)%
per share - basic and diluted (\$)1	0.93	0.74	26%	1.97	1.67	18%
Capital expenditures	12,496	16,315	(23)%	26,610	27,141	(2)%
Weighted average Class A and Class B shares ('000)	19,969	26,138	(24)%	20,317	27,818	(27)%
					As at	
			D€	ecember 31, De 2021	cember 31, 2020	% Change
Working capital (including cash) <sup>1</sup>				41,776	74,236	(44)%
Cash and cash equivalents				72,985	104,190	(30)%
Long-term loan				49,603	54,246	(9)%
Outstanding shares ('000)				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Class A				1,750	1,750	0%
Class B				18,203	24,388	(25)%
Total shares outstanding				19,953	26,138	(24)%
RESERVES <sup>2</sup>						
Gross Reserves (Bcf)						
Proved				160	203	(21)%
Probable				28	27	4%
Proved plus probable				188	230	(18)%
Net Present Value, discounted at 10% (\$ million) <sup>3</sup>				100	200	(10)/10
Proved				178	216	(18)%
Proved plus probable				210	241	(13)%

Please refer to the Non-GAAP Financial Measures and Ratios section of the MD&A for additional information.

 $<sup>^{2}\,\,</sup>$  Please refer to the Oil and Gas Advisory section of the MD&A for additional information.

In accordance with the PSA with the TPDC and the GoT in the United Republic of Tanzania, the Company is able to recover income tax and consequently there is no significant difference between the NPV of reserves on a before and after tax basis. Any capitalized terms otherwise not defined within the Financial and Operating Highlights are defined in the MD&A.

#### Financial and Operating Highlights for 2021 and Q4 2021

- Revenue increased by 13% for Q4 2021 and by 10% for the year ended December 31, 2021 compared to the same prior year periods. The increase for Q4 2021 was primarily a result of the increased sales to the industrial sector. The increase for the year ended December 31, 2021 was a result of the increased sales to both the industrial sector and power sector. Gas deliveries increased by 13% for Q4 2021 and by 6% for the year ended December 31, 2021 compared to the same prior year periods. The Q4 2021 increase is due to the 20% increase in gas deliveries to the industrial sector and the 12% increase in gas deliveries to the power sector. The increase for the year ended December 31, 2021 reflects the increase in gas deliveries of 6% to both the power and the industrial sector.
- Net income attributable to shareholders decreased by 79% for Q4 2021 and by 41% for the year ended December 31, 2021 compared to the same prior year periods. The decreases are primarily related to decreases in the reversal of loss allowances related to the lower collection of arrears from TANESCO.
- Net cash flows from operating activities decreased by 4% for Q4 2021 and by 14% for the year ended December 31, 2021 compared to the same prior year periods, primarily reflecting the changes in net income and non-cash working capital.
- Capital expenditures decreased by 23% for Q4 2021 and by 2% for the year ended December 31, 2021 compared to the same prior year periods. The capital expenditures in 2021 primarily relate to the continuation of the compression project and the commencement of the well workover program for the SS-3, SS-4 and SS-10 wells. The capital expenditures in 2020 primarily related to the flowline decoupling project and the compression project. The Company installed feed gas compression on the Songas gas processing facility to allow production volumes through the Songas Infrastructure to be sustained at approximately 102 MMcfd in the near term (3-5 years). The drilling rig was released on April 8, 2022 having completed the planned three well (SS-3, SS-4 and SS-10) workover program. The \$31.6 million program included the reactivation of the SS-3 and SS-4 wells along with the installation of corrosion resistant production tubing on all three of the wells. The SS-3 well was placed on production on February 15, 2022 and the SS-10 well was returned to production on April 18, 2022 after a 36 day shut in period to accommodate the installation of down hole sand mitigation equipment and replacement production tubing. The SS-4 well remains shut in following the drilling and completion of a planned side-track wellbore to replace the original wellbore, which had been compromised by excessive sand production. Currently the SS-4 well is unable to flow naturally due to suspected excessive liquid loading associated with extensive circulating time while waiting on necessary services and equipment. The Company is sourcing a coiled tubing nitrogen unit to safely unload the excess liquid, potentially allowing the well to flow naturally. Subject to logistics and transportation from Poland, it is expected the coiled tubing equipment will be on location in Q3 2022. Together with compression facilities, and subject to demand volumes and associated natural reservoir pressure decline, the current well stock now provides the opportunity to initially increase production potential to within a range of 150 MMcfd to 160 MMcfd by also producing through the adjacent NNGI facilities on Songo Songo Island. If successful in lifting fluids from the SS-4 well, production potential will further increase.
- The Company exited the period in a strong financial position with \$41.8 million in working capital (December 31, 2020: \$74.2 million), cash and cash equivalents of \$73.0 million (December 31, 2020: \$104.2 million) and long-term debt of \$49.6 million (December 31, 2020: \$54.2 million). The decrease in working capital, cash and cash equivalents was primarily related to the substantial issuer bid completed in January 2021 ("2021 SIB") and the reclassification of \$5.0 million of long-term debt into current liabilities as it becomes due in 2022.
- Total proved conventional natural gas reserves ("1P") and total proved plus probable conventional natural gas reserves ("2P") decreased by 21% and 18%, respectively, at December 31, 2021 compared to the prior year. The decrease is due to gross property Additional Gas production in 2021 of 22.0 Bcf (2020: 21.1 Bcf) and lower forecasted sales over the remaining life of the Songo Songo license, predominately due to the delay in new power plants coming on stream. The net present value of estimated future cash flows from 2P reserves at a 10% discount rate decreased by 13% compared to the previous year. This is mainly the result of the decrease in the time remaining to the end of the Songo Songo license together with a moderate increase in forecasted capital costs. The reserves and estimated future cash flows are based on forecasted gross property 1P Additional Gas sales volumes of 77.1 MMcfd for 2022 compared to actual results of 71.1 MMcfd for Q4-2021. Under the terms of the PSA, the Company is required to pay Tanzanian income tax which is fully recovered through the profit sharing arrangements with TPDC. Income tax has no material impact on the cash flows emanating from the PSA and accordingly there is no significant difference between the net present value of reserves on a before and after tax basis.
- As at December 31, 2021 the current receivable from TANESCO was \$2.0 million (December 31, 2020: \$ nil). TANESCO's long-term trade
  receivable as at December 31, 2021 was \$26.5 million with a provision of \$26.5 million compared to \$27.6 million (provision of \$27.6 million)
  as at December 31, 2020. Subsequent to December 31, 2021 TANESCO paid the Company \$8.2 million and the Company invoiced TANESCO
  \$5.5 million for 2022 gas deliveries.
- On February 23, 2021, June 4, 2021, September 9, 2021 and November 19, 2021 the Company declared dividends of CDN\$0.10 per share on each of its Class A common voting shares ("Class A Shares") and Class B subordinate voting shares ("Class B Shares") for a total of \$6.4 million to the holders of record as of March 31, 2021, June 30, 2021, September 29, 2021 and December 31, 2021 (paid on April 15, 2021, July 15, 2021, October 15, 2021 and January 14, 2022, respectively).

#### Financial and Operating Highlights for 2021 and Q4 2021 cont.

- On January 22, 2021 the Company announced the final results of the 2021 SIB whereby the Company repurchased and cancelled 6,153,846 Class B Shares at a price of CDN\$6.50 per Class B Share representing an aggregate purchase price of CDN\$40.0 million and 25.2% of the total number of the Company's issued and outstanding Class B Shares and 23.5% of the total number of the Company's issued and outstanding shares.
- On June 21, 2021 the Company commenced a normal course issuer bid ("NCIB") to purchase Class B Shares through the facilities of the
  TSXV and alternative trading systems in Canada. Purchases pursuant to the NCIB will not exceed 500,000 Class B Shares, representing
  approximately 2.74% of the total outstanding Class B Shares. The NCIB will be in effect until June 21, 2022 (or until such time as the maximum
  number of Class B Shares have been purchased). As at April 20, 2022, 41,200 Class B Shares have been purchased and canceled by the
  Company pursuant to the NCIB.
- On February 24, 2022 the Company declared a dividend of CDN\$0.10 per share on each of its Class A Shares and Class B Shares for a total of \$1.6 million to the holders of record as of March 31, 2022 paid on April 15, 2022.
- 2022 production started strongly, with gross sales of Additional Gas averaging 74 MMcfd in January.
- The Company forecasts average gross gas sales of 70-76 MMcfd during 2022 representing a 10 MMcfd, or approximately 16%, increase to the prior forecasts of 60-66 MMcfd. The increased gas demand forecast is primarily driven by encouraging discussions with the MoE, TPDC and TANESCO to increase gas supply to new power generation facilities expected to be commissioned in 2022.

# Oil and Gas Advisory

The Company's conventional natural gas reserves as at December 31, 2021 disclosed herein were evaluated by McDaniel & Associates Consultants Ltd. ("McDaniel"), independent petroleum engineering consultants, 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 independent reserves evaluations prepared by McDaniel had an effective date of December 31, 2021 and December 31, 2020 and preparation date of February 24, 2022 and February 23, 2021 respectively. All of the reserves presented herein are conventional natural gas 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 administrative costs, but after providing for estimated royalties, production costs, development costs, other income and future capital expenditures for only those wells assigned reserves by McDaniel. 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. 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. All of the reserves referenced herein are based on McDaniel's forecast pricing as at December 31, 2021 and December 31, 2020, as applicable.

All the Company's reserves are located in Tanzania. Reserves included herein are stated on a Company gross reserves basis unless noted otherwise. Company gross reserves are the total of the Company's working interest share in reserves before deduction of royalties owned by others and without including any royalty interests of the Company, and are based on the Company's 92.07% ownership interest in the reserves following the transaction with Swala Oil & Gas (Tanzania) plc. Additional reserves information required under NI 51-101 is included in Orca's reports relating to reserves data and other oil and gas information under NI 51-101, which are filed on its profile on SEDAR at www.sedar.com.

"BOEs" may be misleading, particularly if used in isolation. A BOE conversion ratio of six thousand cubic feet of natural gas to one barrel of oil equivalent (6 Mcf: 1 Bbl) is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead. As the value ratio between natural gas and crude oil based on the current prices of natural gas and crude oil is significantly different from the energy equivalency of 6:1, utilizing a conversion on a 6:1 basis may be misleading as an indication of value.

For certainty, all referenced herein to "production", "gross daily sales", "gas sales" and "Additional Gas sales" are references to conventional natural gas production, conventional natural gas daily sales, conventional natural gas sales and conventional natural gas sales, which are classified as Additional Gas in accordance with the PSA, respectively.

### **Operating Volumes**

The average gross daily sales volume increased by 13% for Q4 2021 and by 6% for the year ended December 31, 2021 over the comparable prior year periods. The increase in gross sales volume was primarily due to increased sales to both the power and the industrial sectors.

The Company's gross sales volumes were split between the Industrial and Power sectors as detailed in the table below:

		Three Months ended December 31		ded er 31
	2021	2020	2021	2020
Gross sales volume (MMcf)				
Industrial sector	1,371	1,137	4,882	4,633
Power sector	5,168	4,640	17,430	16,484
Total volumes	6,539	5,777	22,312	21,117
Gross daily sales volume average (MMcfd)				
Industrial sector	14.9	12.4	13.4	12.7
Power sector	56.2	50.4	47.7	45.0
Gross daily sales volume average total	71.1	62.8	61.1	57.7

#### **Industrial Sector**

Industrial sector gross daily sales volumes increased by 20% for Q4 2021 and by 6% for the year ended December 31, 2021 over the comparable prior year periods. The increases were a result of increased consumption due to an overall increase in demand for services and products and by an increase in the number of industrial customer contracts entered into during the year.

### **Power Sector**

Power sector sales gross daily sales volumes increased by 12% for Q4 2021 and by 6% for the year ended December 31, 2021 over the comparable prior year periods. The increases were primarily due to increased gas sales to TPDC though the NNGI.

# **Protected Gas Volumes**

Protected Gas volumes increased by 16% to 3,854 MMcf (41.9 MMcfd) for Q4 2021 compared to 3,335 MMcf (36.3 MMcfd) for Q4 2020 and by 9% to 13,255 MMcf (36.3 MMcfd) for the year ended December 31, 2021 compared to 12,138 MMcf (33.2 MMcfd) for the year ended December 31, 2020. The Company receives no revenue for Protected Gas volumes, however the volumes are required to calculate total gas produced from the reservoir and the allocation of certain production, distribution and transportation expenses between Protected Gas and Additional Gas.

# **Commodity Prices**

The commodity prices achieved in the different sectors during the year are detailed in the table below:

\$/mcf		Three Months ended December 31		Year ended December 31	
	2021	2020	2021	2020	
Average sales price					
Industrial sector	8.58	7.56	8.09	7.44	
Power sector	3.41	3.52	3.47	3.47	
Weighted average price	4.50	4.32	4.48	4.34	

### Commodity Prices cont.

#### **Industrial Sector**

The average industrial sales price increased by 13% for Q4 2021 and by 9% for the year ended December 31, 2021 over the comparable prior year periods. The increase in prices is primarily due to the underlying increase in the price of heavy fuel oil against which most of the industrial customer contracts are priced.

#### **Power Sector**

The average power sector sales price decreased by 3% for Q4 2021 and remained unchanged for the year ended December 31, 2021 compared to the same prior year periods. The average power sector sales price varies depending on whether gas is delivered and sold through the NNGI or the Songas Infrastructure. Sales through the NNGI are to TPDC and do not include processing and transportation tariffs which are included in gas delivered through the Songas Infrastructure.

#### Revenue

Under the terms of the PSA the Company is responsible for invoicing, collecting and allocating the revenue from Additional Gas sales (See "Principal Terms of the PSA and Related Agreements").

The Company is entitled to recover all costs incurred on the exploration, development and operations of the project ("Cost Gas revenue") up to a maximum of 75% of the net field revenue (gross field revenue less the tariff for processing and pipeline infrastructure) prior to allocating the remaining net field revenue between TPDC and the Company ("Profit Gas revenue"). Any costs not recovered in a period are carried forward for recovery out of future revenues. Once the Cost Gas revenue has been recovered, TPDC is able to recover any pre-approved marketing costs. Currently there are no pre-approved marketing costs for TPDC.

The reconciliation of gross field revenue to Company operating revenue and revenue is detailed below:

	Three Months Decembe		Year end Decembe	
\$'000	2021	2020	2021	2020
Industrial sector	11,764	8,589	39,477	34,485
Power sector	17,649	16,347	60,445	57,267
Gross field revenue	29,413	24,936	99,922	91,752
TPDC share of revenue	(6,010)	(2,822)	(22,285)	(19,685)
Company operating revenue	23,403	22,114	77,637	72,067
Current income tax adjustment	1,416	(134)	8,385	5,807
	24,819	21,980	86,022	77,874

Revenue increased by 13% for Q4 2021 and by 10% for the year ended December 31, 2021 over the comparable prior year periods. The increases are primarily a result of increased sales to both the industrial and the power sectors together with increase in the weighted average price in relation to sales to the industrial sector.

The average Additional Gas sales volumes for the quarters and for the years ended December 31, 2021 and December 31, 2020 were above 50 MMcfd, which entitled the Company to a 55% share of Profit Gas revenue. The Company was allocated a total of 76% of the Additional Gas net field revenue for Q4 2021 (Q4 2020: 88%) and a total of 75% of the Additional Gas net field revenue for the year ended December 31, 2021 (year ended December 31, 2020: 77%).

### Production, Distribution and Transportation Expenses

The production, distribution and transportation costs are detailed in the table below:

\$'000	Three Months ended  December 31		Year ended December 31	
	2021	2020	2021	2020
Operating costs	560	844	2,042	2,539
Tariff for processing and pipeline infrastructure	2,437	2,056	8,222	7,009
Ring-main distribution costs	259	620	1,989	2,356
	3,256	3,520	12,253	11,904

Included in operating costs are well maintenance costs, PSA license costs, regulatory fees, insurance, certain costs associated with evaluation of the reserves and the costs of personnel not recoverable from Songas. Operating costs are allocated between Protected Gas (recoverable from Songas) and Additional Gas in proportion to their respective volumes during the period. Operating costs decreased by 34% for Q4 2021 and by 20% for the year ended December 31, 2021 compared to the same prior year periods, primarily due to decreased expenditure on reserve and resource evaluation. The amount paid under the tariff for processing and pipeline infrastructure increased by 19% for Q4 2021 and by 17% for the year ended December 31, 2021 compared to the same prior year periods, primarily as result of increased volumes processed and delivered through the Songas Infrastructure. Ring-main distribution costs decreased by 58% for Q4 2021 and by 16% for the year ended December 31, 2021 compared to the same prior year periods, primarily as a result of reduced spending on expansion and lower maintenance costs associated with the ring-main which transports the gas primarily to industrial customers.

# **Operating Netback**

The operating netback per mcf before general and administrative expenses, tax and APT is detailed in the table below (see "Non-GAAP financial measures and ratios"):

	Three Months December		Year ended December 31	
\$/mcf	2021	2020	2021	2020
Gas price - Industrial	8.58	7.56	8.09	7.44
Gas price - Power	3.41	3.52	3.47	3.47
Weighted average price for gas	4.50	4.32	4.48	4.34
TPDC Profit Gas entitlement	(0.92)	(0.49)	(1.00)	(0.93)
Production, distribution and transportation expenses	(0.50)	(0.61)	(0.55)	(0.56)
Operating netback	3.08	3.22	2.93	2.85

The operating netback decreased by 4% for Q4 2021 and increased by 3% for the year ended December 31, 2021 over the comparable prior year periods. The decrease in Q4 2021 is the result of lower capital expenditure than in Q4 2020 resulting in a higher TPDC Profit Gas entitlement, partially offset by the increase in gas prices to the industrial sector. The increase for the year ended December 31, 2021 over the comparable prior year period is mainly due to the increase in gas price to the industrial sector.

#### **General and Administrative Expenses**

General and administrative expenses are split between the Company's head office and Tanzania. A significant percentage of general and administration expenses relate to office and management costs that support the Company's operations in Tanzania and are cost recoverable under the PSA.

		Three Months ended December 31		
\$'000	2021	2020	2021	2020
Tanzania	1,891	2,184	6,946	7,052
Corporate	1,423	943	5,042	6,540
	3,314	3,127	11,988	13,592

General and administrative expenses are detailed in the table below:

		Three Months ended December 31		
\$'000	2021	2020	2021	2020
Employee and related costs	1,833	1,600	6,919	7,499
Office costs	785	1,206	2,716	4,006
Marketing and business development costs	327	130	967	879
Reporting, regulatory and corporate	369	191	1,386	1,208
	3,314	3,127	11,988	13,592

General and administrative expenses averaged \$1.1 million per month during Q4 2021 (Q4 2020: \$1.0 million) and \$1.0 million per month for the year ended December 31, 2021 (year ended December 31, 2020: \$1.1 million). The 8% decrease in employee and related costs for the year ended December 31, 2021 over the comparable prior year period was mainly due to termination payments to senior management in 2020. The 32% decrease in office costs for the year ended December 31, 2021 over the comparable prior year period was a result of the decision in Q3 2020 to focus on Tanzanian operations by reducing head office staff, office space and related costs. The 10% increase in marketing and business development costs for the year ended December 31, 2021 over the comparable prior year period was a result of expanding the corporate social responsibility program in Tanzania. The 15% increase in reporting, regulatory and corporate costs for the year ended December 31, 2021 over the comparable prior year period was due to increase in costs related to professional and legal services.

# **Stock Based Compensation**

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

	Three Months December	Year ended December 31		
\$'000	2021	2020	2021	2020
Stock appreciation rights ("SARs")	(123)	681	(585)	671
Restricted stock units ("RSUs")	24	146	9	403
	(99)	827	(576)	1,074

As at December 31, 2021 a total of 746,166 SARs were outstanding (December 31, 2020: 1,242,166). No new SARs were issued, 412,667 SARs were exercised, and 83,333 SARs were forfeited during 2021. As at December 31, 2021 a total of 76,366 RSUs were outstanding (December 31, 2020: 133,200). No new RSUs were issued, 47,501 RSUs were exercised, and 9,333 RSUs were forfeited during 2021.

As SARs and RSUs are settled in cash, they are re-valued at each reporting date using the Black-Scholes option pricing model with the resulting liability being recognized in trade and other liabilities. In the valuation of SARs and RSUs at the reporting date, the following assumptions have been made: a risk-free rate of interest of 1.0%, stock volatility of 26.6% to 37.8%, 5% forfeiture and a closing price of CDN\$5.40 per Class B Share. The valuation of outstanding SARs and RSUs awards is increased to reflect the dividends paid between the award date and the exercise date.

As at December 31, 2021 a total accrued liability of \$1.1 million (December 31, 2020: \$2.2 million) has been recognized in relation to SARs and RSUs. The Company recognized \$0.1 million for Q4 2021 as stock based compensation recovery (Q4 2020: \$0.8 million as stock based compensation expense) and \$0.6 million for the year ended December 31, 2021 as stock based compensation recovery (year ended December 31, 2020: \$1.1 million as stock based compensation expense).

# **Depletion and Depreciation**

Natural gas properties are depleted using the unit of production method based on the production for the period as a percentage of the total future production from the Songo Songo proved reserves. As at December 31, 2021 the estimated proved reserves remaining to be produced over the term of the PSA as determined by McDaniel in their report dated February 24, 2022 with an effective date of December 31, 2021 and prepared in accordance with NI 51-101 and the COGE Handbook were 160 Bcf (December 31, 2020: 203 Bcf). The average depletion rate was \$0.71/mcf for the year ended December 31, 2021 compared to \$0.69/mcf for the comparable prior year.

	Three Months ended December 31		Year ended December 31	
\$'000	2021	2020	2021	2020
Oil and natural gas interests	4,646	4,078	15,779	14,830
Office and other	6	11	37	94
Right-of-use assets	72	73	290	397
	4,724	4,162	16,106	15,321

The depletion charge for natural gas interests increased by 14% for Q4 2021 and by 6% for the year ended December 31, 2021 over the comparable prior year periods. The increases were due to increased gas produced and sold, additional capital expenditure, and a reduction in estimated proved reserves.

# Finance Income and Expense

Finance income is detailed in the table below:

	Three Months ended  December 31		Year ended December 31	
\$'000	2021	2020	2021	2020
Interest income	25	124	133	844
Investment income	-	-	-	305
	25	124	133	1,149

At December 31, 2021 and December 31, 2020 the Company did not have investments in short-term bonds. The \$0.3 million investment income for 2020 relates to the interest earned on short-term investment bonds.

Finance expense is detailed in the table below:

		Three Months ended December 31		led er 31
\$'000	2021	2020	2021	2020
Base interest expense	1,476	1,467	5,982	5,830
Participation interest expense	372	889	920	1,971
Lease interest expense	9	14	43	86
Interest expense	1,857	2,370	6,945	7,887
Net foreign exchange loss (gain)	274	58	628	(438)
Interest on tax assessment	588	-	588	-
ndirect tax	212	203	1,826	1,873
	2,931	2,631	9,987	9,322

# Finance Income and Expense cont.

Base and participation interest expense relate to the long-term loan ("Loan") from the International Finance Corporation ("IFC") to the Company's subsidiary operating in Tanzania, PanAfrican Energy Tanzania Limited ("PAET"). Base interest on the Loan is payable quarterly in arrears at 10% per annum on a "pay-if-you-can-basis" using a formula to calculate the net cash available for such payments as at any given interest payment date. The participation interest expense is paid annually in arrears. It equates to 6.4% of PAET's net cash flows from operating activities less the net cash flows used in investing activities for the year. Such participation interest will continue until October 15, 2026 regardless of whether the Loan is repaid prior to its contractual maturity date. The decrease in participation interest expense for the year ended December 31, 2021 over the comparable prior year period is primarily a consequence of PAET's capital expenditure program, which has reduced the net cash flows on which the participation interest expense is based compared to the same prior year period.

Net foreign exchange gains and losses are the result of transactions in foreign currencies recorded at the rate of exchange prevailing on the date of such transactions. Monetary assets and liabilities in foreign currencies are translated at period-end rates. Non-monetary items are translated at historic rates, unless such items are carried at market value, in which case they are translated using the exchange rates that existed when the values were determined. These foreign exchange gains and losses are recorded in finance expense.

The interest on tax assessment represents the Company's share of the amount in dispute with respect to interest on depreciation disallowed by the TRA for expenditures in relation to completing well SS-10 in 2009 and 2010 and well SS-12 in 2015 and 2016 (see "Contingencies - Taxation"). The indirect tax is for value added tax ("VAT") associated with invoices to TANESCO under the take or pay provisions within the PGSA and for interest on late payments.

#### (Reversal of) Loss Allowance

		Three Months ended		led
	Decembe	er 31	Decembe	er 31
\$'000	2021	2020	2021	2020
Reversal of loss allowance	-	(3,478)	(3,762)	(20,951)
Loss allowance	1,188	-	1,188	5,337
	1,188	(3,478)	(2,574)	(15,614)

The reversal of loss allowance of \$3.8 million during 2021 (2020: \$21.0 million) follows collection of: (i) TANESCO arrears of \$1.1 million (2020: \$19.9 million) which had been previously allowed for and represents the excess of receipts over gas sales invoiced during the year; (ii) Songas operatorship arrears of \$1.9 million (2020: \$1.1 million) which had been previously allowed for; and (iii) collection of \$0.8 million (2020: \$ nil) of indirect taxes related to the receipt of funds for the TANESCO 2016 take or pay invoice that had been previously allowed for.

The loss allowance of \$1.2 million during 2021 is for: (i) \$0.5 million, being the amount in dispute with the Tanzanian Revenue Authority ("TRA") with respect to withholding tax on services performed outside Tanzania by non-resident persons in 2010 and 2015-16; and (ii) \$0.7 million with respect to impairment of Swala convertible preference shares. The loss allowance for 2020 related to \$5.3 million the TRA collected via an Agency Notice which obligated the Company's bank in Tanzania to release funds in favor of the TRA. This \$5.3 million was initially considered recoverable, however in 2021 the Tanzanian Court of Appeal ("CAT") ruled against an appeal filed by the Company in 2020 and the Company, with advice from its legal counsel, decided not to proceed further on this matter.

For additional context regarding the reversal of loss allowance and the loss allowance for receivables, please see the Company's audited financial statements for the fiscal year ended December 31, 2020, and the Company's Q3 2020 MD&A and Q3 2020 interim financial statements and notes available on SEDAR at www.sedar.com or the Company's website.

#### Tax

#### Income Tax

	Three Mont		Year end Decembe	
\$'000	2021	2020	2021	2020
Current tax	3,736	816	10,192	7,384
Deferred tax	2,743	2,296	6,534	3,356
	6,479	3,112	16,726	10,740

Under the terms of the PSA with TPDC and the GoT, the Company is liable for income tax in Tanzania at the corporate tax rate of 30%. However, the PSA provides a mechanism by which income tax payable is recovered from TPDC by reducing TPDC's share of Profit Gas revenue and increasing the allocation to the Company. This is reflected in the accounts by increasing the Company's share of revenue by an amount equivalent to current year income taxes payable grossed up by 30%.

As at December 31, 2021 there were temporary differences between the carrying value of the assets and liabilities for financial reporting purposes and the amounts used for taxation purposes under the Income Tax Act 2004. Applying the 30% Tanzanian tax rate, the Company has recognized a deferred tax liability of \$25.0 million (December 31, 2020: \$18.5 million). The deferred tax has no impact on cash flow until it becomes a current income tax, at which point the tax is paid and recovered from TPDC's share of Profit Gas revenue.

#### Additional Profits Tax ("APT")

	Three Months ended		Year ended	
	 December 31		December 31	
\$'000	2021	2020	2021	2020
APT	1,214	589	4,609	4,054

Under the terms of the PSA, APT is payable when the Company has recovered its costs plus a specified return out of Cost Gas revenue and Profit Gas revenue. As a result: (i) no APT is payable until the Company recovers its costs out of Additional Gas revenue plus an annual operating return under the PSA of 25% plus the percentage change in the United States Industrial Goods Producer Price Index ("PPI"); and (ii) the maximum APT rate is 55% of the Company's Profit Gas revenue when costs have been recovered with an annual return of 35% plus the percentage change in PPI.

The timing and the effective rate of APT depends on the realized value of Profit Gas revenue which in turn depends on the level of expenditure. The Company provides for APT by annually forecasting the total APT payable in the future as a proportion of the forecast Profit Gas revenues over the term of the PSA. The forecast takes into account the timing of future development capital spending. As at December 31, 2021 the current portion of APT payable was \$8.5 million (December 31, 2020: \$11.5 million) with a long-term APT payable of \$20.9 million (December 31, 2020: \$24.8 million). APT of \$11.5 million was paid in Q1 2021 based on the 2020 results (Q1 2020: \$11.9 million based on 2019 results).

The effective APT rate of 17.3% (Q4 2020: 17.1%) has been applied to the Company's share of Profit Gas revenue of \$6.8 million for Q4 2021 (Q4 2020: \$3.4 million), and an average effective rate of 17.3% (2020: 16.8%) has been applied to Company's share of Profit Gas revenue of \$26.7 million for the year ended December 31, 2021 (year ended December 31, 2020: \$24.1 million). Accordingly, \$1.2 million for the quarter ended December 31, 2021 (Q4 2020: \$0.6 million) and \$4.6 million for the year ended December 31, 2021 (year ended December 31, 2020: \$4.1 million) of APT has been recorded in the Consolidated Statements of Comprehensive Income.

#### **Working Capital**

Working capital as at December 31, 2021 was \$41.8 million (December 31, 2020: \$74.2 million) and is detailed in the table below (also see "Non-GAAP financial measures and ratios"):

	As at December 31			
\$'000		2021		2020
Cash and cash equivalents		72,985		104,190
Trade and other receivables				
Songas	8,776		6,624	
TPDC	5,603		7,417	
TANESCO	2,042		-	
TRA	-		5,337	
Industrial customers and other receivables	15,487		10,960	
Loss allowance	(1,177)	30,731	(8,458)	21,880
Prepayments		1,133		898
		104,849		126,968
Trade and other liabilities				
TPDC share of Profit Gas revenue <sup>1</sup>	21,911		25,570	
Songas	1,899		2,062	
Deferred income - take or pay contracts	5,215		-	
Other trade payables and accrued liabilities	17,751		11,655	
Current portion of long-term loan	5,000		-	
Current portion of APT	8,461	60,237	11,489	50,776
Tax payable		2,836		1,956
		63,073		52,732
Working capital		41,776		74,236

The balance of \$21.9 million payable to TPDC is the liability for TPDC's share of Profit Gas revenue, primarily related to unpaid gas deliveries to TANESCO. The majority of the settlement of this liability is dependent on receipt of payment from TANESCO for arrears. For their allocation of Profit Gas revenue, the Company paid TPDC \$15.6 million in 2021 (2020: \$14.9 million).

# Financial Instruments

Current financial instruments of the Company include cash and cash equivalents, trade and other receivables, trade and other liabilities and tax payable. The carrying values of the financial instruments approximate fair values due to their relatively short periods to maturity. The risks associated with the Company's financial instruments are primarily attributed to the inherent riskiness of cash, and the risk that trade and other receivables may not be paid when due. The Company mitigates these risks by (i) holding the majority of its cash outside of Tanzania in reputable international financial institutions primarily in Jersey and Mauritius which reduces geo-political risk; and (ii) monitoring and reviewing the trade and other receivables on a regular basis to determine if allowances are required for overdue amounts or action is required to restrict deliveries on past due accounts to reduce exposure on outstanding receivables. There are no restrictions on the movement of cash from Jersey, Mauritius or Tanzania.

Financial assets and liabilities are recognized when the Company becomes a party to the contractual provisions of the instrument. Financial assets are derecognized when the rights to receive cash flows from the assets have expired or have been transferred and the Company has transferred substantially all risks and rewards of ownership.

# **Working Capital Requirements**

The Company expects to have sufficient cash flow from operating activities to maintain adequate working capital to cover both short-term and long-term obligations, including forecast debt and interest payments (\$11.1 million) and capital expenditure (\$50.0 million) for 2022. The Company hasn't incurred any losses from debtors in 2021 and does not expect to incur any losses from debtors in 2022. The Company maintains adequate cash and cash equivalents on hand to ensure it can meet all its capital expenditure obligations and deal with possible fluctuations in liquidity from operational problems including any potential impact from COVID-19. The Company does not anticipate any circumstances that are reasonably likely to occur that could significantly impact the Company's cash flows and liquidity.

#### Working Capital cont.

#### TANESCO Receivable

As at December 31, 2021 the current receivable from TANESCO was \$2.0 million (December 31, 2020: \$ nil), which was subsequently paid in 2022. During 2021 the Company invoiced TANESCO \$23.9 million (2020: \$23.3 million) for gas deliveries and received \$22.9 million (2020: \$43.2 million) in payments. Based on the consistent payments from TANESCO, the Company: (i) recognized all amounts invoiced for gas deliveries in 2021 and 2020 as revenue; and (ii) recognized \$1.1 million during the year (2020: \$19.9 million) as a reversal of loss allowance relating to the amounts collected during the year that were applied towards the long-term TANESCO receivables previously allowed for.

The TANESCO long-term receivable as at December 31, 2021 was \$26.5 million with a provision of \$26.5 million compared to \$27.6 million (with a provision of \$27.6 million) as at December 31, 2020. In 2021 the Company invoiced TANESCO \$6.7 million (2020: \$6.5 million) under the take or pay provision within the PGSA; this invoice has not been recognized as it does not meet revenue recognition criteria with respect to assurance of collectability. Subsequent to December 31, 2021 the Company has invoiced TANESCO \$5.5 million for 2022 gas deliveries and TANESCO has paid the Company \$8.2 million.

# **Capital Expenditures**

The capital expenditures (see "Non-GAAP financial measures and ratios") in 2021 primarily related to the installation of compression facilities and well workover planning and design. The capital expenditures in 2020 primarily related to the flowline construction and the compression project.

	Three Months Decembe		Year ended December 31	
\$'000	2021	2020	2021	2020
Pipelines, well workovers and infrastructure	12,494	16,310	26,596	27,117
Other capital expenditures	2	5	14	24
	12,496	16,315	26,610	27,141

### **Capital Requirements**

Except as described below, there are no contractual commitments for exploration or development drilling or other field development, either in the PSA or otherwise agreed, which would give rise to significant capital expenditure at Songo Songo Island. Any additional significant capital expenditure in Tanzania is discretionary.

As at the date of this report, the Company's only significant contractual commitment is in relation to contracts for the workover program. The Company concluded the onshore well remediation program comprising three wells (SS-3, SS-4 and SS-10) in April 2022. The SS-3 well was shut in 2012 due to excessive corrosion and sustained annulus pressure. Having returned to production on February 15, 2022, the SS-3 well has since been continually producing an average of 10 MMcfd. The SS-4 well was suspended in 2019 after it started producing sand. Currently not producing due to excessive liquid loading, the Company intends to mobilize a coiled tubing unit to lift the liquids and allow the SS-4 well to flow naturally. However, a recent upturn in industry activity means a suitable unit is unlikely to be available in Tanzania until Q3 2022. The SS-10 well was still producing prior to the workover program, but was also affected by progressive corrosion of its production tubing which would have ultimately threatened its safe operation. Following considerable delays due to downhole complications necessitating extensive milling and fishing, the workover of the well was completed on April 7, 2022, and was successfully returned to production on April 18, 2022. The total estimated gross cost for the workovers was \$21.4 million. However, following considerable logistical and customs delays, increased service company costs against estimates, and surface and down hole technical issues, the total cost of the program increased to \$31.6 million. As of December 31, 2021, \$13.9 million was incurred with \$9.7 million incurred in Q1 2022 and the remaining \$8.0 million forecasted to be paid by the end of Q2 2022. Subject to ongoing negotiations and approvals, further expenditure may be necessary in mobilizing the coiled tubing nitrogen unit to restart production from the SS-4 well.

In March 2022, one month ahead of schedule, the Company completed construction and commissioning of feed gas compression facilities on the Songas gas processing facility. The installation of three 35 MMcfd reciprocating compressors was designed to ensure maximum gas throughput of the Songas gas processing plant at arrival pressures as low as 38 bar. The sustainability of such production is subject to gas demand in the forthcoming years, however internal forecasts predict this may be achievable to October 2026 (the end of the current PSA). The original lump sum turnkey price for the contract was \$38.0 million, however price variations due to increased costs of sea freight, a requirement to increase on site power generation capacity, design changes and brief scheduling delays to avoid an extended plant shut down over the 2021 Christmas and New Year period, have seen the total project costs increase to \$41.7 million, of which \$40.5 million was incurred as of December 31, 2021 with forecast outstanding expenditures of \$1.2 million expected to be paid in Q2 2022.

In order to de-risk both the future development drilling and potential exploration drilling of prospective resources, the Company intends to carry out a 3D seismic acquisition program in 2022, budgeted at \$20.0 million. Following an open tender process, the Company has issued a recommendation for award of contract and is in the process of negotiating terms and program timing with the preferred service provider. Physical execution of the acquisition is planned for Q3 2022, but is dependent on obtaining environmental approvals in time to take advantage of suitable weather windows.

# **Long-term Receivables**

		As at December 31	
\$'000	2021	2020	
VAT - Songas workovers	2,205	2,205	
Lease deposit	10	9	
	2,215	2,214	

In 2017, based on agreement with TPDC, \$12.3 million relating to the Songas share of workover costs of the SS-5 and SS-9 wells was transferred to the cost pool enabling the Company to recover the costs via the PSA cost recovery mechanism. This resulted in \$2.2 million relating to VAT on the workovers that had already been paid being reclassified as a long-term receivable. The Company continues to take formal action to collect the workover costs and filed an initial arbitration claim in October 2021, on behalf of the Company and its partner, TPDC, in accordance with the agreement. Amounts not collected will be pursued through the mechanisms provided in the agreements with Songas.

The following table details the amounts receivable from TANESCO that do not meet revenue recognition criteria and therefore are not recorded in the consolidated financial statements:

	As at Decer	mber 31
\$'000	2021	2020
Total amounts invoiced to TANESCO	119,168	111,234
Trade receivable - TANESCO	(2,042)	-
Unrecognized amounts not meeting revenue recognition criteria <sup>1</sup>	(90,634)	(83,685)
Loss allowance	(26,492)	(27,549)
	_	_

The amount includes invoices for interest on late payments and invoices relating to differences between natural gas contracted for delivery versus gas taken by TANESCO.

# Long-term Loan

In 2015 PAET took out the Loan with the IFC, a member of the World Bank Group, for \$60 million. The Loan was fully drawn down in 2016.

The Loan is to be paid out through six semi-annual payments of \$5.0 million starting October 15, 2022 and one final payment of \$25.2 million due on October 15, 2025. The Company may voluntarily prepay all or part of the Loan but must simultaneously pay any accrued base interest costs related to the principal amount being prepaid. The Loan is an unsecured subordinated obligation of PAET and was guaranteed by the Company to a maximum of \$30.0 million. The guarantee may only be called upon by IFC at maturity in 2025 and, subject to IFC approval and receipt of all required regulatory approvals, the Company, at its discretion, may issue shares in fulfillment of all or part of the guarantee obligation in 2025. Pursuant to the sale of a non-controlling interest in PAE PanAfrican Energy Corporation ("PAEM"), the parent company of PAET, the Company agreed with the IFC to reduce the outstanding amount of the Loan by the percentage interest sold of 7.9% (\$4.8 million) before the fourth anniversary of the first drawdown. PAET made this payment on October 16, 2019.

Dividends and distributions from PAET to PAEM are restricted at any time whenever amounts of interest, principal or participating interest are due and outstanding. All amounts under the Loan have been paid when due.

### **Outstanding Shares**

The Class A Shares are convertible at any time at the option of the holder into Class B Shares on a one-for-one basis. Subject to the terms and conditions of conversion specified in the memorandum of association and articles of association of the Company, the Class B Shares are convertible into Class A Shares on a one-for-one basis if an offer is made to purchase Class A Shares that: (i) must, by reason of applicable securities legislation or the requirements of a stock exchange on which the Class A Shares are listed, be made to all or substantially all of the holders of Class A Shares; and (ii) is not made concurrently with an offer to purchase Class B Shares that is identical to the offer to purchase Class A Shares and that has no condition attached other than the right not to take up and pay for shares tendered if no shares are purchased pursuant to the offer for Class A Shares. The conversion right does not come into effect under certain events specified in the memorandum of association of the Company, including, without limitation, the prior delivery to the Company's transfer agent and to the Secretary of the Company of a certificate signed by one or more shareholders owning more than 50% of the then outstanding Class A Shares.

Pursuant to the 2021 SIB of CDN\$40.0 million in January 2021 (CDN\$50.0 million pursuant to the substantial issuer bid completed in 2020 ("2020 SIB")) the Company purchased and canceled 6,153,846 Class B Shares (2020: 7,692,297 Class B Shares). Pursuant to the NCIB commenced on June 21, 2021, the Company has purchased and canceled 30,900 Class B Shares as of December 31, 2021 and 41,200 Class B Shares as of April 20, 2022. 1,750,495 Class A Shares and 18,202,714 Class B Shares were outstanding as at December 31, 2021 and 1,750,495 Class A Shares and 18,192,414 Class B Shares were outstanding as at April 20, 2022. See "Substantial Issuer Bid, Normal Course Issuer Bid and Dividends" in this MD&A.

# **Cash Flow Summary**

	Three Month Decembe			
\$'000	2021	2020	2021	2020
Operating activities				
Net income	1,915	7,698	17,963	29,121
Non-cash adjustments	12,016	2,791	30,074	25,637
Interest expense	1,857	2,370	6,945	7,887
Changes in non-cash working capital <sup>1</sup>	2,733	6,510	(14,872)	(16,140)
Net cash flows from operating activities	18,521	19,369	40,110	46,505
Net cash (used in) from investing activities	(13,629)	28,633	(24,985)	17,720
Net cash used in financing activities	(3,269)	(42,386)	(45,949)	(54,408)
Increase (decrease) in cash	1,623	5,616	(30,824)	9,817

See Consolidated Statements of Cash Flows.

The Company's net cash flows from operating activities decreased by 4% for Q4 2021 and by 14% for the year ended December 31, 2021 over the comparable prior year periods. The decreases were primarily a result of a decrease in the reversal of loss allowances for receivables due to lower payments from TANESCO. The decrease in net cash (used in) from investing activities for the year ended December 31, 2021 over the comparable prior year period was mainly a result of the conversion of \$44.8 million short-term bonds to cash in 2020. The decrease in net cash used in financing activities for the year ended December 31, 2021 over the comparable prior period was primarily a result of difference in the amount of the 2021 SIB of \$31.9 million compared to the 2020 SIB of \$38.2 million.

# **Related Party Transactions**

The Chair of the Company's Board of Directors is counsel to Burnet, Duckworth & Palmer LLP, a law firm that provides legal advice to the Company and its subsidiaries. Fees for services provided by this firm totaled \$65 thousand for the quarter ended December 31, 2021 (Q4 2020: \$0.3 million) and \$0.3 million for the year ended December 31, 2021 (year ended December 31, 2020: \$1.0 million). As at December 31, 2021 the Company had a total of \$0.1 million (December 31, 2020: \$0.1 million) recorded in trade and other liabilities in relation to this related party.

### Substantial Issuer Bid, Normal Course Issuer Bid and Dividends

During Q1 2021 the Company repurchased and canceled 6,153,846 Class B Shares (Q1 2020: 7,692,297) at a weighted average price of CDN\$6.50 per Class B Share under the 2021 SIB (2020 SIB: CDN\$6.50). This resulted in an aggregate purchase of CDN\$40.0 million (2020 SIB: CDN\$50.0 million) of Class B Shares representing 25.2% (2020 SIB: 23.6%) of the Company's issued and outstanding Class B Shares and 23.5% (2020 SIB: 22.4%) of the total number of the Company's issued and outstanding shares. Total cash payments of \$31.9 million (2020 SIB: \$38.2 million) were applied to the capital stock and accumulated income accounts.

On June 21, 2021 the Company commenced a NCIB to purchase Class B Shares through the facilities of the TSXV and alternative trading systems in Canada. Purchases pursuant to the NCIB are made by Research Capital Corporation ("Research Capital") on behalf of the Corporation and will not exceed 500,000 Class B Shares, representing approximately 2.74% of the total outstanding Class B Shares. The NCIB will be in effect until June 21, 2022 (or until such time as the maximum number of Class B Shares have been purchased). Purchases of Class B Shares are made by Research Capital based on the parameters prescribed by the TSXV and applicable securities laws. The acquisition price of Class B Shares under the NCIB will not exceed the market price of the Class B Shares at the time of acquisition and the funds available to acquire the Class B Shares will come from the Company's working capital and cash flow. All Class B Shares purchased under the NCIB will be canceled. As of December 31, 2021 30,900 Class B Shares were repurchased by the Company pursuant to the NCIB at an average price per Class B Share of CDN\$5.17 and as of April 20, 2022, 41,200 Class B Shares have been purchased by the Company pursuant to the NCIB at an average price per Class B Share of CDN\$5.20. Shareholders may obtain a copy of the notice regarding the NCIB filed with the TSXV from the Company without charge.

All issued capital stock is fully paid.

### **Dividend Summary**

Declaration date	Record date	Payment date	Amount per share (CDN\$)
February 24, 2022	March 31, 2022	April 15, 2022	0.10
November 9, 2021	December 31, 2021	January 14, 2022	0.10
September 9, 2021	September 29, 2021	October 15, 2021	0.10
June 4, 2021	June 30, 2021	July 15, 2021	0.10
February 23, 2021	March 31, 2021	April 15, 2021	0.10
November 19, 2020	December 31, 2020	January 15, 2021	0.08
September 17, 2020	September 30, 2020	October 15, 2020	0.08
June 22, 2020	June 30, 2020	July 15, 2020	0.06
February 25, 2020	March 31, 2020	April 30, 2020	0.06

### Consolidation

The companies which are being consolidated for the purposes of this MD&A are:

Subsidiary	Incorporated	Holding
Orca Energy Group Inc.	British Virgin Islands	Parent Company
Orca Exploration Italy Inc.1	British Virgin Islands	100%
Orca Exploration Italy Onshore Inc. <sup>1</sup>	British Virgin Islands	100%
PAE PanAfrican Energy Corporation ("PAEM")	Mauritius	92%
PanAfrican Energy Tanzania Limited	Jersey	92%
Orca Exploration UK Services Limited	United Kingdom	100%

<sup>&</sup>lt;sup>1</sup> The companies were wound up during 2020.

# **Non-Controlling Interest**

The Company sold 7.9% (7,933 Class A common shares) of PAEM to a wholly owned subsidiary of Swala Oil & Gas (Tanzania) plc. ("Swala") in 2018 for \$15.4 million cash and \$4.0 million of Swala convertible preference shares ("Preference Shares") pursuant to a share purchase agreement. The Preference Shares entitle the Company to a 10% per annum distribution payable 15 days after each quarter end, commencing from the closing date, January 16, 2018. Payment of the quarterly distributions is at the discretion of Swala based on funds available, however, the liability accrues if any amount is unpaid when due. If any distributable amount remains unpaid after December 31, 2021, the Company may demand settlement and Swala is obligated to comply by transferring and returning the Class A common shares of PAEM sold to Swala. The aggregate value of these shares will equal the amount of the outstanding distributions. As at December 31, 2021, the Company has not received any distributions or recorded any amount receivable related to the Preference Shares.

Swala is obligated to redeem 20% of the Preference Shares for cash annually starting from December 31, 2021 until all shares are redeemed. If at any time Swala does not redeem the required number of Preference Shares for cash, Swala is obligated to redeem the Preference Shares by transferring and returning the Class A common shares of PAEM sold to Swala's wholly owned subsidiary. The aggregate value of these Class A common shares will equal the amount of any outstanding redemption. As of December 31, 2021, the Company recorded \$0.7 million as a loss allowance with respect to Preference Shares.

A reconciliation of the non-controlling interest is detailed below:

		As at December 31	
\$'000	2021	2020	
Balance, beginning of year	1,523	163	
Share of post-disposition income	1,593	1,360	
Balance, end of year	3,116	1,523	

# Contingencies

#### Taxation

					As at Decem	ber 31
Amounts in \$'million	ns				2021	2020
Area	Period	Reason for dispute	Principal	Interest	Total	Total
Pay-As-You-Earn ("PAYE") tax	2008-10	PAYE tax on grossed-up amounts in staff salaries which are contractually stated as net.	0.7		0.3(1)	1.6
Withholding tax ("WHT")	2005-09	WHT on services performed outside of Tanzania by non-resident persons.	0.3	0.6	1.6 <sup>(2)</sup>	8.7
Income tax	2008-09, 2011-17	Deductibility of capital expenditures and expenses (2012, 2015 and 2016), additional income tax (2008, 2011 and 2012), tax on repatriated income (2012 to 2016), foreign exchange rate application (2013, 2014 and 2015), underestimation of tax due (2014 and 2016) and methodology of grossing up income taxes paid (2015 to 2017).	34.2	17.5	<b>51.7</b> <sup>(3)</sup>	52.1
VAT	2012-18	VAT already paid (2012 to 2014), VAT on imported services (2015 and 2016); interest on VAT decreasing adjustments and input	0.2	1,2	<b>1.4</b> <sup>(4)</sup>	6.0
		VAT on services (2017 and 2018).	0.2 35.7	19.3	55.0	6.8

### Contingencies cont.

#### Taxation cont.

During Q2 2021 the Company paid the TRA \$1.8 million as a deposit against the disputed taxes including PAYE tax, WHT, income tax and VAT for the years 2012-16, an amount agreed upon in order for TRA to admit the outstanding tax objections. In Q3 2021, the CAT delivered its judgment on an appeal instituted by the Company on the appealability of a one-third deposit required to admit objections for the 2012 year of income. The CAT decided that the matters are not tax decisions and are therefore not appealable. The Company filed a notice of motion for review of the decision at the same court and is awaiting a hearing. The decision, however, will not affect the position on admission of objections for the years of 2012-16.

During 2020 the TRA issued an Agency Notice for \$5.3 million, obligating PAET's commercial bank in Tanzania to release funds in favor of the TRA with regards to the output VAT on SSI operatorship services (2008-10). In Q3 2020, the Company filed an appeal with the CAT and recorded the \$5.3 million as other receivables and fully allowed for the amount on the Company's financial statements. Subsequently, during Q3 2021, the CAT ruled in favor of the TRA on the Company's appeal. Management, with advice from its legal counsel, decided not to proceed further on this matter.

During Q4 2021 the TRA issued a new assessment with regards to 2017 income tax (\$6.4 million). The Company has objected TRA's incorrect methodology of grossing up income taxes already paid (\$6.4 million) and the issue of imposing interest on deemed delayed payment (\$0.1 million) and is awaiting a TRA response.

In Q4 2021, the Company recorded an allowance of \$0.6 million with respect to interest on depreciation of disallowed costs of completion of wells SS-10 (2009-10) and SS-12 (2015-16). In addition, the Company recorded an allowance of \$0.5 million with respect to WHT on services performed outside Tanzania by non-resident persons (2010 and 2015-16). These disputes are no longer represented in the table above.

In Q4 2021, the Company recorded an additional provision of approximately \$2.2 million.

In Q4 2021, further to issuing its objections to TRA's 2015-16 assessments, the Company received determination letters whereby the TRA agreed to drop their claims with regards to WHT on interest on the IFC Loan and management fees (2015-16) and PAYE on grossed up salaries (2015-16) in the amounts of \$0.9 million and \$1.4 million, respectively. The aforementioned disputes are no longer represented in the table above. Additionally, with the advice from its legal and tax counsels, it was established that four of the assessments with respect to 2011 (\$0.2 million), 2013 (\$0.2 million), 2014 (\$3.3 million) and 2015-16 (\$0.4 million) income tax, which were previously presented as contingencies, were overridden by four other assessments, effectively presenting duplicating assessments, for the respective years of income. This has now been amended accordingly in the taxation contingency table above.

Subsequent to December 31, 2021, following the expiry of the statutory deadline for the TRA to respond to the Company's objections, the Company filed notices of intention to appeal to the Tanzania Revenue Appeals Board ("TRAB") against the corporate income tax assessments for the years of 2012-16, tax on repatriated income for the years of 2012 and 2013, and VAT for the years of 2015-16. In Q2 2022, these matters came for hearing and, at the request from the TRA, the TRAB granted an order that these matters be withdrawn to allow the TRA to further review and issue determination letters. The matters are expected to appear for a status review in May 2022. In addition, the Company paid the TRA \$0.7 million as a deposit against disputed income tax for the year of income of 2017.

During 2020, the TRA conducted audits of 2017 and 2018 and issued two assessments with regards to VAT (\$1.2 million) and WHT (\$0.01 million). The Company has conceded to the TRA with respect to the WHT assessment (\$0.01 million) and a portion of the VAT assessment (\$0.06 million). However, the Company has objected to the incorrect imposition of interest on VAT decreasing adjustments on TANESCO payments (\$1.1 million) and disallowing input VAT claimed in certain services (\$0.1 million). No final assessments have been issued to date with respect to corporation tax, excise duty or payroll tax for 2017 and no preliminary assessment has yet been received for 2018. During 2020, the Company filed an application for judicial review at the CAT with regards to the 2008-10 PAYE case (\$0.3 million). During the year, again acting under instructions from the TRA, PAET's commercial bank in Tanzania transferred the full principal tax amount in dispute (\$0.3 million) to the TRA. The Company has filed an appeal for review with the CAT.

Management, with the advice from its legal counsel, has reviewed the Company's position on the objections and appeals related to the disputed amounts and has concluded that no further provision is required. However, if the TRA reassesses the Company's tax returns for open taxation years on a similar basis, the Company may be required to make future deposits to object such assessments.

### Contingencies cont.

#### Taxation cont.

The process of appealing assessments issued by the TRA starts by initially filing an appeal with the TRA. If this is not successful, claims can be taken to higher authorities starting with the TRAB, followed by an appeal to the Tax Revenue Appeals Tribunal ("TRAT") and finally to the CAT. Below is a summary of the status of the various assessments:

- (1) (a) 2008-10 (\$0.3 million): In 2020, the Company lost an appeal with CAT on the principal amount of PAYE tax and filed an application for judicial review at CAT. The TRA instructed PAET's commercial bank to transfer the full principal amount in dispute to TRA;
- (2) (a) 2005-2009 (\$1.6 million): In 2018 the CAT ruled in favor of the Company that no WHT was required on services performed outside Tanzania by non-resident persons. It is unknown whether TRA will file an application objecting to the CAT ruling;
- (3) (a) 2008 (\$0.6 million): The Company objected to a TRA assessment that did not recognize a tax loss carried forward and is awaiting a response;
  - (b) 2009 (\$0.8 million): The Company objected to an amended assessment from the TRA for being time-barred and arbitrary and is awaiting a TRA response;
  - (c) 2011 (\$1.7 million): The Company is awaiting a hearing at the TRAT following the TRAB ruling in favor of the TRA (\$1.7 million);
  - (d) 2012 (\$13.6 million): The Company objected to the TRA assessments with respect to understated revenue, timing of deductibility of capital expenditures, expenses and tax on repatriated income. Following expiry of the statutory deadline for the TRA to respond to its objection, the Company filed an appeal at the TRAB and is awaiting a hearing;
  - (e) 2013 (\$9.3 million): The Company objected to two assessments as being time-barred and without merit (\$1.9 million) and tax on repatriated income (\$7.4 million) and is awaiting the TRA's response;
  - (f) 2014 (\$8.0 million): The TRA issued two assessments for corporation tax (\$4.9 million) and tax on repatriated income (\$3.1 million). The Company field objections to the assessments and is awaiting the TRA's response;
  - (g) 2015-16 (\$11.2 million): The TRA issued two assessments for corporation tax (\$5.8 million) and tax on repatriated income (\$5.4 million). The Company appealed to the TRAB against the assessments following the TRA failure to determine the matters within the statutorily allowed period and is awaiting a response;
  - (h) 2017-18 (\$6.5 million): The TRA issued an assessment for corporation tax including questioning the Company's methodology of grossing up already paid corporation tax (\$6.4 million) and raising the issue of imposing interest on deemed delayed payment (\$0.1 million). The Company filed an objection and is awaiting the TRA's response;
- (4) (a) 2012-16 (\$0.2 million): The Company has filed an objection to a TRA assessment with respect to disallowing VAT on certain services and is awaiting a response;
  - (b) 2017-18 (\$1.2 million) The Company has filed an objection to a TRA assessment and is awaiting a response. The Company has objected to incorrect imposition of interest on VAT decreasing adjustments in respect of delayed TANESCO payment (\$1.1 million) and disallowing input VAT claimed in certain services (\$0.1 million).

In 2016, the TRA introduced significant changes in relation to the income tax treatment of the extractive sector with separate new chapters in Part V of the Income Tax Act 2004 ("ITA, 2004") for mining and for petroleum to be effective commencing in 2018. Further changes were subsequently made by the Written Laws (Miscellaneous Amendments) Act, 2017 ("WLMAA, 2017") and in particular section 36(a)(ii) of the WLMAA, 2017. The WLMAA, 2017 amended section 65M and 65N of the ITA, 2004 to exclude cost oil/cost gas from inclusion in both income and expenditure. The Company continues to review the tax effects of the changes as there are a number of uncertainties and ambiguities as to the interpretation and application of certain provisions of the WLMAA, 2017. In the absence of guidance on these matters, the Company has used what it believes are reasonable interpretations and assumptions in applying the WLMAA, 2017 for purposes of determining its tax liabilities and the results of operations, which may change as it receives additional clarification and implementation guidance. The Company does not expect a significant impact from the changes as it is able to recover taxes payable from the TPDC Profit Gas revenue entitlement under the terms of the PSA.

# **Accounting Changes**

The following pronouncements from the International Accounting Standards Board (the "IASB") became effective or were amended for financial reporting periods beginning on or after January 1, 2021.

COVID-19 Related Rent Concessions amendment to IFRS 16 has been adopted. There has been no impact on the Company's financial statements or business.

The Interest Rate Benchmark Reform, Phase 2 (Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16). The Company has adopted the amended standards. However, the Company has contracts using US Dollar LIBOR, this rate has yet to be discontinued, and these contracts have yet to transition to an alternative rate. The Company does not expect transitioning to have any material impact on the Company's financial statements.

The following standards have been issued but are not yet effective:

- Onerous contracts Cost of fulfilling a contract (Amendments to IAS 37).
- Deferred Tax related to Assets and Liabilities arising from a Single Transaction (Amendments to IAS 12).
- Reference to the Conceptual Framework (Amendments to IFRS 3).
- Annual Improvements to IFRS Standards 2018-2020.

The Company intends to adopt these standards when they become effective and is currently evaluating the potential impact.

# Disclosure Controls and Procedures and Internal Controls over Financial Reporting

The Company's Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO") have designed, or caused to be designed under their supervision, disclosure controls and procedures ("DC&P") for Orca. DC&P, as defined in National Instrument 52-109, Certification of Disclosure in Issuers' Annual and Interim Filings, are designed to provide reasonable assurance that information required to be disclosed in reports filed with, or submitted to, securities regulatory authorities is recorded, processed, summarized and reported within the time periods specified under Canadian securities law and include controls and procedures designed to ensure that information required to be so disclosed is accumulated and communicated to management, including the CEO and CFO, as appropriate, to allow timely decisions regarding required disclosure. The CEO and CFO of Orca evaluated the effectiveness of the design and operation of the Company's DC&P. Based on the evaluation, the officers concluded that Orca's DC&P were effective as at December 31, 2021.

#### **Quarterly Results Summary**

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

Figures in \$'000	2021				2020			
except where otherwise stated	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
Revenue	24,819	22,271	20,301	18,631	21,980	20,859	17,320	17,715
Net income attributable to shareholders	1,548	7,613	3,246	3,963	7,375	1,487	6,254	12,645
Earnings per share								
- basic and diluted (\$)	0.08	0.38	0.17	0.18	0.28	0.06	0.27	0.39
Net cash flows from operating activities	18,521	12,132	10,251	(794)	19,369	12,793	13,516	827
Capital expenditures	12,496	3,715	10,167	232	16,315	9,412	1,005	489

Revenue decreased in the Q2 2020 as a result of increased use of hydropower during an extended rainy season, which led to a fall in sales to the power sector. Revenue increased during Q3 2020 and Q4 2020 as the power sector demand for gas increased to compensate for a reduction in the availability of hydropower. Revenue decreased during Q1 2021 as a result of decreased deliveries to TANESCO and TPDC due to increased availability of hydropower with the onset of the seasonal rains resulting in a decrease in demand for gas power generation. Revenue increased during Q2 2021 as a result of increased sales to the industrial sector and lower TPDC share of revenue as an outcome of increased capital expenditures and higher Cost Gas revenue recoveries by the Company. Revenue increased during Q3 2021 as a result of increased sales to the power sector which was partially offset by increased TPDC share of revenue as an outcome of reduced capital expenditures and lower Cost Gas revenue recoveries by the Company. Revenue increased during Q4 2021 as a result of increased sales to the industrial sector which was partially offset by decreased TPDC share of revenue as a result of increased sales to the industrial sector which was partially offset by decreased TPDC share of revenue as a result of increased capital expenditures.

Net income attributable to shareholders was affected by several factors, other than changes in revenue, including:

- the decrease in Q2 2020 was partially due to lower revenue and a lower collection of TANESCO arrears as compared to Q1 2020;
- the decrease in Q3 2020 was primarily a result of a loss allowance of \$5.3 million in respect of the disputed 2008-10 output VAT case with the TRA;
- the increase in Q4 2020 was partially due to the collection of \$3.5 million of TANESCO long-term arrears resulting in an increase in the reversal of loss allowances;
- the decrease in Q1 2021 and Q2 2021 was a result of a lower collection of TANESCO arrears as compared to Q4 2020;
- the increase in Q3 2021 was a result of lower general and administrative expenses and lower indirect tax as compared to Q2 2021; and
- the decrease in Q4 2021 was a result of higher general and administrative expenses and higher loss allowance for receivables compared to Q3 2021.

In addition to the factors impacting net income attributable to shareholders, net cash flows from operating activities were primarily affected by the timing and amount of payments received from TANESCO. The increase in Q2 2020 was primarily a result of the annual payment of the 2019 current liability associated with APT paid in Q1 2020. The decrease in Q3 2020 resulted from a combination of decreased collections from TANESCO compared to prior periods and a \$5.3 million payment to the TRA. Correspondingly, the increase in Q4 2020 resulted from higher collections from TANESCO compared to the previous quarter. The decrease in Q1 2021 and consequent increases in Q2, Q3 and Q4 2021 were mainly a result of the annual 2020 current liability associated with APT paid in Q1 2021.

Capital expenditures in Q1 2020 and Q2 2020 primarily relate to the refrigeration project and flowline decoupling and construction work. Capital expenditures in Q3 2020 and Q4 2020 mainly relate to the installation of compression. Capital expenditures in Q1 2021 were mainly related to well workover planning and design. Capital expenditures in Q2 2021 mainly relate to the installation of compression. Capital expenditures in Q3 and Q4 2021 were mainly related to the well workover program.

#### Selected Annual Financial Information

Selected annual financial information derived from the audited consolidated financial statements for the years ended December 31, 2021, 2020 and 2019 is set out below:

Figures in \$'000 except per share amount	2021	2020	2019
Revenue	86,022	77,874	85,595
Net income attributable to shareholders	16,370	27,761	24,718
Earnings - basic and diluted (\$ per share)	0.81	1.00	0.71
Cash dividends declared (CDN\$ per Class A and B Shares)	0.40	0.28	0.23
Net cash flows from operating activities	40,110	46,505	34,873
Total non-current liabilities	95,744	98,008	102,603
Total assets	230,271	242,612	271,772

Revenue decreased by 9% in 2020 compared to 2019 primarily due to lower power sales volumes and a lower current income tax adjustment. The 10% increase of revenue in 2021 compared to 2020 was a result of increased sales to TANESCO, TPDC and industrial customers as well as a higher current income tax adjustment.

The increase in net income attributable to shareholders in 2020 was primarily due to increased reversal of loss allowances related to the collection of TANESCO arrears. The decrease in net income attributable to shareholders in 2021 was primarily a result of decreased reversal of loss allowances related to the collection of TANESCO arrears.

In 2019 the Company approved quarterly dividends, CDN\$0.05 per share for Q1 and CDN\$0.06 per share for Q2, Q3 and Q4. In 2020 the Company approved quarterly dividends, CDN\$0.06 per share for Q1 and Q2 and CDN\$0.08 per share for Q3 and Q4. In 2021 the Company approved quarterly dividends, CDN\$0.10 per share for Q1, Q2, Q3 and Q4. Please refer to the table in the Substantial Issuer Bid, Normal Course Issuer Bid and Dividends section of this MD&A.

The changes in net cash flows from operating activities are primarily related to the changes in non-cash working capital primarily associated with variations in prepayments and in trade and other receivables.

Total non-current liabilities did not change significantly between the years. The \$4.6 million decrease in 2020 compared to 2019 and the \$2.3 million decrease in 2021 compared to 2020 were primarily a result of the repayment of a portion of the APT and the reclassification of \$5.0 million of the IFC loan as a current liability in 2021.

Total assets decreased by 11% in 2020 compared to 2019 and 5% in 2021 compared to 2020. These decreases were mainly a result of the 2020 SIB and 2021 SIB, respectively. Please refer to the Substantial Issuer Bid, Normal Course Issuer Bid and Dividends section of this MD&A.

### **Non-GAAP Financial Measures and Ratios**

In this MD&A, the Company has disclosed the following non-GAAP financial measures, non-GAAP ratios and supplementary financial measures: capital expenditures, operating netback, operating netback per mcf, working capital and net cash flows from operating activities per share.

These non-GAAP financial measures and ratios disclosed in this MD&A 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.

#### Non-GAAP Financial Measures and Ratios cont.

#### Capital expenditures

Capital expenditures 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	Year ended December 31		
	Decembe			
\$'000	2021	2020	2021	2020
Pipelines, well workovers and infrastructure	(12,494)	(16,310)	(26,596)	(27,117)
Other capital expenditures	(2)	(5)	(14)	(24)
Capital expenditures	(12,496)	(16,315)	(26,610)	(27,141)
Change in non-cash working capital	(1,133)	192	1,625	105
Proceeds from sale of investments in bonds, net	-	44,756	-	44,756
Net cash (used by) from investing activities	(13,629)	28,633	(24,985)	17,720

# Operating netback

Operating netback is calculated as revenue less processing and transportation tariffs, TPDC's revenue share, and operating and distribution costs (see "Operating Netback"). The operating netback summarizes all costs that are associated with bringing the gas from the Songo Songo Gas field to the market, it is a measure of profitability. A reconciliation to the most directly comparable financial measure is as follows:

	Three Months Decembe	Year ended December 31		
\$'000	2021	2020	2021	2020
Revenue	24,819	21,980	86,022	77,874
Production, distribution and transportation expenses	(3,256)	(3,520)	(12,253)	(11,904)
Net Production Revenue	21,563	18,460	73,769	65,970
Less current income tax adjustment (recorded in revenue)	(1,416)	134	(8,385)	(5,807)
Operating net back	20,147	18,594	65,384	60,163
Sales volumes MMcf	6,539	5,777	22,312	21,117
Netback \$/mcf	3.08	3.22	2.93	2.85

# **Non-GAAP Ratios**

# Operating netback per mcf

Operating netback per mcf represent the profit margin associated with the production and sale of Additional Gas and is calculated by taking the operating netback and dividing it by the volume of Additional Gas delivered and sold. This is a key measure as it demonstrates the profit generated from each unit of production.

# **Supplementary Financial Measures**

### Working capital

Working capital is defined as current assets less current liabilities, as reported in the Company's Consolidated Statements of Financial Position. It is an important measure as it indicated the Company's ability to meet its financial obligations as they fall due.

# Net cash flows from operating activities per share

Net cash flows from operating activities per share is calculated as net cash flows from operating activities divided by the weighted average number of shares, similar to the calculation of earnings per share. Net cash flow from operations is an important measure as it indicates the cash generated from the operations that is available to fund ongoing capital commitments.

# **Use of Estimates and Judgments**

The preparation of consolidated financial statements in conformity with IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. The reader is referred to Orca's December 31, 2021 audited consolidated financial statements for a description of estimates and judgments.

#### **Business Risks**

# **Industry and Business Conditions**

#### Competition and operational risk

The natural gas industry is intensely competitive and the Company competes with other companies which possess greater technical and financial resources. Natural gas drilling and production operations are subject to all the risks typically associated with such operations, including but not limited to risks of fires, blowouts, spills, cratering and explosions, mechanical and equipment problems, uncontrolled flows or leaks of oil, well fluids, natural gas, brine, toxic gas or other pollutants or hazardous materials, marine hazards with respect to offshore operations, formations with abnormal pressures, adverse weather conditions, natural or man-made disasters, premature decline of reservoirs and invasion of water into producing formations.

Drilling wells is speculative and involves significant costs that may be more than estimated and may not result in any discoveries or additions to our future production or reserves. Operational activities have numerous inherent risks and our license area is located on an island, 25km offshore mainland Tanzania, and partially in shallow water. This generally increases the operating costs, chances of delay, planning time, technical challenges and risks associated with production activities. Our inability to access appropriate equipment and infrastructure in a timely manner may hinder our access to natural gas markets or delay our natural gas production.

The development of oil and natural gas projects, including the availability and cost of drilling rigs, equipment, supplies, personnel and oilfield services, is subject to delays and cost overruns. The Company may be affected by the inability to respond to changing technological developments and remain competitive. Slower economic growth rates may materially adversely impact our operating results and financial position. Any material inaccuracies in drilling costs, estimates or underlying assumptions will materially affect our business.

#### COVID-19

The emergence of COVID-19 resulted in travel bans, mandatory and self-imposed guarantines and isolations, social distancing and the closing of non-essential businesses which has had a negative impact on economies world-wide. The Company originally took appropriate action to protect employees such as social distancing, working from home where possible and ensuring staff who work on rotation at our operational site on Songo Songo Island are tested for COVID-19, and placed into quarantine prior to receiving their results and before resuming regular duties. The Company has since returned to office based working but continues to observe social distancing wherever possible. Staff traveling to Songo Songo Island are now subject to lateral flow testing and may only travel if the result is negative. The Company's business, operations and financial condition have not been significantly adversely affected by COVID-19, however there has been a decline in revenue from gas deliveries as a result of temporary business slowdowns, closures and expansion delays. Although the Company has lived with the impact of COVID-19 for almost two years, the full extent of the risks surrounding the long-term impact and severity of the COVID-19 pandemic remains unclear at this time. The further spread of COVID-19 could result in volatility and disruptions in regular business operations including disruption of supply chains that could impact operations and performance of counter-parties, volatility in foreign exchange rates, payment delays from customers, additional cyber-security and internal control risk as a result of more employees working remotely as well as declining trade and market sentiment. COVID-19 poses a risk on the financial capacity of the Company's contract counterparties and potentially their ability to perform contractual obligations and the Company's ability to implement planned capital projects. Although the Company's production and reserves are entirely comprised of natural gas, a prolonged decline in world oil prices could impact the competitiveness and demand for natural gas in Tanzania and negatively impact Company revenues, collectability of receivables and cash flow.

### Key staff

Our performance and success are largely dependent on the ability, expertise, judgment and discretion of our management and the ability of our technical team to identify, discover, evaluate and develop reserves. We are dependent on members of our management and technical team that may not be easily replaced.

# Effects of climate change

Risks related to climate change may have an impact on the Company's operations and the Company may be subject to additional disclosure requirements in the future. The International Sustainability Standards Board issued an IFRS Sustainability Disclosure Standard with the objective to develop a global framework for environmental sustainability disclosure. In addition, the Canadian Securities Administrators also issued a proposed National Instrument 51-107 Disclosure of Climate-related Matters which sets forth additional reporting requirements for Canadian reporting issuers. We continue to monitor developments on these reporting requirements and the impact they may have on the Company's financial position and results of operating activities in future periods.

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

#### Business Risks cont.

# Industry and Business Conditions cont.

#### Effects of climate change cont.

The Company operates in Tanzania, where extreme hot weather, heavy rains and floods or other severe weather conditions may cause operational difficulties, including downtime and increased costs of maintenance and construction. Extreme weather conditions may also impact workovers of existing wells and drilling of new wells.

As of the date of this report, it is difficult to estimate the effect of the climate change-related legislations (including the Glasgow Climate Pact, which was recently signed by nearly 200 countries), on our business or whether additional evolving climate-change legislation, regulations or other measures will be adopted in Tanzania. There are uncertainties regarding timing and effects of the emerging climate-change regulations, making it difficult to accurately determine the cost impacts and effects on the Company's operations.

#### Contractual

We operate in a litigious environment which could result in title or contractual disputes during the ordinary course of business. The inability of one or more third parties who contract with us to meet their obligations to us may adversely affect our financial results.

#### Marketability and pricing

The marketability and price of natural gas which may be acquired, discovered or marketed by the Company will be affected by numerous factors beyond its control. The natural gas market in Tanzania is developing and there is currently limited access to infrastructure with which to serve potential new markets beyond that being constructed by the Company, Songas and TPDC, which now includes the NNGI. The ability of the Company to market any natural gas from current or future reserves in Tanzania may depend upon its ability to develop natural gas markets in Tanzania and the surrounding region, obtain access to the necessary infrastructure to process gas and to deliver sales gas volumes, including acquiring capacity on pipelines which deliver natural gas to commercial markets. The Company is also subject to market fluctuations in the prices of natural gas, uncertainties related to the delivery and proximity of its reserves to pipelines and processing facilities and extensive government regulation relating to prices, taxes, royalties, land tenure, allowable production, the export of oil and gas and many other aspects of the oil and gas business.

The prices that the Company receives for its natural gas affect the Company's revenue, profitability, access to capital and future growth rate. Historically, the oil and natural gas markets have been volatile and will likely continue to be volatile in the future. Oil prices have experienced significant and sustained declines in the past few years and may continue to be volatile in the future; though gas prices are less volatile, they may also be significantly affected in the longer run.

The natural gas prices the Company receives from its industrial customers fluctuate with the price of heavy fuel oil against which most of the Company's industrial customer contracts are priced. Prices can also be affected by gas on gas competition from other producers in Tanzania. There have been significant onshore and offshore discoveries of gas in Tanzania over the last ten years and it is expected that the development of these discoveries will increase competition in the future. There is also scope for greater government intervention on gas prices as TPDC owns and operates the majority of the gas processing and pipeline infrastructure in Tanzania.

A substantial or extended decline in both global and local oil and natural gas prices may adversely affect our business, financial condition and results of operations. Localized competition with other gas producers and alternative power sources such as hydropower could adversely impact our financial results.

### Cyber attack

The oil and gas industry has become increasingly dependent on digital technologies to conduct day-to-day operations including certain exploration, development and production activities. For example, software programs are used to interpret seismic data, manage drilling rigs, conduct reservoir modeling and reserves estimation, and to process and record financial and operating data. A cyber incident could result in information theft, data corruption, operational disruption, and/or financial loss. There can be no assurance that we will not be the target of cyber-attacks in the future or suffer such losses related to any cyber-incident.

### Financial

# Cost of capital

Our business plan requires substantial additional capital that we may be unable to fund out of working capital and cash flow generated from operations or raise on acceptable terms or at all in the future and which may in turn limit our ability to develop our appraisal, development and production activities. The Company's ability to meet its financing obligations or to arrange financing in the future will depend in part upon the prevailing capital market conditions as well as the Company's business performance. There can be no assurance that the Company would be successful in its efforts to meet its current commitments or arrange additional financing on terms satisfactory to the Company.

# Collectability of receivables

The Company evaluates the collectability of its receivables on the basis of payment history, frequency and predictability, as well as Management's assessment of the customer's willingness and ability to pay. In the past, the Company has recorded loss allowances for receivables that did not meet the criteria for revenue recognition however no allowances have been recorded for the past two years relating to revenue.

#### **Business Risks** cont

# Industry and Business Conditions cont.

#### Foreign exchange

The Company operates internationally and is exposed to foreign exchange risk arising from currency fluctuations against the US dollar when transactions and recognized assets and liabilities of the Company are denominated in a currency that is not the US dollar functional currency. The main currencies to which the Company has an exposure are Tanzanian shillings, British pounds sterling, Euros and Canadian dollars.

The majority of the expenditure associated with the operation of the gas distribution system is denominated in Tanzanian shillings. Whilst conversion of Tanzanian shillings into US dollars is unrestricted, the foreign exchange market for Tanzanian shillings is limited and not highly liquid, reducing the Company's ability to convert large amounts of Tanzanian shillings into US dollars at any given time. To mitigate the risk of Tanzanian shilling devaluation, the Company regularly converts Tanzanian shilling receipts into US dollars to the extent practicable. Capital stock, equity financing and any associated stock based compensation are denominated in Canadian dollars. The operational revenue and the majority of capital expenditures are denominated in US dollars.

Fluctuations in currency exchange rates could adversely impact the Company's financial results.

#### Debt financing

From time to time the Company may enter into transactions to acquire assets or the shares of other companies. These transactions may be financed in part or in whole with debt, which may temporarily increase the Company's debt levels above industry standards. PAET, the Company's subsidiary operating in Tanzania currently has a long-term loan that includes covenants that, among other things, restrict the incurrence of additional indebtedness, payment of dividends under certain conditions, granting of liens, mergers and sale of all or a substantial part of our business or license.

#### Foreign operations and concentration risk

#### Asset concentration

The Company's natural gas reserves are currently limited to one producing property, the Songo Songo gas field, and the productive potential from this field is limited. There is no assurance that the Company will have sufficient deliverability through the existing wells to provide Protected and Additional Gas volumes, and there may be significant capital expenditures associated with any remedial work, workovers, or new drilling required to achieve optimal deliverability. In addition, any difficulties relating to the operation or performance of the Songo Songo gas field would have a material adverse effect on the Company. A loss or material reduction in production capabilities will have a material adverse effect on the total production and funds flow from operating activities of the Company.

# Access to infrastructure

The Company is dependent upon access to the Songas Infrastructure and the GoT owned NNGI to deliver gas to customers. The Company operates the Songas Infrastructure however Songas is the owner of the facilities including the 12-inch subsea and the 16-inch surface pipeline systems which transport natural gas from Songo Songo Island to Dar es Salaam. There are agreements in place to allow the Company to process and transport gas, but there is no assurance that these rights could not be challenged or access curtailed. The inability to access infrastructure would materially impair the Company's ability to realize revenue from natural gas sales.

### Reputational

Our Tanzanian operations are anticipated to be the sole source of the Company's near-term revenue earnings. Due to our asset concentration, the success of our operations is dependent on positive commercial relationships with a small number of organizations (including states and parastatal organizations) and certainty with respect to our rights and obligations arising from those relationships. Any damage to our reputation due to the actual or perceived occurrence of any number of events, such as environmental incidents, could negatively impact the Company. Reputation loss may result in negative publicity and diminished or adversarial stakeholder relationships, which could lead to increased challenges in developing and maintaining community relations, decreased investor confidence, and would likely impede our overall ability to advance our projects, thereby having a material adverse impact on financial performance, cash flows and growth prospects.

#### Business Risks cont.

# Foreign operations and concentration risk cont.

#### Country risk

The geographic location of the Songo Songo license offshore Tanzania exposes us to an increased risk of loss of revenue or curtailment of production as a result of factors generally associated with foreign operations or arising from factors specifically affecting the area in which we operate or may operate. Tanzania may be considered to be politically and/or economically unstable. Development and operational activities in Tanzania may require protracted negotiations with host governments, national oil companies and third parties, and are frequently subject to economic and political considerations, such as, the risks of war, actions by terrorist or insurgent groups, expropriation, nationalization, creeping nationalization, renegotiation or nullification of existing contracts and production sharing agreements, taxation policies, foreign exchange restrictions, changing political conditions, international monetary fluctuations, currency controls and foreign governmental regulations that favor or require the awarding of drilling and construction contracts to local contractors or require foreign contractors to employ citizens of, or purchase supplies from, a particular jurisdiction. In addition, if a dispute arises with foreign operations, the Company may be subject to the exclusive jurisdiction of foreign courts.

In Tanzania the state retains ownership of its minerals and consequently retains control of the exploration and production of hydrocarbon reserves.

The GoT has historically been supportive of foreign investment in resource development projects in Tanzania however it has recently adopted a more conservative approach toward foreign involvement in the extractive sector, including the production, transmission, processing and marketing of natural gas. Factors such as changes in government, an increased nationalist sentiment and pressure to preserve development opportunities for local enterprises can result in legal and regulatory changes that can impact our ability to maintain our business operations.

Countries in Africa are susceptible to outbreaks of disease and may lack the resources to effectively contain such an outbreak quickly. Such outbreaks may impact our ability to explore for natural gas, develop or produce our license areas by limiting access to qualified personnel, increase costs associated with ensuring the safety and health of our personnel, restricting transportation of personnel, equipment, supplies and natural gas production to and from our areas of operation and diverting the time, attention and resources of government agencies which are necessary to conduct our operations. In addition, any losses we experience as a result of such outbreaks of disease which impact sales or delay production may not be covered by our insurance policies. If travel bans are implemented or extended to the countries in which we operate, or contractors or personnel refuse to travel there, we could be adversely affected. If services are obtained, costs associated with those services could be significantly higher than planned which could have a material adverse effect on our business, results of operations, and future cash flow.

# Corruption

Tanzania ranks 87 out of 180 on the 2021 Transparency International Corruption Index (2020: 94 out of 180). Having assessed the Company's exposure to corruption in Tanzania, it has been concluded that the risk of the Company and/or its subsidiaries violating applicable laws prohibiting corrupt activities are mitigated or unlikely given the Company's controls relating to such risks and their effective operation. However, there is exposure to liabilities under anti-money laundering and/or anti-corruption laws, and any determination that we violated such laws could have a material adverse effect on our business. There can be no assurance that corruption may not indirectly affect or otherwise impair the Company's ability to operate in Tanzania and effectively pursue its business plan in that country.

# Contractual, regulatory and legislation risk

### Contracts and regulations

The Company's operations are subject to regulation and control by the GoT (see "Principal Terms of the PSA and Related Agreements"). The Company has operated in Tanzania for a number of years and believes that it has had reasonably good relations with the current GoT. Under the principal agreements the Company has the right to market and sell Additional Gas provided that such sales do not jeopardize the priority right of Songas to sell or otherwise dispose of Protected Gas. There is a risk that Songas could exercise its contractual rights, which may curtail our ability to sell Additional Gas if there is insufficient natural gas available for the required volumes of Protected Gas. There can be no assurance that present or future administrations in Tanzania will honor all principal agreements which could materially adversely affect the Company's operations or future cash flows.

PSA operations are regulated by national and parastatal organizations including the energy regulators (the Petroleum Upstream Regulatory Authority ("PURA") and the Energy and Water Utilities Regulatory Authority ("EWURA")), and TPDC. Under the terms of the Gas Agreement (as defined below) with the GoT, TPDC and Songas, the Company has the right to market and sell Additional Gas. The ARGA (as defined below) provided clarification of the Protected Gas volumes and removes all terms dealing with the security of the Protected Gas. The ARGA was initialed by all parties but remains unsigned as at the date of this report. In certain respects, the parties thereto are conducting themselves as though the ARGA is in effect. In 2017 the AGP2 (as defined below) was signed further delineating the rights of the Company to market and sell Additional Gas. If our relationships with these counterparties were to deteriorate, then they might choose to exercise their contractual rights under our agreements differently and in a manner that is adverse to our interests. Management does not foresee a material risk with the conduct of the Company's business with an unsigned ARGA at this time (see "Principal Terms of the PSA and Related Agreements").

#### Business Risks cont.

# Contractual, regulatory and legislation risk cont.

Contracts and regulations cont.

We have had, and continue to have, disagreements with TPDC and the GoT regarding certain of our rights and responsibilities under the PSA. Pursuant to the PSA, the Company plans for development and annual work programs must be submitted to TPDC for comment and subsequently to PURA who, under the Petroleum Act, 2015 ("Petroleum Act"), insist on the right to approve the budget. TPDC has also challenged our rights to cost recover a number of items under the PSA including the costs of our downstream operations; however, there are currently no disagreements that have risen to the level of a formal dispute.

There can be no assurance that all of these disagreements will be resolved in our favor or that future disagreements will not arise in Tanzania or with any host government and/or national oil companies in future projects elsewhere that may have a material adverse effect on our exploration or development activities, ability to operate, rights under our licenses and local laws or rights to monetize our interests.

#### Legislation

The GoT has passed several new laws in the past five years impacting the Company's operation in Tanzania.

The National Energy Policy (2015) and the Petroleum Act, passed in 2015 provided regulatory framework over upstream, mid-stream and downstream gas activity. The Petroleum Act created PURA, a new regulator to oversee the upstream sectors and conferred upon TPDC the status of "National Oil Company" as the sole aggregator of natural gas in the country. Article 260(3) of the Petroleum Act preserves the Company's pre-existing right with TPDC to market and sell Additional Gas together or independently on terms and conditions (including prices) negotiated with third party natural gas customers. There remain differences of opinion between the Company and TPDC on the effect of certain provisions within the Petroleum Act and their application to the Company.

On October 7, 2016, the GoT issued the Petroleum (Natural Gas Pricing) Regulation made under Sections 165 and 258(I) of the Petroleum Act, which may give rise to additional uncertainty. Changes resulting from this regulation could impact the Company's ability to set gas pricing and the introduction of regulated gas pricing could result in operations becoming uneconomical and anticipated revenues could be materially affected. While the PSA has been grandfathered under the Petroleum Act, we can provide no assurances that this situation will remain unchanged in the future.

On July 15, 2017 the GoT passed into law the Natural Wealth and Resources (Permanent Sovereignty) Act, 2017, the Written Laws (Miscellaneous Amendments) Act, 2017, and the Natural Wealth and Resources Contracts (Review and Re-Negotiation of Unconscionable Terms) Act, 2017 ("NWRCA"). The first and second of these acts are forward looking and only apply to agreements entered into on or after July 15, 2017. The GoT may argue that the NWRCA has retrospective effect in terms of its ability to renegotiate pre-existing contracts. On January 31, 2020, the Government released the Natural Wealth and Resources Contracts (Review and Renegotiation of Unconscionable Terms) Regulations, 2020 which set out further guidance as to how contracts may be renegotiated. These acts contain new regulations including but not limited to regulations that all arbitration processes must be heard within Tanzania and potentially restrict the ability to move funds out of Tanzania.

In 2016, the TRA introduced significant changes to the income tax treatment of the extractive sector with separate new chapters in Part V of the ITA, 2004 for mining and for petroleum to be effective commencing in 2018. Subsequent to this, further changes were made by the WLMAA, 2017 to exclude cost oil/cost gas from inclusion in both income and expenditure. We are still evaluating the tax effects of the changes as there are a number of uncertainties and ambiguities as to the interpretation and application of certain provisions of the WLMAA, 2017 as there is an absence of regulations and guidance from TRA on the implementation of the changes. In the absence of guidance on these matters, we will continue to use what we believe are reasonable interpretations and assumptions in applying the WLMAA, 2017 for purposes of determining our tax liabilities and filing our tax returns, which interpretations and assumptions may change as we receive additional clarification and implementation guidance. As necessary, we will seek adjustments to the PSA to preserve our economic benefits. In addition, the Natural Wealth and Resources (Permanent Sovereignty) Act, 2017 (the "Permanent Sovereignty Act, 2017") and the WLMAA 2017 restrict the ability of companies to repatriate funds out of Tanzania and it is possible that the GoT will seek to argue at some stage that these provisions apply to the Company even though the Company's contracts with the GoT permit the repatriation of funds out of Tanzania.

Intervening policy and legislative changes such as those described above may conflict with our pre-existing rights under the PSA and other agreements, though it remains unclear how such legislative actions will be implemented and whether and to what extent they will impact us. We are unable to predict what legislation may be proposed that might affect our business or when any such proposals, if enacted, might become effective. Such changes could require increased capital and operating expenditure and could prevent or delay certain of our operations. If, for reasons beyond our control, we are unable to maintain compliance with any legislative changes, whether in the future or past, we may have to cease operations in certain locations.

# Principal Terms of the PSA and Related Agreements

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

#### **Obligations and Restrictions**

- (a) The PSA covers two blocks within the Songo Songo gas field where there are gas reserves ("Discovery Blocks"). The Company has the right to conduct petroleum operations on the Discovery Blocks, market and sell all Additional Gas produced and share the net revenue with TPDC for a term of 25 years, expiring in October 2026.
- (b) No sale of Additional Gas may be made from the Discovery Blocks if in the Company's reasonable judgment such sales would jeopardize the supply of Protected Gas. Any Additional Gas contracts entered into are subject to interruption. Songas has the right to request that the Company and TPDC obtain security reasonably acceptable to Songas prior to making any sales of Additional Gas from the Discovery Blocks to secure the Company's and TPDC's obligations in respect of Insufficiency (as defined in (c) below).
- (c) "Insufficiency" occurs if there is insufficient gas from the Discovery Blocks to supply the Protected Gas requirements or if the gas is so expensive to develop that its cost exceeds the market price of alternative fuels at Ubungo.
  - Where there have been third party sales of Additional Gas by the Company and TPDC from the Discovery Blocks prior to the occurrence of the Insufficiency, the Company and TPDC shall be jointly liable for the Insufficiency and shall satisfy their related liability by either replacing the Indemnified Volume (as defined in (d) below) at the price for Protected Gas with natural gas from other sources; or by paying monetary damages equal to the difference between: (a) the market price for a quantity of alternative fuel that is appropriate for the five gas turbine electricity generators at Ubungo without significant modification together with the costs of any modification; and (b) the sum of the price for such volume of Protected Gas (at \$0.55/MMbtu escalated) and the amount of transportation revenues previously credited by Songas to the state electricity utility, TANESCO, for the gas volumes.
- (d) The "Indemnified Volume" means the lesser of the total volume of Additional Gas sales supplied from the Discovery Blocks prior to an Insufficiency and the Insufficiency Volume. "Insufficiency Volume" means the volume of natural gas determined by multiplying the average of the annual Protected Gas volumes for the three years prior to the Insufficiency by 110% and multiplied by the number of remaining years (initial term of 20 years) of the power purchase agreement entered into between Songas and TANESCO in relation to the five gas turbine electricity generators at Ubungo from the date of the Insufficiency.

### Access and Development of Infrastructure

(e) The Company is able to utilize the Songas Infrastructure including the gas processing plant and main pipeline to Dar es Salaam. Access to the Songas Infrastructure is open and can be utilized by any third party that wishes to process or transport gas.

# Revenue Sharing Terms and Taxation

(f) 75% of the gross field revenues derived from the Discovery Blocks, less processing and pipeline tariffs and direct sales taxes in any year ("field net revenue"), can be used to recover past costs incurred. Costs recovered out of field net revenue are termed "Cost Gas".

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

To date, TPDC has neither elected to back in within the prescribed notice period nor contributed any costs associated with backing in. The Company has therefore determined that to date there has been no working interest earned by TPDC. For the purpose of the reserves certification as at December 31, 2021, there are no planned drilling activities to the end of the license.

(g) The Company's long-term gas price to the Power sector as set out in the ARGA between the GoT, TPDC and Songas and the PGSA is based on the price of gas at the wellhead. As at the date of this report, the ARGA remains an initialed agreement only and the parties are not in agreement with all the terms in the ARGA, however the parties are conducting themselves in terms of pricing as though the ARGA is in force.

In Q3 2017 the Company received approval of the Additional Gas Plan 2 ("AGP2") from the MoE to produce and sell increased volumes of Additional Gas. Currently the SS-10, SS-11 and SS-12 wells are connected to the NNGI and the SS-12 well started flowing gas through the NNGI in December 2018.

In May 2019 the Company and TPDC signed the LTGSA, initially for volumes up to 20 MMcfd which was increased subsequently to 30 MMcfd on a best endeavors basis. In 2020 the parties established a 12-month renewable agreement for the supply of volumes above 30MMcfd on an ad hoc basis, allowing TPDC to meet fluctuating demand and compensate for shortfalls in production from their Madimba plant without being penalized due to a higher, fixed contractual limit and the subsequent take-or-pay penalties should the demand reduce again. The agreement has allowed the Company to supply volumes in excess of 50MMcfd on occasion, increasing average sales volumes and revenues.

#### Principal Terms of the PSA and Related Agreements cont.

#### Revenue Sharing Terms and Taxation cont.

(h) Profits on sales from the Proven Section ("Profit Gas") are shared between TPDC and the Company, the proportion of which is dependent on the average daily volumes of Additional Gas sold or cumulative production.

The Company receives a higher share of the field net revenue after cost recovery, based on the higher of the cumulative production or the average daily sales. The Profit Gas share available to the Company is a minimum of 25% and a maximum of 55%.

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

For Additional Gas produced outside of the Proven Section, the Company's Profit Gas share is 55%.

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

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

- (i) "Additional Profits Tax" (or "APT") is payable when the Company recovers its costs out of Additional Gas revenues plus an annual operating return under the PSA of 25%, plus the percentage change in the United States Industrial Goods Producer Price Index ("PPI"). The maximum APT rate is 55% of the Company's Profit Gas when costs have been recovered with an annual return of 35% plus PPI return. The PSA is, therefore, structured to encourage the Company to develop the market and the gas fields with the knowledge that the Profit Gas share can increase with larger daily gas sales and that the costs will be recovered with a 25% plus PPI annual return before APT becomes payable. APT can have a significant negative impact on project economics if only limited capital expenditure is incurred.
- (j) The Company is appointed to develop, produce and process Protected Gas and operate and maintain the Songas Infrastructure, including the staffing, procurement, capital improvements, contract maintenance, maintenance of books and records, preparation of reports, maintenance of permits, waste handling, liaison with the GoT and taking all necessary safety, health and environmental precautions, all in accordance with good oilfield practices. In return, the Company is paid or reimbursed by Songas so that it neither benefits nor suffers a loss as a result of its performance.
- (k) In the event of loss arising from Songas' failure to perform, and the loss is not fully compensated by Songas or through insurance coverage, then the Company is liable to a performance and operational guarantee of \$2.5 million when (i) the loss is caused by the gross negligence or willful misconduct of the Company, its subsidiaries or employees, and (ii) Songas has insufficient funds to cure the loss and operate the project.

# **Protected Gas**

Under the terms of the Gas Agreement for the Songo Songo project ("Gas Agreement"), in the event that there is a shortfall/insufficiency in Protected Gas as a consequence of the sale of Additional Gas, the Company is liable to pay the difference between the price of Protected Gas (\$0.55/MMbtu escalated) and the price of an alternative feedstock multiplied by the volumes of Protected Gas up to a maximum of the volume of Additional Gas sold (257 Bcf as at December 31, 2021). The Company did not have a shortfall during the reporting period and does not anticipate a shortfall arising during the term of the Protected Gas delivery obligation to July 2024.

#### Principal Terms of the PSA and Related Agreements cont.

### Re-Rating Agreement

In 2011 the Company, TPDC and Songas signed the Re-Rating Agreement which evidenced an increase to the gas processing capacity of the Songas Infrastructure to a maximum of 110 MMcfd (the pipeline and delivery pressure requirements at the Ubungo power plant restrict the infrastructure capacity to a maximum of 102 MMcfd). Under the terms of the Re-Rating Agreement, the Company paid additional compensation of \$0.30/mcf for sales between 70 MMcfd and 90 MMcfd and \$0.40/mcf for volumes above 90 MMcfd by issuing credit notes to TANESCO. This was in addition to the tariff of \$0.59/mcf payable to Songas as set by the energy regulator, EWURA.

Although Songas notified the Company in 2014 that the Re-Rating Agreement was terminated, the parties have continued to produce, transport and sell gas volumes in line with the re-rated plant capacity. In May 2016 the Company notified TANESCO and Songas that the additional compensation for sales over 70 MMcfd would no longer be paid effective June 2016. The additional compensation was always intended to be temporary in nature until the expansion of the Songas Infrastructure, at which time Songas would apply to EWURA to obtain approval of a new tariff for the processing of volumes over 70 MMcfd. The PGSA provides for passing on to TANESCO any tariff charged to the Company should a new tariff be approved.

The parties to the Re-Rating Agreement are in the process of negotiating a replacement agreement which may address the additional compensation paid. In the interim, the processing capacity at the Songas Infrastructure remains unaltered and is fully available for utilization by the Company. This capacity is in addition to the capacity available within the NNGI.

#### Portfolio Gas Supply Agreement

In June 2011 the PGSA was signed (term to June 30, 2023) between TANESCO (as the buyer) and the Company (through its subsidiary PAET) and TPDC (collectively as the seller). TANESCO requested a change to the PGSA maximum daily quantity which PAET and TPDC approved effective January 29, 2018. The seller is now obligated, subject to infrastructure capacity, to sell a maximum of approximately 26 MMcfd (previously 36 MMcfd) for use in any of TANESCO's current power plants, except those operated by Songas at Ubungo. Under the agreement, the basic wellhead price of approximately \$2.98/mcf increased to \$3.04/mcf on July 1, 2018, to \$3.10/mcf on July 1, 2019, \$3.14/mcf on July 1, 2020 and \$3.20/mcf on July 1, 2021.

### Long-term Gas Sales Agreement

On May 14, 2019 the Company and TPDC signed the LTGSA for an initial delivery of 20 MMcfd through 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 of 30 MMcfd. In 2020 the parties established a 12-month renewable agreement for the supply of volumes above 30 MMcfd on an ad hoc basis, allowing TPDC to meet fluctuating demand and compensate for shortfalls in production from their Madimba plant without being penalized due to a higher, fixed contractual limit and the subsequent take-or-pay penalties should the demand reduce again. The agreement has allowed the Company to supply volumes in excess of 50 MMcfd on occasion, increasing average sales volumes and revenues. All volumes above 20 MMcfd are supplied on a best endeavors basis until compression facilities are added to the Songas Infrastructure.

# TPDC Back-in

TPDC has the rights under the PSA to "back in" to the Songo Songo field development and to convert this into a carried working interest in the PSA. The current terms of the PSA require TPDC to provide formal notice in a defined period and contribute a proportion of the costs of any development, sharing in the risks in return for an additional share of the gas. To date, TPDC has neither provided notice nor contributed any costs.

### **Forward-Looking Statements**

This MD&A contains forward-looking statements or information (collectively, "forward-looking statements") within the meaning of applicable securities legislation. All statements, other than statements of historical fact included in this MD&A, which address activities, events or developments that Orca expects or anticipates to occur in the future, are forward-looking statements. Forward-looking statements often contain terms such as may, will, should, anticipate, expect, continue, estimate, believe, project, forecast, plan, intend, target, outlook, focus, could and similar words suggesting future outcomes or statements regarding an outlook. More particularly, this MD&A contains, without limitation, forward-looking statements pertaining to the following: the ability for the SS-4 well to flow naturally following the installation of a coiled nitrogen unit; the timing of when the coiled nitrogen unit and other equipment will be on location; the demand for gas and Orca's average gross gas sales are in line with the Company's forecasts; the results of discussions with the MoE, TPDC and TANESCO relating to the increase in gas supply; the timing for when new power generation facilities are commissioned; the amount of debt and interest payments and capital expenditures are in line with the Company's forecasts; the Company's expectations regarding supply and demand of natural gas; the Company's expectations regarding timing and cost for the completion of installation of compression on the Songas Infrastructure and the well workover program; the Company's expectations as to the efficacy of the compression and its ability to sustain gas production at existing levels to the end of our license; anticipated production volumes and increased well deliverability as a result of the installation of compression on the Songas Infrastructure and the completion of the well workover program; the Company's expectations regarding timing and cost for the completion of the 3D seismic acquisition program; the results of negotiations with Orca's preferred service provider to conduct the 3D seismic acquisition program; the ability for the Company to obtain environmental approvals and the availability of suitable weather windows to conduct the 3D seismic acquisition program; current and potential production capacity of the Songo Songo gas field; the receipt of the payment of arrears from TANESCO; the Company's expectation that there will continue to be no restrictions on the movement of cash from Jersey, Mauritius or Tanzania; expected timing, cost and ability to remediate one onshore well, SS-4; the Company's expectation that it will not incur any losses from debtors; the Company's expectation that all planned capital expenditures be funded out of existing working capital and cash flow generated by current operations; the timing and effective rate of the APT payable by the Company; the Company's ability to produce additional volumes; the Company's expectation that it can expand and maintain the deliverability of gas volumes in excess of the existing Songas Infrastructure; the potential impact on the Company resulting from the further spread of COVID-19; the Company's expectations regarding the impact on operations resulting from the GoT's new restrictions in response to COVID-19; the Company's expectations regarding changes to its tax liabilities and the results of its operations as a result of amendments made to the ITA, 2004, the WLMAA, 2017 and the implementation of further legislation; expectations in respect of its appeals on the decisions of the TRAB, TRAT and CAT and other statements under "Contingencies - Taxation"; the Company's expectations that the IASB pronouncements will not have any impact on the Company's consolidated financial statements; the availability of additional debt financing; the ability of the Company to compete with other companies in the industry; the Company's ability to access appropriate equipment and infrastructure in a timely manner; the Company's ability to respond to changing technological developments; the Company's ability to attract and retain key personnel; the timing and effect of additional reporting requirements as a result of new environmental and climate-change related legislation; the ability of third parties who contract with the Company to meet their obligations; and the Company's ability to maintain positive commercial relationships with the GoT and other state and parastatal organizations. 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 produced profitably 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: failure to receive payments from TANESCO; risks related to the implementation of potential financing solutions to resolve the TANESCO arrears; risk that the well workovers are unsuccessful or determined to be unfeasible; risk of a lack of access to Songas processing and transportation facilities; risk that the Company may be unable to complete additional field development to support the Songo Songo production profile through the life of the license; risk that the Company may be unable to develop additional supply or increase production values; risks associated with the Company's ability to complete sales of Additional Gas; 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, 2015 and other recently enacted 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; risk that the Company will not be successful in appealing claims made by the TRA and may be required to pay additional taxes and penalties; 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; changes in laws and regulations including the adoption of new environmental laws and regulations, impact of local content regulations and variances in how they are interpreted and enforced; increased competition; the lack of availability of qualified personnel or management; fluctuations in commodity prices, foreign exchange or interest rates; stock market volatility; competition for, among other things, capital, oil and gas field services and skilled personnel; failure to obtain required equipment for field development; delays in development plans; failure to obtain expected results from the drilling or workover of wells; effect of changes to the PSA on the Company as a result of the implementation of new government policies for the oil and gas industry; changes in laws; imprecision in reserve estimates; the production and growth potential of the Company's assets; obtaining required approvals of regulatory authorities; failure to install compression on the Songas Infrastructure or complete the well workover program and 3D seismic acquisition program on the timelines or at the costs anticipated; risks associated with negotiating with foreign governments; inability to satisfy debt conditions of financing; failure to successfully

# Forward-Looking Statements cont.

negotiate agreements; risk that the Company will not be able to fulfill its contractual obligations; reduced global economic activity as a result of COVID-19, including lower demand for natural gas and a reduction in the price of natural gas; the potential impact of COVID-19 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; and 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 such additional risks listed under "Business Risks" in this report. In addition, there are risks and uncertainties associated with oil and gas operations, therefore the Company's actual results, performance or achievement could differ materially from those expressed in, or implied by, these forward-looking statements and, accordingly, no assurances can be given that any of the events anticipated by these forward-looking statements will transpire or occur, or if any of them do so, what benefits the Company will derive therefrom. Readers are cautioned that the foregoing list of factors is not exhaustive.

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, the ability of the Company to negotiate Additional Gas sales contracts; the ability of the Company to complete additional developments and increase its production capacity; the actual costs to complete the Company's workover program, the installation of compression and the 3D seismic acquisition program are in line with estimates; that there will continue to be no restrictions on the movement of cash from Mauritius, Jersey or Tanzania; the impact of COVID-19 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; 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 successfully negotiate agreements; receipt of required regulatory approvals; the ability of the Company to increase production as required to meet demand; infrastructure capacity; commodity prices will not 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 labor; 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 Company's appeal of various tax assessments will be successful; current or, where applicable, proposed industry conditions, laws and regulations will continue in effect or as anticipated as described herein; the effect of new environmental and climate-change related regulations will not negatively impact the Company; the Company is able to maintain strong commercial relationships with the GoT and other state and parastatal organizations; the current and future administration in Tanzania continues to honor the terms of the PSA and the Company's other principal agreements; the IASB pronouncements will not have any impact on the Company's consolidated financial statements; the new power generation facilities are commissioned on the expected timelines; and other matters.

The forward-looking statements contained in this MD&A are made as of the date hereof and the Company undertakes no obligation to update publicly or revise any forward-looking statements or information, whether as a result of new information, future events or otherwise, unless so required by applicable securities laws.

# **Additional Information**

Additional information relating to the Company is available on SEDAR at www.sedar.com.

# **Orca Energy Group Inc.** Annual Report & Accounts 2021

# Glossary

mcf	Thousand standard cubic feet	1P	Proven reserves
MMcf	Million standard cubic feet	2P	Proven and probable reserves
Bcf	Billion standard cubic feet	kWh	Kilowatt hour
Tcf	Trillion standard cubic feet	MW	Megawatt
MMcfd	Million standard cubic feet per day	\$	US dollars
MMbtu	Million British thermal units	CDN\$	Canadian dollars

# Management's Report to Shareholders

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

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

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

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

Jay Lyons

Chief Executive Officer April 20, 2022 **Lisa Mitchell** Chief Financial Officer April 20, 2022

Lisa Mitchell

### Independent Auditors' Report

# To the Shareholders of Orca Energy Group Inc.

# Opinion

We have audited the consolidated financial statements of Orca Energy Group Inc. (the Entity), which comprise:

- the consolidated statements of financial position as at December 31, 2021 and December 31, 2020
- · the consolidated statements of comprehensive income for the years then ended
- the consolidated statements of changes in shareholders' equity for the years then ended
- · the consolidated statements of cash flows for the years then ended
- · and notes to the consolidated financial statements, including a summary of significant accounting policies

(Hereinafter referred to as the "financial statements").

In our opinion, the accompanying financial statements present fairly, in all material respects, the consolidated financial position of the Entity as at December 31, 2021 and December 31, 2020, and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB).

### **Basis for Opinion**

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the "Auditors' Responsibilities for the Audit of the Financial Statements" section of our auditors' report.

We are independent of the Entity in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada and we have fulfilled our other ethical responsibilities in accordance with these requirements.

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

#### Other Information

Management is responsible for the other information. Other information comprises the information included in Management's Discussion & Analysis and in the document entitled "Annual Report" filed with the relevant Canadian Securities Commissions.

Our opinion on the financial statements does not cover the other information and we do not and will not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit and remain alert for indications that the other information appears to be materially misstated.

We obtained the information included in Management's Discussion & Analysis and in the Annual Report filed with the relevant Canadian Securities Commissions as at the date of this auditors' report. If, based on the work we have performed on this other information, we conclude that there is a material misstatement of this other information, we are required to report that fact in the auditors' report.

We have nothing to report in this regard.

# Responsibilities of Management and Those Charged with Governance for the Financial Statements

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

In preparing the financial statements, management is responsible for assessing the Entity's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Entity or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Entity's financial reporting process.

### Auditors' Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, we exercise professional judgment and maintain professional skepticism throughout the audit.

#### We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion.
  - The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Entity's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Entity's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditors' report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the Entity to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.
- Provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the group Entity to express an opinion on the financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

The engagement partner on the audit resulting in this auditors' report is Petre Gueorguiev Kotev.

Chartered Professional Accountants

LPMG LLP

Calgary, Canada April 20, 2022

# Consolidated Statements of Comprehensive Income

		Years ended De	cember 31
\$'000	Note	2021	2020
Revenue	7	86,022	77,874
Production, distribution and transportation		12,253	11,904
Net production revenue		73,769	65,970
Operating expenses			
General and administrative	8	11,988	13,592
Stock based compensation (recovery) expense	17	(576)	1,074
Depletion	13	15,779	14,830
Reversal of loss allowance	12	(2,574)	(15,614)
Finance income	9	(133)	(1,149)
Finance expense	9	9,987	9,322
Income before tax		39,298	43,915
Income tax expense – current	10	10,192	7,384
Income tax expense - deferred	10	6,534	3,356
Additional Profits Tax	11	4,609	4,054
Net income		17,963	29,121
Net income attributable to non-controlling interest	24	1,593	1,360
Net income attributable to shareholders		16,370	27,761
Foreign currency translation (loss) gain from foreign operations		(6)	39
Comprehensive income		16,364	27,800
Net income attributable to shareholders per share (\$)			
Basic and diluted	18	0.81	1.00

See accompanying notes to the consolidated financial statements.

# Consolidated Statements of Financial Position

		As at Decer	mber 31
\$'000	Note	2021	2020
ASSETS			
Current assets			
Cash and cash equivalents		72,985	104,190
Trade and other receivables	12	30,731	21,880
Prepayments		1,133	898
		104,849	126,968
Non-current assets			
Long-term receivables	15	2,215	2,214
Investments	24	3,240	3,967
Capital assets	13	119,967	109,463
		125,422	115,644
Total assets		230,271	242,612
EQUITY AND LIABILITIES			
Current liabilities			
Trade and other liabilities	14	46,776	39,287
	14	2,836	1,956
Tax payable	16	•	1,930
Current portion of long-term loan		5,000	11 400
Current portion of Additional Profits Tax	11	8,461	11,489
Nam arrayant linkilitian		63,073	52,732
Non-current liabilities	10	05.047	10.500
Deferred income taxes	10	25,043	18,509
Lease liabilities	13	176	423
Long-term loan	16	49,603	54,246
Additional Profits Tax	11	20,922	24,830
		95,744	98,008
Total liabilities		158,817	150,740
SHAREHOLDERS' EQUITY			
Capital stock	17	47,454	63,243
Accumulated other comprehensive loss		(177)	(171)
Accumulated income		21,061	27,277
Non-controlling interest	24	3,116	1,523
		71,454	91,872
Total equity and liabilities		230,271	242,612

See accompanying notes to the consolidated financial statements.

Nature of operations (Note 1); Contractual obligations and committed capital investment (Note 20); Contingencies (Note 21); Subsequent events (Note 25). The consolidated financial statements were approved by the Board on April 20, 2022.

Jay Lyons Chief Executive Officer April 20, 2022



**Linda Beal**Chair of Audit and Risk Committee
April 20, 2022

# Consolidated Statements of Cash Flows

	<u> </u>	Years ended De	cember 31
\$'000	Note	2021	2020
OPERATING ACTIVITIES			
Net Income		17,963	29,121
Adjustment for:			
Depletion and depreciation	13	16,106	15,321
Loss on disposal of lease		-	293
Indirect tax	9	1,826	1,873
Stock based compensation (recovery) expense	17	(576)	1,074
Deferred income taxes	10	6,534	3,356
Additional Profits Tax	11	4,609	4,054
Loss allowance	12	1,188	-
Unrealized loss (gain) on foreign exchange		387	(334)
Interest expense	9	6,945	7,887
Change in non-cash operating working capital	23	(14,872)	(16,140)
Net cash flows from operating activities		40,110	46,505
INVESTING ACTIVITIES			
INVESTING ACTIVITIES  Capital expenditures	13	(24,985)	(27,036)
Proceeds from sale of investments in bonds, net	9	-	44,756
Net cash (used in) from investing activities	<u> </u>	(24,985)	17,720
FINANCING ACTIVITIES			
	13	(319)	(759)
Lease payments	13 17	(319) (31,872)	
Lease payments Substantial issuer bid		• •	(38,170)
Lease payments Substantial issuer bid Normal course issuer bid	17	(31,872)	(38,170)
Lease payments Substantial issuer bid Normal course issuer bid Interest paid	17 17	(31,872)	(38,170) (2,149) (7,887)
Lease payments Substantial issuer bid Normal course issuer bid Interest paid Dividends paid to shareholders	17 17 9	(31,872) (131) (7,198)	(38,170) (2,149) (7,887) (5,443)
Lease payments Substantial issuer bid Normal course issuer bid Interest paid Dividends paid to shareholders Net cash used in financing activities	17 17 9	(31,872) (131) (7,198) (6,429)	(38,170) (2,149) (7,887) (5,443)
Lease payments Substantial issuer bid Normal course issuer bid Interest paid Dividends paid to shareholders Net cash used in financing activities (Decrease) increase in cash	17 17 9	(31,872) (131) (7,198) (6,429) (45,949)	(38,170) (2,149) (7,887) (5,443)
FINANCING ACTIVITIES  Lease payments  Substantial issuer bid  Normal course issuer bid  Interest paid  Dividends paid to shareholders  Net cash used in financing activities  (Decrease) increase in cash  Cash and cash equivalents at the beginning of the year  Effect of change in foreign exchange on cash for the year	17 17 9	(31,872) (131) (7,198) (6,429) (45,949) (30,824)	(759) (38,170) (2,149) (7,887) (5,443) (54,408) 9,817 93,899

See accompanying notes to the consolidated financial statements.

# Consolidated Statements of Changes in Shareholders' Equity

		Accumulated			
		other		Non-	
	Capital	comprehensive	Accumulated	Controlling	
\$'000	stock	loss	income	Interest	Total
Note	17		17	24	
Balance as at December 31, 2020	63,243	(171)	27,277	1,523	91,872
Share repurchase	(15,789)	-	(16,012)	-	(31,801)
Share repurchase costs	-	-	(202)	-	(202)
Dividends declared	-	-	(6,372)	-	(6,372)
Foreign currency translation adjustment on foreign operations	-	(6)	-	-	(6)
Net income	-	-	16,370	1,593	17,963
Balance as at December 31, 2021	47,454	(177)	21,061	3,116	71,454

			Accumulated			
			other		Non-	
	Capital	Contributed	comprehensive	Accumulated	Controlling	
\$'000	stock	surplus	loss	income	Interest	Total
Note	17			17	24	
Balance as at December 31, 2019	84,099	4,181	(210)	20,334	163	108,567
Share repurchase	(20,856)	(4,181)	-	(14,460)	-	(39,497)
Share repurchase costs	_	-	-	(822)	_	(822)
Dividends declared	-	-	-	(5,536)	-	(5,536)
Foreign currency translation adjustment on foreign operations	_	-	39	_	_	39
Net income	-	-	-	27,761	1,360	29,121
Balance as at December 31, 2020	63,243	-	(171)	27,277	1,523	91,872

See accompanying notes to the consolidated financial statements.

#### **General Information**

Orca Energy Group Inc. was incorporated on April 28, 2004 under the laws of the British Virgin Islands with its registered office located at Vistra Corporate Service Center, Wickhams Cay II, Road Town, Tortola, British Virgin Islands, VG110. The Company produces and sells natural gas to the power and industrial sectors in Tanzania.

The consolidated financial statements of the Company as at and for the year ended December 31, 2021 comprise accounts of the Company and its subsidiaries (collectively, the "Company" or "Orca Energy") and were authorized for issue in accordance with a resolution of the Directors on April 20, 2022. The Company is controlled by Shaymar Limited who is the registered holder of 24.6% of the equity and controls 71.4% of the total votes of the Company. The shares are held in a trust that is independently managed for the beneficiaries.

# 1. Nature of Operations

The Company's principal operating asset is an interest held by a subsidiary, PanAfrican Energy Tanzania Limited ("PAET") in a Production Sharing Agreement ("PSA") with the Tanzania Petroleum Development Corporation ("TPDC") and the Government of Tanzania ("GoT") in the United Republic of Tanzania. This PSA covers the production and marketing of certain gas from the Songo Songo Block offshore Tanzania.

The PSA defines gas in the Songo Songo 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 2024 ("Gas Agreement") to Songas Limited ("Songas") and Tanzania Portland Cement PLC. Songas is the owner of the infrastructure that enables the gas to be delivered to Dar es Salaam, which includes a gas processing plant on Songo Songo Island ("Songas Infrastructure"). The Company operates the gas processing plant and field on a "no gain no loss" basis and receives no revenue for the Protected Gas delivered to Songas.

Under the PSA, the Company has the right to produce and market all gas in the Songo Songo Block in excess of the Protected Gas requirements ("Additional Gas").

The Tanzania Electricity Supply Company Limited ("TANESCO") is a parastatal organization which is wholly-owned by the Government of Tanzania, with oversight by the Ministry for Energy ("MoE"). TANESCO is responsible for the majority of electricity generation, transmission and distribution throughout Tanzania. The Company and TPDC as joint sellers currently supply Additional Gas directly to TANESCO by way of a Portfolio Gas Supply Agreement ("PGSA") and indirectly through the supply of Protected Gas and Additional Gas to Songas. The Company also delivers gas to TPDC through a long-term gas sales agreement ("LTGSA") to the TPDC operated National Natural Gas Infrastructure ("NNGI") on Songo Songo Island where the natural gas is processed before being transported to Dar es Salaam for power and industrial use.

In addition to gas supplied to TPDC, Songas and TANESCO, the Company has developed and supplies an industrial gas market in the Dar es Salaam area.

# 2. Basis of Preparation

# Statement of Compliance

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

### **Basis of Measurement**

These consolidated financial statements have been prepared on a historical cost basis and have been prepared using the accrual basis of accounting. The consolidated financial statements are presented in US dollars ("\$") unless otherwise stated.

# Basis of Consolidation

# Subsidiaries

Subsidiaries are those enterprises controlled by the Company. The following companies have been consolidated within the Orca Energy financial statements:

Subsidiary	Registered	Holding	Functional currency
Orca Energy Group Inc.	British Virgin Islands	Parent Company	US dollar
Orca Exploration UK Services Limited	United Kingdom	100%	British pound
PAE PanAfrican Energy Corporation ("PAEM")	Mauritius	92%	US dollar
PanAfrican Energy Tanzania Limited	Jersey	92%	US dollar
Orca Exploration Italy Inc. <sup>1</sup>	British Virgin Islands	100%	Euro
Orca Exploration Italy Onshore Inc <sup>1</sup>	British Virgin Islands	100%	Euro

The companies were wound up during 2020.

### 2. Basis of Preparation cont.

### Transactions Eliminated Upon Consolidation

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

## **Foreign Currency**

### i) Foreign Currency Transactions

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

# ii) Foreign Currency Translation

Foreign currency differences are recognized in comprehensive income and accumulated in the translation reserve. The assets and liabilities of these companies are translated into the functional currency at the period-end exchange rate. The income and expenses of the companies are translated into the functional currency at the average exchange rate for the period. Translation gains and losses are included in other comprehensive income.

#### COVID-19

There has been no significant change in the Company's business during the year ended December 31, 2021 as a result of the ongoing coronavirus pandemic ("COVID-19"). The Tanzanian government has introduced new restrictions and continued with its vaccination program in an effort to control the spread of COVID-19 however given the steps already taken by the Company, no significant impact on our operations or business results is expected as a result of the new restrictions. The current situation is dynamic and the ultimate duration and magnitude of the impact on the Tanzanian economy and the financial effect on the Company are not known at this time.

# Climate change regulations

Risks related to climate change may have an impact on the Company's operations and the Company may be subject to additional disclosure requirements in the future. The International Sustainability Standards Board issued an IFRS Sustainability Disclosure Standard with the objective to develop a global framework for environmental sustainability disclosure. In addition, the Canadian Securities Administrators also issued a proposed National Instrument 51-107 Disclosure of Climate-related Matters which sets forth additional reporting requirements for Canadian Public Companies. We continue to monitor developments on these reporting requirements and the impact they may have on the Company's financial position and results of operating activities in future periods.

### 3. Summary of Significant Accounting Policies

The accounting policies set out below have been applied consistently to all periods presented in these consolidated financial statements.

### Capital Assets

### i) Capital Assets

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

# ii) Impairment of Property, Plant and Equipment

At each balance sheet date, the Company reviews the carrying amounts of its property, plant and equipment to determine if indicators of impairment exist. Individual assets are grouped together as a cash generating unit ("CGU") for impairment assessment purposes at the lowest level at which there are identifiable cash flows that are independent from other group assets. If any such indication of impairment exists, the Company makes an estimate of its recoverable amount. The recoverable amount is the higher of fair value less costs to sell and value in use. Where the carrying amount of a CGU exceeds its recoverable amount, the CGU is considered impaired and is written down to its recoverable amount. In assessing the value in use, the estimated future cash flows are adjusted for the risks specific to the CGU and are discounted to their present value with a pre-tax discount rate that reflects the current market indicators. The fair value less costs to sell is the amount that would be obtained from the sale of a CGU in an arm's length transaction between knowledgeable and willing parties. Where an impairment loss subsequently reverses, the carrying amount of the asset CGU is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognized for the CGU in prior years. A reversal of an impairment loss is recognized in earnings.

### 3. Summary of Significant Accounting Policies cont.

### Operatorship

The Company operates the Songo Songo Gas Field, flowlines and gas processing plant. The Songas wells, flowlines and gas plant are operated by the Company on behalf of Songas on a "no gain no loss" basis. The cost of operating and maintaining the wells and flowlines is paid for by the Company and Songas in proportion to the respective volumes of Protected Gas and Additional Gas sales. The costs of operating and maintaining the wells and flowlines are reflected in the accounts to the extent that the costs were incurred to accomplish Additional Gas sales. The cost of operating the gas processing plant and pipeline to Dar es Salaam is paid by Songas. Costs incurred by the Company in connection with the operatorship of the Songas plant are recorded as receivables which are re-charged to Songas. Subsequent payments received from Songas are credited to receivables. When there are Additional Gas sales, a tariff is paid to Songas as compensation for using the gas processing plant and pipeline.

### **Employment Benefits**

### i) Pension

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

# ii) Stock Appreciation Rights and Restricted Stock Units

Stock appreciation rights ("SARs") and restricted stock units ("RSUs") are issued to certain key managers, officers, Directors and employees. The fair value of SARs and RSUs are recorded in earnings in accordance with the service period. The fair value of the SARs and RSUs is revalued every reporting date with the change in the value recognized in earnings.

### **Asset Retirement Obligations**

No provision has been made for future site restoration costs in Tanzania because the Company currently has no legal or contractual or constructive obligation under the PSA to restore the fields at the end of their commercial lives, should such occur within the term of the PSA. If an amendment to the PSA is agreed requiring the Company to restore the fields at the end of the commercial lives, a provision will be made for future site restoration costs.

### Revenue Recognition, Production Sharing Agreements and Royalties

Pursuant to the terms of the PSA, the Company has exclusive rights (i) to carry on Exploration Operations in the Songo Songo Gas Field; (ii) to carry on Development Operations in the Songo Songo Gas Field and (iii) jointly with TPDC, to sell or otherwise dispose of Additional Gas.

The Company recognizes revenue related to Additional Gas sales to all customers at specified delivery points at benchmark and contractual prices.

A good or service is transferred when the customer obtains control of that good or service. The transfer of control of natural gas occurs at the metering points at the inlet to the customer's facility. Under the terms of the PSA, the Company pays both its share and TPDC's share of operating, administrative and capital costs. The Company recovers all reasonably incurred operating, administrative and capital costs including TPDC's share of these costs from future revenues over several years ("Cost Gas"). TPDC's share of operating and administrative costs is recorded in operating and general and administrative costs when incurred and capital costs are recorded in capital assets. All recoveries are recorded as Cost Gas revenue in the year of recovery.

The Company has gas sales contracts under which the customers are required to take, or pay for, a minimum quantity of gas. In the event that a customer has paid for gas that was not delivered, the additional income received by the Company is carried on the balance sheet as deferred revenue. If the customer consumes volumes in excess of the minimum, it will be charged at the current rate, but may receive a credit for volumes paid but not delivered. At the end of each reporting period the Company reassesses the volumes for which the customer may receive credit, any remaining balance is credited to income. As at December 31, 2021, future revenues from take or pay provisions of the LTGSA extending through 2026 are approximately \$1.0 million, of which approximately \$0.7 million is expected to be recognized in 2022. As at December 31, 2021, future revenues from take or pay provisions of the PGSA extending through 2026 are approximately \$4.2 million, of which \$4.2 million is expected to be recognized in 2022.

In any given year, the Company is entitled to recover as Cost Gas up to 75% of the net revenue (gross revenue less processing and pipeline tariffs). Any net revenue in excess of the Cost Gas ("Profit Gas") is shared between the Company and TPDC in accordance with the terms of the PSA. Under the PSA the Profit Gas payable to TPDC is adjusted by the amount necessary to fully pay and discharge the Company's liability for taxes on income. Revenue represents the Company's share of Profit Gas and Cost Gas during the period.

The Company records revenues for sales to TANESCO based on the expected amount to be collected, which represents a percentage of the amounts invoiced to TANESCO determined by comparison of TANESCO's payment history to the amounts invoiced by the Company. Management believes this approach provides the best estimate of TANESCO's ability to pay and remain reasonably current; it also reflects the economic reality of the situation (see Notes 4 and 7).

### 3. Summary of Significant Accounting Policies cont.

# Revenue Recognition, Production Sharing Agreements and Royalties cont.

The estimated percentage used to recognize TANESCO revenue will be reviewed periodically as circumstances require. If there is a significant difference between the amount of revenue recorded and amounts received, the percentage used to record revenue as well as any existing receivable or deferred revenue balance will be revised accordingly. For the years ended December 31, 2020 and 2021 the Company recognized 100% of amounts invoiced for TANESCO gas deliveries in revenue as payments from TANESCO for the past five years have consistently been higher than amounts invoiced for gas deliveries apart from Q3 and Q4 2021. As of December 31, 2021, the Company had \$2.0 million of TANESCO current receivables which was settled in Q1 2022.

The Company sells its natural gas to power customers (TANESCO, TPDC and Songas) and one industrial customer (a cement manufacturer) pursuant to fixed-price contracts. Sales to other industrial customers are at fixed-price discounts (subject to certain floors and ceilings) to the lowest alternative fuel source in Dar es Salaam, Heavy Fuel Oil ("HFO") and coal. Under all contracts, the Company is required to deliver volumes of natural gas to the contract counterparty. Natural gas revenue is recognized when the Company gives up control of the natural gas which occurs at metering points located at the inlets of customers' facilities. The amount of production revenue recognized is based on the agreed transaction price and the volumes delivered.

The Company has entered into contracts with customers with terms ranging from four to five years.

# **Additional Profits Tax**

Under the terms of the PSA, in the event that all costs have been recovered with an annual return from the PSA of 25% plus the percentage change in the United States Industrial Goods Producer Price Index, an Additional Profits Tax ("APT") is payable to the Government of Tanzania. APT is provided for by forecasting the total APT payable in the future as a proportion of the forecast Profit Gas over the term of PSA license. The actual APT that will be paid is dependent on the achieved value of the Additional Gas sales and the quantum and timing of the operating costs and capital expenditure program.

The PSA states that APT shall be calculated for each year and shall vary with the real rate of return earned by the Company on the net cash flow from the Contract Area (as defined in the PSA). The calculation of APT includes a working capital adjustment reflecting the effect of the timing of actual receipt of amounts owing from TANESCO on net cash flow.

### Income Taxes

Income tax expense comprises current and deferred tax. It is recognized in profit or loss except to extent they relate to items recognized directly in equity, in which case the tax is recognized in equity.

Current tax comprises the expected tax payable or receivable on the taxable income or loss for the year and any adjustments to the tax payable or receivable in respect to previous years. Where current income tax is payable, this is shown as a current tax liability. The amount of the current tax payable is the best estimate of the tax amount expected to be paid that reflects uncertainty related to income taxes, if any. It is measured using tax rates enacted or substantively enacted at the reporting date.

Deferred tax is recognized using the asset and liability method, providing for temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. The amount of deferred tax provided is based on the expected manner of realization or settlement of carrying amounts of assets and liabilities using tax rates substantively enacted at the balance sheet date. A deferred tax asset is recognized only to the extent that it is probable that future taxable profits will be available, against which the asset can be utilized. Deferred tax assets are reduced to the extent that it is no longer probable that the related tax benefits will be realized.

### Depreciation

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

Leasehold improvement Over remaining life of the lease

Computer equipment 3 years

Vehicles 3 years

Fixtures and fittings 3 years

Leased assets and right-of-use assets Over the remaining life of the lease

## 3. Summary of Significant Accounting Policies cont.

### **Financial Instruments**

All financial instruments are initially recognized at fair value on the consolidated statement of financial position. The Company has classified each financial instrument into one of the following categories: (i) fair value through the statement of comprehensive income (loss), (ii) loans and receivables, and (iii) other financial liabilities. Measurement in subsequent periods depends on the classification of the financial instrument as described below:

- Fair value through profit or loss: financial instruments under this classification include cash and cash equivalents and derivative assets and liabilities.
- Amortized cost: financial instruments under this classification include accounts receivable, investments in bonds, investments, accounts
  payable and accrued liabilities, dividends payable, finance lease obligations, and long-term debt.

Financial assets and liabilities are recognized when the Company becomes a party to the contractual provisions of the instrument. Financial assets are derecognized when the rights to receive cash flows from the assets have expired or have been transferred and the Company has transferred substantially all risks and rewards of ownership. Financial assets and liabilities are offset and the net amount is reported on the statement of financial position when there is a legally enforceable right to offset the recognized amounts and there is an intention to settle on a net basis, or realize the asset and settle the liability simultaneously.

### **Financial Instruments Classification and Measurement**

The Company's financial instruments include trade and other receivables, long-term receivables, trade and other liabilities and long-term loan. The Company classifies the fair value of these financial instruments according to the following hierarchy based on the amount of observable inputs used to value the instrument.

- Level 1 Quoted prices are available in active markets for identical assets or liabilities as of the reporting date. Active markets are those in which transactions occur in sufficient frequency and volume to provide pricing information on an ongoing basis.
- Level 2 Pricing inputs are other than quoted prices in active markets included in Level 1. Prices in Level 2 are either directly or indirectly observable as of the reporting date. Level 2 valuations are based on inputs, including quoted forward prices for commodities, time value and volatility factors, which can be substantially observed or corroborated in the marketplace.
- Level 3 Valuation in this level are those with inputs for the asset or liabilities that are not based on observable market data.

The fair value of trade and other receivables and trade and other liabilities approximate their carrying amount due to the short-term nature of those instruments. The fair value of long-term receivables also approximates their carrying amount.

The Company's long-term loan is classified as Level 2 measurements. The long-term loan bears interest at a fixed rate which is close to the current market rates and accordingly the fair market value of the long-term loan approximates the carrying value.

### Cash and Cash Equivalents

Cash and cash equivalents include cash on hand, term deposits and short-term highly liquid investments with the original term to maturity of three months or less, which are convertible to known amounts of cash and which, in the opinion of management, are subject to an insignificant risk of changes in value. The fair value of cash and cash equivalents approximates their carrying amount. There are no restrictions on the movement of funds out of Tanzania.

### **Investments in Short-Term Bonds**

Investments in short-term bonds includes highly liquid investments with the original term to maturity of 12 months or less which are convertible to known amounts of cash and which, in the opinion of management, are subject to an insignificant risk of changes in value. The fair value of the investments in short-term bonds approximates their carrying amount. At December 31, 2021 and December 31, 2020 the Company did not have investments in short-term bonds.

# 3. Summary of Significant Accounting Policies cont.

### Impairment of Financial Assets

A financial asset is assessed at each reporting date to determine whether there is any objective evidence that it is impaired. A financial asset is considered to be impaired if objective evidence indicates that one or more events have had a negative effect on the estimated future cash flows of that asset.

An impairment loss in respect of a financial asset measured at amortized cost is calculated as the difference between its carrying amount and the present value of the estimated future cash flows discounted at the original effective interest rate. Individually significant financial assets are tested for impairment on an individual basis. The remaining financial assets are assessed collectively in groups that share similar credit risk characteristics.

All impairment losses are recognized in earnings. An impairment loss is reversed if the reversal can be related objectively to an event occurring after the impairment loss was recognized. For financial assets measured at amortized cost the reversal is recognized in earnings.

#### Leases

The Company recognizes a right-of-use asset and a lease liability at the lease commencement date. The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred and an estimate of costs to dismantle and remove the underlying asset or to restore the underlying asset or the site on which it is located, less any lease incentives received.

The right-of-use asset is depreciated using the straight-line method from its commencement date to the earlier of the end of the useful life of the right-of-use asset or end of the lease term. The estimated useful lives of right-of-use assets are determined on the same basis as those of property, plant and equipment. In addition, the right-of-use asset is periodically reduced by impairment losses, if any, and adjusted for certain re-measurements of the lease liability.

The lease liability is initially measured at the present value of the minimum lease payments that are not yet paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the Company's incremental borrowing rate for that asset. Generally, the Company uses its incremental borrowing rate as the discount rate. The lease liability is subsequently increased by the interest cost on the lease liability and decreased by lease payments made. It is remeasured when there is a change in future lease payments arising from a change in an index or rate, a change in estimate of the amount expected to be payable under a residual value guarantee, changes in the assessment of whether a purchase or extension option is reasonably certain to be exercised or a termination option is reasonably certain not to be exercised.

# Short-Term Leases and Leases of Low Value Assets

The Company has elected not to recognize right-of-use assets and lease liabilities for short-term leases that have a term of 12 months or less and leases of low value assets defined as less than \$5,000 or less. The Company recognizes the lease payments associated with these leases as an expense when incurred, over the lease term.

# **Accounting Changes**

The following pronouncements from the IASB became effective or were amended for financial reporting periods beginning on or after January 1, 2021.

COVID-19 Related Rent Concessions amendment to IFRS 16 has been adopted. There has been no impact on the Company.

The Interest Rate Benchmark Reform, Phase 2 (Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16). The Company has adopted the amended standards. However, the Company has contracts using US Dollar LIBOR, this rate has yet to be discontinued, and these contracts have yet to transition to an alternative rate. The Company does not expect transitioning to have any material impact on the Company's financial statements.

The following standards have been issued but are not yet effective:

- Onerous contracts Cost of fulfilling a contract (Amendments to IAS 37).
- Deferred Tax related to Assets and Liabilities arising from a Single Transaction (Amendments to IAS 12).
- Reference to the Conceptual Framework (Amendments to IFRS 3).
- Annual Improvements to IFRS Standards 2018-2020.

The Company intends to adopt these standards when they become effective and is currently evaluating the potential impact.

## 4. Use of Estimates and Judgments

The following are the critical judgments, apart from those involving estimations (see below), that management has made in the process of applying the Company's accounting policies and that have the most significant effect on the accounts recognized in these consolidated financial statements.

### Critical Judgments in Applying Accounting Policies:

### A. Natural gas assets

The Company assesses its natural gas assets for impairment when events or circumstances indicate that the carrying amount of its assets may not be recoverable. If any indication of impairment exists, the Company performs an impairment test on the CGU, which is the lowest level at which there are identifiable cash flows. The carrying amount of the CGU is compared to its recoverable amount which is defined as the greater of its fair value less cost to sell and value in use and is subject to management estimates. These estimates include quantities of reserves and future production, future commodity pricing, development costs, operating costs, and discount rates. Any changes in these estimates may have an impact on the recoverable amount of the CGU.

### B. Collectability of receivables

The Company evaluates the collectability of its receivables on the basis of payment history, frequency and predictability, as well as Management's assessment of the customer's willingness and ability to pay. Management performs impairment tests each period on the Company's current and long-term receivables.

# C. Statutory taxes

The Company operates in a jurisdiction with complex tax laws and regulations, which are evolving over time. The Company has taken certain tax positions in its tax filings and these filings are subject to audit and potential reassessment after the lapse of considerable time. Accordingly, the actual income tax impact may differ significantly from that estimated and recorded by management.

The recognition or reversal of deferred tax assets requires judgment as to whether or not there will be sufficient taxable profits available to offset the tax assets when they do reverse. This requires assumptions regarding future profitability and is therefore inherently uncertain.

# Key Sources of Estimation of Uncertainty

# A. Reserves

There are numerous uncertainties inherent in estimating quantities of proved and probable reserves and cash flows to be derived therefrom, including many factors beyond the control of the Company. The reserves and estimated future net cash flow from the Company's properties have been evaluated by independent petroleum engineers. These evaluations include a number of assumptions relating to factors such as initial production rates, production decline rates, ultimate recovery of reserves, timing and amount of capital expenditures, marketability of production, crude oil price differentials to benchmarks, future prices of oil and natural gas, operating costs, transportation costs, cost recovery provisions and royalties, TPDC "back-in" methodology and other Government levies that may be imposed over the producing life of the reserves. These assumptions were based on price forecasts in use at the date the relevant evaluations were prepared and many of these assumptions are subject to change and are beyond the control of the Company. To date, TPDC has neither elected to back in within the prescribed notice period nor contributed any costs associated with backing in.

Reserves are integral to the amount of depletion and impairment test.

### B. Cost Recovery

The Company is able to recover reasonable costs incurred on the development of the Songo Songo project out of 75% of the gross field revenue less processing and pipeline tariffs ("field net revenue"). There are inherent uncertainties in estimating when costs have been recovered as these costs are subject to Government audit and under certain circumstances a potential reassessment after the lapse of a considerable period of time.

## 5. Risk Management

The Company, by its activities in oil and gas exploration, development and production, is exposed to the risk associated with the unpredictable nature of the financial markets as well as political risk associated with conducting operations in an emerging market. The Company seeks to manage its exposure to these risks wherever possible.

### A. Foreign Exchange Risk

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

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

The majority of contracts with customers are based on US dollar prices for gas delivered however the majority of invoices and receipts are in Tanzanian shillings. Invoices are priced and then converted to Tanzanian shillings at the time of invoicing however payments are based on the US dollar invoiced amount translated to shillings at the time of payment. While conversion of Tanzanian shillings into US dollars is unrestricted, the foreign exchange market for Tanzanian shillings is limited and not highly liquid, reducing the Company's ability to convert large amounts of Tanzanian shillings into US dollars at any given time. To mitigate the risk of Tanzanian shilling devaluation, the Company regularly converts Tanzanian shilling receipts into US dollars to the extent practicable taking into consideration that the majority of operating expenditures are denominated in Tanzanian shillings.

The majority of capital expenditures are denominated in US dollars. Capital stock, equity financing and any associated stock based compensation are denominated in Canadian dollars.

There are no forward exchange rate contracts in place.

A 10% increase in the US dollar against the relevant foreign currency would result in an overall increase in working capital (defined as current assets less current liabilities) of \$1.8 million from \$41.8 million to \$43.8 million and an increase in the income before tax from \$39.3 million to \$41.1 million.

The sensitivity includes only outstanding foreign currency denominated monetary items and adjusts their translation at period end for a 10% change in the foreign currency rates. A 10% sensitivity rate is used when reporting foreign currency risk internally to key management personnel and represents management's assessment of the reasonable possible change in foreign exchange rates.

The following balances are denominated in foreign currency (stated in US dollars at period end exchange rates):

# Balances as at December 31, 2021

	Canadian	Tanzanian	British	Other	
\$'millions	dollars	shillings	pounds	currencies	Total
Cash	0.1	13.7	0.9	-	14.7
Trade and other receivables	-	8.7	-	-	8.7
Trade and other liabilities	(1.6)	(3.9)	-	(0.1)	(5.6)
Net	(1.5)	18.5	0.9	(0.1)	17.8

# **B. Commodity Price Risk**

The Company negotiated industrial gas sales contracts with gas prices which, subject to certain floors and ceilings, are determined as a discount to the lowest cost alternative fuels in Dar es Salaam, namely Heavy Fuel Oil ("HFO") and coal. The price of HFO is exposed to the volatility in the market price of crude oil.

# C. Interest Rate Risk

Interest rate risk is the risk that future cash flows will fluctuate as a result of changes in market interest rates. The Company has minimal exposure to interest rates as the long-term loan has a fixed interest rate, interest rates on short-term investments are fixed and interest received on cash balances is not significant.

### D. Concentration Risk

All the Company's sales are currently made in Tanzania. The sales are made to the Power sector and the Industrial sector. In relation to sales to the Power sector, the Company has a contract with Songas for the supply of gas to the Ubungo power plant, a contract with TANESCO to supply gas to some of the TANESCO power plants, and a contract with TPDC to supply gas through NNGI. The contracts with Songas, TANESCO and TPDC accounted for 60% of the Company's gross field revenue operating revenue during 2021 and \$10.2 million of the short-and long-term receivables at December 31, 2021.

## 5. Risk Management cont.

### E. Credit Risk

Credit risk is the risk of financial loss to the Company if a customer or counterparty to a financial instrument fails to meet its contractual obligations and arises principally from the Company's receivables from TANESCO, Songas and TPDC. The carrying amount of accounts receivable and the long-term receivable represents the maximum credit exposure. As at December 31, 2021 and 2020, loss allowance exists against all of the long-term TANESCO receivable, gas plant operations and capital expenditure receivables from Songas, and a receivable of \$0.5 million from one industrial customer. No write-off of any receivables occurred in 2021 or 2020 (see Note 12).

The Company manages the credit exposure related to cash and cash equivalents by selecting counterparties based on credit ratings and monitoring all investments to ensure a stable return, avoiding complex investment vehicles with higher risk such as asset backed commercial paper. The Company's cash resources are placed with reputable financial institutions with no history of default.

# F. Liquidity Risk

Liquidity risk is the risk that the Company will not have sufficient funds to meet its liabilities. Cash forecasts identifying liquidity requirements of the Company are produced on a regular basis. These are reviewed to ensure sufficient funds exist to finance the Company's current operational and investment cash flow requirements. At December 31, 2021 the Company has working capital of \$41.8 million which is net of \$63.1 million of financial liabilities with regards to trade and other liabilities of which \$29.6 million is due within one to three months, \$4.9 million is due within three to six months, and \$28.6 million is due within six to 12 months (see Note 14).

At the end of the year approximately 35% of the current liabilities relate to TPDC (see Note 14). The amounts due to TPDC represent its share of Profit Gas. In accordance with the terms of the PSA, TPDC is entitled to the payment of its share of Profit Gas on a quarterly basis proportional to the cash receipts during the quarter. A substantial proportion of the TPDC liability is associated with the long-term TANESCO arrears and payments to TPDC are made when cash is received for the arrears.

COVID-19 has reduced travel throughout the world in 2021 and 2020. Tourism is a major source of revenue and foreign currency for Tanzania and the decrease in travel has resulted in a reduction of foreign currency flowing into the country. It has been more difficult for the Company to convert Tanzanian shillings to United States dollars compared to prior years, however, as at the date of this report, this has not significantly impacted PAET's ability to meet its United States dollar obligations. There is a risk that in the future the Company may not be able to convert Tanzanian shillings to United States dollars as and when required.

# G. Capital Risk Management

The Company's objectives when managing capital are to safeguard the Company's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to achieve an optimal capital structure to reduce the cost of capital.

### H. Country Risk

The Company has unresolved disputes with TPDC related to Cost Gas revenue, TANESCO and Songas regarding unpaid invoices, and the Tanzanian Revenue Authority ("TRA") in relation to tax disputes (see Note 21). The Company continues to rely upon its rights under the existing PSA and has initiated notices of disputes as required under the PSA and by local tax regulations to resolve outstanding issues.

# 6. Segment Information

The Company has one reportable industry segment which is international exploration, development and production of petroleum and natural gas. During 2021 and 2020 the Company's producing assets were entirely located in Tanzania.

### 7. Revenue

	Years ended December	ecember 31	
\$'000	2021 20	020	
Industrial sector	<b>39,477</b> 34,4	485	
Power sector	<b>60,445</b> 57,2	267	
Gross field revenue	99,922 91,.	752	
TPDC share of revenue	<b>(22,285)</b> (19,6	685)	
Company operating revenue	<b>77,637</b> 72,0	)67	
Current income tax adjustment	<b>8,385</b> 5,8	307	
	<b>86,022</b> 77,8	874	

The Company recognized 100% of amounts invoiced for deliveries to TANESCO as revenue during 2021 and 2020. During 2021 the Company invoiced TANESCO \$23.9 million (2020: \$23.3 million) for gas deliveries and received \$22.9 million (2020: \$43.2 million) in payments. Based on the consistent payments from TANESCO, the Company: (i) recognized all amounts invoiced for gas deliveries in 2021 and 2020 as revenue; and (ii) recognized \$1.1 million during the year (2020: \$19.9 million) as a reversal of loss allowance relating to the amounts collected during the year that were applied towards the long-term TANESCO receivables previously allowed for (see Note 9). Subsequent to December 31, 2021 the Company has invoiced TANESCO \$5.5 million for 2022 gas deliveries and TANESCO has paid the Company \$8.2 million.

# 8. Personnel Expenses

	Years ended Dec	cember 31
\$'000	2021	2020
Employee and related costs included in:		
Production, distribution and transportation	2,932	3,176
General and administrative	7,032	6,163
	9,964	9,339
Stock based compensation (recovery) expense (Note 17)	(576)	1,074
	9,388	10,413

Personnel expenses include Company employees who operate the Songas facilities on behalf of Songas; these expenses are recharged to Songas.

## 9. Finance Income and Expense

## Finance Income

	Years ended De	cember 31
\$'000	2021	2020
Interest income	133	844
Investment income	-	305
	133	1,149

At December 31, 2021 and December 31, 2020 the Company did not have investments in short-term bonds. The \$0.3 million investment income for 2020 includes interest earned of \$0.3 million and amortization of the discount on the acquisition of the bonds of \$ nil.

# Finance Expense

	Years ended De	cember 31
\$'000	2021	2020
Base interest expense	5,982	5,830
Participation interest expense	920	1,971
Lease interest expense	43	86
Interest expense	6,945	7,887
Net foreign exchange loss (gain)	628	(438)
Interest on tax assessment	588	-
Indirect tax	1,826	1,873
	9,987	9,322

Base interest expense and participation interest expense relate to the long-term loan ("Loan") with the International Finance Corporation ("IFC"). Base interest on the Loan is payable quarterly in arrears at 10% per annum on a "pay-if-you-can" basis using a formula to calculate the net cash available for such payments as at any given interest payment date. The participation interest expense is paid annually in arrears and equates to 6.4% of PAET's net cash flows from operating activities net of net cash flows used in investing activities for the year. Such participation interest will continue until October 15, 2026 regardless of whether the Loan is repaid prior to its contractual maturity date (see Note 16).

The interest on tax assessment represents the Company's share of the amount in dispute with respect to interest on depreciation disallowed by the TRA for expenditures in relation to completing well SS-10 in 2009 and 2010 and well SS-12 in 2015 and 2016. The indirect tax is for value added tax ("VAT") associated with invoices to TANESCO under the take or pay provisions within the PGSA and for interest on late payments. In 2021 a take or pay invoice of \$6.7 million (2020: \$6.5 million) was raised but not recognized in the financial statements as it did not meet the revenue recognition criteria with respect to assurance of collectability.

# 10. Income Taxes

The tax charge is as follows:

<u> </u>		ecember 31
\$'000	2021	2020
Current income tax expense	10,192	7,384
Deferred income tax expense	6,534	3,356
	16,726	10,740

Tax of \$2.0 million was paid during 2021 in relation to the settlement of the prior year's tax liability (2020: \$0.6 million). Installment tax payments totaling \$7.3 million were made in respect of 2021 (2020: \$5.3 million). These are presented as a reduction in tax payable on the consolidated statement of financial position.

# Tax Rate Reconciliation

	Years ended De	cember 31
\$'000	2021	2020
Income before tax per Consolidated Statements of Comprehensive Income	39,298	43,915
Less Additional Profits Tax	(4,609)	(4,054)
Income before statutory tax	34,689	39,861
Provision for income tax calculated at the statutory rate of 30%	10,407	11,958
Effect on income tax of:		
Administrative and operating expenses	328	1,959
Foreign rate difference	651	-
Foreign exchange loss (gain)	1	(258)
Stock based compensation (recovery) expense	(68)	186
TANESCO interest not recognized as interest income	1,342	1,468
Change in unrecognized tax asset	905	(4,796)
Changes in estimates related to prior years	3,160	223
	16,726	10,740

As at December 31, 2021 the loss allowance for TANESCO had resulted in an \$18.6 million unrecognized deferred tax asset (December 31, 2020: \$18.6 million). If this debt is ultimately not recovered, the Company will also be entitled to an \$18.7 million (2020: \$13.1 million) refund of VAT). As at December 31, 2021, the Company has not recognized the benefit of unused trading loss carry forwards of \$7.5 million, which do not expire, as it is not probable that future taxable profits will be available against which the benefit can be utilized.

In respect of each type of temporary difference the amounts of deferred tax assets/(liabilities) recognized in the consolidated balance sheet were as follows:

	As at December 31	
\$'000	2021	2020
Differences between tax base and carrying value of property, plant and equipment	(33,244)	(30,417)
Tax recoverable from TPDC	(3,449)	(3,110)
Loss allowances	2,847	3,357
Additional Profits Tax	8,884	10,946
Unrealized exchange losses/other provisions	(81)	715
	(25,043)	(18,509)

### 11. Additional Profits Tax

Under the terms of the PSA, APT is payable when the Company has recovered its costs plus a specified return out of Cost Gas revenue and Profit Gas revenue. As a result: (i) no APT is payable until the Company recovers its costs out of Additional Gas revenues plus an annual operating return under the PSA of 25% plus the percentage change in the United States Industrial Goods Producer Price Index ("PPI"); and (ii) the maximum APT rate is 55% of the Company's Profit Gas when costs have been recovered with an annual return of 35% plus the percentage change in PPI.

The timing and the effective rate of APT depends on the realized value of Profit Gas which in turn depends on the level of expenditure. The Company provides for APT by annually forecasting the total APT payable in the future as a proportion of the forecast Profit Gas over the term of the PSA. The forecast takes into account the timing of future development capital spending. As at December 31, 2021 the current portion of APT payable was estimated at \$8.5 million (December 31, 2020: \$11.5 million) with a long-term APT payable of \$20.9 million (December 31, 2020: \$24.8 million).

The effective APT rate of 17.3% (2020: 16.8%) has been applied to the Company's Profit Gas of \$26.7 million (2020: \$24.1 million). Accordingly, \$4.6 million of APT has been recorded as APT in Consolidated Statement of Comprehensive Income for the year ended December 31, 2020 (2020: \$4.1 million).

### 12. Current Trade and Other Receivables

				As at Decem	nber 31
\$'000				2021	2020
Trade receivables					
Songas				2,502	2,053
TPDC				5,603	7,417
TANESCO				2,042	-
Industrial customers				11,840	9,362
Loss allowance				(452)	(452)
				21,535	18,380
Other receivables					
Songas gas plant operations				2,827	4,571
Songas well workover program				3,447	-
Other				3,647	6,935
Loss allowance				(725)	(8,006)
				9,196	3,500
				30,731	21,880
Trade Receivables Aged Analysis					
		As at	December 31, 20	21	
\$'000	Current	>30 <60	>60 <90	>90	Total
	19,442	812	302	979	21,535
		As at I	December 31, 202	20	
\$'000	Current	>30 <60	>60 <90	>90	Total
	14,608	1,424	882	1,466	18,380

# 12. Current Trade and Other Receivables cont.

## Songas

As at December 31, 2021 Songas owed the Company \$5.3 million (December 31, 2020: \$6.6 million), while the Company owed Songas \$1.9 million (December 31, 2020: \$2.0 million). The amounts due to the Company are mainly for sales of gas of \$2.5 million (December 31, 2020: \$2.1 million) and for the operation of the gas plant of \$2.8 million (December 31, 2020: \$4.6 million) against which the Company has made a loss allowance of \$0.7 million (December 31, 2020: \$2.7 million). The amounts due to Songas primarily relate to pipeline tariff charges of \$1.5 million (December 31, 2020: \$1.7 million). The operation of the gas plant is conducted at cost and the charges are billed to Songas on a flow through basis.

### TPDC

The current receivable from TPDC is for gas deliveries through the NNGI pursuant to the signing of the LTGSA. In accordance with the LTGSA, any unpaid, overdue amounts are offset against TPDC profit share.

### Reversal of loss allowance

	Years ended D	Years ended December 31	
\$'000	2021	2020	
Reversal of loss allowance	(3,762)	(20,951)	
Loss allowance	1,188	5,337	
	(2,574)	(15,614)	

The reversal of loss allowance of \$3.8 million (2020: \$21.0 million) follows collection of: (i) TANESCO arrears of \$1.1 million (2020: \$19.9 million) which had been previously allowed for and represents the excess of receipts over gas sales invoiced during the year; (ii) Songas operatorship arrears of \$1.9 million (2020: \$1.1 million) which had been previously allowed for; and (iii) collection of \$0.8 million (2020: \$ nil) of indirect taxes related to the receipt of funds for the TANESCO 2016 take or pay invoice that had been previously allowed for.

The loss allowance of \$1.2 million is for: (i) \$0.5 million being the amount in dispute with the Tanzanian Revenue Authority ("TRA") with respect to withholding tax on services performed outside Tanzania by non-resident persons in 2010 and 2015-16; and (ii) \$0.7 million with respect to impairment of Swala convertible preference shares (see Note 24). The loss allowance for 2020 is for a receivable from the TRA who issued an Agency Notice for \$5.3 million obligating the Company's bank in Tanzania to release funds in favor of the TRA. In 2021 the Tanzanian Court of Appeal ("CAT") ruled in favor of the TRA on the Company's appeal filed in 2020. The Company, with advice from its legal counsel, decided not to proceed further on this matter.

# 13. Capital Assets

As at December 31, 2021	119,509	7	451	119,967
Net book values				
As at December 31, 2021	148,367	2,901	633	151,901
Additions	15,779	37	290	16,106
As at December 31, 2020	132,588	2,864	343	135,795
Accumulated depletion and depreciation				
As at December 31, 2021	267,876	2,908	1,084	271,868
Additions	26,596	14	_	26,610
As at December 31, 2020	241,280	2,894	1,084	245,258
Costs				
\$'000	Natural gas interests	Office and other	Right-of-use	Total
	N	0 ((:		

# 13. Capital Assets cont.

\$'000	Natural gas interests	Office and other	Right-of-use	Total
Costs				
As at December 31, 2019	214,163	2,870	1,665	218,698
Additions	27,117	24	80	27,221
Disposals	-	-	(661)	(661)
As at December 31, 2020	241,280	2,894	1,084	245,258
Accumulated depletion and depreciation As at December 31, 2019	117.758	2,770	189	120 717
Additions	14,830	2,770	397	120,717 15,321
Disposals	-	-	(243)	(243)
As at December 31, 2020	132,588	2,864	343	135,795
Net book values				
As at December 31, 2020	108,692	30	741	109,463

In determining the depletion charge the Company takes into account an estimate of future development costs, the capital expenditure required to ensure the Company can produce the required gas volumes to meet its contractual obligations for the remaining life of the license. As at December 31, 2021 the estimated future development costs required to bring the total proved reserves to production were \$26.8 million (December 31, 2020: \$34.2 million). During the year the Company recorded depreciation of \$0.3 million (2020: \$0.1 million) in general and administrative expenses.

# Right-of-use assets

\$'000	
As at December 31, 2020	741
Depreciation	(290)
As at December 31, 2021	451
As at December 31, 2019	1,476
Additions	80
Disposals	(418)
Depreciation	(397)
As at December 31, 2020	741

# 13. Capital Assets cont.

# Lease liabilities

\$'000	
As at December 31, 2020	684
Lease interest expense	43
Lease payments	(319)
As at December 31, 2021	408
As at December 31, 2019	1,411
Additions	80
Disposals	(125)
Lease interest expense	86
Lease foreign currency translation difference	(9)
Lease payments	(759)
As at December 31, 2020	684

Right-of-use assets are presented as part of capital assets on the Company's balance sheet. Of the total lease liability of \$0.4 million (2020: \$0.7 million), \$0.2 million (2020: \$0.3 million) is current and is presented in trade and other liabilities.

# 14. Trade and Other Liabilities

	As at Decen	nber 31
\$'000	2021	2020
Songas	1,899	2,062
Other trade payables	3,179	2,573
Trade payables	5,078	4,635
TPDC Profit Gas entitlement, net	21,911	25,570
Deferred income - take or pay contracts	5,215	-
Accrued liabilities	14,572	9,082
	46,776	39,287

# TPDC share of Profit Gas

	As at Decem	nber 31
\$'000	2021	2020
TPDC share of Profit Gas	27,994	30,405
Less "Adjustment Factor"	(6,083)	(4,835)
TPDC share of Profit Gas entitlement	21,911	25,570

Under the PSA revenue sharing mechanism, the Company adjusts TPDC's Profit Gas share by the "Adjustment Factor". The Adjustment Factor is equal to the amount necessary to fully pay and discharge the PAET liability for taxes on income derived from petroleum operations. A significant percentage of the settlement of the \$21.9 million liability to TPDC is dependent on receipt of payment from TANESCO for long-term arrears that have been fully allowed for.

# 15. Long-term Receivables

	As at Decer	mber 31
\$'000	2021	2020
Amounts invoiced to TANESCO	119,168	111,234
Trade receivables - TANESCO	(2,042)	-
Unrecognized amounts not meeting revenue recognition criteria <sup>1</sup>	(90,634)	(83,685)
Loss allowance	(26,492)	(27,549)
Net TANESCO receivable	-	-
VAT - Songas workovers	2,205	2,205
Lease deposit	10	9
	2,215	2,214

The amount includes invoices for interest on late payments and invoices relating to differences between gas contracted for delivery versus gas taken by TANESCO.

The Company recognized 100% of amounts invoiced for deliveries to TANESCO as revenue during 2021 and 2020. In 2021 the Company invoiced TANESCO \$6.7 million (2020: \$6.5 million) under the take or pay provision within the PGSA; this invoice has not been recognized as it does not meet revenue recognition criteria with respect to assurance of collectability.

In 2017, based on agreement with TPDC, \$12.3 million relating to the Songas share of workover costs of the wells SS-5 and SS-9 was transferred to the cost pool to recover the costs via the PSA cost recovery mechanism. This resulted in \$2.2 million relating to VAT on the workovers that had already been paid being reclassified as a long-term receivable. The Company continues to take action to collect the workover costs through the mechanisms provided in the agreements with Songas.

# 16. Long-term Loan

In 2015 PAET took out the Loan with the IFC, a member of the World Bank Group, for \$60 million. The Loan was fully drawn down in 2016.

The Loan is to be paid out through six semi-annual payments of \$5.0 million starting October 15, 2022 and one final payment of \$25.2 million due on October 15, 2025. The Company may voluntarily prepay all or part of the Loan but must simultaneously pay any accrued base interest costs related to the principal amount being prepaid. The Loan is an unsecured subordinated obligation of PAET and was initially guaranteed by the Company to a maximum of \$30.0 million. The guarantee may only be called upon by IFC at maturity in 2025 and, subject to IFC approval and receipt of all required regulatory approvals, the Company, at its discretion, may issue shares in fulfillment of all or part of the guarantee obligation in 2025. Pursuant to the sale of the non-controlling interest in PAEM, the parent company of PAET, the Company agreed with the IFC to reduce the outstanding amount of the Loan by the percentage interest sold of 7.9% (\$4.8 million) before the fourth anniversary of the first drawdown. PAET made this payment on October 16, 2019.

Dividends and distributions from PAET are restricted, if at any time amounts of interest, principal or participating interest are due and outstanding. All amounts due under the Loan have been paid when due.

	As at Decem	nber 31
\$'000	2021	2020
Loan principal	55,240	55,240
Financing costs	(637)	(994)
Current portion of long-term loan	(5,000)	-
	49,603	54,246

# 17. Capital Stock

# Authorised

50,000,000	Class A common shares ("Class A Shares")	No par value
100,000,000	Class B subordinate voting shares ("Class B Shares")	No par value
100,000,000	First preference shares	No par value

The Class A and Class B Shares rank pari passu in respect of dividends and repayment of capital in the event of winding-up. Class A Shares carry twenty (20) votes per share and Class B Shares carry one (1) vote per share. The Class A Shares are convertible at the option of the holder at any time into Class B Shares on a one-for-one basis. The Class B Shares are convertible into Class A Shares on a one-for-one basis in the event that a takeover bid is made to purchase Class A Shares which must, by reason of a stock exchange or legal requirements, be made to all or substantially all of the holders of Class A Shares and which is not concurrently made to holders of Class B Shares.

# Changes in the capital stock

		As at December 31					
		2021			2020		
Number of shares	Authorised (000)	Issued (000)	Amount (\$'000)	Authorised (000)	Issued (000)	Amount (\$'000)	
Class A Shares	50,000	1,750	983	50,000	1,750	983	
Class B Shares	100,000	18,203	46,471	100,000	24,388	62,260	
First preference shares	100,000	-	-	100,000	-	-	
Total	250,000	19,953	47,454	250,000	26,138	63,243	

During Q1 2021 the Company repurchased and canceled 6,153,846 Class B Shares at a weighted average price of CDN\$6.50 per Class B Share under a substantial issuer bid. This resulted in an aggregate purchase of CDN\$40.0 million of Class B Shares representing 25.2% of the Company's issued and outstanding Class B Shares and 23.5% of the total number of the Company's issued and outstanding shares. Total cash payments of \$32.0 million were applied to the capital stock and accumulated income accounts. All issued capital stock is fully paid.

On June 21, 2021 the Company commenced a normal course issuer bid ("NCIB") to purchase Class B Shares through the facilities of the TSXV and alternative trading systems in Canada. As at December 31, 2021, 30,900 Class B Shares have been purchased by the Company pursuant to the NCIB at an average price per Class B Share of CDN\$5.17. As at December 31, 2021, 15,100 of the purchased Class B Shares were canceled by the Company.

# Changes in Stock Appreciation Rights ("SARs")

	2021 SARs Exercise price		20:	2020 SARs Exercise price	
			SARs		
	(000)	(CDN\$)	(000)	(CDN\$)	
Outstanding as at January 1	1,242	3.87 to 6.65	2,322	2.30 to 6.65	
Issued	-	-	160	5.02	
Exercised	(413)	5.00	(517)	5.00	
Exercised	-	-	(120)	3.02	
Exercised	-	-	(30)	3.87	
Exercised	-	-	(30)	2.30	
Forfeited	(83)	5.00	(317)	5.00	
Forfeited	-	-	(118)	5.02	
Forfeited	-	-	(108)	6.65	
Outstanding as at December 31	746	3.87 to 6.65	1,242	3.87 to 6.65	

# 17. Capital Stock cont.

The number outstanding, the weighted average remaining life and weighted average exercise prices of SARs at December 31, 2021 were as follows:

		Weighted		
		average		Weighted
		remaining		average
	Number	contractual	Number	exercise
	outstanding	life	exercisable	price
Exercise price (CDN\$)	(000)	(years)	(000)	(CDN\$)
3.87	60	1.00	30	3.87
5.00 to 6.65	686	1.04	227	5.19
3.87 to 6.65	746	2.03	257	5.08

# Change in Restrictive Stock Units ("RSUs")

	2021		2020	
		Exercise		Exercise
	RSUs (000)	price (CDN\$)	RSUs (000)	price (CDN\$)
Outstanding as at January 1	133	0.01	235	0.01
Issued	-	0.01	20	0.01
Exercised	(48)	0.01	(78)	0.01
Forfeited	(9)	0.01	(44)	0.01
Outstanding as at December 31	76	0.01	133	0.01

The number outstanding, the weighted average remaining life and weighted average exercise prices of RSUs at December 31, 2021 were as follows:

0.01	76	24	1.08
Exercise price (CDN\$)	(000)	(000)	(years)
	outstanding	exercisable	contractual life
	Number	Number	remaining
			average
			Weighted

As SARs and RSUs are settled in cash, they are revalued at each reporting date using the Black-Scholes option pricing model with the resulting liability being recognized in trade and other liabilities. In the valuation of stock appreciation rights and restricted stock units as at December 31, 2021, the following assumptions have been made: a risk free rate of interest of 1.0% (December 31, 2020: 1.0%), stock volatility of 26.6% to 37.8% (December 31, 2020: 31.0% to 41.1%), 5% forfeiture (December 31, 2020: 5%) and a closing stock price of CDN\$5.40 (December 31, 2020: CDN\$6.33) per Class B share. The valuation of the SARs and RSUs awards is increased to reflect the amount of dividends paid between the award date to the time of exercise.

	As at Dece	mber 31
\$'000	2021	2020
\$'000 SARs	727	1,683
RSUs	326	496
	1,053	2,179

As at December 31, 2021 a total accrued liability of \$1.1 million (December 31, 2020: \$2.2 million) has been recognized in relation to SARs and RSUs which is included in other payables. The Company recognized a recovery for the year of \$0.6 million (2020: expense of \$1.1 million) as stock based compensation.

## 17. Capital Stock cont.

## **Dividend Summary**

Declaration date	Record date	Payment date	Amount per share (CDN\$)
February 24, 2022	March 31, 2022	April 15, 2022	0.10
November 9, 2021	December 31, 2021	January 14, 2022	0.10
September 9, 2021	September 29, 2021	October 15, 2021	0.10
June 4, 2021	June 30, 2021	July 15, 2021	0.10
February 23, 2021	March 31, 2021	April 15, 2021	0.10
November 19, 2020	December 31, 2020	January 15, 2021	0.08
September 17, 2020	September 30, 2020	October 15, 2020	0.08
June 22, 2020	June 30, 2020	July 15, 2020	0.06
February 25, 2020	March 31, 2020	April 30, 2020	0.06

# 18. Earnings Per Share

	As at Decer	mber 31
\$'000	2021	2020
Outstanding shares		
Weighted average number of Class A and Class B Shares, basic	20,317	27,818
Weighted average number of Class A and Class B Shares, diluted	20,317	27,818

The calculation of basic earnings per share is based on a net income attributable to shareholders for the year of \$16.4 million (2020: \$27.8 million) and a weighted average number of Class A and Class B Shares outstanding during the period of 20,317,407 (2020: 27,817,531).

# 19. Related Party Transactions

The Chair of the Company's Board of Directors is counsel to Burnet, Duckworth & Palmer LLP, a law firm that provides legal advice to the Company and its subsidiaries. During the year ended December 31, 2021 fees for services provided by this firm totaled \$0.3 million (2020: \$1.0 million).

As at December 31, 2021 the Company had a total of \$0.1 million (December 31, 2020: \$0.1 million) recorded in trade and other liabilities in relation to related parties.

# 20. Contractual Obligations and Committed Capital Investments

# **Protected Gas**

Under the terms of the Gas Agreement for the Songo Songo project ("Gas Agreement"), in the event that there is a shortfall/insufficiency in Protected Gas as a consequence of the sale of Additional Gas, the Company is liable to pay the difference between the price of Protected Gas (\$0.55/MMbtu escalated) and the price of an alternative feedstock multiplied by the volumes of Protected Gas up to a maximum of the volume of Additional Gas sold which was 257 Bcf as at December 31, 2021 (December 31, 2020: 235 Bcf). The Company did not have a shortfall during the reporting period and does not anticipate a shortfall arising during the term of the Protected Gas delivery obligation to July 2024.

Terms of the Gas Agreement were modified by the Amended and Restated Gas Agreement ("ARGA") which was initialed by all parties but remains unsigned. In certain respects, the parties thereto are conducting themselves as though the ARGA is in effect. Management does not foresee a material risk with the conduct of the Company's business with an unsigned ARGA at this time.

### 20. Contractual Obligations and Committed Capital Investments cont.

### Re-Rating Agreement

In 2011 the Company, TPDC and Songas signed a Re-Rating Agreement which evidenced an increase to the gas processing capacity of the Songas Infrastructure to a maximum of 110 MMcfd (the pipeline and delivery pressure requirements at the Ubungo power plant restrict the infrastructure capacity to a maximum of 102 MMcfd). Under the terms of the Re-Rating Agreement, the Company paid additional compensation of \$0.30/mcf for sales between 70 MMcfd and 90 MMcfd and \$0.40/mcf for volumes above 90 MMcfd by issuing credit notes to TANESCO. This was in addition to the tariff of \$0.59/mcf payable to Songas as set by the energy regulator, EWURA.

Although Songas notified the Company in 2014 that the Re-Rating Agreement was terminated, the parties have continued to produce, transport and sell gas volumes in line with the re-rated plant capacity. In May 2016 the Company notified TANESCO and Songas that the additional compensation for sales over 70 MMcfd would no longer be paid effective June 2016. The additional compensation was always intended to be temporary in nature until the expansion of the Songas Infrastructure, at which time Songas would apply to EWURA to obtain approval of a new tariff for the processing of volumes over 70 MMcfd. The PGSA provides for passing on to TANESCO any tariff charged to the Company in the event that a new tariff is approved.

The parties to the Re-Rating Agreement are in the process of negotiating a replacement agreement which may address the additional compensation paid. In the interim, the processing capacity at the Songas Infrastructure remains unaltered and is fully available for utilization by the Company. This capacity is in addition to the capacity available within the NNGI.

### Portfolio Gas Supply Agreement ("PGSA")

On June 17, 2011, the PGSA was signed (term to June 2023) between TANESCO (as the buyer) and the Company and TPDC (collectively as the seller). TANESCO requested a change to the PGSA MDQ in accordance with clause 7.6(b) which PAET and TPDC approved effective January 29, 2018. The seller is obligated, subject to infrastructure capacity, to sell a maximum of approximately 26 MMcfd (previously 36 MMcfd) for use in any of TANESCO's current power plants, except those operated by Songas at Ubungo. Under the agreement, the basic wellhead price of approximately \$2.98/mcf increased to \$3.04/mcf on July 1, 2017, to \$3.10/mcf on July 1, 2019, \$3.14/mcf on July 1, 2020 and \$3.20/mcf on July 1, 2021. Previously under the PGSA any sales in excess of 36 MMcfd were subject to a 150% increase in the basic wellhead gas price. On December 22, 2018 a side letter amendment to the PGSA was agreed with TPDC to allow PGSA volumes up to a maximum monthly average volume of 35 MMcfd to temporarily flow through the NNGI. The temporary arrangement was terminated in September 2019 once the refrigeration unit became fully operational and all PGSA volumes were again processed through the Songas Infrastructure.

# Long-term Gas Sales Agreement ("LTGSA")

On May 14, 2019 the Company and TPDC signed the LTGSA for an initial delivery of 20 MMcfd through 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 of 30 MMcfd. In 2020 parties established a 12-month renewable agreement for the supply of volumes above 30 MMcfd on an ad hoc basis, allowing TPDC to meet fluctuating demand and compensate for shortfalls in production from their Madimba plant without being penalized due to a higher, fixed contractual limit and the subsequent take-or-pay penalties should the demand reduce again. The agreement has allowed the Company to supply volumes in excess of 50 MMcfd on occasion, increasing average sales volumes and revenues.

All volumes above 20 MMcfd are supplied on a best endeavors basis until compression facilities are added to the Songas facilities in Q1 2022.

# Leases

The Company has three office rental agreements, two in Dar es Salaam, Tanzania, and one in London, England. An agreement for the office in Dar es Salaam was entered into on November 1, 2019 and expires on October 31, 2023 at an annual rent of \$0.4 million. Another agreement for the downstream office in Dar es Salaam was entered into on May 1, 2018 and extended on November 1, 2020 to June 30, 2022 at an annual rent of \$0.04 million. On November 15, 2021 the Company leased new office premises in London for a period of 12 months at a cost of \$0.1 million per annum. The cost of the London office lease is recognized in the general and administrative expenses.

# **Capital Commitments**

### Tanzania

At the date of this report, the Company's significant outstanding contractual commitments are in relation to the compression contract, originally priced at \$38.0 million which has increased through variations to \$41.7 million and the upcoming workover program originally priced at \$21.4 million which has increased through variations to \$31.6 million. As of December 31, 2021, \$40.5 million of the compression contract has been paid, the remaining capital expenditures under this contract of \$1.2 million will be paid in 2022. As of December 31, 2021, \$13.9 million of the workover contracts has been paid, the remaining capital expenditures of \$17.7 million will be paid in 2022.

# 21. Contingencies

## **Upstream and Downstream Activities**

The Petroleum Act, 2015 (the "Petroleum Act") provides TPDC with exclusive rights over the distribution of gas in Tanzania. The Petroleum Act has grandfathering provisions upholding the rights of the Company to develop and market natural gas produced under the PSA as it was signed prior to the Petroleum Act coming into effect in 2015.

On October 7, 2016 the Government of Tanzania issued the Petroleum (Natural Gas Pricing) Regulation made under Sections 165 and 258 (I) of the Petroleum Act. Article 260 (3) of the Petroleum Act preserves the Company's pre-existing right with TPDC to market and sell Additional Gas together or independently on terms and conditions (including prices) negotiated with third party Natural Gas customers. To date there has been no impact on the Company as a result of the Natural Gas Pricing Regulation, however, any future impact cannot be determined at this time.

### TPDC Back-in

TPDC has the right under the PSA to "back in" to the Songo Songo field development and convert this into a carried working interest in the PSA. The current terms of the PSA require TPDC to provide formal notice in a defined period and contribute a proportion of the costs of any development, sharing in the risks in return for an additional share of the gas. To date, TPDC has not contributed towards any costs.

# Cost Recovery

TPDC conducted an audit of historical costs (the "Cost Pool") and in 2011 disputed approximately \$34.0 million of costs that had been recovered from the Cost Pool from 2002 through to 2009. In 2014 a substantial portion of the disputed costs were agreed to be cost recoverable by TPDC with \$25.4 million remaining in dispute. Under the dispute mechanism outlined in the PSA, parties are to agree the appointment of an independent specialist to assist the parties in reaching agreement on costs that are still subject to dispute. In 2014, prior to appointing an independent specialist, TPDC suspended the process. From 2010 to 2015 TPDC rejected a further \$16.8 million of costs. In 2016 the Tanzanian Petroleum Upstream Regulatory Authority ("PURA") assumed the role of auditing the PSA cost pool from TPDC and for 2016 to 2020 have rejected all costs pertaining to downstream development amounting to \$15.0 million and a further \$9.5 million of other costs. To date there remains a total of \$66.7 million of costs that have been queried or rejected by TPDC or PURA through the cost pool audit process.

During 2019 discussions on the disputed amounts briefly resumed with TPDC. At the time of writing this report no independent specialist has been appointed and neither TPDC nor PURA have issued a formal dispute regarding cost recovery. If the matter is not resolved to the Company's satisfaction, the Company intends to proceed to arbitration via the International Centre for Settlement of Investment Disputes pursuant to the terms of the PSA. The Company's view is that all costs have been correctly included in the Cost Pool however should any of the costs be rejected as not being cost recoverable, the Company would be required to retroactively adjust its share of revenue for the period under dispute.

# Taxation

				_	As at Decem	oer 31
Amounts in \$'million	ns				2021	2020
Area	Period	Reason for dispute	Principal	Interest	Total	Total
Pay-As-You-Earn ("PAYE") tax	2008-10	PAYE tax on grossed-up amounts in staff salaries which are contractually stated as net.	0.3	-	0.3(1)	1.6
Withholding tax ("WHT")	2005-09	WHT on services performed outside of Tanzania by non-resident persons.	1.0	0.6	1.6(2)	8.7
Income tax	2008-09, 2011-17	Deductibility of capital expenditures and expenses (2012, 2015 and 2016), additional income tax (2008, 2011 and 2012), tax on repatriated income (2012 to 2016), foreign exchange rate application (2013, 2014 and 2015), underestimation of tax due (2014 and 2016) and methodology of grossing up income taxes paid (2015 to 2017).	34.2	17.5	<b>51.7</b> <sup>(3)</sup>	52.1
VAT	2012-18	VAT already paid (2012 to 2014), VAT on imported services (2015 and 2016); interest on VAT decreasing adjustments and input VAT on services (2017 and 2018).	0.2	1.2	1.4(4)	6.8
			35.7	19.3	55.0	69.2

## 21. Contingencies cont.

#### Taxation cont.

During Q2 2021 the Company paid the TRA \$1.8 million as a deposit against the disputed taxes including PAYE tax, WHT, income tax and VAT for the years 2012-16, an amount agreed upon in order for TRA to admit the outstanding tax objections. In Q3 2021, the Court of Appeal of Tanzania ("CAT") delivered its judgment on an appeal instituted by the Company on the appealability of a one-third deposit required to admit objections for the 2012 year of income. The CAT decided that the matters are not tax decisions and are therefore not appealable. Aggrieved by the decision, the Company filed a notice of motion for review of the decision at the same court and is awaiting a hearing. The decision, however, will not affect the position on admission of objections for the years of 2012-16.

During 2020 the TRA issued an Agency Notice for \$5.3 million obligating PAET's commercial bank in Tanzania to release funds in favor of the TRA with regards to the output VAT on SSI operatorship services (2008-10). In Q3 2020 the Company filed an appeal with the CAT and recorded the \$5.3 million as other receivables and fully allowed for the amount on the Company's financials. Subsequently, during Q3 2021 the CAT ruled in favor of the TRA on the Company's appeal. Management, with advice from its legal counsel, decided not to proceed further on this matter.

During Q4 2021 the TRA issued a new assessment with regards to 2017 income tax (\$6.4 million). The Company has objected TRA's incorrect methodology of grossing up income taxes already paid (\$6.4 million) and the issue of imposing interest on deemed delayed payment (\$0.1 million) and is awaiting a TRA response.

In Q4 2021 the Company recorded an allowance of \$0.6 million with respect to interest on depreciation of disallowed costs of completion of wells SS-10 (2009-10) and SS-12 (2015-16). In addition, the Company recorded an allowance of \$0.5 million with respect to WHT on services performed outside Tanzania by non-resident persons (2010 and 2015-16). These disputes are no longer represented in the table above.

In Q4 2021, the Company recorded an additional provision of approximately \$2.2 million.

In Q4 2021, further to issuing its objections to TRA's 2015-16 assessments, the Company received determination letters whereby the TRA agreed to drop their claims with regards to WHT on interest on the IFC Loan and management fees (2015-16) and PAYE on grossed up salaries (2015-16) in the amounts of \$0.9 million and \$1.4 million, respectively. The aforementioned disputes are no longer represented in the table above. Additionally, with the advice from its legal and tax counsels, it was established that four of the assessments with respect to 2011 (\$0.2 million), 2013 (\$0.2 million), 2014 (\$3.3 million) and 2015-16 (\$0.4 million) income tax, which were previously presented as contingencies, were overridden by four other assessments, effectively presenting duplicating assessments, for the respective years of income. This has now been amended accordingly in the taxation contingency table above.

Subsequent to December 31, 2021, following the expiry of the statutory deadline for the TRA to respond to the Company's objections, the Company filed notices of intention to appeal to TRAB against the corporate income tax assessments for the years of 2012-16, tax on repatriated income for the years of 2012 and 2013, and VAT for the years of 2015-16. In Q2 2022, these matters came for hearing and, at the request from the TRAB granted an order that these matters be withdrawn to allow the TRA to further review and issue determination letters. The matters are expected to appear for a status review in May 2022. In addition, the Company paid the TRA \$0.7 million as a deposit against disputed income tax for the year of income of 2017.

During 2020, the TRA conducted audits of 2017 and 2018 and issued two assessments with regards to VAT (\$1.2 million) and WHT (\$0.01 million). The Company has conceded to the TRA with respect to the WHT assessment (\$0.01 million) and a portion of the VAT assessment (\$0.06 million). However, the Company has objected to the incorrect imposition of interest on VAT decreasing adjustments on TANESCO payments (\$1.1 million) and disallowing input VAT claimed in certain services (\$0.1 million). No final assessments have been issued to date with respect to corporation tax, excise duty or payroll tax for 2017 and no preliminary assessment has yet been received for 2018. During 2020 the Company filed an application for judicial review at the CAT with regards to the 2008-10 PAYE case (\$0.3 million). During the year, again acting under instructions from the TRA, PAET's commercial bank in Tanzania transferred the full principal tax amount in dispute (\$0.3 million) to the TRA. The Company has filed an appeal for review with the CAT.

Management, with advice from its legal counsel, has reviewed the Company's position on the objections and appeals related to the disputed amounts and has concluded that no further provision is required. However, if the TRA reassesses the Company's tax returns for open taxation years on a similar basis, the Company may be required to make future deposits to object such assessments.

# 21. Contingencies cont.

#### Taxation cont.

The process of appealing assessments issued by the TRA starts by initially filing an appeal with the TRA. If this is not successful, claims can be taken to higher authorities starting with the TRAB, followed by an appeal to the Tax Revenue Appeals Tribunal ("TRAT") and finally to the CAT. Below is a summary of the status of the various assessments:

- (1) (a) 2008-10 (\$0.3 million): In 2020, the Company lost an appeal with CAT on the principal amount of PAYE tax and filed an application for judicial review at CAT. The TRA instructed PAET's commercial bank to transfer the full principal amount in dispute to TRA;
- (2) (a) 2005-2009 (\$1.6 million): In 2018 the CAT ruled in favor of the Company that no WHT was required on services performed outside Tanzania by non-resident persons. It is unknown whether TRA will file an application objecting to the CAT ruling;
- (3) (a) 2008 (\$0.6 million): The Company objected to a TRA assessment that did not recognize a tax loss carried forward and is awaiting a response;
  - (b) 2009 (\$0.8 million): The Company objected to an amended assessment from the TRA for being time-barred and arbitrary and is awaiting a TRA response;
  - (c) 2011 (\$1.7 million): The Company is awaiting a hearing at the TRAT following the TRAB ruling in favor of the TRA (\$1.7 million);
  - (d) 2012 (\$13.6 million): The Company objected to the TRA assessments with respect to understated revenue, timing of deductibility of capital expenditures, expenses and tax on repatriated income. Following expiry of the statutory deadline for the TRA to respond to its objection, the Company filed an appeal at the TRAB and is awaiting a hearing;
  - (e) 2013 (\$9.3 million): The Company objected to two assessments as being time-barred and without merit (\$7.4 million) and tax on repatriated income (\$7.4 million) and is awaiting the TRA's response;
  - (f) 2014 (\$8.0 million): The TRA issued two assessments for corporation tax (\$4.9 million) and tax on repatriated income (\$3.1 million). The Company field objections to the assessments and is awaiting the TRA's response;
  - (g) 2015-16 (\$11.2 million): The TRA issued two assessments for corporation tax (\$5.8 million) and tax on repatriated income (\$5.4 million). The Company appealed to the TRAB against the assessments following the TRA failure to determine the matters within the statutorily allowed period and is awaiting a response;
  - (h) 2017-18 (\$6.5 million): The TRA issued an assessment for corporation tax including questioning the Company's methodology of grossing up already paid corporation tax (\$6.4 million) and raising the issue of imposing interest on deemed delayed payment (\$0.1 million). The Company filed an objection and is awaiting the TRA's response;
- (4) (a) 2012-16 (\$0.2 million): The Company has filed an objection to a TRA assessment with respecting to disallowing VAT on certain services and is awaiting a response;
  - (b) 2017-18 (\$1.2 million) The Company has filed an objection to a TRA assessment and is awaiting a response. The Company has objected incorrect imposition of interest on VAT decreasing adjustments in respect of delayed TANESCO payment (\$1.1 million) and disallowing input VAT claimed in certain services (\$0.1 million).

In 2016 the TRA introduced significant changes in relation to the income tax treatment of the extractive sector with separate new chapters in Part V of the Income Tax Act 2004 ("ITA, 2004") for mining and for petroleum to be effective commencing in 2018. Further changes were subsequently made by the Written Laws (Miscellaneous Amendments) Act, 2017 ("WLMAA, 2017") and in particular section 36(a)(ii) of the WLMAA, 2017. The WLMAA, 2017 amended section 65M and 65N of the ITA 2004 to exclude cost oil/cost gas from inclusion in both income and expenditure. The Company continues to review the tax effects of the changes as there are a number of uncertainties and ambiguities as to the interpretation and application of certain provisions of the WLMAA, 2017. In the absence of guidance on these matters, the Company has used what it believes are reasonable interpretations and assumptions in applying the WLMAA, 2017 for purposes of determining its tax liabilities and the results of operations, which may change as it receives additional clarification and implementation guidance. The Company does not expect a significant impact from the changes as it is able to recover taxes payable from the TPDC Profit Gas revenue entitlement under the terms of the PSA.

### 22. Directors' and Officers' Emoluments

	Stock based				
			C	ompensation	
\$'000	Year	Base	Bonus	expense	Total
Directors	2021	500	-	-	500
Directors	2020	514	-	157	671
Officers	2021	1,316	259	196	1,771
Officers	2020	1,465	472	285	2,222

The table above provides information on compensation relating to the Company's officers and Directors. Three officers (year ended December 31, 2020: five) and three Non-Executive Directors (year ended December 31, 2020: six) comprised the key management personnel during the year ended December 31, 2021.

# 23. Change in Non-Cash Operating Working Capital

	As at December 31		
\$'000	2021	2020	
Increase in trade and other receivables	(11,143)	(1,654)	
(Increase) decrease in prepayments	(235)	5,854	
Increase (decrease) in trade and other liabilities	7,172	(9,892)	
Decrease in APT	(11,545)	(11,939)	
(Decrease) increase in tax payable	880	1,455	
(Increase) decrease in long-term receivable	(1)	36	
	(14,872)	(16,140)	

# 24. Non-Controlling Interest

The Company sold 7.9% (7,933 Class A common shares) of PAEM to a wholly owned subsidiary of Swala Oil & Gas (Tanzania) plc. ("Swala") in 2018 for \$15.4 million cash and \$4.0 million of Swala convertible preference shares ("Preference Shares") pursuant to a share purchase agreement. The Preference Shares entitle the Company to a 10% per annum distribution payable 15 days after each quarter end commencing from the closing date, January 16, 2018. Payment of the quarterly distributions is at the discretion of Swala based on funds available, however, the liability accrues if any amount is unpaid when due. If any distributable amount remains unpaid at December 31, 2021, the Company may demand settlement and Swala is obligated to comply by transferring and returning the Class A common shares of PAEM sold to Swala. The aggregate value of these shares will equal the amount of the outstanding distributions. As at December 31, 2021, the Company has not received any distributions or recorded any amount receivable related to the Preference Shares.

Swala is obligated to redeem 20% of the Preference Shares for cash annually starting from December 31, 2021 until all shares are redeemed. If at any time Swala does not redeem in cash the required number of Preference Shares, Swala is obligated to redeem the Preference Shares by transferring and returning the Class A common shares of PAEM sold to Swala. The aggregate value of these Class A common shares will equal the amount of any outstanding redemption. As of December 31, 2021, the Company recorded \$0.7 million as a loss allowance with respect to Preference Shares.

A reconciliation of the non-controlling interest is detailed below:

	As at December 31		
\$'000	2021	2020	
Balance, beginning of year	1,523	163	
Net income attributable to non-controlling interest	1,593	1,360	
Balance, end of year	3,116	1,523	

### 25. Subsequent Events

On February 24, 2022 the Company declared a dividend of CDN\$0.10 per share on each of its Class A Shares and Class B Shares for a total of \$1.6 million to holders of record as of March 31, 2022 paid on April 15, 2022.

# Corporate Information

### **Board of Directors**

### Jay Lyons

Executive Director and Chief Executive Officer Vancouver, Canada

#### David W. Ross

Chairman and Non-Executive Director Calgary, Canada

# Dr Frannie Léautier

Non-Executive Director Washington DC, United States

### Linda Beal

Non-Executive Director London, UK

# Advisor to the Board and PAET

### Lloyd Herrick

Director, PAET Calgary, Canada

### Officers

### Jay Lyons

Chief Executive Officer Vancouver, Canada

# Lisa Mitchell

Chief Financial Officer London, UK

# Andrew Hanna

Managing Director, PAET Surrey, UK

# **Operating Office**

# PanAfrican Energy Tanzania Limited

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# **Registered Office**

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# **Investor Relations**

# Jay Lyons

Chief Executive Officer jlyons@orcaenergygroup.com

### Lisa Mitchell

Chief Financial Officer Imitchell@orcaenergygroup.com

# **International Subsidiaries**

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# Engineering Consultants

# McDaniel & Associates Consultants Ltd.

Calgary, Canada

# Auditors

### KPMG LLP

Calgary, Canada

#### Website

orcaenergygroup.com

#### Lawyers

Burnet, Duckworth & Palmer LLP

Calgary, Canada

# Transfer Agent

**AST Trust Company** Calgary, Canada





Orca Energy Group Inc. Wickhams Cay II Road Town, Tortola VG1110 British Virgin Islands

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