



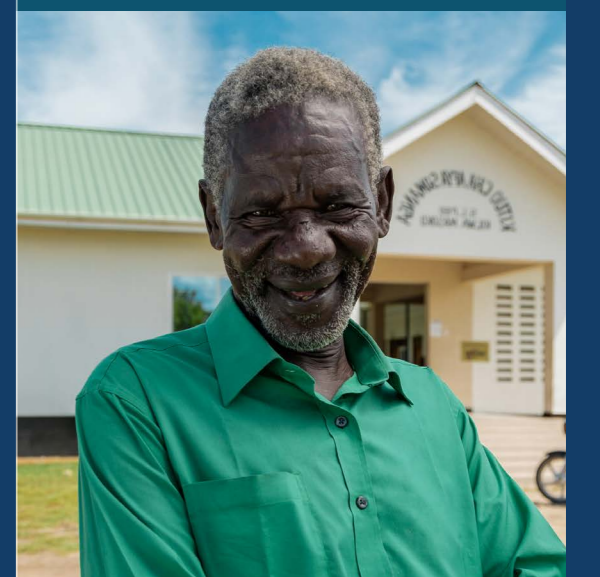
8 DECENT WORK AND ECONOMIC GROWTH



7 AFFORDABLE AND CLEAN ENERGY



13 CLIMATE ACTION



SUSTAINABLE LONG-TERM VALUE

Orca Energy Group Inc. and PanAfrican Energy Tanzania
Sustainability Report 2021

Welcome

PROVIDING DOMESTIC NATURAL GAS TO SUPPORT TANZANIA'S GROWTH



Message from our CEO	02
Our Company	04
About us	04
Our Purpose	04
Our Approach to Sustainability	05
Our Culture and Values	06
United Nations Sustainable Development Goals ("SDGs")	07
World Bank Pathways for Tanzania	08
Our Stakeholders	09
Materiality Assessment	10
Material Issues	11
Governance	12
Board Structure	13
Governance Topics	14
Environment	15
Climate Change	16
Climate Related Risk Management	18
GHG Emissions	19
Environment	20
Social	21
Social Wellbeing	22
Human Capital Development	25
Community Relations	27
Human Rights, Labor and Supply Chain Management	29
Our Future	30
Appendix	31
GRI Content Index	31

About this report

Orca Energy Group Inc. ("Orca" or the "Company") and PanAfrican Energy Tanzania ("PAET")'s annual Sustainability Report aims to provide transparency around how sustainability-related topics are approached as a business by outlining the firm-wide sustainability strategy, discussing performance on key sustainability topics and providing insight into future ambitions and goals.

The 2021 Sustainability Report reflects our progress on our sustainability strategy to date. Going forward, we will seek to align our sustainability reporting with global reporting standards and look to report in line with the Task Force on Climate-related Financial Disclosures "TCFD" and the Global Reporting Initiative. We do however, for this inaugural report, highlight the key metrics mapped to the Global Reporting Initiative ("GRI") in the Appendix.

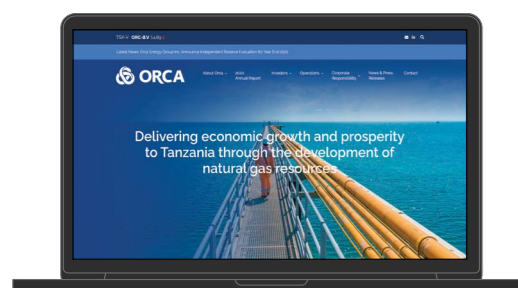
A Note on Terminology: There are numerous terms used to describe corporate sustainability practices. In this report, we use Environmental, Social, and Governance ("ESG") factors to bring structure to our corporate sustainability strategy, which aims to capture the most important issues for our business as well as our impact on stakeholders.

How to use this report

Please use the < > single arrows to move between pages and the ⌂ home button to return to the start.

Use the tabs at the top of each page to jump between sections.

Click on the read mores to go directly to that page number.



Our website

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

www.orcaenergygroup.com

Message from our CEO

PLAYING A KEY ROLE WITHIN THE WIDER TANZANIAN ENERGY TRANSITION

Despite continued macro headwinds from the COVID-19 pandemic in 2021, Orca’s strong business performance was in line with expectations. Orca remains aligned with the Government of Tanzania on its strategic objectives in the gas sector and is committed to making a lasting and material contribution towards the country’s economic prosperity.

This is Orca’s maiden Sustainability Report and we are proud of the progress we made in 2021 and the range and impact that our ESG focused initiatives had, which will continue with the same momentum in 2022. As a company active in the energy space, we are intrinsically linked with Tanzania’s energy needs, with our primary objective being to provide reliable natural gas to support the country’s power and industrial sectors, and to help transition the nation towards a lower carbon economy.

With this report, we aim to set out the Company’s ambitions, both from a corporate and sustainability perspective, and demonstrate how our holistic approach to sustainability is the right method of implementation for Orca to take. the Board of Directors of the Company (the “Board”), our view is that strong governance practices and an empowered workforce will drive us towards creating value for all stakeholders by maximizing the value of our asset in Tanzania. Our approach towards sustainability is inspired by the 17 UN Sustainable Development Goals (“UN SDGs”) and the 2019 World Bank Pathways for Tanzania, and founded on what is most relevant for our business and our stakeholders.

While Orca is a greenhouse gas (“GHG”) emitter, the Company believes it can, and indeed does, play an important role in transitioning the country away from more carbon intensive energy sources, such as; coal, and refined petroleum products. In addition, we regularly engage with stakeholders, in order to ensure that we fully understand and address issues that are important to these groups, combined with our focus on reducing Orca’s impact on the local environment. Furthermore, we work to ensure we have strategic focus and execution attention to ESG issues.

At an operational level, during this reporting period we increased our average sales volumes to 61.1 MMcfd and expanded our industrial gas distribution to displace higher carbon based and more expensive energy alternatives. We also invested considerable sums into our operations during the period and we plan to continue our investment throughout 2022, with the workover program concluding and the planned seismic acquisition. We are cognizant of the fact that we plan to increase production capacity over the coming years, so in this report we have detailed the steps we plan to take to minimize our negative impact on the environment.



Since 2021, we have worked with third-party ESG advisory firm, to ensure that the sustainability principles and framework in place at Orca are meaningful. While there remains work to be done, we are pleased with the strides we have made on these measures in recent years. We have also developed the Company’s oversight of ESG matters at the Board level, with our dedicated ESG Committee responsible for overseeing the Company’s strategies, policies and practices when it comes to sustainability.



Tanzania

Size
950,000Km²

Population
62,000,000

Message from our CEO cont.

Turning to our local region, Tanzania is blessed with an abundance of energy sources, and at present the country remains highly dependent on hydropower, and other more carbon intensive power sources such as refined petroleum products. The country's hydropower industry is arguably one of the best in Africa, but due to its seasonality and the somewhat unpredictable nature of weather patterns, we believe that there will continue to be a place for domestic natural gas in the country's energy mix in the future. At present, we are the largest natural gas to electricity supplier in-country, responsible for approximately 45% of the Tanzanian electricity supply, and given the country's future industrial growth plans, we believe that further development of the Songo Songo gas field will enable additional power capacity, while keeping additional carbon emissions as restricted as possible. Natural gas also has a role to play in reducing carbon intensive sectors such as compressed natural gas ("CNG") in the transportation sector and industrial development.

Since 2021, we have worked with third-party ESG advisory firm, to ensure that the sustainability principles and framework in place at Orca are meaningful. While there remains work to be done, we are pleased with the strides we have made on these measures in recent years. We have also developed the Company's oversight of ESG matters at the Board level, with our dedicated ESG Committee responsible for overseeing the Company's strategies, policies and practices when it comes to sustainability.

We saw with the 2021 United Nations Climate Change Conference ("COP26") that climate change and reducing dependency on carbon intensive energy sources are at the forefront of the minds of global leaders. However, we also recognize that Tanzania is a growing economy, in need of energy to support its population and industrial growth and development. Therefore, while the Company recognizes the need for global economies to transition to low carbon energy sources, we are also appreciative of the fact that Tanzania is in need of a reliable supply of domestic power in order to meet the country's growth and development targets.

Following the publication of our first Sustainability Report, our ambition is to continue to produce these on an annual basis. This not only ensures that the Company can track its ESG performance on a regular basis, but also that the direction of travel and milestones achieved can also be recognized.

In recent years, we have laid the foundations for a number of projects that increase and sustain the Company's future production while seeking to be as carbon efficient as possible.

In closing, we remain positive about the Company's prospects for the remainder of 2022, with a number of operational projects that we are on track to deliver. We are committed to helping the Tanzanian economy grow, empowering the country's population and playing a key role within the wider Tanzanian energy transition through displacement of high carbon content fuels and through achieving efficiencies in our ongoing production. I look forward to keeping our stakeholders updated throughout the rest of the year, as we work alongside our host government and partners in Tanzania to deliver further value from the Songo Songo gas field for all those involved in the project and for the wider population.



Jay Lyons
Chief Executive Officer



Welcoming Lisa Mitchell to the Orca Board of Directors in June, 2022

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.

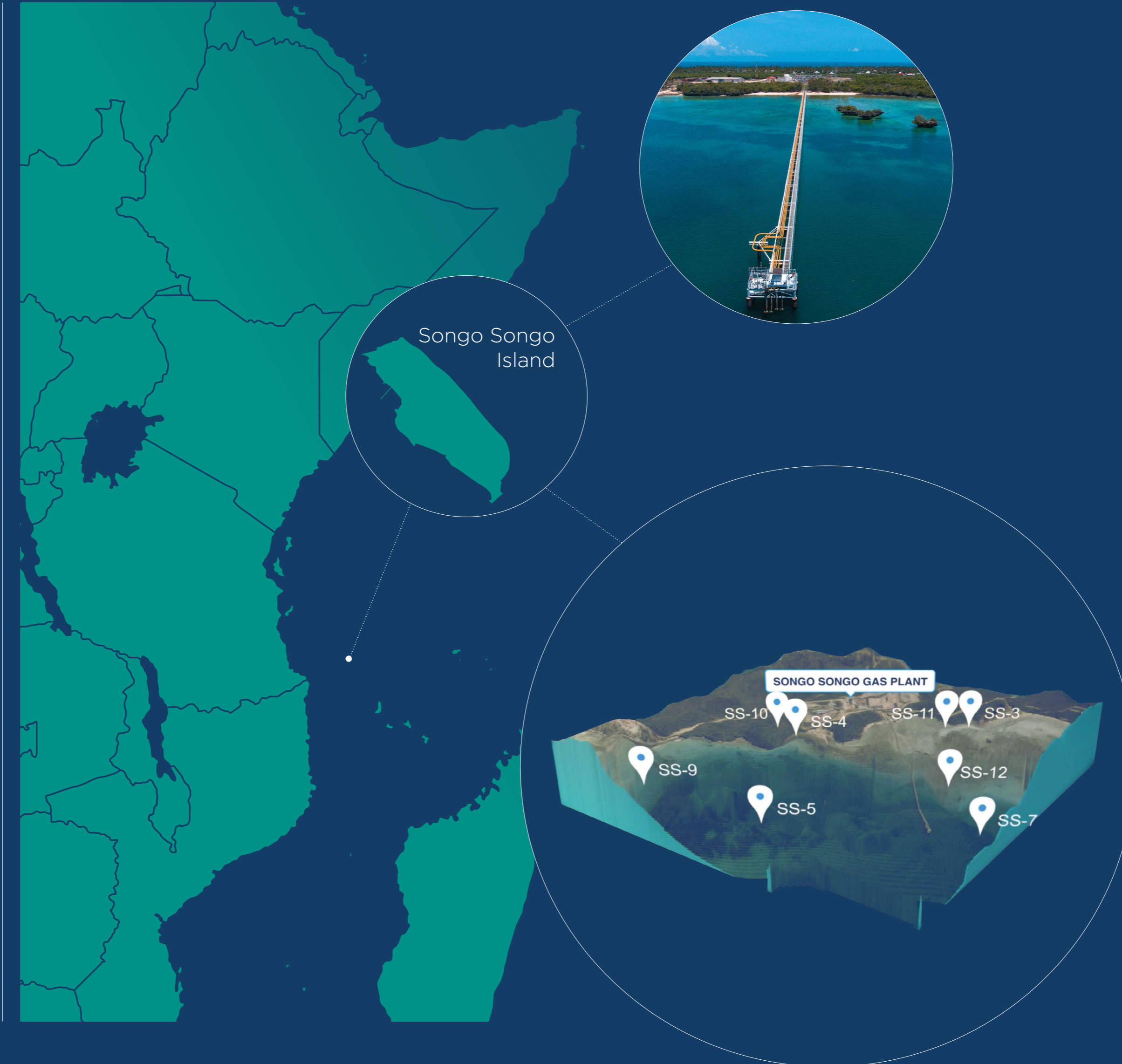


Our Company

DELIVERING ECONOMIC GROWTH AND PROSPERITY TO TANZANIA THROUGH THE DEVELOPMENT OF NATURAL GAS RESOURCES

Orca Energy Group Inc. is listed on the TSX Venture Exchange (TSX-V), and works to develop natural gas resources in Africa. We are headquartered in the British Virgin Islands, and operate a gas field on and around the Songo Songo Island through our subsidiary, PAET. This Sustainability Report covers both Orca and PAET.

We operate a license with a total area of approximately 170Km² containing the world class Songo Songo reservoir, which is positioned on and slightly offshore of Songo Songo Island. Songo Songo Island is located in shallow water approximately 15Km off the coast and 200Km south of Dar es Salaam. The license is operated under a Production Sharing Agreement ("PSA") with the Government of Tanzania and the Tanzania Petroleum Development Corporation ("TPDC").



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 in the most carbon efficient manner possible. 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.

Highlights

Producing wells

6

Orca and PAET employees

116

Percentage of Tanzanian employees

90% (99% within Tanzania)

Experience operating the Songo Songo gas field and related infrastructure

18 years

MMcfd average sales volume

61.1

MMcfd gross sales volume

23,313

OUR APPROACH TO SUSTAINABILITY

We continue to grow a sustainable business model around our asset in Tanzania and believe it is fundamental that our strategy considers what our stakeholder's needs and priorities are.

In this section	
Our Culture and Values	06
United Nations Sustainable Development Goals ("SDGs")	07
World Bank Pathways for Tanzania	08
Our Stakeholders	09
Materiality Assessment	10
Material Issues	11

Our Culture and Values

An embedded Company culture

In 2021, we spent significant time honing our shared values across Orca and PAET. We identified three main topics that lay the foundation for what kind of firm we want to be:



Responsibility

We have an opportunity to play a pivotal role in Tanzania's development and achievement of its sustainability goals. We aspire to support the Government of Tanzania in delivering better conditions for future generations to inherit.



Authenticity

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



Ethics

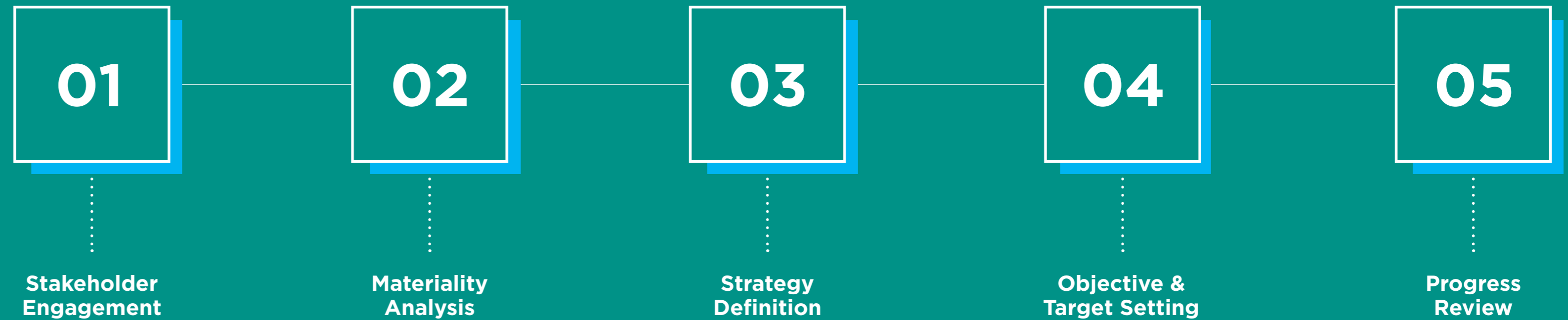
Strong business ethics is non-negotiable and is embedded throughout all facets of the organization.



Sustainable activities roadmap

Our main ambition is to continue growing a sustainable business model around our asset in Tanzania. In order to do so, we want to ensure that we understand the needs of and the impact on our stakeholders and the environment.

Our sustainability strategy and performance is reviewed on an ongoing basis through the steps outlined in the diagram to the right, with the purpose of this report to provide transparency around progress.



United Nations Sustainable Development Goals (“SDGs”)

Strategically created with country level actions in mind

Our sustainability strategy is further inspired by the 17 United Nations Sustainable Development Goals and the 2019 World Bank Pathways for Tanzania.

With a 90% Company wide Tanzanian employee rate, and a 99% in country Tanzanian workforce, the Company carries a responsibility to contribute to the development of Tanzania, its people and its achievement of the SDG’s. As such, we are conscious of how our business activities may impact the achievement of the UN goals.



► Source for statistics: United Republic of Tanzania ... Sustainable Development Knowledge Platform

Importantly, the 17 SDGs were created with country-level actions in mind, and even though we support all SDGs, not all goals and targets are directly relevant for our business. Therefore, we have assessed the goals to find those most relevant for us, and framed the goals and relevant underlying targets in terms of their applicability to our business. In fact, our action on the SDGs is tied to our core business, sustainability strategy and material issues, and not limited to philanthropic programs. This report is structured around our material issues, and the impact against the SDGs is flagged where relevant. In sum, we have a specific focus on goals 7, 8 and 13, and their underlying targets given our business activities. These are expanded on beside:

► In addition, our philanthropic activities focus on SDG 3 Good Health and Wellbeing, and SDG 4 Quality Education. We discuss these in more depth under the ‘Community Relations’ section of this report.



Achievement will require some step-up efforts. Population with access to electricity is improving, but reliability remains a key development point.

Targets that our business activities aim to contribute to:

- 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



Reasonably good performance on this goal, with high GDP growth at 6.7% and average labor force participation at 83%.

Targets that our business activities aim to contribute to:

- 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



Achievement will require significant local efforts and international support.

Targets that our business activities aim to contribute to:

- 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

World Bank Pathways for Tanzania

ALIGNING WITH GLOBAL INITIATIVES ON CLIMATE ACTION

In 2019, the World Bank released a report detailing the main environmental and urban and industrial challenges facing Tanzania, whilst also suggesting four pathways for tackling them, listed to the right.

Specifically, Pathway 3 is important for us as it focuses on tackling the widespread use of charcoal and firewood as fuel sources. A key element of this is to improve access to modern and reliable energy sources, reinforcing the role of natural gas as a transitional fuel in terms of both its lower emissions and heightened efficiency relative to prevailing fuel sources in Tanzania.



Our Stakeholders

WE KEEP OUR STAKEHOLDERS AT THE HEART OF EVERYTHING WE DO

We believe it is fundamental that our business strategy considers what our stakeholder’s 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 main needs, which we look to embed as part of our strategy.



The 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 to their well-being. For the communities, our key priorities are employment opportunities, education, health and empowerment.



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.



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 a sub-group of our customers on topics such as how we could contribute to lower emissions and ensuring a high product quality.



Investors

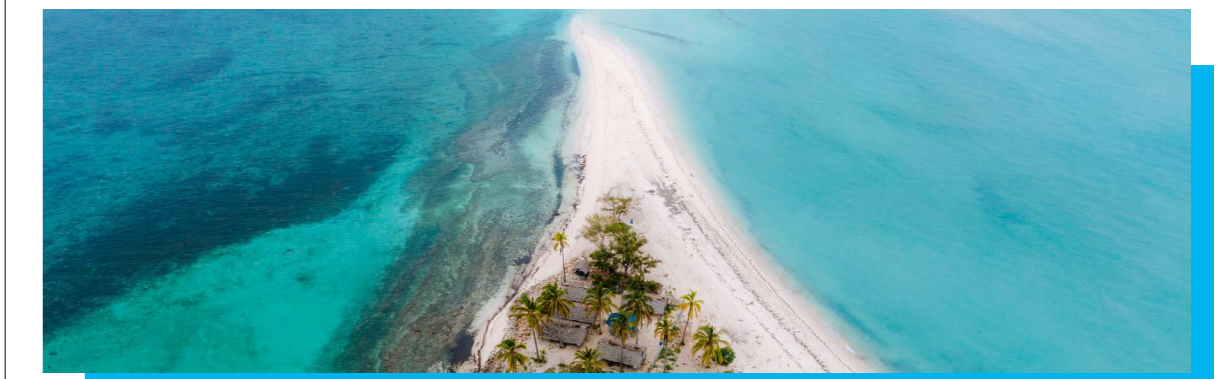
Being transparent and engaging with our investors is a key priority for the Company. We keep investors updated and engaged in the strategic direction and operational plans via a range of regular reporting, press releases, and discussions. We listen to our shareholders carefully, value their support, 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.



Local Stakeholders

Our 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.



The Environment

As a natural gas operator, we will by nature be a 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.

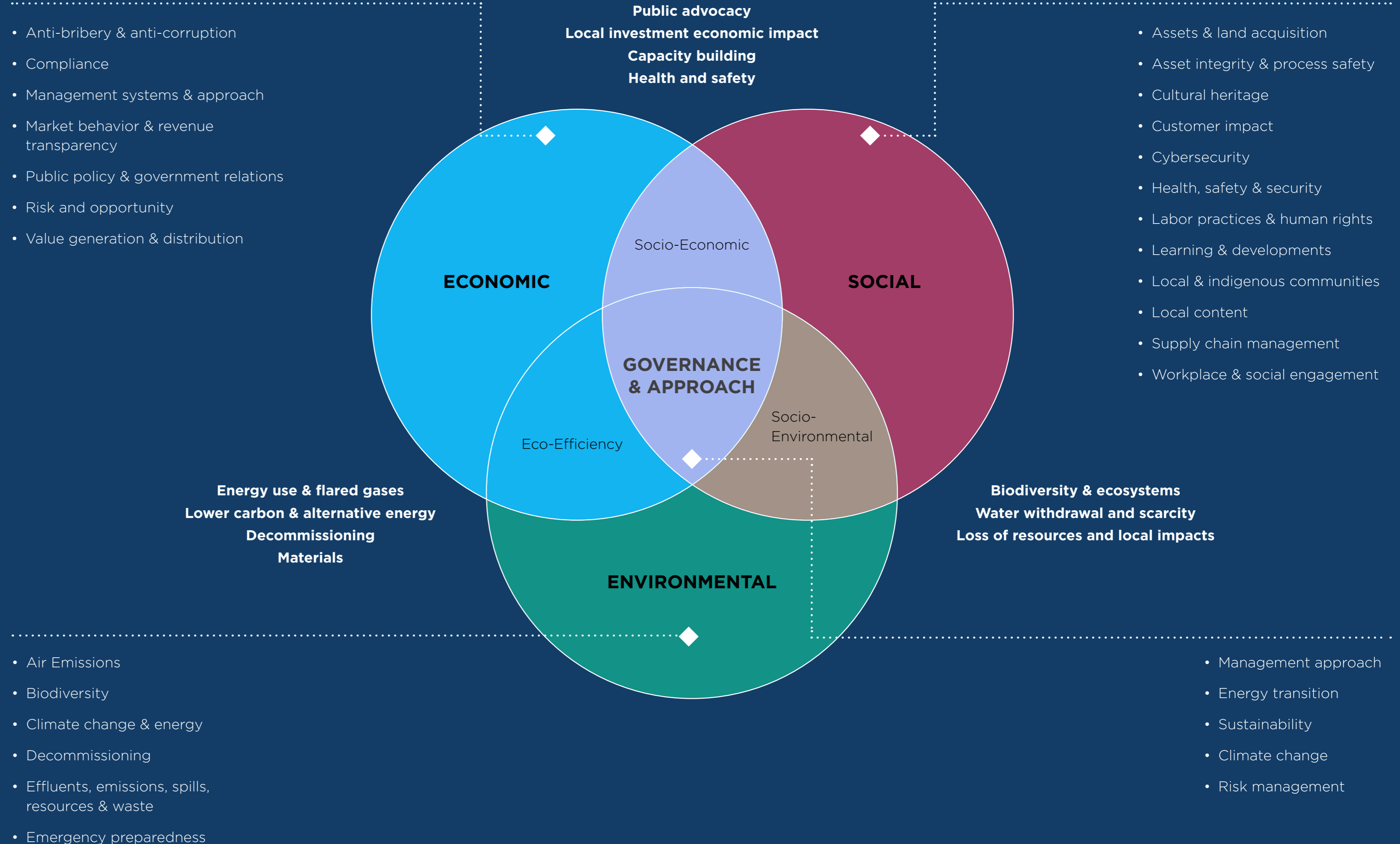
We are committed to continue engaging with local regulators and stakeholders in order to ensure that we are aware and fully transparent about our contribution to global climate change and local environmental matters.

Materiality Assessment

Material ESG Topics

In 2020, we conducted a high level materiality assessment identifying a list of potentially material ESG features and issues relevant to us, our business and our stakeholders. Our next steps included the further refinement of this list through consultation with our employees and other key stakeholders, so that focus can be delivered in areas that matter and where value can be added.

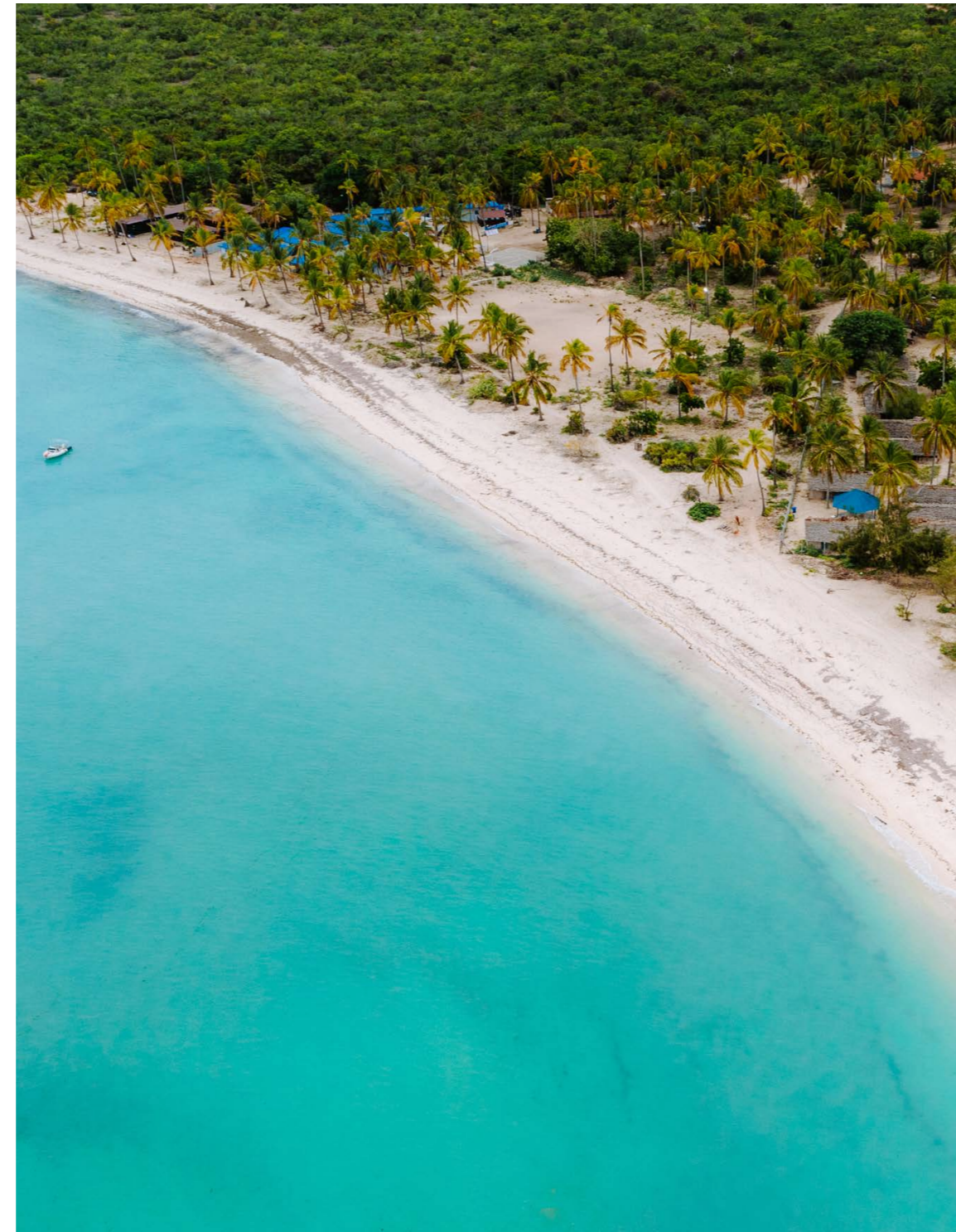
The list of material topics identified through our assessment and analysis, which we will use in our ongoing risk assessment and strategic planning are outlined in the figure on the right.



Material Issues

Materiality analysis helps us to prioritize our ESG issues within our approach and goal setting, as well as guiding our engagement with key stakeholders.

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



Environmental

- Climate Change
- Biodiversity Impact
- Water and Waste Management



Social

- Community Relations
- Employee Wellbeing
- Human Capital Development
- Human Rights.



Governance

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

- Supply Chain Management (both Environmental & Social)

GOVERNANCE

Ensuring a high level of governance and oversight is one of the top priorities for the Company.



In this section	
Board Structure	13
Governance Topics	14

Board Structure

An international team leading through diligent management

We define governance in relation to how we aim to run our business responsibly. We believe our Board and management has a critical role to play in driving our sustainability strategy and the solutions to meet the expectations of our stakeholders.

We have an effective Board structure aimed at efficacy in terms of its composition, skills and experience, in order to support our business and sustainability goals.

Our Board consists of a diverse group of individuals with wide-ranging, complimentary skill sets and experiences that combine to:

- Provide independent oversight that ensures the integrity of the business
- Provide the Company with strategic direction
- Monitor the risk management framework for the Company

We have four committees formally embedded within our governance structure, with each committee covering key aspects of our business:

Audit and Risk Committee

- Responsible for providing oversight of the financial reporting process
- Provides independent assessment of audit process
- Ensures compliance with laws and regulations
- Responsible for overseeing the management of internal controls and risk management
- The Audit and Risk committee is guided by the Charter of the Audit and Risk Committee

ESG Committee (further information provided under 'ESG Oversight')

- Has ultimate oversight of all ESG matters
- Responsible for the review, approval and guidance for the implementation of the ESG strategy and policies

- Provides a systems check on safety, environmental and governance associated risks
- The ESG Committee is guided by the Mandate and Terms of Reference for the ESG Committee, which are reviewed at least annually, or as and when needed

Remuneration / Compensation Committee

- Reviews and decides the overall remuneration of Executive Management and other key employees
- The Remuneration Committee is guided by the Charter of the Remuneration Committee.

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
- Ensures 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

For more information on governance please see our 2021 Annual Report



A R RC

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.



R E

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.



A E

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.



A RC

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. Linda is also a non-executive director at Kropz PLC and Hurricane Energy PLC.

Committee membership key

- A** Audit and Risk Committee
- R** Reserves Committee
- E** ESG Committee
- RC** Remuneration / Compensation Committee

Governance Topics

The Company's vision of sustainability is founded on the principle of generating enduring long-term value through prudent governance.

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. The ESG Committee is responsible for overseeing the Company's strategies, policies and practices when it comes to sustainability.

As part of the work of the ESG Committee this year, we will conduct an analysis for how ESG issues can be integrated into other Board level committees, specifically around risk management. All Board members and senior management will be provided with tailored ESG training sessions covering ESG oversight, key material issues, and upcoming regulatory requirements. Both these actions will ensure that ESG considerations are not siloed, and that the key people responsible for driving our long-term business strategy are completely aligned in terms their understanding of ESG and the role it will play in supporting this strategy.

The Committee is headed by Dr. Frannie Leautier.

Business Ethics

Tanzania ranks 87/180 on the 2021 Transparency International Corruption index. Since strong business ethics is one of our core values, we take a zero tolerance approach towards any potential incidents of bribery or corruption, and want to ensure that our whistleblowing practices are of high standard. All employees are signatories to our Whistleblowing Policy which provides a clear mechanism for them to raise concerns relating to Accounting/Audit matters, potential violations and breach of conduct, whilst formalizing an environment to raise such concerns free of any form of discrimination, retaliation, threats or harassment.

We have previously undertaken an assessment of our exposure to corruption in Tanzania, concluding that our risk of violating the applicable laws prohibiting corrupt activities has been mitigated and is unlikely. We have a specific anti-bribery and anti-corruption policy in place. Our approach towards ensuring anti-bribery and anti-corruption extends towards third-parties, such as agents, contractors, government officials, and consultants. In fact, no third party will be asked to work on the Company's behalf in circumstances that may involve dealing with government officials without a written contract in place or other document in which the party acknowledges and agrees to abide by our standards.

In 2021, there were no confirmed incidents of corruption or anti-competitive behavior, anti-bribery, anti-trust and monopoly practices from the Company.

We have the following policies in place:

- Code of Business Conduct and Ethics
- Employee Handbook
- Whistleblower Policy
- Anti-Bribery and Anti-Corruption Policy
- Corporate Governance Disclosure of Practices
- Conflict of Interest Policy
- Disclosure, Confidentiality, Trading Policy

Cybersecurity

We recognize that our industry relies on digital technologies to conduct day-to-day operations. Potential cyber incidents include information theft, data corruption, operational disruption, and/or financial loss. Additional cybersecurity risks may also arise due to more employees working remotely.

We aim to continuously develop a safety culture into our operations, which includes data safety and security. As such, we are committed to minimize the possibility of a cybersecurity breach through holding a cybersecurity training session for the relevant employees, and ensuring that all employees have the necessary anti-virus software protection.

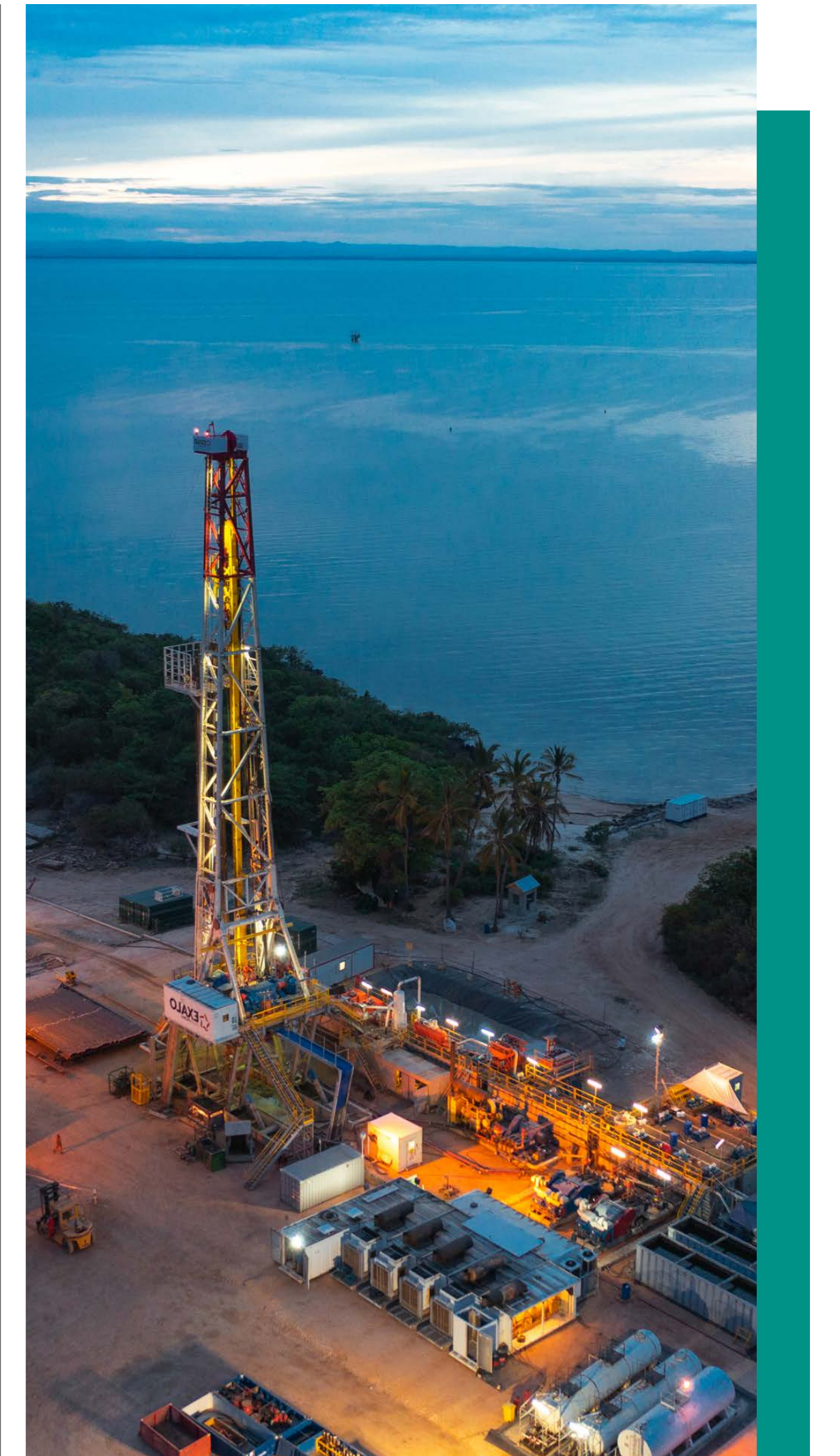
We have the following policies in place:

- Cyber Incident Response Plan
- IT Acceptable Use Policy
- IT Bring Your Own Device Policy

In 2021, we had no data related breaches.

Remuneration and Compensation

We have a dedicated Remuneration/Compensation Committee that reviews and decides the overall remuneration of Executive Management and other key employees. The compensation program is designed to reward performance based on the achievement of corporate and personal performance goals and objectives and to sit in the mid-range of comparable companies in the market in which the Company competes for talent. Base and variable compensation primarily recognises the value of the individual to the Company and rewards recent performance, while long-term incentives encourage the delivery of results that improve the Company's share price over a longer period of time as well as serving as an employment retention mechanism.



ENVIRONMENT

Respect for and protection of the environment is central to all that the Company does. We recognize the privilege it is to operate in Tanzania, but also the centrality of the environment and its extraordinary ecological systems to the livelihoods of many of the Tanzanian people.

In this section	
Climate Change	16
Climate Related Risk Management	18
GHG Emissions	19
Environment	20

Climate Change

Working with Tanzania in meeting its development goals.

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-degree 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 cross-roads 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 Liquid Natural Gas ("LNG"). As such, we believe that our business is vital for assisting Tanzania in meeting its development goals while also advancing towards a lower carbon economy.

We have been and want to continue to be an active part of this journey, and therefore seek to proactively communicate our efforts and collaborate with local groups, regulators, and other stakeholders to ensure that we are working towards common goals.

Specifically, Pathway 3 is important for us as it focuses on tackling the widespread use of charcoal and firewood as fuel sources. A key element of this is to improve access to modern and reliable energy sources, reinforcing the role of natural gas as a transitional fuel in terms of both its lower emissions and heightened efficiency relative to prevailing fuel sources in Tanzania.

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.



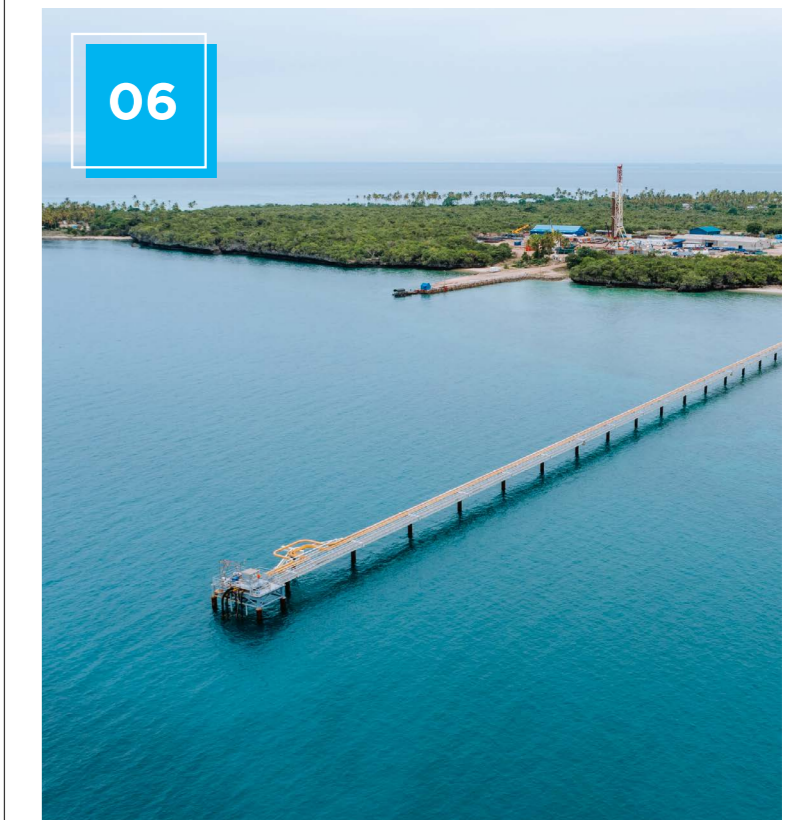
Promote and develop renewable energy technologies and projects particularly for rural households.



Strengthen sustainable use and management of oil and natural gas.



Develop renewable energy sources for cooking to mitigate climate change.



Strengthen the availability of oil and natural gas by enhancing petroleum exploration and development.

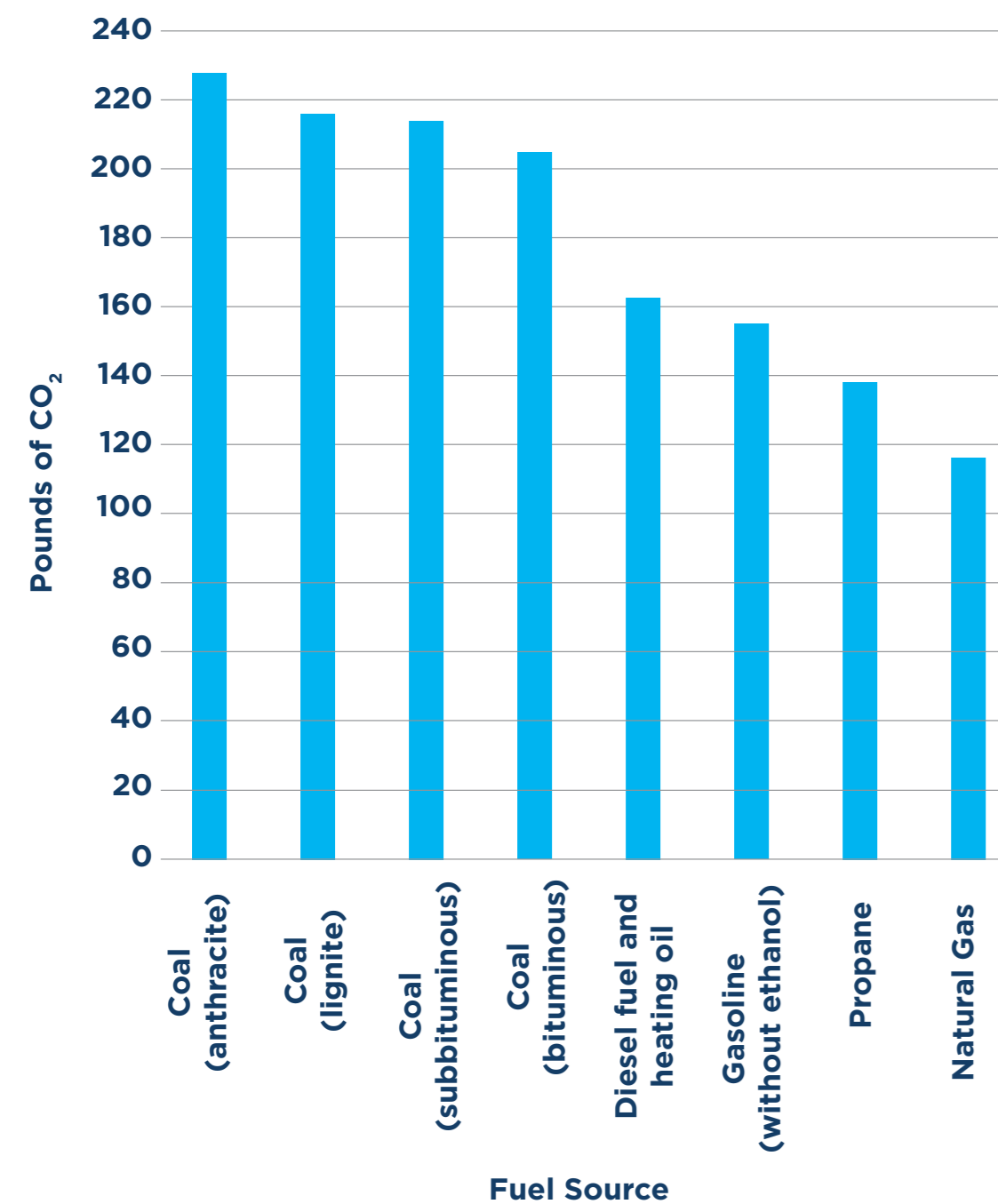
Climate Change cont.

OUR TAKE ON 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.

Pounds of CO₂ emitted per million British Thermal units (Btu) of energy

Source: US Energy Information Administration



SDG 13 Climate Action

Given the nature of our business and the urgency to act on climate change, environmental issues are fundamental for our license to operate. Since we are a natural gas operator, we will by nature be a carbon emitter and we recognize that as the business grows, our absolute GHG emissions are likely to continue to increase. Nevertheless, we will seek to develop ways in which we can reduce our emissions intensity and believe that we can be a positive contributor to Tanzania's energy transition by contributing to the replacement of more carbon intensive sources such as coal and HFO.

We have mapped our business activities to the following targets:

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

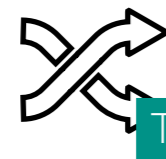
As a natural gas operator, we are exposed to both physical and transitional climate change risks, while we acknowledge that our operations have the potential to exacerbate these risks further over the long-term.

Climate Related Risk Management



Physical Risk

We use a 207Km onshore pipeline that transports gas from Songo Songo Island to Dar Es Salaam. Climate change induced extreme weather events may pose a risk to the pipeline's infrastructure, thereby resulting in gas leaks. We own a 50Km downstream low pressure pipeline that is buried beneath the ground, and as such, is not particularly exposed to any climate change induced extreme weather events. Other physical infrastructure such as offshore and onshore wells may also be vulnerable to extreme weather events. We are committed to ensure that 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 5-year development plan references the need to "strengthen the availability of natural gas by enhancing petroleum exploration and development activities", Orca is unlikely to be impacted by this risk directly in the short and medium term. Nevertheless, sentiment around fossil fuels generally is changing and there is a risk of losing access to financing if Orca 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 investigating options to extract components of natural gas for LNG or CNG production. This would not reduce the amount of natural gas that we produce, but it will reduce the amount of CO₂ produced as a result of flaring, whilst also further reducing Tanzania's reliance on coal, HFO and imported LNG and CNG.



▶ The following case studies have been included to demonstrate the role that a reliable source of domestically produced natural gas must play in both accelerating Tanzania's overall economic development, whilst also being a lower carbon alternative to the nation's predominant fuel sources.

Kioo Glass

Kioo Glass started using natural gas for captive power in 2005 as a fuel for melting glass in two furnaces. When switching from HFO to natural gas, Kioo Glass almost tripled in size.

Kioo Glass General Manager, Mr Kumar stated that "natural gas availability has given Kioo the consistency and reliability to expand."

Initially Kioo Glass had one furnace, however given the growth that Kioo Glass has experienced, a second furnace has since been built. When producing glass, energy reliability is one of the most the important factors as fluctuations to power or furnace burning, results in an interruption to the production process, which ultimately leads to a considerable loss for the company.

"Unplanned interruptions have previously had a serious impact on the business. The business is a continuous process and variations affect us a lot, although we have back up arrangements, it takes time for those to kick in and we lose several hours of production which cannot be retrieved, as we run 24/7 operations. Natural gas is very reliable, more cost effective and environmentally friendly compared to HFO" said Mr. Kumar.

He ranked the service provided by the Company as first class, including the communication, response time and maintenance programs. With regards to carbon emission, Kioo Glass are controlling nitrogen oxides ("Nox") and sulphur oxides ("Sox") levels. The General Manager added, "we have recently rebuilt both furnaces with the latest technology and, we will during the year, complete measurements to cross check the results."

Tanzania Portland Cement Company LTD ("TPCC")

In 2009, TPCC displaced HFO and transitioned to natural gas, supplied by the Company to run their cement kilns. The natural gas is used to produce clinker, a raw material needed to make cement. Following the transition, TPCC saw a remarkable increase in production of clinker, from approximately 600,000 tons per year to around 1,050,000 tons.

The transition to natural gas has resulted in significant benefits for TPCC, including:

- Reduced running costs due to improved logistics of natural gas
- Improved reliability due to improved logistics and ease of availability of natural gas
- More environmental friendly due to reduction in spillage and carbon emissions of natural gas

"You just can't compare natural gas and HFO, particularly from an environmental aspect, and we have also reduced our costs by almost 6 times." - TPCC's Production & Kilns Manager

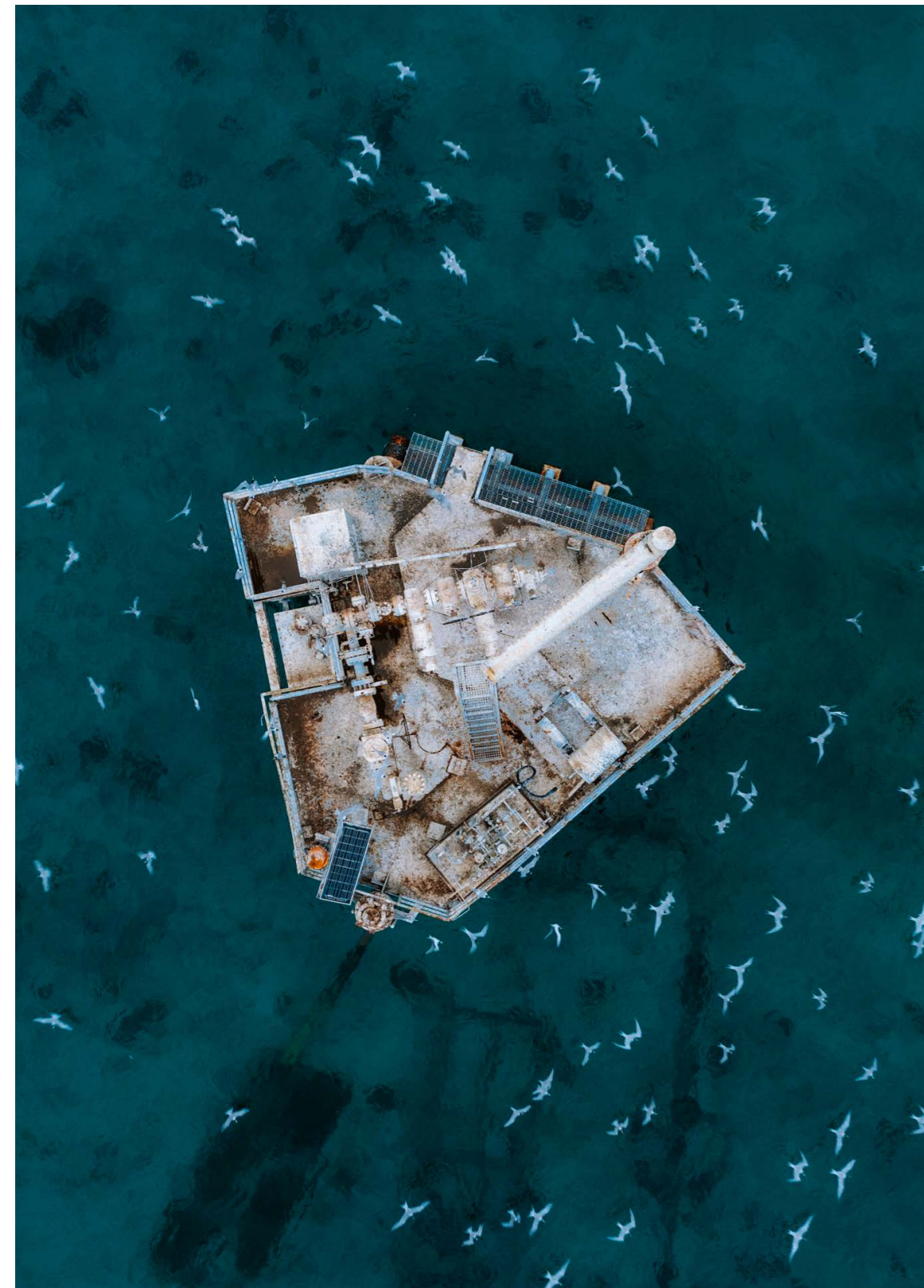
In 2019, TPCC's total natural gas consumption was 3,736,816 GJ, emitting 209,636 tons of CO₂. If the equivalent amount of HFO GJ was used, the emissions would be 288,109 tons of CO₂. This meant a notable decrease in emissions intensity of 78,473 tons of CO₂ due to the switch to natural gas.

Source: https://ghgprotocol.org/sites/default/files/Emission_Factors_from_Cross_Sector_Tools_March_2017.xlsx (live.com)

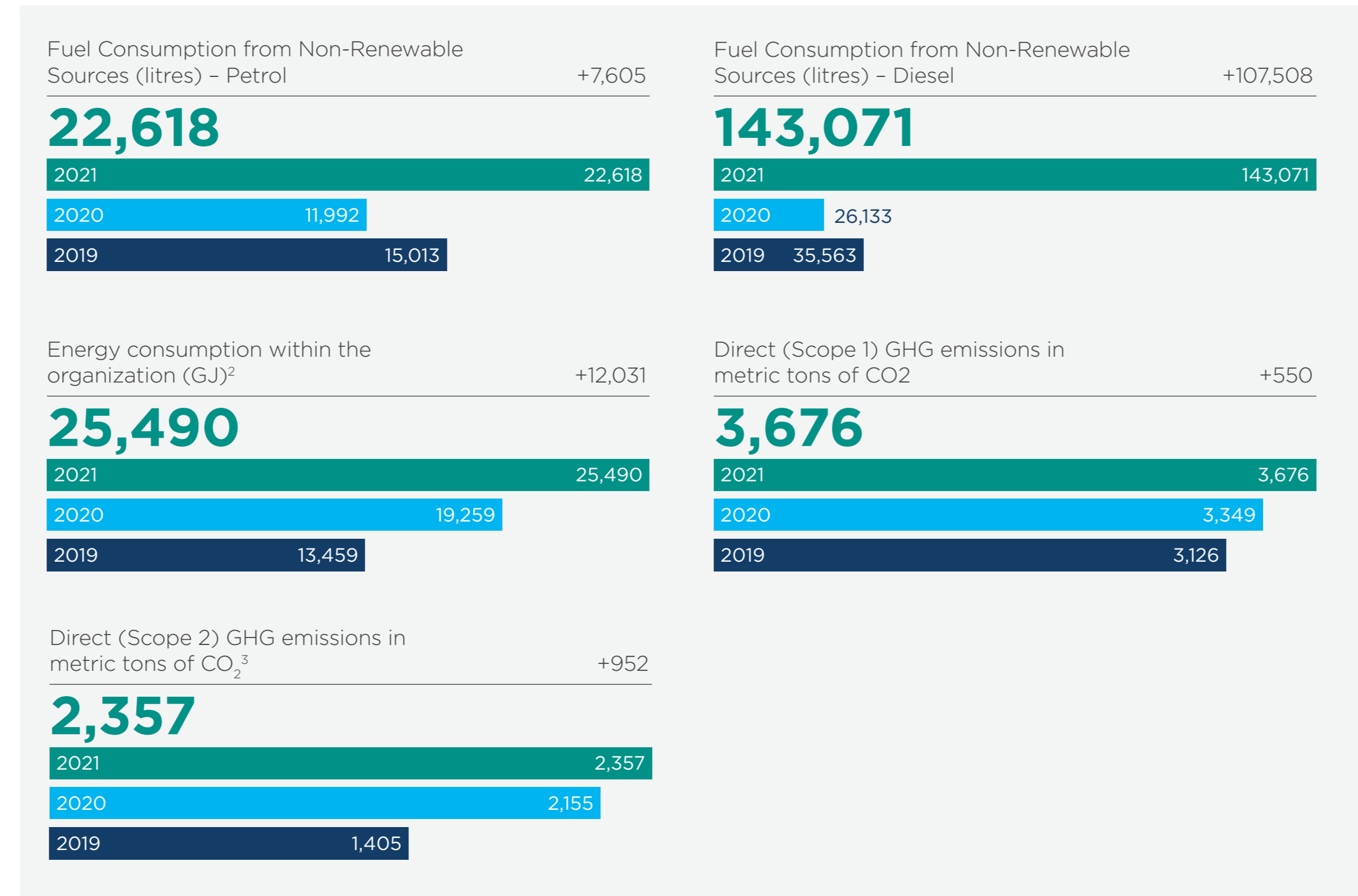


GHG Emissions

The overwhelming majority of our emissions stem from our operations on Songo Songo Island. During 2021, flared gas accounted for roughly 31% of our emissions, but we were able to control the flaring and reduce flared gas emissions.



Across the board, our emissions and fuel and energy consumption has increased. This is predominantly due to the increased operational activity on Songo Songo Island, which stemmed from both our business emerging from the effects of the COVID-19 pandemic, as well as additional critical projects undertaken such as well workovers and the construction of a compression facility, which ran alongside our routine operations.



1 Some of the marine vessels are owned by the Company. For simplicity, all marine vessel emissions are included under Scope 1.
 2 The 2021 UK DEFRA (Department for Environment, Food & Rural Affairs) conversion factors are used for converting litres of fuel consumed and kWh of electricity consumed to GJ.
 3 The US Environmental Protection Agency (EPA) source used for converting kwh to mtCO_{2e}:

Scope 1	Scope 2
Equipment Emissions	Electricity Consumption
Gen Sets Emissions	
Logistics Support Equipment Emissions	
Marine Vessel Emissions ¹	
Vehicle Emissions	
Flared Gas	

At present, we have measured our emissions from the sources below. We are committed to further measure and improve our reporting of the 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. We will also consider the possibility of carbon offsetting, but we want to emphasize that carbon offsetting will not be a core pillar of any future emissions reduction strategy, rather, it will be utilized to balance any emissions that exist after we have exhausted all feasible steps to reduce our emissions.

Note: The following emission sources have been used for calculating the percentage of emissions that flared gas accounted for. (Metric tonnes of CO₂^e)

- Equipment Emissions: 5
- Gen Sets Emissions: 1284
- Logistics Support Equipment Emissions: 200
- Marine Vessel Emissions: 159
- Vehicle Emissions: 48
- Flared Gas: 1979
- Domestic and International Flights: 422
- Coastal Airline Charter: 8
- Electricity Consumption: 2,357
- Total Emissions: 6462
- Flare gas emissions percentage= 31%

Environment

Biodiversity Impact

The exploration and production of natural gas tends to be an invasive process that may damage biodiversity in our operational areas. For companies in our industry, the potential biodiversity impact stems from contamination of air, soil and water, soil erosion, and sedimentation of waterways. Biodiversity can be impacted from both onshore and offshore activities, with threats likely to increase as oil and gas exploration moves into more remote areas.

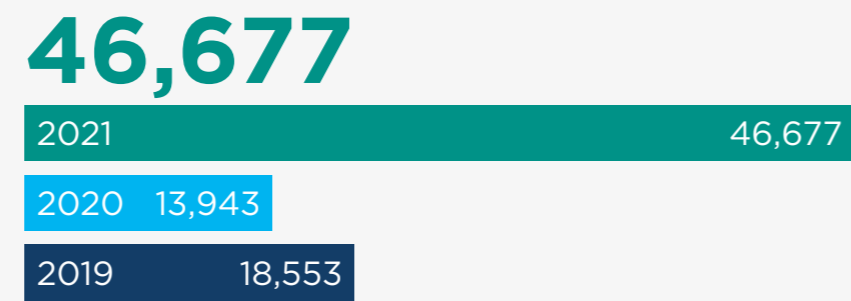
We want to continue maintaining our strong record on biodiversity, and potentially contribute to habitat restoration. In 2019, we conducted a marine study in the Songo Songo area which did not raise any biodiversity concerns. However, we are committed to conducting another baseline study in order to begin measuring our environmental impact from 2023 onwards. We will also look to partner with universities or other industry participants to study the biodiversity impact of natural gas and other sources of energy (e.g., hydropower). This will also contribute towards our actions for UN SDG “Goal 7 Affordable and Clean Energy”, and its underlying target of “7.A. Promoting access to research technology and investments in clean energy”.

Similarly, we provide training to our employees on environmental management, environmental management awareness and health, safety and environment induction. As part of our sustainability strategy, we will explore providing training on biodiversity specifically as this is a complex topic and is becoming increasingly important for our stakeholders.

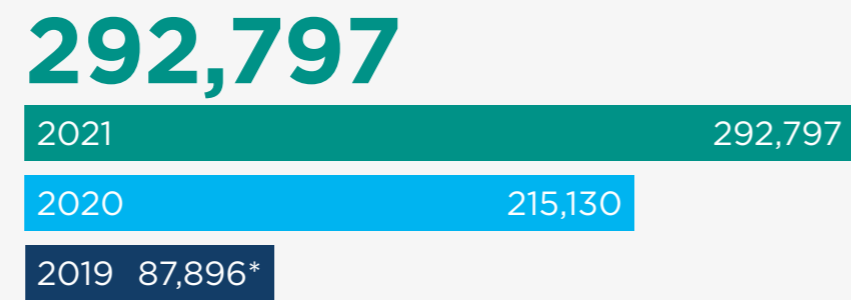
Environmental Incidents

0 (2021)
2020: 1
2019: 0

Waste generated (kg) +28,124



Total Effluent Discharge (m³)⁴ +204,901*



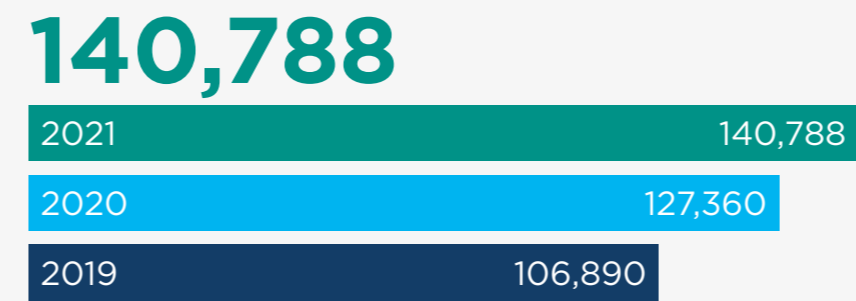
⁴ Measured by aggregating liquid effluent discharges, PWHS discharge volumes, reject water, and sewage treatment plant.

* The 2019 data does not include liquid effluent discharges, which was the largest contributor to total effluent discharge (e.g., in 2021, liquid effluent discharges were 146,399m³ out of a total of 292,797m³).

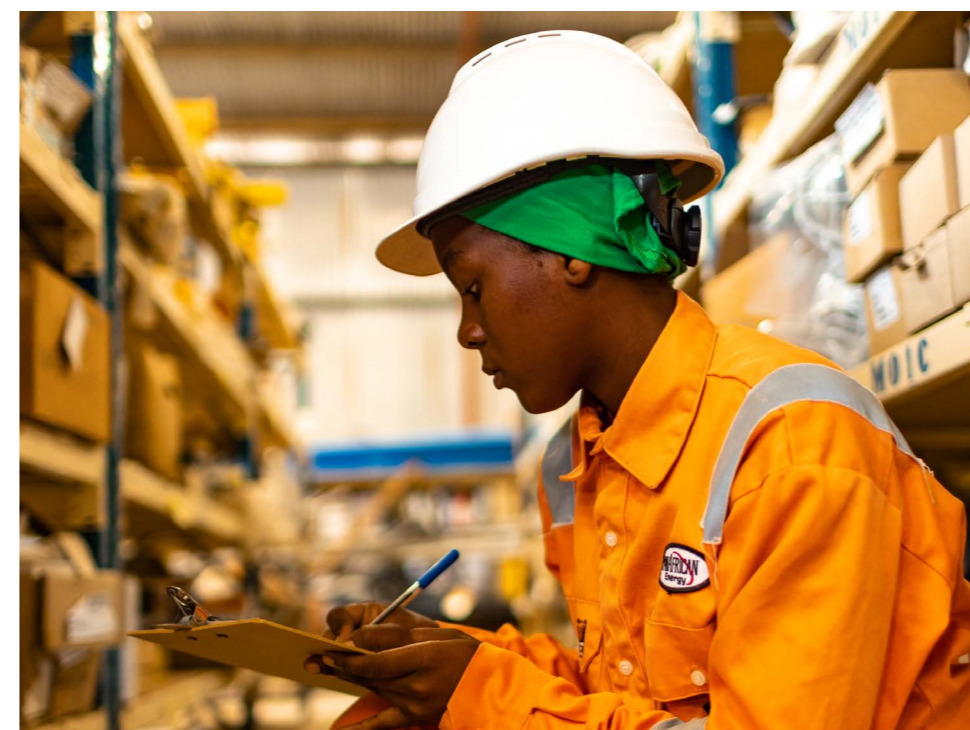
In 2021, the amount of waste generated increased by 32,734kg compared to the previous year, which saw unusual operations due to COVID-19. Similarly, the amount of water withdrawn, and the total effluent discharge also increased during 2021. Again, this can be attributed to the increase in operational activity on Songo Songo Island.

Going forward, we are committed to providing further granularity regarding our water and waste management data. This includes collecting information on how our waste is disposed, and, where applicable, measuring our water withdrawal beyond seawater.

Water Withdrawal (m³ seawater abstracted) +33,898



Potable Water Produced (m³) N/A



Water and Waste Management

We recognize that as a natural gas operator, operating in close proximity to a local community, it is vital for us to have best practice regarding our water and waste management. We do this through our operational guidelines for environmental impact that all employees adhere to and are trained on. Our guidelines include, for example strict criteria for water discharge quality to ensure there is no negative impact on the environment.

Waste Management and Community Engagement

Our waste management process involves working with a variety of stakeholders to ensure all waste is managed and treated in accordance with national and internal standards. The main stakeholders that we work with include:

- National Environmental Management Agency (“NEMC”)
- Government Chemist Laboratory Authority (“GCLA”)
- Kilwa District Council

Over the years, we have worked with several local (Kilwa District) and non-local (Dar Es Salaam) service providers to ensure all waste disposal is handled professionally and with registered, government approved service providers. Our engagement process is transparent and in line with our local procurement processes and local content. All vendors need to apply for waste disposal activities by tender and specify the areas of impact along with their capabilities.

As part of our local content policy and in compliance with Kilwa District Council guidance, we need to ensure that all service providers of both hazardous and non-hazardous waste disposal are registered with Kilwa District Council before they are awarded a contract and begin service, ensuring that there is clear government oversight and monitoring for all disposal activities. In instances where local disposal service providers have failed to meet set requirements and guidelines, or where we believe that neither the expertise nor disposal facilities are satisfactory, service providers will be sourced from Dar Es Salaam, where they are more easily available.

Local disposal benefits from the support of the local district council and NEMC Southern Zone guidance. Non-local disposal is viewed as diverting revenue and employment opportunities.

Where it has been proven that neither the expertise nor disposal facilities are satisfactory and/or do not meet requirements, it has been decided to source services from Dar Es Salaam.

We are committed to making a positive social contribution in Tanzania. Building on our history of supporting critically important education and health projects, not only on Songo Songo Island, but also across the wider region.

SOCIAL

In this section	
Social Wellbeing	22
Human Capital Development	25
Community Relations	27
Human Rights, Labor and Supply Chain Management	29

Social Wellbeing

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.



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

Stella Ndossi
Logistics Manager, PAET Tanzania



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



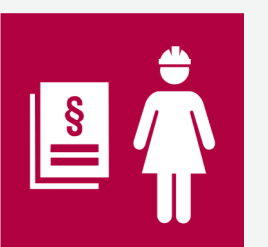
8.6
Promote youth employment, education and training



8.7
End modern slavery, trafficking and child labor



8.8
Protect labor rights and promote safe working environments



Social Wellbeing cont.

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

In response to COVID-19, the Company 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 were tested for COVID-19, and placed into quarantine prior to receiving their results and, if negative, resuming regular duties. The Tanzanian government also introduced restrictions and started a vaccination program in an effort to control the spread of COVID-19.

We recognize our duty to provide a safe working environment for our employees, and to ensure physical wellbeing, we have health and safety guidelines, contained within our Employee Handbook, which applies to all employees, temporary workers, contractors, and consultants. 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.

Physical Health

The priority aspect of our practices around physical health is about providing safe workplace that proactively seeks to prevent any accidents from occurring in the first place. Our Employee Handbook and training programs are core to ensuring minimal accidents, and we are proud to report that we did not have any work-related injuries or fatalities during the reporting period. We are committed to continued transparency on this topic, and will report on these key performance indicators going forward.

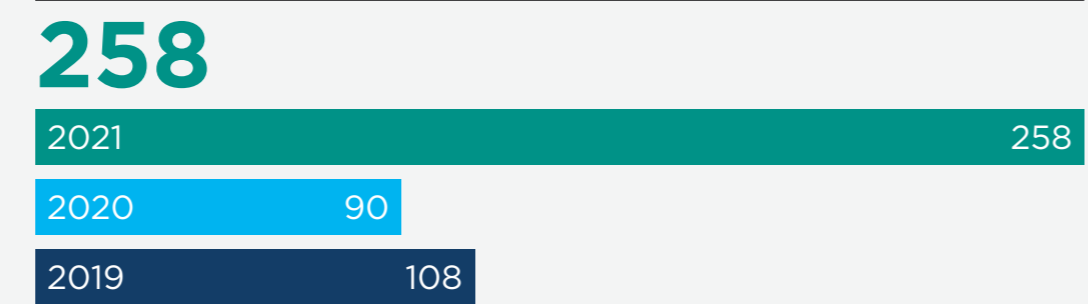
Worker Training on Occupational Health and Safety



Emergency Preparedness and Response +11



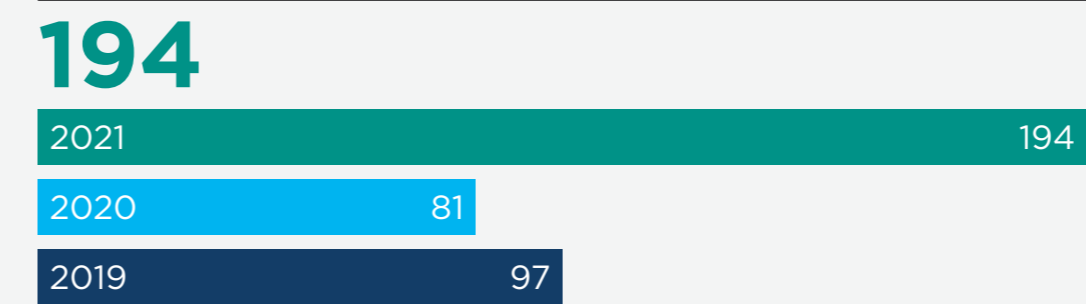
Health, Safety and Environmental Induction (including contracted staff) +150



Emergency Preparedness and Response -3



Health, Safety and Environmental Induction (including contracted staff) +97

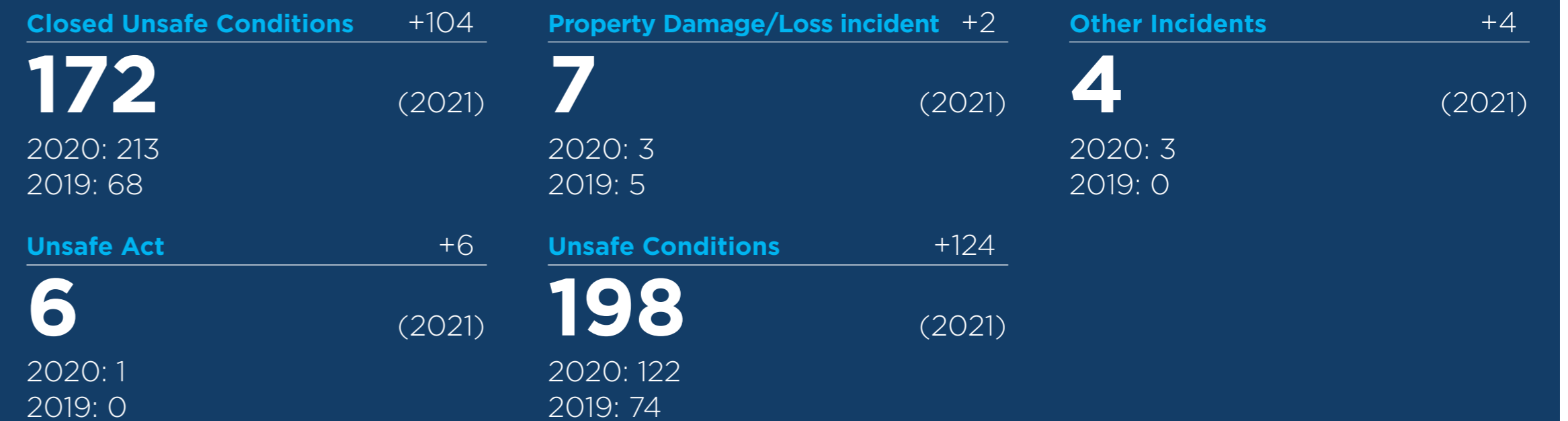


► As part of our efforts to ensure physical safety, we also monitor our asset for any unsafe operating conditions. If an unsafe operating condition is identified, we immediately take necessary action to remedy the situation, thus proactively aiming to prevent any incidents from occurring that could potentially result in employee injuries or fatalities.

Overall, the increase in HSE related unsafe conditions or incidents in 2021 can be attributed to the increased operational activity on site at Songo Songo Island. As the number of personnel doubled, along with increases in material handling equipment on site, it inevitably created more opportunities for these incidents to occur. Despite this, we did not have any accidents or injuries in the workplace. We will continue to monitor these statistics and provide transparency around any incidents that may occur.

Moreover, we have a zero-tolerance attitude towards discrimination on the grounds of sex, political affiliation, gender, religion and promote an inclusive culture in all areas, which is clear in our Employee Handbook. As a result, we have not recorded any incidents of discrimination throughout 2018-2020. 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.

Asset Integrity and Critical Incident Management



No medical treatment cases (2021)
2020: 1
2019: 0

No work-related fatalities (2021)
2020: 0
2019: 0

No lost time accidents (2021)
2020: 0
2019: 1

No restricted work injuries (2021)
2020: 0
2019: 0

No first aid incidents (2021)
2020: 0
2019: 1

Social Wellbeing cont.

Mental Wellbeing

Mental health is a topic that we take seriously. In 2019, 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 the coming year, whilst also introducing confidential mental health counseling for our employees.



► The substantial increase in COVID-19 awareness training was due to the Company providing this for all visitors to Songo Songo Island, including our contractors.

Physical Health Beyond Operations

We firmly believe that a healthy body leads to a healthy mind. It is a well-documented fact that healthy and happy staff are an asset to any business and contribute positively to the working culture as well as reducing costs and downtime. As such, we have implemented a range of programs focused on promoting physical and mental health to encourage the wellbeing of all our employees.

One such program is providing all employees membership to one of Dar es Salaam’s gyms and allowing employees to use their memberships during the working day. The Company offers an extended lunch period for employees who wish to use the gym, leaving sufficient time to exercise, shower, change and eat. The gym, located a short distance from the head office, is extremely well equipped, and operates at hours where employees can also make use of it outside of working hours.

Most staff who make use of the gym described this incentive initiative as being amongst the best offered by the Company, and many would continue using the gym even if PAET did not cover membership costs.

When asked why they felt this initiative was so beneficial, many commented that alongside improving physical health, the membership also had wider benefits, such as increasing professional and personal motivation, and creating opportunities to establish new connections, both of which result in the improvement of general mental wellbeing. In one instance, an employee mentioned being appreciative of the connections made in the gym, particularly when that employee had not visited for a long period of time, leading to other gym goers reaching out and checking in to make sure all was well.

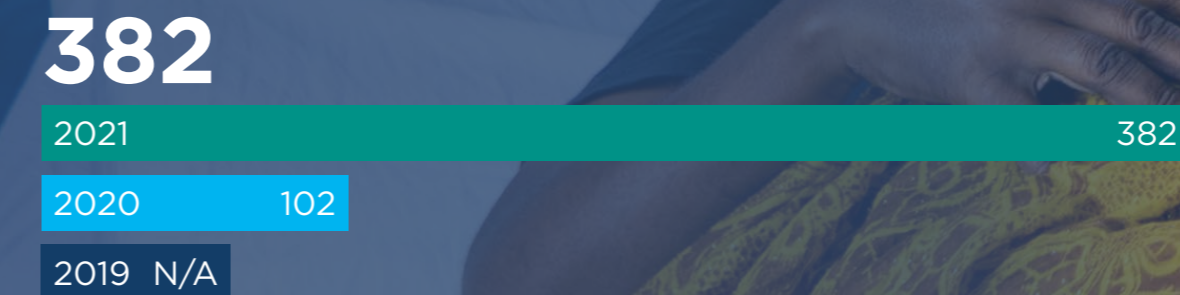
This is an initiative we are proud of and one we will continue to maintain going forward.

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 protective measures, social distancing and compulsory quarantine for 13-days for anyone returning to work or visiting 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 transport.

The pandemic saw a number of personnel return positive or inconclusive tests, however no cases of prolonged sick leave were required. 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, personal protective equipment where required, and additional cleaning measures going forward. The Company will continue to monitor the global situation closely.

COVID-19 Awareness Training (number of employees, including contracted staff)

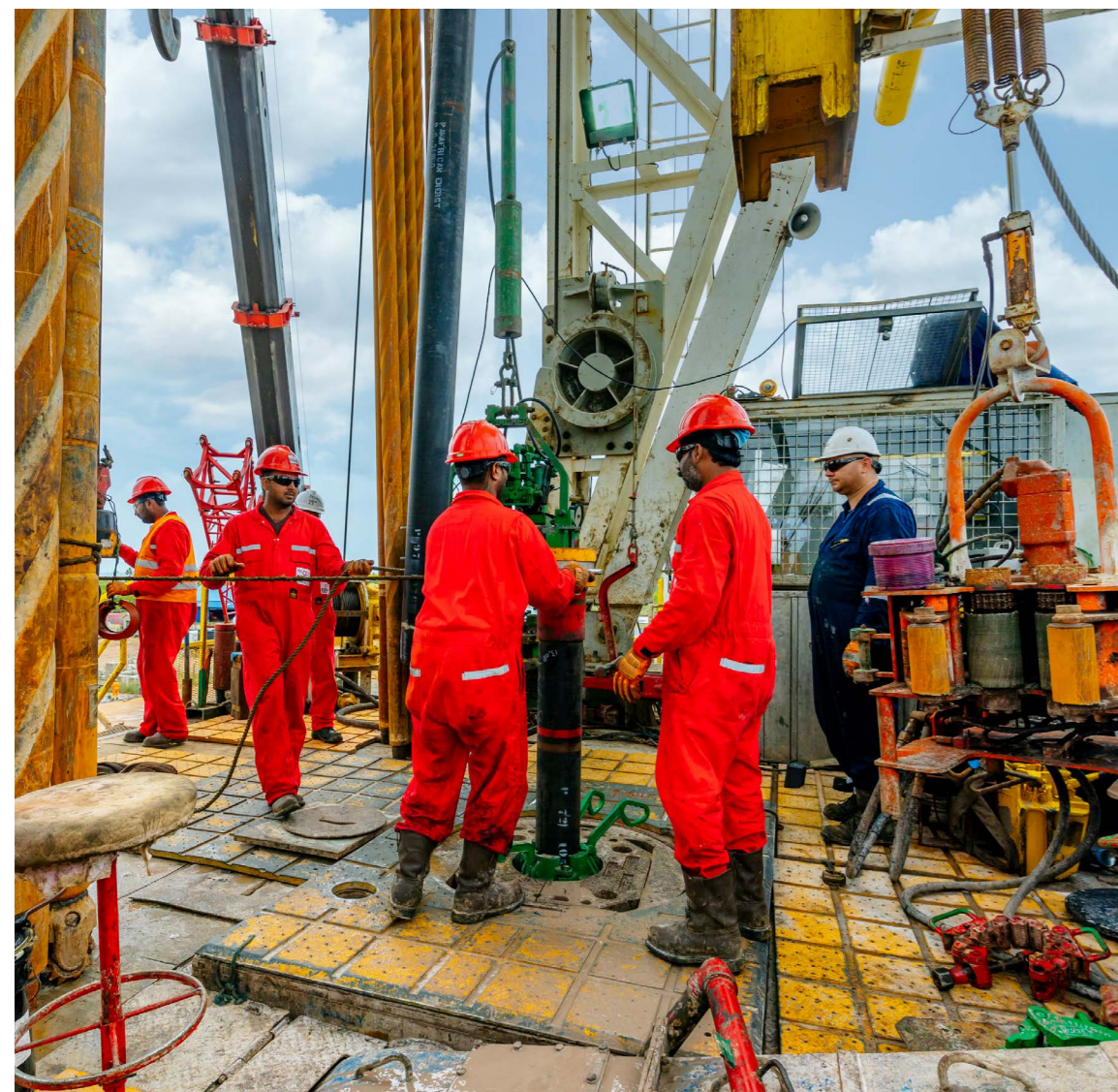


Human Capital Development

Given the technical nature of our business, we depend on attracting, retaining and developing skilled and talented employees.

Moreover, our Tanzania focus means that we have a real opportunity to contribute to the country’s economic development through training and upskilling the local population. We invest heavily in employee training and aspire to provide all employees with long term and rewarding careers, and we encourage employees to discuss their training and development needs with their manager. The majority of our Tanzanian managers have been trained and promoted from roles within the Company.

For 2021, out of the 24 managerial positions within the Company, 16 are held by individuals from Tanzania. 90% of all our employees are Tanzanian, with the in-country workforce comprising of 99% local Tanzanian staff. We also have low Company turnover, 3.8%, with staff mainly leaving us through retirement and succession planning.



Training and Promotion Statistics

Percentage of Total Workforce that is Tanzanian

90% (2021)
2020: 90%
2019: N/A

Percentage of Tanzanian Workforce in Tanzania

99% (2021)
2020: 99%
2019: N/A

Female Employees

14.4% (2021)
2020: 13.7%
2019: 14.1%

Employee Turnover

3.8% (2021)
2020: 4%
2019: 5%

Percentage of Women at Management Level

28.6% (2021)
2020: 5.9%
2019: 5.9%

Manager positions held by Tanzanians

16/24 (66.7%) (2021)
2020: 16/24 (66.7%)
2019: N/A

Number of New Employees

5 (2021)
2020: 9
2019: 6

Training and Development

James Mughenyi, Site Operations Manager, is a graduate with a BSc. in Chemical and Processing Engineering from the University of Dar es Salaam. He was hired by the Company following a focused talent acquisition program, seeking personnel at the beginning of the Songo Songo gas to electricity project. James’ journey exemplifies what can be achieved through hard work, application of a strong skill set and ambition, complimented by the Company’s focus on talent development.

James joined the Company in November 2004, initially as a Field Operator. After taking a sabbatical in 2008, he re-joined the Company in May 2010, as a Production Engineer responsible for the acquisition, validation and reporting of production and well test data from the Songo Songo gas field. His role in analyzing data was critical in the early identification and reporting of production anomalies and facilities issues.

James proved to be a highly reliable and diligent Production Engineer. His supervisory skills were clear for all to see, overseeing a team of two other engineers, an Operations/Wells Services Engineer, and Reservoir Engineer. In September 2017 his efforts were rewarded when he was promoted to Site Manager on Songo Songo Island, the first Tanzanian to be afforded this role. His role saw him oversee over 100 staff members and contractors responsible for day-to-day operations, maintenance and major development projects for the Songo Songo gas field and the associated gas processing facility. Working as the Site Manager for the main gas production plant in Tanzania is a highly demanding role, James has more than risen to this challenge, handling his responsibilities with maturity and professionalism throughout.

At all levels of his journey, the Company has supported James’ personal and professional development through the funding and support of training sessions, which prepared him to succeed in his current role. This has given him the confidence and skills to manage staff and other activities of the gas processing plant. The training opportunities provided ranged from subsurface skills to offshore emergency control, to major emergency management. He is also certified by the International Well Control Forum in Wells Intervention Pressure Control, a course he undertook at the Aberdeen Drilling School. Through remote learning, James also completed a Post Graduate Diploma in Petroleum Engineering from Herriot Watt University.

After 17-years with the Company, his knowledge, experience, innate leadership skills and naturally calm nature, have made James a vital part of the Company.

Human Capital Development cont.

In order to determine what training would be most beneficial for employee career development, we will conduct an employee survey to ascertain employee feedback around which training sessions would be most preferred. Furthermore, we will continue to focus on developing a pipeline of local talent through collaborating with top tier universities such as the University of Dar es Salaam, Dar es Salaam Institute of Technology and the University of Dodoma, in developing internship programs; where headroom allows, which may result in full time offers.

We are committed to continuing employee training and development, beyond necessary operations-related training, and have set yearly budgets for providing such training programs.

We also want to be an equal opportunities employer and make sure that our workplace does not discriminate any individuals based on any characteristics. Our Employee Handbook includes our Equality and Diversity policy which outlines our actions around unlawful discrimination and harassment and how we ensure that these situations do not arise in our workplace. The Employee Handbook also describes our policies around maternity, paternity, adoption, parental and dependent leave. We want to ensure that important life situations do not result in anyone receiving less favorable treatment.

For 2022, we will look to report statistics around our human capital development, employee engagement and diversity initiatives.

Diversity and Inclusion

A key pillar of the Company’s diversity and inclusion efforts is encouraging female participation within the workforce. The reality is that there is a lack of female representation within the Tanzanian oil and gas sector, particularly in operationally focused roles. The Company has sought to combat this by instituting a Company wide strategy focused on attracting and developing female talent.

The Company has launched an intern recruitment initiative designed to offer women exposure to the industry. To date, the intake has been slower than desired, largely due to the imbalance in the ratio of men to women undertaking deep engineering disciplines in schools and colleges. We are trying to change this by offering roles to women without engineering backgrounds to get experience in the industry, and also focusing beyond operational roles to legal, financial and human resources positions.

Beyond the intern recruitment initiative, the Company is extremely proud of its wider diversity and equal opportunity focused efforts, which has resulted in several women joining, and now holding key, senior level positions within the Company. A clear example of this is Stella Ndossi, Logistics Manager, who joined in 2011 from the telecom industry as Executive Assistant, responsible for administrative activities. When Stella joined PAET, she was inexperienced in the oil and gas industry, however, clearly possessing the attitude and skills desired for holding a senior position within the Company. Management quickly identified Stella’s potential, and through targeted coaching and support, she was trained in a range of logistic skills. Within two years, she was promoted to Logistics Manager, leading the Logistics Department through overseeing logistics for several multi-million dollar projects, as well as coordinating the imports, exports and support services required to support a company operating in this region.

Stella has thrived in her current role, her expertise and guidance is highly valued, and she is an integral member of the team.



Stella Ndossi
Logistics Manager, PAET Tanzania

Community Relations

WE CARE ABOUT OUR **RELATIONSHIPS** WITH LOCAL GROUPS

The relationships that we have with different local groups is important for our success. As such, we take care to collaborate, listen to, and partner with these different groups.



SDG 7: Affordable and Clean Energy

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

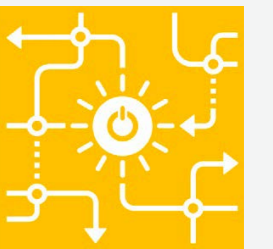
7.1
Universal access to modern energy



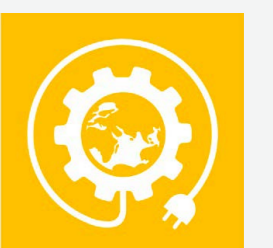
7.3
Double the improvement in energy efficiency



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'. However, our business contributes to reducing Tanzania's reliance on coal, and thereby to the movement towards a lower carbon economy.

Community Relations cont.

In 2021, the natural gas that the Company supplied to Songas, TANESCO and TPDC generated approximately 45% of all electrical power, and approximately 63% of all gas used for power generation in Tanzania.

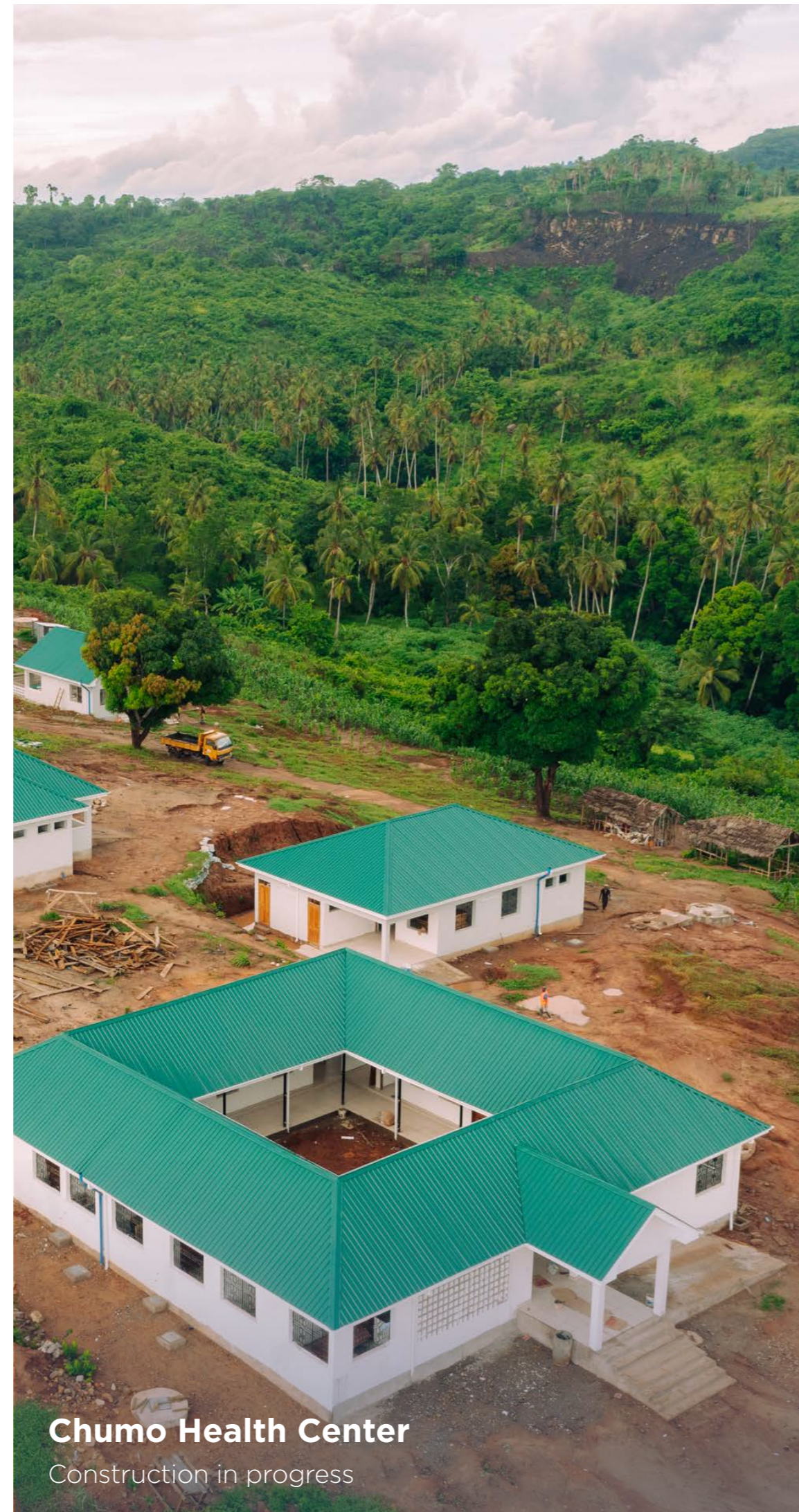
Beyond our operations we also aim to impact the Songo Songo Island community across three focus areas of our Corporate Social Responsibility (CSR) program:

1. Education: Expanding access to primary and secondary education for the local community.
2. Health: Increase access to clean, well equipped and well-staffed medical facilities in the areas surrounding our operations.
3. Scholarships: Expanding access to higher education opportunities for the local community.

In 2021, we invested approximately US\$1 million in community related development projects.

Construction of Chumo Health Centre 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.



Chumo Health Center
Construction in progress

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 aims 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 pediatric oncology fellows at Muhimbili National Hospital (“MNH”) and has added two more sites to its network.

In 2021, the Company’s support 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 centre
- Provision of antibiotics and other essential medication
- 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

Construction of Songo Songo Island Health Care

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.

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.

Community Relations cont.

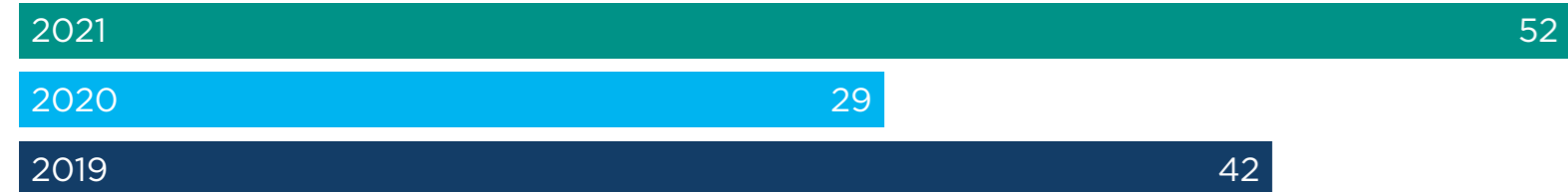
Number of students using the Science Lab (provided by the Company) at the Songo Songo Island Secondary School. +80

194



Number of female students using the Songo Songo Island girls dormitory +10

52



Human Rights, Labor and Supply Chain Management

Human Rights and Labor Management

Our respect for human rights and strong labor management practices are axiomatic. We fully respect human rights which are clear within our Code of Conduct and Anti-Corruption policy. There have been no recorded incidents of human rights violations, and we continue to vigorously monitor human rights across all facets of the Company, including the prevention of child labor, any form of forced labor, modern slavery or human trafficking. We will also explore signing up to the UN Global Compact, further cementing our commitment towards upholding human rights.

Supply Chain Management

Our strategy around the environment and society also expands to our relationships with key suppliers to ensure that high standards are adhered to amongst our suppliers.

Given that business ethics are non-negotiable, we expect all suppliers to operate with the same high standards when it comes to both environmental and social issues. By 2023, we aim to formalize an assessment framework for suppliers and consider drafting a code of conduct.



The Company makes significant social investment. Implementing innovative, effective and sustainable projects that deliver genuine and measurable benefit to Tanzania.

Our Future

The formalization of our sustainability strategy and publication of our inaugural Sustainability Report marks an important milestone in our Company's story. With a strategy that is founded on our values of responsibility, authenticity, and ethics, the next step is to continue implementing our actions, reporting on progress, and revising our targets accordingly so that we can deliver on our commitments in a transparent manner.

Our Future

Our forward-looking ambitions are twofold. Where we have been collecting comprehensive ESG data we now seek to structure it and set targets to improve performance. On the environmental side, this means continuing to monitor and seeking ways to minimize our environmental impact, whilst remaining forthright about the fact that we are a natural gas company. Socially, this means continuing to put our employees at the heart of everything we do, whether that be employee health and safety, physical and mental wellbeing, as well as training and development.

Where data is still required, we will review our internal data collection and assurance processes, identifying and channelling the necessary resources into collecting information on our material ESG issues, with the intention to embed this in our 2022 Sustainability Report. We will continue to review and strengthen our oversight functions to ensure that everyone has the necessary skills and knowledge to succeed within their roles.

Going forward we will also seek to build more structure around our CSR program, such that we can report on the outcomes of our projects. We will continue to ensure that our projects are selected with intention and match the development needs in our surrounding communities.

We look forward to continuing evolving on the topics outlined in this report.



Appendix

GRI Content Index

GRI Definition	Disclosure Number	Disclosure Description	Location
General Disclosures	2-1	Organizational details	Page 4 and Page 35; Orca Energy Group website; Annual Report 2021
	2-2	Entities included in the organization's sustainability reporting	Page 1
	2-3	Reporting period, frequency and contact point	Page 31 and 35
	2-4	Restatements of information	Not applicable
	2-5	External assurance	Report has been written together with third party ESG advisor, but not assured.
	2-6	Activities, value chain and other business relationships	2021 Annual Report Page 10-13
	2-7	Employees	Page 4 and Page 25
	2-9	Governance structure and composition	Page 13
	2-11	Chair of the highest governance body	Page 13
	2-13	Delegation of responsibility for managing impacts	Page 13 and 14; Annual Report 2021 Page 21
	2-14	Role of the highest governance body in sustainability reporting	Page 13 and 14; Annual Report 2021 Page 21
	2-17	Collective knowledge of the highest governance body	Page 14
	2-20	Process to determine remuneration	Page 14
	2-27	Compliance with laws and regulations	No significant instances of non-compliance
2-29	Approach to stakeholder engagement	Page 9	
Material Topics	3-1	Process to determine material topics	Page 10 and 11
	3-2	List of material topics	Page 10 and 11
	3-3	Management of material topics	Page 2 - 30

► Orca Energy Group Inc. has reported the information cited in this GRI content index for the period 1 January 2021 – 31 December 2021 with reference to the GRI Standards. GRI 1: Foundation 2021 has been used.

GRI Definition	Disclosure Number	Disclosure Description	Location
Economic Performance	201-1	Direct economic value generated and distributed	Annual Report 2021
	201-2	Financial implications and other risks and opportunities due to climate change	Annual Report 2021
	201-3	Defined benefit plan obligations and other retirement plans	Annual Report 2021
	201-4	Financial assistance received from government	Not applicable
Market Presence	202-2	Proportion of senior management hired from the local community	Page 25
Anti-corruption	205-1	Operations assessed for risks related to corruption	Page 14
	205-2	Communication and training about anti-corruption policies and procedures	Page 14
	205-3	Confirmed incidents of corruption and actions taken	Page 14
Anti-competitive Behavior	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	Page 14
Tax	207-1	Approach to tax	Annual Report 2021
	207-2	Tax governance, control, and risk management	Annual Report 2021
Energy	302-1	Energy consumption within the organization	Page 19
	302-3	Energy intensity	Page 19
	302-4	Reduction of energy consumption	Page 19
Water and Effluents	303-1	Interactions with water as a shared resource	Page 20
	303-2	Management of water discharge-related impacts	Page 20
	303-3	Water withdrawal	Page 20
	304-4	Water discharge	Page 20

Appendix cont.

GRI Content Index cont.

GRI Definition	Disclosure Number	Disclosure Description	Location
Biodiversity	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Page 20
	304-2	Significant impacts of activities, products and services on biodiversity	Page 20
Emissions	305-1	Direct (Scope 1) GHG emissions	Page 19
	305-2	Energy indirect (Scope 2) GHG emissions	Page 19
	305-5	Reduction of GHG emissions	Page 19
Waste	306-1	Waste generation and significant waste-related impacts	Page 19
	306-2	Management of significant waste-related impacts	Page 20
	306-3	Waste generated	Page 20
Employment	401-1	New employee hires and employee turnover	Page 25
	401-3	Parental leave	Page 26
Occupational Health and Safety	403-1	Occupational health and safety management system	Page 23
	403-2	Hazard identification, risk assessment, and incident investigation	Page 23
	403-5	Worker training on occupational health and safety	Page 23
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Page 23
	403-8	Workers covered by an occupational health and safety management system	Page 23
	403-9	Work-related injuries	Page 23
	403-10	Work-related ill health	Page 23

GRI Definition	Disclosure Number	Disclosure Description	Location
Training and Education	404-2	Programs for upgrading employee skills and transition assistance programs	Page 25 and 26
Diversity and Equal Opportunity	405-1	Diversity of governance bodies and employees	Page 13 and 25
Non-discrimination	406-1	Incidents of discrimination and corrective actions taken	No significant incidences
Child Labor	408-1	Operations and suppliers at significant risk for incidents of child labor	Page 29
Forced or Compulsory Labor	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	Page 29
Supplier Social Assessment	414-1	New suppliers that were screened using social criteria	Page 29

Advisories

FOWARD LOOKING STATEMENT

Certain information regarding Orca set forth in this report contains forward-looking statements that involve substantial known and unknown risks and uncertainties. The use of any of the words “plan”, “expect”, “prospective”, “project”, “intend”, “believe”, “should”, “anticipate”, “estimate” or other similar words, or statements that certain events or conditions “may” or “will” occur are intended to identify forward-looking statements.

More particularly, this report may contain, without limitation, forward-looking statements pertaining to the following: the Company’s expectations regarding supply and demand of natural gas and power; Tanzania’s future industrial growth plans; expectations regarding future development of resources and the Songo Songo gas field; the ability to bring online additional production capacity by developing the Songo Songo gas field; the Company’s ability to increase production capacity in the coming years; the expected increase in demand for gas in Tanzania; the Company’s belief that it is positioned to meet increases in natural gas demand and assist Tanzania in advancing towards a lower carbon economy; the demand for CNG and its ability to displace more carbon intensive alternatives; the Company’s market share of increased natural gas demand; the role of conventional natural gas in Tanzania’s future energy mix; the Company’s goals and strategies relating to becoming more carbon efficient, sustainability, creating long term sustainable and accretive value for investors, achieving applicable SDGs, maximizing the social and economic potential of the Company’s asset in Tanzania, and other ESG related measures; the purpose and design of the Company’s compensation program; the Company’s ability to address investor concerns; the Company’s ability to positively communicate its efforts with regulators and other stakeholders; the Company’s ability to provide a safe workplace and prevent accidents from occurring; the Company’s ability to structure the ESG data it has obtained to date and set targets to improve performance; Orca’s ability to minimize its environmental impact; the Company’s ability to build more structure around its CSR program; the Company’s ability to improve access to affordable, reliable and modern energy services in Tanzania, and other forward-looking statements. Actual results may differ materially from those anticipated in the forward looking statements. Although management believes that the expectations reflected in the forward-looking statements are reasonable, it cannot guarantee future results, levels of activity, access to resources and infrastructure, performance or achievement since such expectations are inherently subject to significant business, economic, operational, competitive, political and social uncertainties and contingencies.

These forward-looking statements involve substantial known and unknown risks and uncertainties, certain of which are beyond the Company’s control, and many factors could cause the Company’s actual results to differ materially from those expressed or implied in any forward-looking statements made by the Company, including, but not limited to: the impact of general economic conditions in the areas in which the Company operates; civil unrest; the susceptibility of the areas in which the Company operates to outbreaks of disease; industry conditions including changes in laws and regulations, and changes in how they are interpreted and enforced; competition; lack of availability of qualified personnel; risks related to obtaining required approvals of regulatory authorities; risks associated with negotiating with governments and other counterparties; fluctuations in commodity prices, foreign exchange rates and/or interest rates; stock market volatility; competition for, among other things, capital, drilling equipment and skilled personnel; failure to obtain required equipment for drilling; delays in drilling plans; failure to obtain expected results from drilling of wells; changes in laws and regulations including the adoption of new environmental laws and regulations, impact of new local content regulations and changes in how they are interpreted and enforced; imprecision in reserve estimates; the production and growth potential of the Company’s assets; obtaining required approvals from regulatory authorities; risks associated with obtaining an extension to the Songo Songo license; changes in income tax laws or tax rates; ability to access sufficient capital from internal and external sources; failure of counterparties to perform under the terms of their contracts; reduced global economic activity as a result of the COVID-19 pandemic, including lower demand for natural gas and a reduction in the price of natural gas; the potential impact of the COVID-19 pandemic on the health of the Company’s employees, contractors, suppliers, customers and other partners and the risk that the Company and/or such persons are or may be restricted or prevented (as a result of quarantines, closures or otherwise) from conducting business activities for undetermined periods of time; the impact of actions taken by governments to reduce the spread of COVID-19, including declaring states of emergency, imposing quarantines, border closures, temporary business closures for companies and industries deemed non-essential, significant

travel restrictions and mandated social distancing, and the effect on the Company’s operations, access to customers and suppliers, availability of employees and other resources; risk that contract counterparties are unable to perform contractual obligations; the potential negative effect on the Company’s rights under the PSA and other agreements relating to its business in Tanzania as a result of the Petroleum Act, passed in 2015 (the “Act”), and other recently enacted and future legislation, as well as the risk that such legislation will create additional costs and time connected with the Company’s business in Tanzania; risks regarding the uncertainty around evolution of Tanzanian legislation; and unanticipated changes to legislation; the effect on the Company’s operations, including, but not limited to, the Act and the Natural Gas Pricing Regulation made under Sections 165 and 258(I) of the Act; failure to complete the 3D seismic program and other capital programs on the timelines or at the costs anticipated; risk that the results of the 3D seismic program are not as lucrative or instructive as anticipated; failure to increase production volumes and capabilities; inability to obtain necessary environmental, governmental or partners approvals to complete the Company’s planned capital program; the Company is unable to increase production capacity in the coming years; demand for conventional natural gas in Tanzania is lower than expected; the Company is unable to further develop the Songo Songo gas field; the Company is unable to achieve its ESG related goals; the Company’s compensation program does not achieve the designed results; the Company is unable to prevent accidents from occurring; Orca is not able to minimize its environmental impact; and the Company is not able to provide access to affordable and reliable Energy Services in Tanzania. Readers are cautioned that the foregoing list of factors is not exhaustive.

Advisories cont.

Such forward-looking statements are based on certain assumptions made by the Company in light of its experience and perception of historical trends, current conditions and expected future developments, as well as other factors the Company believes are appropriate in the circumstances, including, but not limited to: that the Company will have adequate funding to continue operations; that the Company will successfully negotiate agreements; receipt of required regulatory approvals; the ability of the Company to increase production at a consistent rate; infrastructure capacity; commodity prices will not further deteriorate significantly; the ability of the Company to obtain equipment and services in a timely manner to carry out exploration, development and exploitation activities; future capital expenditures; availability of skilled 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 enactment of the Act and new legislation in Tanzania will not impair the Company's rights under the PSA to develop and market natural gas in Tanzania; current or, where applicable, proposed industry conditions, laws and regulations will continue in effect or as anticipated as described herein; the Company is able to increase production capacity from the Songo Songo gas field; demand for natural gas in Tanzania is in line with the Company's forecasts; the Company is successful in implementing its ESG related strategies and achieves its ESG related goals; and other matters.

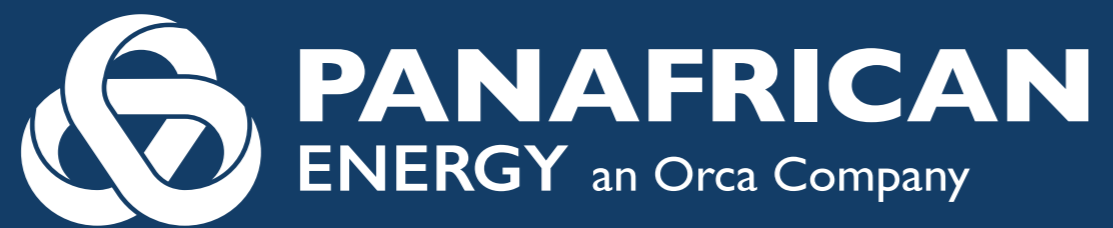
Additionally, statements regarding resources are subject to the assumption that Orca will receive an extension of the Songo Songo license. Orca has not yet commenced discussion regarding such an extension and no guarantee can be made that: an application for an extension will be made; if such application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

Future shareholder returns, including but not limited to the payment of dividends or other distributions to shareholders, if any, and the level thereof is uncertain. Any decision to pay further distributions on the Class A Common Shares and Class B Subordinate Voting Shares (including the actual amount, the declaration date, the record date and the payment date in connection therewith) will be subject to the discretion of the Board of Directors of the Company and may depend on a variety of factors, including, without limitation the Company's business performance, financial condition, financial requirements, growth plans, expected capital requirements and other conditions existing at such future time including, without limitation, satisfaction of the solvency tests imposed on the Company under applicable corporate law, contractual restrictions and compliance with applicable laws. The actual amount, the declaration date, the record date and the payment date of any dividend are subject to the discretion of the Board of Directors. There can be no assurance that the Company will pay any distributions in the future.

Management has included the above summary of assumptions and risks related to forward-looking information provided in this report in order to provide stakeholders with a more complete perspective on the Company's current and future operations and such information may not be appropriate for other purposes. Orca's actual results, performance or achievement could differ materially from those expressed in, or implied by, these forward-looking statements and, accordingly, no assurance can be given that any of the events anticipated by the forward-looking statements will transpire or occur, or if any of them do, what benefits Orca will derive. These forward-looking statements are made as of the date of this document and Orca disclaims any intent or obligation to update publicly any forward-looking statements, whether as a result of new information, future events or results or otherwise, other than as required by applicable securities laws. The forward looking statements contained in this report are expressly qualified by this cautionary statement.



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