FORM 51-102F3
MATERIAL CHANGE REPORT

1. Name and Address of Company

Orca Exploration Group Inc. ("**Orca**" or the "**Company**")
Vistra Corporate Services Centre
Wickhams Cay II, Road Town, Tortola
British Virgin Islands VG1110

2. Date of Material Change

January 24, 2020.

3. Press Releases

A news release setting out information concerning the material change described in this report was issued by the Company on January 24, 2020 and disseminated through the facilities of GlobeNewsire, and would have been received by the securities commissions where the Company is a reporting issuer.

4. Summary of Material Change

On January 24, 2020, Orca announced the authorization of a substantial issuer bid, the outcome of its strategic review process, and its focused strategy to grow an integrated gas business in Africa.

Based on the alternatives available to the Company, the special committee ("**Special Committee**") of Orca recommended, and the board of directors (the "**Board**") of Orca concluded, that it is in the best interests of the Company and its shareholders ("**Shareholders**") to continue operating as an independent company with a view to enhancing value to its Shareholders through a balanced approach, focused on:

1) Return of Capital: The return of retained cash to Shareholders in the form of share purchases and/or dividends;

2) Value maximization of the Songo Songo Production Licence: The continued value maximization and monetization of the Company's Songo Songo natural gas field in Tanzania; and

3) Sustainable Growth: Strategic reinvestment utilizing the Company's core competency to develop a sustainable, integrated gas business in Africa with accretive returns.

In conjunction with the announcement of this strategy, the Company announced its intention to return a portion of its excess cash to Shareholders through a substantial issuer bid.

5.1 Full Description of Material Change

On January 24, 2020, Orca announced the outcome of its strategic review process, its focused strategy to grow an integrated gas business in Africa, and the authorization of a substantial issuer bid.

With the assistance of its financial advisor, RBC Capital Markets ("**RBC**"), the Special Committee completed a thorough review of the options available to the Company to maximize Shareholder value. As part of the strategic review, the Special Committee considered and evaluated a

substantial issuer bid, a secondary listing of the Company's shares on another exchange, a reorganization of the Company's share capital, a secondary offering of the Company's outstanding shares, and the acquisition of the Company or other arrangement, merger transaction or business combination with another company resulting in asset and/or jurisdiction diversification and a larger, more liquid market, for the equity of the combined company.

Based on the alternatives available to the Company, the Special Committee recommended, and the Board concluded, that it is in the best interests of the Company and its Shareholders to continue operating as an independent company with a view to enhancing value to its Shareholders through a balanced approach, focused on:

1) Return of Capital: The return of retained cash to Shareholders in the form of share repurchases and/or dividends;

2) Value maximization of the Songo Songo Production Licence: The continued value maximization and monetization of the Company's Songo Songo natural gas field in Tanzania; and

3) Sustainable Growth: Strategic reinvestment utilizing the Company's core competency to develop a sustainable, integrated gas business in Africa with accretive returns.

In conjunction with the announcement of this strategy, the Company announced its intention to return a portion of its excess cash to Shareholders through a substantial issuer bid.

Return of Capital and Announcement of Substantial Issuer Bid

The Company announced on January 24, 2020 that the Board authorized management to finalize the terms and conditions for a substantial issuer bid of up to CDN$50 million pursuant to which the Company will offer to purchase for cancellation a portion of its Class B Shares (the "**Offer**"). The Company anticipates that the Offer will commence during the next two weeks and will be completed before the end of the first quarter of 2020. The Company intends to fund the Offer from current cash resources.

Under the Offer, which remains subject to the recommendation of the Special Committee and Board approval, Shareholders will have the opportunity to tender their shares through a modified Dutch auction tender. The Offer will not be conditional upon any minimum number of shares being tendered and will be subject to conditions customary for transactions of this nature.

Focused Strategy to Grow the Company's Integrated Gas Business in Africa

One of Orca's objectives moving forward is to replicate the success of the Company's development and operation of its Songo Songo gas field in Tanzania, its midstream infrastructure and its downstream distribution network that transports and distributes low pressure gas to industrial customers elsewhere in Africa and become one of the leading African developers and operators of natural gas resources for domestic consumption. It is envisaged that a focused strategy targeting the consolidation of African gas assets will generate improved liquidity in Orca's equity.

Orca intends to focus on acquiring and developing proven gas resources, or merging with entities that have existing gas production, in countries where there is robust market demand for natural gas. It is anticipated that developments would be project-financed once the gas reservoirs are proven to a level that supports the signing of a long-term gas sales agreement with credit-worthy customers. Orca would undertake detailed evaluation of all investment opportunities to ensure that capital is allocated to the most accretive projects. This includes further returns to Shareholders where it is considered that the Company trades at a significant discount to its net

asset value. Disciplined capital allocation, diversification and increased liquidity are central to Orca's growth strategy.

RISK FACTORS

Before making an investment decision, you should consider and read carefully all of the risks and uncertainties described in Schedule A of this material change report, together with all of the other information contained in our other disclosure documents and any reports, statements or other information that we file with the securities regulatory authorities in each of the provinces of Canada, copies of which can be accessed on our website at www.orcaexploration.com and under our issuer profile at www.sedar.com. If any of the following risks actually occur, our business, business prospects, financial condition, results of operations or cash flows could be materially adversely affected. The risks below are not the only ones we face. Also, many of the risks below are not ones that we currently face but may affect our business in the future to the extent we execute on our strategy to acquire and develop a natural gas business elsewhere in Africa. Additional risks not currently known to us or that we currently deem immaterial may also adversely affect us. Unless the context requires otherwise, "we," "us," "our", and "the Company" refer to Orca Exploration Group Inc. and its subsidiaries and affiliates.

FORWARD-LOOKING INFORMATION

Certain statements in this material change report, including but not limited to: the Company's stated intention to return a portion of its excess cash to Shareholders through a substantial issuer bid; that it is in the best interest of the Company and its Shareholders to continue as an independent company with a view to enhancing value to its Shareholders through a balanced approach; the aggregate amount of consideration to be used by the Company to purchase Class B Shares for cancellation under the Offer; the expected commencement and completion of the Offer; the Company's expectation that it will fund any purchases of Class B Shares pursuant to the Offer from cash on hand; the Company's focused strategy targeting the consolidation of African gas assets will generate improved liquidity in Orca's equity; the Company's intention to focus on acquiring and developing proven gas resources, or merging with entities that have existing gas production, in countries where there is a robust market demand for natural gas and the expectation that such developments would be project-financed once such gas reservoirs are proven to a level that supports the signing of a long-term gas sales agreement with credit-worthy customers; the Company will undertake detailed evaluation of all investment opportunities to ensure that capital is allocated to the most accretive projects which includes further returns to Shareholders where the Company considers that the securities of the Company trade at a significant discount to the net asset value of the Company; and the Company's current and future plans, projections, expectations and intentions, results, levels of activity, performance, goals or achievements or any other characterization of future events or developments, constitute "forward-looking information" within the meaning of applicable Canadian securities laws. The words "may", "will", "would", "should", "could", "expects", "plans", "intends", "trends", "indications", "anticipates", "believes", "estimates", "predicts", "likely" or "potential" or the negative or other variations of these words or other comparable words or phrases, are intended to identify forward-looking information. Forward-looking information is based on estimates and 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 that the Company believes are appropriate and reasonable in the circumstances, but there can be no assurance that such estimates and assumptions will prove to be correct or that the Company's expectations contained in this material change report or the Company's actual results, level of activity, performance or achievements or future events or developments will be achieved.

The forward-looking information contained in this material change report involves 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 information contained in this material change report.

Additionally, such forward-looking information is 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. Such risks, uncertainties, and assumptions more fully described under the heading "Risk Factors" in this material change report.

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

5.2 Disclosure for Restructuring Transactions

Not applicable.

6. Reliance on subsection 7.1(2) of National Instrument 51-102

Not applicable.

7. Omitted Information

None.

8. Executive Officer

For additional information, please contact Blaine Karst, Chief Financial Officer of Orca at +44-747-190-2734.

9. Date of Report

January 24, 2020.

SCHEDULE "A"
RISK FACTORS

Drilling wells is speculative, often involving significant costs that may be more than we estimate, and may not result in any discoveries or additions to our future production or reserves. Any material inaccuracies in drilling costs, estimates or underlying assumptions will materially affect our business.

Exploring for and developing hydrocarbon reserves involves a high degree of technical, operational and financial risk, which precludes definitive statements as to the time required and costs involved in reaching certain objectives. The budgeted costs of planning, drilling, completing and operating wells are often exceeded and can increase significantly when drilling costs rise due to limitations in the supply of various types of oilfield equipment and related services or unanticipated geologic conditions.

The technologies used in drilling operations do not allow us to determine conclusively prior to drilling whether a well will produce economically. Before a well is spudded, we incur significant geological and geophysical (seismic) costs, which are incurred whether or not a well eventually produces commercial quantities of hydrocarbons or is drilled at all. Drilling may be unsuccessful for many reasons, including geologic conditions and unusual geological formations, weather, equipment shortages and mechanical difficulties or force majeure events. Exploratory wells bear a much greater technical and economic risk of failure than development wells. Furthermore, the successful drilling of a well does not necessarily result in the commercially viable development of a field or indicate the potential for the development of a commercially viable field. A variety of factors, including those that are geologic and market-related, can cause a field to become uneconomic or only marginally economic. Further, equipment malfunctions, operations that cease production or a lack of drilling opportunities may cause us to incur significant costs associated with an idle rig and/or related services, particularly if we cannot contract out rig slots to other parties resulting in cost overruns. Many of our prospects that may be developed in the future will require significant additional exploration, appraisal and development, regulatory approval and commitments of resources prior to commercial development. In addition, a successful discovery would require significant capital expenditure to develop and produce oil and natural gas, even if we deemed such discovery to be commercially viable. See *"Our business plan requires substantial additional capital, which we may be unable to fund out of working capital and cash flow generated from operations or raise on acceptable terms or at all in the future and which may in turn limit our ability to develop our exploration, appraisal, development and production activities"*.

In the areas in which we operate and intend to operate in the future, we face and could face higher above-ground risks related to foreign operations necessitating, among other things: (i) higher expected returns; (ii) increased capital expenditure due to a general lack of infrastructure and underdeveloped oil and gas industries; and (iii) increased transportation costs due to geographic remoteness, each of which will either require a single well to be exceptionally productive, or the existence of multiple successful wells, to allow for the development of a commercially viable field. See "*Our operations may be adversely affected by unexpected legal and regulatory changes*" and "*Our operations may be adversely affected by political, social and economic circumstances in the countries in which we operate*." Furthermore, if our actual drilling and development costs are significantly more than our estimated costs, we may not be able to continue our business operations as proposed and could be forced to modify our plan of operation.

Development drilling may not result in commercially productive quantities of oil and gas reserves.

Our reserves and production and, therefore, our cash flows and earnings are highly dependent upon us developing and increasing our current reserve base and discovering or acquiring additional reserves through exploratory, development and acquisition programmes. Major development projects, and any future exploration discoveries, will require significant development effort and cost to bring to production. We must successfully execute our development strategy and projects, including development drilling, to generate future production and cash flow. However, development drilling is not always successful and the profitability of development projects may change over time.

For example, the limited data available to us from new development projects may not allow us to completely know the extent of the reservoir or choose the best locations for drilling development wells. A development well we drill may be a dry hole or result in non-commercial quantities of hydrocarbons. All costs of development drilling and other development activities are capitalized, pursuant to international accounting standards, even if the activities do not result in commercially productive quantities of hydrocarbon reserves. This puts a project at higher risk of future impairment if commodity prices decrease or operating or development costs increase.

To the extent that cash flow from operations is insufficient and external sources of capital become limited or unavailable, our ability to make the necessary capital investments to maintain and expand our reserves will be impaired. There can be no assurance that we will be able to find and develop or acquire additional reserves to replace production at an economic cost.

A substantial or extended decline in both global and local oil and natural gas prices may adversely affect our business, financial condition and results of operations.

The prices that we will receive for our oil and natural gas will significantly affect our revenue, profitability, access to capital and future growth rate. Historically, the oil and natural gas markets have been volatile and will likely continue to be volatile in the future. Oil prices have experienced significant and sustained declines in the past few years and may continue to be volatile in the future. The prices that we will receive for our production and the levels of our production depend on numerous factors. These factors include, but are not limited to, the following:

- changes in supply and demand for oil and natural gas both globally and domestically in the countries in which we operate;
- the actions of the Organization of the Petroleum Exporting Countries ("**OPEC**") and other countries that cooperate with OPEC;
- speculation as to the future price of oil and natural gas and the speculative trading of oil and natural gas futures contracts;
- global and domestic economic conditions, including growth rates in emerging world economies and sovereign debt levels;
- political and economic conditions and interventions, particularly in Tanzania and other African countries;
- the continued threat of terrorism and the impact of military and other action;
- the level of global oil and natural gas exploration and production activity;
- the availability of finance for the oil and gas industry as restricted by environmental, social and governance concerns;
- the level of global oil inventories and oil refining capacities;
- weather conditions and natural or man-made disasters;
- technological advances affecting energy consumption and generation;
- governmental regulations and taxation policies, including emissions pricing;
- resource conservation efforts;

- proximity and capacity of transportation facilities;
- the development and exploitation of alternative fuels or energy sources;
- the price and availability of competitors' supplies of oil and natural gas and alternative fuels or energy sources; and
- the price, availability or mandated use of alternative fuels or energy sources.

For example, the natural gas prices we receive from our industrial customers in Tanzania fluctuate with the price of heavy fuel oil against which most of our industrial customer contracts are priced. Prices can also be affected by gas on gas competition from other producers in Tanzania. There have been significant onshore and offshore discoveries of gas in the last ten years and it is expected that the development of these discoveries will increase competition in the future. There is also scope for greater government intervention on gas prices as the Tanzania Petroleum Development Corporation ("**TPDC**") owns and operates the majority of the gas processing and pipeline infrastructure and has (it says, but we dispute) the right under the *Petroleum Act, 2015* (the "**Petroleum Act**") to purchase all gas in Tanzania for onward sale, excluding gas preserved for export purposes in relation to certain LNG projects. In any event, the Petroleum Act nevertheless allows producers to sell gas to third parties with the permission of TPDC.

In addition, the weighted average sales price fluctuates depending on the mix between sales to industrial customers (traditionally higher priced) versus power customers (traditionally lower priced). Lower oil or natural gas prices may not only reduce our revenues but also may limit the amount of oil and/or natural gas that we can produce economically from producing formations, as well as the reserves that we consider economic. A substantial or extended decline in oil and natural gas prices may materially and adversely affect our future business, reservoir replacement rate, financial condition, results of operations, cash flows, liquidity or ability to finance planned capital expenditure.

Under the terms of our future petroleum contracts, we may be contractually obligated to drill wells and declare any discoveries to retain exploration and production rights. In the competitive market for our future license areas, failure to drill these wells or declare any discoveries may result in substantial license renewal costs or loss of our interests in the undeveloped parts of our future license areas, which may include prospects.

In Tanzania, there are currently no contractual commitments for exploration or development drilling or other field development during the current licence period which would give rise to significant capital expenditure. However, to meet our production obligations under the Songo Songo Production Sharing Agreement (the "**Songo Songo PSA**") and other contracts, there are planned expenditures for compression and workovers totaling approximately US$51.8 million to be spent during the next two years, although at least some of these costs may be recovered from third parties. Additionally, if there is a license extension, there is the possibility that we will undertake to drill additional wells resulting in significant capital expenditures being incurred.

To protect our exploration and production rights in our current and future license areas, we will likely be required to incur significant capital expenditures. In general, unless we make and declare discoveries within certain time periods specified in our future petroleum agreements and licenses, our interests in the undeveloped parts of our license areas may lapse. Should the prospects yield discoveries, we may face delays in the appraisal and development of these prospects or may even have to relinquish them. The cost to maintain petroleum contracts over such areas may fluctuate and may increase significantly from the original term, and we may not be able to renew or extend such petroleum contracts on commercially viable terms or at all. Our actual drilling activities may therefore materially differ from our current expectations, which could adversely affect our business.

Under these petroleum contracts, we expect to have work commitments to perform exploration and other related activities. Failure to do so may result in a loss of the licenses.

Under the Songo Songo PSA, we currently have the right to produce and, together with TPDC, market and sell all gas in the Songo Songo Block in excess of the Protected Gas requirements, referred to as "Additional Gas", until the Songo Songo license (the "**Songo Songo License**") expires in October 2026. Our current contractual obligations related to Protected Gas end July 31, 2024 at which time all gas produced will be Additional Gas unless otherwise agreed through contract revisions. We have the right under the Songo Songo PSA to request TPDC to obtain an extension to the Songo Songo License. If accepted, an extension of the Songo Songo License may require negotiations on the Songo Songo PSA and new contractual arrangements with the TPDC and the Government of Tanzania ("**GoT**") to continue to produce and market natural gas from the Songo Songo License. Such extensions may, in the view of the GoT, be required on new, as of yet unknown, terms and we cannot assure you that we will decide to enter any such new arrangements, if available, or that our own attempts to amend the Songo Songo PSA might be accepted. We understand that the GoT is currently reviewing for a potential renegotiation, the terms of all existing licenses and related production sharing agreements in Tanzania. For each of our petroleum contracts, including the Songo Songo PSA, we cannot assure you that any renewals or extensions will be granted or whether any new agreements will be available on commercially reasonable terms, or, in some cases, at all.

Our asset concentration, operational dependence and the local focus of our existing contracts may have a material impact on our ability to operate profitably.

Our Tanzanian operations are anticipated to be our sole source of our near-term revenue earnings. Due to our asset concentration, the success of our operations is dependent on positive commercial relationships with a small number of organizations (including states and parastatal organizations) and certainty with respect to our rights and obligations arising from those relationships. Under our Gas Agreement ("**GA**") with the GoT, TPDC and Songas Limited ("**Songas**"), for example, we have the right to market and sell Additional Gas provided that such sales do not jeopardize the priority right of Songas to sell or otherwise dispose of Protected Gas. There is a risk that Songas could exercise its contractual rights, which may curtail our ability to sell Additional Gas if there is insufficient natural gas available for the required volumes of Protected Gas. In particular, Songas has the right in specific circumstances to request reasonable security on all Additional Gas sales. As well, although we operate the Songas gas processing plant, Songas owns the plant and the related pipeline systems ("**Songas Facilities**"). Until recently, all Additional Gas was processed and transported through the Songas Facilities.

In 2008, the parties to the GA initialed certain proposed amendments to that agreement, in the context of the Songas Expansion Project. However, that project did not proceed and the draft Amended and Re-stated Gas Agreement (the "**ARGA**") was never executed. The ARGA would have provided important clarifications concerning the Protected Gas volumes and would have removed terms dealing with the security of supply of the Protected Gas. Contract terms dealing with the consequences of a failure to deliver Protected Gas volumes were also to be regulated by a proposed Insufficiency Agreement ("**IA**") but, again, the IA was never executed. Nevertheless, in certain, limited, respects, the parties to the ARGA have conducted themselves as though certain parts of the ARGA are in effect although there is no agreement as to which parts. If our relationships with these counterparties were to deteriorate, then they might choose to exercise their contractual rights under our agreements differently and in a manner that is adverse to our interests.

Furthermore, due to our asset concentration and operational dependence, damage to our reputation within the jurisdictions in which we currently or may in the future operate due to the actual or perceived occurrence of any number of events, such as environmental incidents, could negatively impact us. Reputation loss may result in negative publicity and diminished or adversarial stakeholder relationships, which could lead to increased challenges in developing and maintaining community relations, decreased investor confidence, and would likely impede our overall ability to advance our projects, thereby having a material adverse impact on financial performance, cash flows and growth prospects.

The inability of one or more third parties who contract with us to meet their obligations to us may adversely affect our financial results.

We may be liable for certain unascertainable costs if third parties who contract with us are unable to meet their contractual commitments.

In Tanzania, we are dependent on TPDC for access and operation of the National Natural Gas Infrastructure ("**NNGI**") and to Songas for access to the Songas Facilities. If access is limited by either party being unable (or unwilling) to meet their contractual obligations, this would impact our ability to meet our contractual delivery of Additional Gas. See "*Our inability to access appropriate equipment and infrastructure in a timely manner may hinder our access to oil and natural gas markets or delay our oil and natural gas production.*"

In addition, we contract with third parties to conduct drilling and related services on our producing assets and development projects. Such third parties may not perform the services they provide us with on schedule or within budget. Furthermore, the drilling equipment, facilities and infrastructure owned and operated by the third parties we contract with is complex and subject to malfunction and breakdown. Any malfunctions or breakdowns may be outside our control and result in delays, which could be substantial. Any delays in our activities caused by equipment, facility or equipment malfunction or breakdown could materially increase our costs and cause an adverse effect on our business, financial position and results of operations.

In Tanzania, our principal exposure to credit risk will be through receivables resulting from the sale of Additional Gas, which we currently sell to Songas, TPDC, Tanzania Electric Supply Company Limited ("**TANESCO**") and approximately 42 industrial customers, and the reimbursement of operating expenses from Songas.

The inability or failure of our significant customers or counterparties to meet their obligations to us or their insolvency or liquidation may adversely affect our financial results. This includes our ability to meet our interest and principal repayment obligations under a loan with the International Finance Corporation (the "**IFC**"). We are unable to predict sudden changes in the creditworthiness of our customers. Even if we do accurately predict sudden changes, our ability to negate the risk may be limited and we could incur significant financial losses. See "*Risks associated with the collectability of receivables could adversely affect our business*".

Our inability to access appropriate equipment and infrastructure in a timely manner may hinder our access to oil and natural gas markets or delay our oil and natural gas production.

Our ability to market our oil and natural gas production will depend substantially on the availability and capacity of processing facilities and other infrastructure, owned and operated by third parties. Our failure to obtain access to such facilities on acceptable terms could materially harm our business. We may also rely on access to drilling rigs suitable for the environment in which we operate. The delivery of drilling rigs may be delayed or cancelled, and we may not be able to gain continued access to suitable rigs in the future. We may be required to shut in production due to the absence of a market or because access to processing facilities may be limited or unavailable. If that were to occur, then we would be unable to realize revenue from those wells until alternative arrangements were made to deliver the production to market, which could cause a material adverse effect on our financial condition and results of operations. In addition, the shutting in of wells can lead to mechanical problems when attempting to bring production back on-line, and this results in decreased production and increased remediation costs.

Additionally, the future exploitation and sale of natural gas will be subject to the availability of commercial processing facilities and marketing of these products, which will in turn be dependent upon the contracting, financing, construction and operating of infrastructure by ourselves or third parties, the relationships and agreements related to which can, at times, be uncertain. For example, in 2011, and as a temporary measure on the assumption that the Songas Expansion Project would eventually proceed, the capacity of the Songas gas processing plant was increased from 70 MMscfd to a maximum of 110 MMscfd and a Re-Rating

Agreement was signed with Songas and others to access this additional capacity. There remains some disagreement as to the status of the Re-Rating Agreement and Songas have at various stages suggested that the plant may be de-rated to its original capacity of 70 MMscfd. We have never accepted that a de-rating is permissible but, in any event, the parties have mitigated this issue by agreeing Additional Gas Plan 2 which acknowledges the current agreed rating of the plant. Any risk has been further mitigated by the fact that Additional Gas can be, and volumes now are, processed and transported to the markets in Dar es Salaam through the NNGI (see below). However, our operational dependence on the ongoing viability of these commercial relationships and contracts with the TPDC, Songas and TANESCO, including the uncertainty associated with the status of the ARGA, may pose risks to our future operations.

In 2017, the GoT completed the US$1.2 billion NNGI, comprised of two gas processing plants, one at Mtwara and one on Songo Songo Island, and a pipeline that transports gas from Southern Tanzania to Dar es Salaam. This infrastructure is important to our operations. On May 29, 2019, we announced that we had entered a long-term gas sales agreement with TPDC to supply up to 20 million standard cubic feet per day (“**MMscfd**”) (amended to 30 MMscfd, on a reasonable endeavours basis, on September 24, 2019) of natural gas to TPDC using the NNGI. While the NNGI now provides us with additional optionality to deliver our gas to the Tanzanian market, our ability to deliver gas to our customers in Dar es Salaam remains dependent upon our ability to access both the Songas Facilities and the NNGI, neither of which we control.

We may not in the future be the operator on all of our license areas and facilities and do not, and may not in the future hold all of the working interests in certain of our license areas. Therefore, we may have reduced control over the timing of exploration or development efforts, associated costs, and the rate of production of any non-operated and, to an extent, any non-wholly-owned, assets.

As we carry out our future exploration and development programs, we may have arrangements with respect to future license areas that result in a greater proportion of our license areas being operated by others. For example, we are the operator of the wells and gas processing plant owned by Songas but do not own the Songas Facilities. Our operations could be negatively impacted through limitations of access to the infrastructure which is not wholly-owned by us. See "*Our operational dependence and the local focus of our existing contracts may have a material impact on our ability to operate profitably*". Dependence on third-party owners could prevent us from realizing our target returns for our projects, including the Songo Songo project. The success and timing of future exploration and development activities will depend on a number of factors that may be largely outside of our control, including:

- the timing and amount of capital expenditure;
- if the activity is operated by one of our block partners, their expertise and financial resources;
- approval of other block partners in drilling wells;
- the scheduling, pre-design, planning, design and approvals of activities and processes;
- selection of technology;
- the available capacity of processing facilities and related pipelines; and
- the rate of production of reserves, if any.

This limited ability to exercise control over the operations on our license areas may cause a material adverse effect on our financial condition and results of operations.

Our estimated proved reserves are based on many assumptions that may turn out to be inaccurate. Any significant inaccuracies in these reserve estimates or underlying assumptions will materially affect the quantities and present value of our reserves.

The process of estimating oil and natural gas reserves is technically complex and imprecise. It requires interpretations of available technical data and many assumptions, including those relating to current and future economic conditions and commodity prices. Any significant inaccuracies in these interpretations or assumptions could materially affect the estimated quantities and present value of reserves shown in the annual reserves report. See www.sedar.com or our website to review our National Instrument 51-101 *Standards of Disclosure for Oil and Gas Activities* for information about our estimated natural gas reserves and the present value of our net revenues as of December 31, 2018.

To prepare our estimates, we must predict production rates and the timing of development expenditure. We must also analyze available geological, geophysical, production and engineering data. The process also requires economic assumptions about factors such as commodity prices, drilling and operating expenses, capital expenditure, taxes and availability of funds.

Actual future production, oil and natural gas prices, revenues, taxes, development expenditure, operating expenses and quantities of recoverable oil and natural gas reserves will vary from our estimates. Any significant variance could materially affect the estimated quantities and present value of reserves. See "*Development drilling may not result in commercially productive quantities of oil and gas reserves*". In addition, we may adjust estimates of our reserves to reflect production history, results of exploration and development, prevailing oil and natural gas prices and other factors, many of which are beyond our control.

The present value of future net revenues from our proved reserves will not necessarily be the same as the current market value of our estimated natural gas reserves.

You should not assume that the present value of future net revenues from our proved reserves is the current market value of our estimated oil and natural gas reserves. In accordance with the requirements of the Canadian Securities Administrators, we have based the estimated net present value of future net revenue attributable to our reserves utilizing forecast price and cost assumptions. Actual future net revenues from our oil and natural gas assets will be affected by factors such as:

- changes to the contractual terms and production sharing arrangements;
- actual prices we receive for oil and natural gas;
- actual cost of development and production expenditure;
- derivative transactions;
- demand from customers;
- the amount and timing of actual production; and
- changes in governmental regulations or taxation.

The timing of both our production and expenses incurred in connection with the development and production of oil and natural gas assets will affect the timing and amount of actual future net revenues from proved reserves, and thus their actual present value. In addition, the discount factors we use when calculating discounted future net revenues may not be the most appropriate discount factors based on interest rates in effect from time to time and risks associated with us or the oil and gas industry in general. Actual future prices and costs may differ materially from those used in the present value estimates included in our estimated reserves. Oil and natural gas prices have recently experienced significant volatility. See

"*Slower economic growth rates may materially adversely impact our operating results and financial position*".

We are dependent on certain members of our management and technical team.

Our performance and success largely depends on the ability, expertise, judgment and discretion of our management and the ability of our technical team to identify, discover, evaluate and develop reserves. The loss or departure of one or more members of our management and technical team could be detrimental to our future success.

There can be no assurance that our management and technical team will remain in place. If any of the management team or other key personnel retire, resign or becomes unable to continue in their present roles and are not adequately replaced, the results of our operations and financial condition could be materially adversely affected. We do not maintain key life insurance on any of our employees or officers.

Our ability to manage our growth, if any, will require us to continue to train, motivate and manage our employees and to attract, motivate and retain additional qualified personnel. Competition for these types of personnel is intense and we may have difficulty attracting, assimilating and retaining qualified personnel to work on our projects due to shortages of qualified workers and competition for their services. It may also be difficult to attract, employ and retain qualified expatriate workers as a result of legal restrictions, socio-economic issues and security concerns in the jurisdictions in which we operate. In the event of a labour shortage, we could be forced to increase wages to attract and retain employees, which may result in higher operating costs and reduced profitability.

Our business plan requires substantial additional capital, which we may be unable to fund out of working capital and cash flow generated from operations or raise on acceptable terms or at all in the future, and which may in turn limit our ability to develop our exploration, appraisal, development and production activities.

We expect our capital outlays and operating expenditure to be substantial to the extent we decide to expand our asset base and operations. For example, to expand the productive capacity of our Songo Songo asset with the appraisal drilling of Songo Songo North and/or the exploration drilling of Songo Songo West (currently dependent on the granting of a license extension), or if any event occurs which adversely affects our proved reserves, natural gas production and cash flows from the Songo Songo PSA, we may require significant sums of additional capital to maintain operations or pursue new development projects.

Obtaining seismic data, as well as conducting all necessary exploration, appraisal, development and production activities entail considerable costs, and we may need to raise substantial additional capital through additional debt financing, strategic alliances or future private or public equity offerings if our cash flows from operations, or the timing of, are not sufficient to cover such costs.

Our future capital requirements will depend on many factors, including:

- the scope, rate of progress and cost of our exploration, appraisal, development and production activities;
- the success of our exploration, appraisal, development and production activities;
- oil and natural gas prices;
- our ability to locate and acquire hydrocarbon reserves;
- our ability to produce oil or natural gas from those reserves;

- the terms and timing of any drilling and other production-related arrangements into which we may enter;
- the cost and timing of governmental approvals and/or concessions including a license extension; and
- the effects of competition by larger companies operating in the oil and gas industry.

Future capital expenditure will be financed out of funds generated from operations, borrowings and possible issues of equity. Our ability to obtain such financing is dependent on, among other factors, our performance and the performance of our investments, the overall state of capital markets and investor appetite for investments in the energy industry and trading in our Shares in particular. We do not currently have any commitments for future external funding beyond our cash balances. Additional financing may not be available on favorable terms, or at all. Even if we succeed in selling additional equity securities to raise funds, at such time the ownership percentage of our existing shareholders would be diluted, and new investors may demand rights, preferences or privileges senior to those of existing shareholders. If we raise additional capital through debt financing, the financing may involve covenants that restrict our business activities. *See "Our loan with the IFC ("IFC Loan") contains certain covenants that may inhibit our ability to make certain investments, incur additional indebtedness and engage in certain other transactions, which could adversely affect our ability to meet our future goals."* If we choose to farm-out interests in our licenses, we will dilute our ownership interest and any potential value resulting therefrom, and may lose operating control or influence over such license areas.

In addition, the uncertainties caused by the creditworthiness of our counterparties and global volatility in the oil and gas market have raised the risk profile associated with our business in Tanzania among both lenders and in equity capital markets. Accordingly, our access to debt and equity financing has been materially impaired and is likely to continue to be impaired until we can resolve these issues. For example, See "*Risks associated with the collectability of receivables could adversely affect our business*" and "*The inability of one or more third parties who contract with us to meet their obligations to us may adversely affect our financial results*".

We may not be able to commercialize our interests in any hydrocarbons produced from our future license areas.

Markets for our hydrocarbons in our future license areas may be primarily domestic and may be in their early stages of commercial and economic development. In such markets, the infrastructure to transport and process hydrocarbons on commercial terms may be limited and the cost associated with constructing such infrastructure may not be commercially viable given prices paid for hydrocarbons. Accordingly, there may be limited or no value derived from any hydrocarbons produced from our license areas. In addition, in local and developing markets, the effects of competition may be amplified and could materially affect our business. Due to our exposure to such markets, our operations are particularly vulnerable to changes in local economies and unilateral regulatory and legal changes with the result that our current and future production in Tanzania and elsewhere may not be economically viable.

We are subject to numerous risks inherent to the exploration and production of oil and natural gas.

Oil and natural gas exploration and production activities involve many risks that a combination of experience, knowledge and interpretation may not be able to overcome. Our future will depend on the success of our exploration and production activities and on the development of an infrastructure that will allow us to take advantage of our discoveries. Additionally, our license area is located on an island, 25 kms offshore mainland Tanzania, and partially in shallow water, which generally increases the capital and operating costs, chances of delay, planning time, technical challenges and risks associated with exploration and production activities.

As a result, our oil and natural gas exploration and production activities are subject to numerous risks, including the risk that drilling will not result in commercially viable oil and natural gas production. Our decisions to purchase, explore or develop discoveries, prospects or licenses will depend in part on the evaluation of seismic data through geophysical and geological analyses, production data and engineering studies, the results of which are often inconclusive or subject to varying interpretations. See "*Our operations involve special risks that could adversely affect our performance and results*".

Furthermore, the marketability of expected oil and natural gas production from our discoveries and prospects will also be affected by numerous factors. These factors include, but are not limited to, market fluctuations of prices (such as recent significant declines in oil and natural gas prices), proximity, capacity and availability of drilling rigs and related equipment, qualified personnel and support vessels, processing facilities, availability of vehicles, pipelines and equipment, access to markets, government regulations (including, without limitation, regulations relating to prices, taxes, royalties, allowable production, domestic supply requirements, importing and exporting of oil and natural gas, the ability to flare or vent natural gas, health and safety matters, environmental protection and climate change). The effect of these factors, individually or jointly, may result in us not receiving an adequate return on invested capital.

If our undeveloped discoveries and prospects are developed and become operational, they may not produce in commercial quantities or at the costs anticipated, and our projects may cease production, in part or entirely, in certain circumstances. Discoveries may become uneconomic as a result of an increase in operating costs to produce oil and natural gas. Our actual operating costs and rates of production may differ materially from our current estimates. Moreover, it is possible that other developments, such as increasingly stringent environmental, climate change, health and safety laws and regulations and enforcement policies thereunder and claims for damages to property or persons resulting from our operations, could result in substantial costs and liabilities, delays, an inability to complete the development of our discoveries or the abandonment of such discoveries, which could cause a material adverse effect on our financial condition and results of operations.

We are subject to drilling and other operational and environmental risks and hazards.

The oil and natural gas industry involves a variety of business, operational and environmental risks, including, but not limited to:

- fires, blowouts, spills, cratering and explosions;
- mechanical and equipment problems, including unforeseen engineering complications;
- uncontrolled flows or leaks of oil, well fluids, natural gas, brine, toxic gas or other pollutants or hazardous materials;
- gas flaring operations;
- marine hazards with respect to offshore operations;
- formations with abnormal pressures;
- pollution, environmental risks, and geological problems; and
- adverse weather conditions and natural or man-made disasters.

Any of these events could result in loss of human life, significant damage to property, environmental or natural resource damage, impairment, delay or cessation of our operations, lower production rates, adverse publicity, substantial losses and civil or criminal liability. We expect to maintain insurance against some, but not all, of these risks and losses; however, there can be no assurance that such insurance will be adequate to cover any losses or exposure for liability and the occurrence of any of these events, whether or not

covered by insurance, could have a material adverse effect on our financial position and results of operations. Furthermore, the costs and risks associated with these events cannot be readily estimated or accounted for and we cannot predict whether any insurance we obtain will be sufficient or continue to be available at a reasonable cost or at all.

Our operations may be materially adversely affected by tropical storms and hurricanes.

Tropical storms, tsunamis, hurricanes and the threat of tropical storms and hurricanes may result in the shutdown of operations, particularly in offshore areas, but also areas that fall within the path and the projected path of a tropical storm or hurricane. In addition, climate change could result in an increase in the frequency and severity of tropical storms, tsunamis, hurricanes or other extreme weather events. During any tropical storm or hurricane, we may be unable to access well sites and our production may be shut down. Additionally, tropical storms, tsunamis or hurricanes may cause evacuation of personnel and damage to our platforms and other equipment, which may result in suspension of our operations. The shut-downs related to evacuations and damage can create unpredictability in activity and utilization rates, as well as delays and cost overruns, which could have a material adverse effect on our business, financial condition and results of operations.

The development of oil and natural gas projects, including the availability and cost of drilling rigs, equipment, supplies, personnel and oilfield services, is subject to delays and cost overruns.

Historically, numerous oil and natural gas development projects have experienced delays and capital cost increases and overruns due to factors both within and outside of our control, including the lack of availability or high cost of drilling rigs and other essential equipment, the cost of supplies, personnel and oilfield services, as well as various mechanical and technical issues. The cost of development is often not fixed and remains dependent upon a number of factors, including the completion of detailed cost estimates and final engineering, contracting and procurement costs. Construction and operation schedules may not proceed as planned and may be subject to delays or cost overruns. Any delays may increase the cost of the project and additional capital required to meet the cost overruns may not be available in a timely and cost-effective fashion.

Our operations involve special risks that could adversely affect our performance and results.

Offshore operations are subject to a variety of operating risks specific to the marine environment, such as capsizing, sinking, collisions and damage or loss to pipeline, subsea or other facilities or from weather conditions. We could incur substantial expenses that could reduce or eliminate the funds available for exploration, development or license acquisitions, or result in loss of equipment and license interests.

Our operations are presently limited to onshore and offshore shallow water exploration, development and production, which do not involve the sorts of risks that would be encountered in deep water drilling, such as lengthier operations and more advanced drilling technologies that involve a higher risk of equipment failure and higher drilling costs. However, there may be production risks of which we are unaware. If we participate in the development of new subsea infrastructure and use floating production systems to transport our hydrocarbons from producing wells, these operations may require substantial time for installation or encounter mechanical difficulties and equipment failures that could result in loss of production, significant liabilities, cost overruns or delays.

Furthermore, operations in East Africa currently lack the oilfield service infrastructure and support present in other regions. As a result, a significant amount of time may elapse between a discovery and the marketing of the associated oil and natural gas, increasing both the financial and operational risks involved with these operations. Because of the lack and high cost of this infrastructure, further discoveries we may make in Africa may never be economically viable.

We have had, and continue to have, disagreements with TPDC regarding certain of our rights and responsibilities under the Songo Songo PSA.

All of our proved reserves are located onshore and offshore Tanzania. The Songo Songo PSA and other material contracts to which we are a party cover the field, activities and commercial arrangements that form the basis of our current operations in Tanzania. Pursuant to these petroleum contracts, most significant decisions, including our plans for development and annual work programs, must be submitted to TPDC for comment. We have previously had, and continue to have, disagreements with TPDC and the GoT regarding certain of our rights and responsibilities under the Songo Songo PSA. We have also disagreed as to the operation and interpretation of new laws and regulations such as the Petroleum Act, which grandfathers the Songo Songo PSA, although the GoT and TPDC allege it still requires compliance with other parts of the regulations in conflict with the Songo Songo PSA There are also disagreements over our ability to market and sell gas to end-users and TPDC has challenged our rights to cost recover a number of items under the Songo Songo PSA, including the costs of our downstream operations; however, there are currently no disagreements that have risen to the level of a formal dispute.

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

The geographic locations of our current and future licenses in Africa expose us to an increased risk of loss of revenue or curtailment of production as a result of factors generally associated with foreign operations or arising from factors specifically affecting those areas in which we operate or may operate.

All of our current petroleum contracts are located in Tanzania with state-owned or controlled enterprises, and a large portion of our future exploration and development licenses may be located in Africa. Through our operations in such foreign jurisdictions, we may become subject to risks that are materially different than those present in markets with better established and more mature hydrocarbon industries. Such risks include (but are not necessarily limited to):

- severe weather, natural or man-made disasters;
- delays or decreases in production, the availability of equipment, facilities, personnel or services;
- delays or decreases in the availability of capacity to transport, gather or process production;
- military conflicts, civil unrest or political strife; and/or
- international border disputes.

For example, oil and natural gas operations in our current and future license areas in Africa may be subject to higher political and security risks than operations conducted under the sovereignty of the United States, the United Kingdom or Canada. We plan to maintain insurance coverage for only a portion of the risks we face from doing business in these regions. There also may be certain risks covered by insurance where the policy does not reimburse us for all of the costs related to a loss.

Further, as many of our licenses are, or may in the future be, concentrated in the same geographic area, a number of our licenses could experience the same conditions at the same time, resulting in a relatively greater impact on our results of operations than they might have on other companies that have a more diversified portfolio of licenses and assets.

Finally, the cross-default provisions contained in many of our agreements, including our loan agreement with the IFC, may have a material adverse effect on our ability to continue operations in Tanzania in the event that we are ever in default of our contractual obligations.

Our operations may be adversely affected by political, social and economic circumstances in the countries in which we operate.

We operate, and may in the future operate, in foreign jurisdictions that may be considered politically and/or economically unstable. We are also subject to foreign laws and regulations that themselves may change in response to shifting political and economic circumstances. Through our operations in foreign jurisdictions, we may become subject to risks that are materially different than those present in markets with better established and more mature hydrocarbon industries. Such risks include (but are not necessarily limited to):

- the renegotiation, cancellation or forced modification of existing contracts and product sharing agreements;
- expropriation, whether direct or indirect, including by confiscatory tax regimes or other regulatory actions, or nationalization of property;
- lack of certainty with respect to intellectual property;
- changes in laws or policies or increasing legal and regulatory requirements of particular countries, such as those relating to taxation, royalties, imports, exports, duties, currency, in-country beneficiation or other claims by government entities, including retroactive claims and/or changes in the administration of laws, policies and practices;
- uncertain political, legislative and economic environments, war, terrorism, sabotage and civil disturbances, territorial disputes and insurrection;
- lack of certainty with respect to foreign legal systems, corruption and other factors that are inconsistent with the rule of law;
- counterfeiting;
- exchange controls;
- delays or inability to obtain or maintain necessary government permits or to operate in accordance with such permits or regulatory requirements;
- currency fluctuations;
- restrictions on the ability of local operating companies to sell products for foreign currency, and on the ability of such companies to hold foreign currencies in offshore bank accounts;
- import and export regulations, including restrictions on the export of hydrocarbons;
- restrictions on the repatriation of earnings and various other foreign exchange restrictions;
- reliance on advisors and consultants in foreign jurisdictions in connection with regulatory, permitting or other governmental requirements; and
- increased financing costs.

Our operations in these areas also increase our exposure to risks of war, local economic conditions, political disruption, civil disturbance, expropriation, piracy, tribal conflicts and governmental policies that may:

- disrupt our operations;
- require us to incur greater security costs;
- restrict the movement of funds or limit repatriation of profits;
- lead to international sanctions from overseas governments; or
- limit access to markets for periods of time.

The regions in which we operate, and may in the future operate, have experienced political instability in the past or are currently experiencing instability. Disruptions may occur in the future, and losses caused by these disruptions and not covered by insurance may occur. Consequently, our exploration, development and production activities may be substantially affected by factors which could have a material adverse effect on our results of operations and financial condition.

Our operations may be adversely affected by unexpected legal and regulatory changes.

Our current and future operations may be materially affected by government and popular action. The resultant political, legal and/or regulatory changes may lead to changes related to royalty rates and payments, export taxes and regulations, surcharges, value added taxes, production bonuses and other charges, midstream transportation, tolls and tariffs, price controls, labour and local content rules, pollution control and environmental protection.

For example, in Tanzania, the state retains ownership of the minerals and controls the exploration, development and production of hydrocarbon reserves. As a result, our development properties and proved natural gas reserves located on/offshore on the Songo Songo Island in Tanzania are subject to regulation and control by the GoT and certain of its national and parastatal organizations.

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

The implementation of the *National Energy Policy (2015)* and, subsequently, the Petroleum Act, created a new regulatory environment in the Tanzanian natural gas industry, imposing a comprehensive legal framework to govern the upstream, midstream and downstream sectors. The Petroleum Act also created a new regulator to oversee the upstream sectors; the Petroleum Upstream Regulatory Authority ("**PURA**"). Among other things, the Petroleum Act seeks to: (i) increase the involvement of national oil companies in hydrocarbon development through mandatory partnerships with foreign companies; (ii) prioritize the development of a domestic natural gas market; (iii) implement a domestic pricing structure; and (iv) increase the benefits that Tanzania receives from hydrocarbon development. These policy aims may have a material impact on our ability to control and conduct operations in Tanzania.

The Petroleum Act confers upon TPDC the status of National Oil Company and it is the sole aggregator of natural gas in the country. TPDC has therefore been mandated with the task of managing the GOT's commercial interests in petroleum operations as well as midstream and downstream natural gas activities. In this respect, the Petroleum Act vests TPDC with exclusive rights in the entire petroleum upstream and the natural gas midstream and downstream value chains. Our business plan currently involves operations in all of these sectors, and TPDC's exclusive rights could impact our ability to market and sell gas to new

customers outside of government parastatals. However, Article 260 of the Petroleum Act is interpreted as grandfathering the Songo Songo PSA and there are economic stability provisions within the Songo Songo PSA, which means that, to date, the impact of the Petroleum Act has been minimal in this respect.

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

Our operations may also be adversely affected by laws and policies of the jurisdictions that affect foreign trade, taxation and the repatriation of funds, including the jurisdictions where our oil and gas operating activities are located, as well as the United Kingdom, Canada, Mauritius and the British Virgin Islands and other jurisdictions in which we do business. Changes in any of these laws or policies or the implementation thereof could materially and adversely affect our financial position, results of operations and cash flows.

We are subject to both uncertainties in the application of the tax laws in the countries in which we operate and to possible changes in such tax laws (or the application thereof), each of which could result in an increase in our tax liabilities. These risks may be higher in the developing countries in which we may conduct a majority of our activities, as is the case in Tanzania, where the Tanzania Revenue Authority (the "**TRA**") is responsible for the collection of taxes. The TRA is not party to the Songo Songo PSA and there is a risk that the TRA has made, and will continue to make, rulings irrespective of the terms of the Songo Songo PSA and other related agreements, resulting in adverse assessments, penalties and fines which have not been contemplated by us and, in addition, costs which are not recoverable under the Songo Songo PSA. In addition to its powers of taxation, the TRA has rights to take enforcement action that could significantly impact our operations within Tanzania.

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

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

There can be no assurance that changes in law in the jurisdictions in which we currently or may in the future operate will not seek to retroactively, either on their face or as interpreted, modify the terms of the agreements governing our interests or the laws that are applicable to our operations. For example, *The Natural Wealth and Resources Contracts (Review and Re-Negotiation of Unconscionable Terms) Act, 2017*

(the "**Unconscionable Terms Act**") appears to provide for the right of the GoT to renegotiate or ultimately expunge contract clauses that are deemed to be unconscionable; while we will dispute this, the GoT may suggest that the Unconscionable Terms Act applies to contracts executed before it came in to force.

In the event of a dispute arising from our current and potential future foreign operations, we may become subject to the exclusive jurisdiction of courts outside of the United States, the United Kingdom or Canada, or may not be successful in subjecting foreign persons to the jurisdiction of courts in the United States, the United Kingdom or Canada or international arbitration, which could adversely affect the outcome of such dispute. For example, on July 15, 2017, in Tanzania, the GoT passed the Permanent Sovereignty Act 2017 and the WLMAA 2017. These Acts contain new regulations, including, but not limited to, regulations specifying that all contractual disputes, regardless of the provisions of the agreements from which they arise, be resolved by judicial bodies or other dispute resolution panels established domestically within Tanzania. This is consistent with other legislation in Tanzania, such as the *Public Private Partnership (Amendment) Act, 2018*, which restricts disputes arising from public-private partnerships concerning natural resource development to domestic dispute resolution measures. In our view, the Permanent Sovereignty Act 2017 and WLMAA 2017 are forward looking and only apply to agreements entered into on or after July 15, 2017; however, we can provide you no assurance that the GoT will not require domestic dispute resolution procedures notwithstanding the terms of our agreements.

The oil and gas industry, including the acquisition of exploratory and/or development licenses, is intensely competitive and many of our competitors possess and employ substantially greater resources than us.

The international oil and gas industry is highly competitive in all aspects, including the exploration for, and the development of, new license areas. We operate in a highly competitive environment for acquiring exploratory licenses and hiring and retaining trained personnel. Many of our competitors possess and employ financial, technical and personnel resources substantially greater than ours, which can be particularly important in the areas in which we operate. These companies may be better able to withstand the financial pressures of unsuccessful drilling efforts, sustained periods of volatility in financial markets and generally adverse global and industry-wide economic conditions, and may be better able to absorb the burdens resulting from changes in relevant laws and regulations, which could adversely affect our competitive position. Our ability to acquire additional prospects and to find and develop reserves in the future will depend on our ability to evaluate and select suitable licenses, conclude transactions and obtain access to necessary facilities and infrastructure in a highly competitive environment. Also, there is substantial competition for available capital for investment in the oil and gas industry. We may also face increasing competition from alternate fuel sources and generation technologies that impact the demand for our products. For example, the GoT is attempting to develop new utility-scale power plants relying on alternative fuel sources such as wind, solar, and coal. As a result of these and other factors, we may not be able to compete successfully in an intensely competitive industry, which could cause a material adverse effect on our results of operations and financial condition

We may be affected by the inability to respond to changing technological development.

The petroleum industry is characterized by rapid and significant technological advancements and introductions of new products and services utilizing new technologies. Other companies may be better able to develop and implement new technologies before us. There can be no assurance that we will be able to respond to such competitive pressures and implement such technologies on a timely basis or at an acceptable cost. One or more of the technologies that we currently utilize or may seek to implement in the future may become obsolete. If we are unable to utilize the most advanced commercially available technology, our business, financial condition and results of operations could also be materially adversely affected.

Participants in the oil and gas industry are subject to numerous laws, regulations, and other legislative instruments that can affect the cost, manner or feasibility of doing business.

Exploration and production activities in the oil and gas industry are subject to local laws and regulations. We may be required to make large expenditures to comply with governmental laws and regulations, particularly in respect of the following matters:

- licenses for drilling operations;
- tax increases, including retroactive claims;
- unitization of oil accumulations;
- local content requirements (including the mandatory use of local partners and vendors; See "*We face various risks associated with global populism*"); and
- safety, health and environmental requirements, liabilities and obligations, including those related to remediation, investigation or permitting.

Under these and other laws, regulations and the terms of our material contracts, we could be liable for personal injuries, property, environmental and other types of damages. Failure to comply with these laws, regulations and certain of our contractual obligations may also result in the suspension or termination of our operations and subject us to administrative, civil and criminal penalties. Moreover, these laws and regulations could change, or their interpretations could change, in ways that could substantially increase our costs. These risks may be higher in the developing countries in which we conduct, and may in the future conduct, the majority of our operations, where there could be a lack of clarity or lack of consistency in the application of these laws, regulations and the interpretation of contractual obligations, if any. Any resulting liabilities, penalties, suspensions or terminations could have a material adverse effect on our financial condition and results of operations. See "*Our operations may be adversely affected by unexpected legal and regulatory changes*" and "*We are subject to numerous health, safety and environmental laws and regulations which may result in material liabilities and costs*".

We are subject to numerous health, safety and environmental laws and regulations which may result in material liabilities and costs.

We are subject to various international, foreign, federal, state and local health, safety and environmental laws, regulations and contractual obligations governing, among other things, the emission and discharge of pollutants into the ground, air or water, the generation, storage, handling, use, transportation and disposal of regulated materials and the health and safety of our employees, contractors and communities in which our assets are located. We are required to obtain environmental permits from governmental authorities for our operations, including drilling permits for our wells. Despite our best efforts to maintain compliance, third parties may suggest that we have not always been, or that we may not always be, in complete compliance with the permits, laws and regulations to which we are subject, and there is a risk such requirements could change in the future or become more stringent. If we violate or fail to comply with such requirements, we could be fined or otherwise sanctioned by regulators, including through the revocation of our permits or the suspension or termination of our operations. If we fail to obtain, maintain or renew permits in a timely manner or at all (due to opposition from partners, community or environmental interest groups, governmental delays or other reasons), or if we face additional requirements imposed as a result of changes in or enactment of laws or regulations, such failure to obtain, maintain or renew permits or such changes in or enactment of laws or regulations could impede or affect our operations, which could have a material adverse effect on our results of operations and financial condition.

We, as an interest owner or as the designated operator of certain of our past, current and future interests, discoveries and prospects, could be held liable for some or all of the health, safety and environmental costs and liabilities arising out of our actions and omissions as well as those of our block partners, third-party

contractors, predecessors or other operators. To the extent we do not address these costs and liabilities or if we do not otherwise satisfy our obligations, our operations could be suspended or terminated. We have contracted with and intend to continue to hire third parties to perform services related to our operations. There is a risk that we may contract with third parties with unsatisfactory health, safety and environmental records or that our contractors may be unwilling or unable to cover any losses associated with their acts and omissions. Accordingly, we could be held liable for all costs and liabilities arising out of their acts or omissions, which could have a material adverse effect on our results of operations and financial condition.

We are not fully insured against all risks and our insurance may not cover any or all health, safety or environmental claims that might arise from our operations or at any of our license areas. If a significant accident or other event occurs and is not covered by insurance, such accident or event could have a material adverse effect on our results of operations and financial condition.

Releases of regulated substances may occur and can be significant. Under certain environmental laws and material contracts, we could be held responsible for all of the costs relating to any contamination at our current or former facilities and at any third party waste disposal sites used by us or on our behalf. In addition, offshore oil and natural gas exploration and production involves various hazards, including human exposure to regulated substances, which include naturally occurring radioactive, and other materials. As such, we could be held liable for any and all consequences arising out of human exposure to such substances or for other damage resulting from the release of any regulated or otherwise hazardous substances to the environment, property or to natural resources, or affecting endangered species.

In accordance with the terms of the Songo Songo PSA, no provision has been recognized for future decommissioning costs which are anticipated to be immaterial as we forecast that there will still be commercial gas reserves if we are unsuccessful in obtaining an extension to the Songo Songo PSA by 2026. However, we expect that the cost of complying with environmental legislation and regulations in Tanzania will increase in the future. Compliance with existing environmental legislation and regulations has not had a material effect on our capital expenditure, earnings or competitive position to date. While we believe that we are currently in compliance with all environmental laws and regulations applicable to our operations in Tanzania, no assurances can be given that we will be able to continue to comply with such laws and regulations without incurring substantial costs.

In addition, we expect continued and increasing attention to climate change issues and emissions of greenhouse gases ("**GHGs**"), including methane (a primary component of natural gas) and carbon dioxide (a by-product of oil and natural gas combustion). Climate change policy is evolving at national and international levels, and political and economic events may significantly affect the scope and timing of climate change measures that are ultimately put in place in countries in which we conduct our business.

For example, in April 2016, 195 nations signed and officially entered into an international climate change accord (the "**Paris Agreement**"). Most African countries, including Tanzania, have ratified the Paris Agreement. The Paris Agreement calls for signatory countries to set their own GHG emissions targets, make these emissions targets more stringent over time and be transparent about the GHG emissions reporting and the measures each country will use to achieve its GHG targets. A long-term goal of the Paris Agreement is to limit global temperature increase to well below two degrees Celsius from temperatures in the pre-industrial era. The Paris Agreement is in effect a successor to the Kyoto Protocol, an international treaty aimed at reducing emissions of GHGs. The Kyoto Protocol has been extended by amendment until 2020. It cannot be determined at this time what effect the Paris Agreement, and any related GHG emissions targets, regulations or other requirements, will have on our business, results of operations and financial condition. It also cannot be determined what impact the United States' announced withdrawal from the Paris Agreement will have on international climate change regulation. This regulatory and policy uncertainty, however, could result in a disruption to our business or operations and direct or indirect costs of compliance with these regulations may have a material adverse effect on our business, financial condition, results of operations and prospects. Any such regulations could also increase the cost of consumption, and thereby reduce demand for our products. In addition, the physical impacts of climate change in the areas in which our assets are located or in which we otherwise operate, including through increased severity and frequency of storms, floods and other weather events, could adversely impact our

operations or disrupt transportation or other process-related services provided by our third-party contractors.

Health, safety and environmental laws are complex, change frequently and have tended to become increasingly stringent over time. Our costs of complying with current and future climate change, health, safety and environmental laws, the actions or omissions of our block partners and third party contractors and our liabilities arising from releases of, or exposure to, regulated substances may adversely affect our results of operations and financial condition.

We face various risks associated with increased activism against oil and gas exploration and development activities.

Opposition toward oil and gas drilling and development activity has been increasing globally. Companies in the oil and gas industry are often the target of activist efforts from both individuals and non-governmental organizations regarding safety, human rights, climate change, environmental matters, sustainability, and business practices. Anti-development activists are working to, among other things, delay or cancel certain operations such as offshore drilling and development.

Future activist efforts could result in the following:

- delay or denial of drilling permits;
- an inability to access well sites and facilities;
- shortening of lease terms or reduction in lease size;
- restrictions or delays on our ability to obtain additional seismic data;
- restrictions on installation or operation of gathering or processing facilities;
- restrictions on the use of certain operating practices;
- legal challenges or lawsuits;
- damaging publicity about oil and gas companies;
- increased regulation;
- increased costs of doing business;
- an inability to raise finance for projects;
- reduction in demand for our products; and
- other adverse effects on our ability to develop our properties and/or undertake production operations.

Our need to incur costs associated with responding to these initiatives or complying with any resulting new legal or regulatory requirements resulting from these activities that are substantial and not adequately provided for, could have a material adverse effect on our business, financial condition and results of operations.

We may be exposed to liabilities under anti-money laundering and/or anti-corruption laws, and any determination that we violated such laws could have a material adverse effect on our business.

We are subject to laws that prohibit improper payments or offers of payments to foreign government officials and political parties for the purpose of obtaining or retaining business or otherwise securing an improper business advantage. We do business, and may do additional business in the future, in countries and regions in which we may face, directly or indirectly, corrupt demands by officials. We face the risk of unauthorized payments or offers of payments by one of our employees, contractors or consultants or accusations by government authorities or local citizens or other organizations that our employees, contractors or consultants have made or offered such payments. Our existing safeguards and any future improvements may prove to be less than effective in preventing such unauthorized payments, and our employees and consultants may engage in conduct for which we might be held responsible. Violations of such laws may result in severe criminal or civil sanctions, and we may be subject to other liabilities, which could negatively affect our business, operating results and financial condition.

In addition, the United States, United Kingdom and Canadian governments may seek to hold us liable for successor liability under their anti-corruption laws for violations committed by companies in which we invest in (for example, by way of acquiring equity interests in, participating as a joint venture partner with, acquiring the assets of, or entering into certain commercial transactions with) or that we acquire.

Corruption remains an issue in Tanzania. Tanzania ranked 99 out of 180 countries on the 2018 Transparency International Corruption Index, with a score of 36/100. On the 2019 World Bank's Ease of Doing Business Index, Tanzania ranked 144/190 countries, with a score of 53.63 (the regional average for Sub-Saharan Africa is 51.61). At the end of 2014, there was a significant corruption scandal in Tanzania's energy sector involving a number of senior government officials.

We may incur substantial losses and become subject to liability claims as a result of future oil and natural gas operations, for which we may not have adequate insurance coverage.

We intend to maintain insurance against certain risks in the operation of the business we plan to develop and in amounts in which we believe to be reasonable. Such insurance, however, may contain exclusions and limitations on coverage or may not be available at a reasonable cost or at all. For example, we are not insured against political or terrorism risks. We may elect not to obtain insurance if we believe that the cost of available insurance is excessive relative to the risks presented. Losses and liabilities arising from uninsured and underinsured events could materially and adversely affect our business, financial condition and results of operations. Further, even in instances where we maintain adequate insurance coverage, potential delays related to receipt of insurance proceeds as well as delays associated with the repair or rebuilding of damaged facilities could also materially and adversely affect our business, financial condition and results of operations. Furthermore, we cannot predict whether insurance will continue to be available at a reasonable cost or at all.

We operate in a litigious environment.

Some of the jurisdictions in which we operate, or may operate in the future, have proven to be litigious environments. Oil and gas companies, such as us, can expect to be involved in various legal proceedings, such as title or contractual disputes, in the ordinary course of business.

From time to time, we may become involved in various legal and regulatory proceedings arising in the normal course of business. We cannot predict the occurrence or outcome of these proceedings with certainty, and if we are unsuccessful in these disputes and any loss exceeds our available insurance, this could have a material adverse effect on our results of operations. Moreover, as our operations are exclusively foreign, we may be subject to the exclusive jurisdiction of foreign courts in countries that have less developed legal systems than those existing in developed countries. We may have difficulty in obtaining effective legal redress in such situations.

Because we maintain assets overseas, and may in the future maintain a diversified portfolio of assets overseas, the complexity and types of legal procedures with which we may become involved may vary, and we could incur significant legal and support expenses in different jurisdictions. If we are not able to successfully defend ourselves, there could be a delay or even halt in our exploration, development or production activities or other business plans, resulting in a reduction in reserves, loss of production and reduced cash flows. Legal proceedings could result in a substantial liability and/or negative publicity about us and adversely affect the price of our Shares. In addition, legal proceedings distract management and other personnel from their primary responsibilities.

We face various risks associated with global populism and various other popular movements.

Globally, certain individuals and organizations are attempting to focus public attention on income distribution, wealth distribution, and corporate taxation levels, and implement income and wealth redistribution policies. These efforts, if they gain political traction, could result in increased taxation on individuals and/or corporations, as well as, potentially, increased regulation on companies and financial institutions. Our need to incur costs associated with responding to these developments or complying with any resulting new legal or regulatory requirements, as well as any potential increased tax expense, could increase our costs of doing business, reduce our financial flexibility and otherwise have a material adverse effect on our business, financial condition and results of our operations.

In Tanzania, the *Non-Citizens (Employment Regulation) Act, 2015*, and the *The Petroleum (Local Content) Regulations, 2017*, compel companies to employ or contract qualified Tanzanian nationals, suppliers or service providers and to give such local options priority over foreign options. Regardless of competitive tendering, if a Tanzanian person or entity can provide the service, even at a higher cost (within a 5% range), there is a requirement to hire locally. In addition, many of our material contracts contain local content and procurement obligations that are substantially similar to these legislative requirements. This could result in increased costs, delays in project completion, inability to meet contractual requirements and deliverables, exposure to potentially unlawful bids, and/or consequences related to alleged contractual breach. In addition, there is renewed focus on the disparity between expat and local salaries which could lead to increased costs for employing locals or the inability to attract suitable qualified experts due to reduced compensation rates which could negatively impact operating results.

With the introduction of the new regulations (*See* "*Our operations may be adversely affected by unexpected legal and regulatory changes")* there is a focus on ensuring Tanzania gains greater benefit from its natural resources which could lead to change in profit share arrangements and reduced revenues.

Slower economic growth rates may materially adversely impact our operating results and financial position.

Market volatility and reduced consumer demand may increase economic uncertainty. Many countries, including countries in which we operate, and may in the future operate, are constrained by long term structural government budget deficits and international financial markets and credit rating agencies are pressing for budgetary reform and discipline. Economic growth drives demand for energy from all sources, including hydrocarbons. A lower future economic growth rate is likely to result in decreased demand growth for our hydrocarbon production. A decrease in demand, notwithstanding impacts from other factors, could potentially result in lower commodity prices, which would reduce our cash flows from operations, our profitability and our liquidity and financial position.

Increased costs of capital could adversely affect our business.

Our business and operating results can be harmed by factors such as the availability, terms and cost of capital, increases in interest rates or a reduction in credit rating. Changes in any one or more of these factors could cause our cost of doing business to increase, limit our access to capital, limit our ability to pursue acquisition opportunities, reduce our cash flows available for drilling and place us at a competitive disadvantage. Recent and continuing disruptions and volatility in the global financial markets may lead to an increase in interest rates or a contraction in credit availability impacting our ability to finance our

operations. We require continued access to capital. A significant reduction in the availability of credit could materially and adversely affect our ability to achieve our planned growth and operating results.

Risks associated with the collectability of receivables could adversely affect our business.

We evaluate the collectability of our receivables on the basis of payment history, frequency and predictability, as well as our assessment of the customer's willingness and ability to pay. We have been impacted by TANESCO's inability to pay for past deliveries and to pay down arrears since 2012.

Prior to 2017, TANESCO payments had been inconsistent and resulted in the Company recording provisions for doubtful accounts for amounts outstanding from TANESCO for more than 60 days. Commencing the last quarter of 2016, we began recording revenues for sales to TANESCO based on the expected amount to be collected, which represents a percentage of the amounts invoiced to TANESCO determined by comparison of TANESCO's payment history with the amounts that we invoiced over the previous three years. Since April 1, 2018 we have recorded 100% of the invoices to TANESCO for gas sales given cash receipts from TANESCO have been sufficient to pay for current gas deliveries.

As at December 31, 2019, the current receivable from TANESCO was US$ nil (December 31, 2018: US$ nil). The TANESCO long-term trade receivable at December 31, 2019, was US$47.5 million with a provision of US$47.5 million compared to US$58.5 million (with a provision of US$58.5 million) at December 31, 2018. There is a risk that we may not be able to recover all or any of the outstanding TANESCO receivables, or that we may need to suspend gas deliveries or initiate dispute resolution mechanisms to recover the TANESCO receivables. Any inability to collect on the TANESCO receivables and resulting actions by our operating subsidiary in Tanzania, PanAfrican Energy Tanzania Limited ("**PAET**") to enforce its rights may materially adversely affect our operations, financial condition or operational results.

Our loan with the IFC ("IFC Loan") contains certain covenants that may inhibit our ability to make certain investments, incur additional indebtedness and engage in certain other transactions, which could adversely affect our ability to meet our future goals.

The IFC Loan includes certain covenants that, among other things, restrict:

- our investments, loans and advances and certain of our subsidiaries' payment of dividends and other restricted payments;
- our incurrence of additional indebtedness;
- the granting of liens;
- mergers, consolidations and sales of all or a substantial part of our business or licenses; and
- the sale of assets (other than production sold in the ordinary course of business).

All of these restrictive covenants may limit our ability to expand or pursue our business strategies. Our ability to comply with these and other provisions of the IFC Loan may be impacted by changes in economic or business conditions, our results of operations or events beyond our control. The breach of any of these covenants could result in a default under the IFC Loan, in which case, depending on the actions taken by the lender thereunder or their successors or assignees, such lender could elect to declare all amounts borrowed under the IFC Loan, together with accrued interest, to be due and payable. If we were unable to repay such borrowings or interest, our lenders, successors or assignees could proceed against their collateral. If the indebtedness under the IFC Loan were to be accelerated, our assets may not be sufficient to repay in full such indebtedness. In addition, the limitations imposed by the IFC on our ability to incur additional debt and to take other actions might significantly impair our ability to obtain other financing.

Under the IFC Loan, PAET's ability to incur additional financial debt is capped at an amount equal to the last twelve months net funds flow from operating activities, which limits our ability to obtain additional financing to fund future working capital, capital expenditure, acquisitions or other general corporate requirements. Therefore, there is a risk that we may not be able to obtain additional financing, which could have a material adverse effect on business financial conditions, results of operations and prospects. Further, even if we are able to obtain financing under the terms of the IFC Loan, there is risk that if the economy or the banking industry experiences unexpected and/or prolonged deterioration, access to additional financing may be affected. Failure to obtain such financing on a timely basis could cause us to forfeit interests in certain properties, miss certain acquisition opportunities and reduce or terminate operations. If revenues from reserves decrease as a result of lower natural gas prices or otherwise, it will affect our ability to obtain the capital necessary to replace reserves or to maintain production. To the extent that external sources of capital become limited, unavailable, or only available on onerous terms, our ability to make capital investments and maintain existing assets may be impaired, and assets, liabilities, business, financial condition and results of operations may be affected materially and adversely as a result.

The pay-if-you-can ("**PIYC**") provisions in the IFC Loan allow PAET to satisfy certain payment obligations by capitalising or deferring them. Such provisions typically apply to interest payments, with a structure that would envisage the repayment of principal at maturity. Under the terms of the IFC Loan, the PIYC provisions only allow base interest to be capitalized by PAET, and the payment of principal to be deferred. Such provisions do not apply to the payment of Participation Interest, the payment of the commitment fee (5% calculated on the undrawn amount) or the payment of other fees and expenses under the IFC Loan. If PAET does not have sufficient cash to satisfy such payment obligations, a payment default could be triggered under the IFC Loan. If a payment default occurs, IFC may require PAET to repay the IFC Loan in full or in part. Although the IFC Loan would then be repayable, PAET's obligation to pay Participation Interest (and/or any related Liquidation Participation Interest Amount) survive such repayment until the earlier of the Participation Interest Maturity Date and the date upon which a Liquidity Event (as defined in the IFC Loan) occurs.

Under the IFC Loan, a prescriptive test is used to determine whether or not PAET has sufficient cash available to satisfy its payment obligations in cash under the IFC Loan or to capitalize or defer them pursuant to the PIYC provisions. Such test is based on cash in bank accounts as at a specific date (the "**Calculation Date**"), adjusted for accrued payables and receivables and a pre-agreed reserve of US$7,500,000, which is lower than what management of PAET has historically considered to be a prudent reserve. Any additional reserves above and beyond this pre-agreed test will require the prior consent of IFC. As future cash payments will be generated out of cash generated from operations, PAET's ability to make such payments is dependent on, among other factors, cash flows received from TANESCO arising between the Calculation Date and the applicable payment date. If such payments from TANESCO are not received in a timely manner, there is a dual risk that (i) PAET may not have sufficient cash to satisfy such payment obligations on the applicable payment date, therefore triggering a payment default under the IFC Loan, with the consequences as highlighted above, and (ii) if PAET has sufficient cash to satisfy such payment obligations on the applicable payment date, it may see its reserves decline and may not have access to the capital necessary either to undertake or complete future drilling and exploration programs or to prevent a default on other of its obligations. There can be no assurance that other debt or equity financing (to the extent permitted under the IFC Loan), or cash generated by operations will be available or sufficient to meet these requirements or for other corporate purposes or, if debt or equity financing is permitted and available, that it will be on terms acceptable to us. PAET's inability to access sufficient capital for our operations could have a material adverse effect on our business financial condition, results of operations and prospects.

Further, The IFC Loan contains restrictive covenants that may limit our ability to engage in activities that may be in our long-term best interest. PAET's failure to comply with those covenants could result in an event of default which, if not cured or waived, could result in the acceleration of all the IFC Loan. Such covenants could have important consequences to securityholders, including:

- increasing PAET's vulnerability to general adverse economic and industry conditions and limiting its flexibility in planning for and reacting to changes in the industry in which it competes;

- limiting the hedging activities that PAET is permitted to undertake to currency hedging only and limiting PAET's ability to purchase additional assets. This places PAET at a disadvantage as compared to its competitors and limits our overall growth potential, as PAET will be prevented from purchasing any property or assets not associated with operations in the Songo Songo field; and

- because PAET is unable under the IFC Loan to guarantee obligations of any if its subsidiaries (if, for example, the downstream operations are re-structured) or of the Company (if, as an example, we are party to a contract in connection with the Songo Songo field for the benefit of PAET, any PAET guarantee in connection therewith will result in a corresponding decrease in the cap of additional financial debt PAET may incur).

Under the IFC Loan, IFC has also been granted subjective discretion and determination rights over a number of matters, which may affect our business, day-to-day operations and future growth opportunities. Such matters include, but are not limited to:

- our auditors must be a firm of internationally recognised independent public accountants and acceptable to IFC;

- IFC has been provided with access to our offices, books and records on a basis much broader than would apply in a standard commercial loan with no limit as to a maximum number of occasions per annum;

- IFC has the right to review and seek revisions to PAET's annual capital budget;

- PAET may pursue sale and lease back transactions at fair market value; however, IFC will decide what constitutes fair market value; and

- in the event of any damage to PAET's property, any insurance proceeds will be handed over to IFC, who then has discretion as to whether such proceeds should be applied towards the repair of such property or the repayment of the IFC Loan.

As the IFC Loan allows IFC to transfer the loan to a third party without the consent of PAET, such assignee will benefit from such discretion and determination rights, including discretion in agreeing to any amendment or waiver relating to departures from the restrictive covenants of the IFC Loan.

Finally, all of the undertakings provided by PAET in the IFC Loan will survive the repayment or prepayment of the loan until 2026. For example, if the loan is prepaid in full in 2024 (other than pursuant to a business combination resulting in a Liquidity Event (as defined in the IFC Loan)), all of PAET's business would continue to be subject to all restrictions in the IFC Loan for a further two years, including restrictions on developing new businesses, incurring debt, and buying or selling assets until the Participation Interest Maturity Date, which could have a significant effect on our future operations and prospects

Provisions of our petroleum contracts, other material contracts and the laws of the countries in which we operate could discourage an acquisition of us by a third party.

Certain provisions of our petroleum contracts, other material contracts and the laws of the countries in which we operate could increase the uncertainty or execution risk of acquiring us or make it more difficult or more expensive for a third party to acquire us, or may even prevent a third party from acquiring us. In Tanzania, for example, the Songo Songo PSA and our other petroleum contracts require governmental approval for transactions that effect a direct or indirect change of control of our license interests or otherwise affect our current and future operations in Tanzania. Also, we understand that GoT authorities take the position that certain Tanzanian laws have extra-territorial application and apply to transactions outside of Tanzania that result in change of control of a business or an asset in Tanzania or that transactions resulting in a change of control of Orca or of either of our Mauritius subsidiary that owns 100% of PAET, PAE

PanAfrican Energy Corporation ("**PAEM**") or PAET requires prior GoT approval failing which the GoT will deem the transaction document to be of no effect and/or grant certain GoT authorities a right of first refusal regarding any interest being transferred to a non-affiliate, including the Songo Songo PSA. It is unclear how the GoT would seek to implement or enforce such provisions of the Petroleum Act in respect of a change of control transaction.

Also, we understand that GoT taxation laws may result in GoT taxation authorities taking the position that, on an indirect change of control of Orca, a realization of PAET's Tanzanian assets and liabilities is deemed to occur under the ITA, 2004 resulting in PAET being required to pay Tanzanian taxes on any capital gains at a rate of 30% of the capital gain.

As well, under our Shareholders' Agreement with Swala (PAEM) Limited, a change of control of Orca involving either (i) a public company that is controlled by one or more persons or (ii) a private company, might trigger Swala (PAEM) Limited's right under the Shareholders' Agreement, subject to certain notice and valuation procedures, to purchase our interests in PAEM (which holds 100% of the equity interests in PAET and our Tanzanian business) at a price determined in accordance with the Shareholders' Agreement. Although we believe, for several reasons, that it is unlikely Swala (PAEM) Limited would ever exercise such rights, the uncertainty of the matter could discourage a potential acquirer from entering into a definitive agreement with us for such a change of control transaction. *See also "Our operations may be adversely affected by unexpected legal and regulatory changes."* for a description of certain Tanzanian laws that might require the consent of Tanzanian government authorities or require the payment of certain taxes which could increase the uncertainty or execution risk of acquiring us or make it more difficult or more expensive for a third party to acquire us, or may even prevent a third party from acquiring us. Our material operational contracts have similar restrictions regarding assignment or associated changes of control. For example, under the Amended and Restated Implementation Agreement, PAEM may not transfer its shares in PAET without the approval of the GOT. All of our operational contracts have restrictions on assignment, but some of these restrictions are drafted broadly and may be interpreted differently. In this respect, our Portfolio Gas Supply Agreement and the recent Gas Sales Agreement that we entered with TPDC restricts our ability to transfer or assign any part of our rights or obligations under such agreements without consent. It is unclear how forthcoming any required consents may be and it is possible that the scope of these restrictions may be interpreted differently by our counterparties, leading to disagreements and, potentially, litigation or arbitration. We cannot provide any assurance that government approval will not be needed for direct or indirect transfers of our petroleum agreements or interests thereunder based on existing legislation. By discouraging an acquisition of us by a third party and introducing legal uncertainty in respect thereof, these petroleum contracts, other material contracts and the laws of the countries in which we operate could have the effect of depriving the holders of our Shares of an opportunity to sell their Shares at a premium over prevailing market prices.

Our level of indebtedness may increase and thereby reduce our financial flexibility.

At December 31, 2019, we had US$55.2 million outstanding under the IFC Loan. In the future, we may incur significant indebtedness to make investments or acquisitions or to explore, appraise or develop our oil and natural gas assets. Our level of indebtedness could affect our operations in several ways, including the following:

- a significant portion or all of our cash flows, when generated, could be used to service our indebtedness;
- a high level of indebtedness could increase our vulnerability to general adverse economic and industry conditions;
- the covenants contained in the agreements governing our outstanding indebtedness will limit our ability to borrow additional funds, dispose of assets, pay dividends and make certain investments;

- a high level of indebtedness may place us at a competitive disadvantage compared to our competitors that are less leveraged and therefore, may be able to take advantage of opportunities that our indebtedness could prevent us from pursuing;

- our debt covenants may also affect our flexibility in planning for, and reacting to, changes in the economy and in our industry;

- additional hedging instruments may be required as a result of our indebtedness;

- a high level of indebtedness may make it more likely that a reduction in our borrowing base following a periodic redetermination could require us to repay a portion of our then-outstanding bank borrowings; and

- a high level of indebtedness may impair our ability to obtain additional financing in the future for working capital, capital expenditure, acquisitions, general corporate or other purposes.

A high level of indebtedness increases the risk that we may default on our debt obligations. Our ability to meet our debt obligations and to reduce our level of indebtedness depends on our future performance. General economic conditions, risks associated with exploring for and producing oil and natural gas, oil and natural gas prices and financial, business and other factors affect our operations and our future performance. Many of these factors are beyond our control. We may not be able to generate sufficient cash flows to pay the interest on our indebtedness and future working capital, borrowings or equity financing may not be available to pay or refinance such indebtedness. Factors that will affect our ability to raise cash through an offering of our equity securities or a refinancing of our indebtedness include financial market conditions, the value of our assets and our performance at the time we need capital.

We are a holding company and our ability to declare and pay dividends and purchase our Shares is dependent upon the receipt of funds from our subsidiaries by way of dividends, fees, interest, loans or otherwise.

We are a holding company, and our subsidiaries and affiliates own all of our assets and conduct all of our operations. Accordingly, our ability to declare and pay dividends and purchase our Shares will be dependent on the generation of cash flow by our subsidiaries and their ability to make such cash available to us, by dividend, debt repayment or otherwise. Our subsidiaries and affiliates may not be able to, or may not be permitted to, make distributions to enable us to make payments in respect of dividends and purchases of Shares. Each subsidiary and affiliate is a distinct legal entity and, under certain circumstances, legal and contractual restrictions may limit our ability to obtain cash from our subsidiaries and affiliates. The IFC Loan and local laws limit the ability of our subsidiaries to pay dividends and distribute funds to the parent companies. If we do not receive distributions from our subsidiaries, we may be unable to pay dividends and purchase our Shares. In addition, the ability of our subsidiaries to make payments to us may be constrained by, among other things: (i) the level of taxation, particularly corporate profits and withholding taxes, in the jurisdictions in which they operate; and (ii) the introduction of foreign exchange and/or currency controls or repatriation restrictions that impact the availability of hard currency to be repatriated If we do not receive distributions from our subsidiaries, we may be unable to pay dividends and purchase our Shares.

We may be subject to risks in connection with acquisitions and the integration of significant acquisitions may be difficult.

We periodically evaluate, and will in the future increase our evaluations of, acquisitions of prospects and licenses, reserves and other strategic transactions that appear to fit within our overall business strategy. The successful acquisition of these assets or businesses requires an assessment of several factors, including:

- recoverable reserves;

- future oil and natural gas prices and their appropriate differentials;
- development and operating costs;
- validity of title; and
- potential environmental and other liabilities.

The accuracy of these assessments is inherently uncertain. In connection with these assessments, we perform a review of the subject assets that we believe to be generally consistent with industry practices. Our review will not reveal all existing or potential problems nor will it permit us to become sufficiently familiar with the assets to fully assess their deficiencies and potential recoverable reserves. In particular, although we will conduct title and other due diligence reviews according to industry standards prior to acquiring oil and natural gas producing properties, or commencing drilling operations, such reviews do not guarantee or certify that an unforeseen defect in the chain of title will not arise to provide uncertainty as to our rights to the property.

In addition, inspections may not always be performed on every asset, and structural or environmental problems, such as ground water contamination, are not necessarily observable even when an inspection is undertaken. Even when problems are identified, the seller may be unwilling or unable to provide effective contractual protection against all or part of the problems. We may not be entitled to contractual indemnification for environmental liabilities and could acquire assets on an "as is" basis. Significant acquisitions and other strategic transactions may involve other risks, including:

- diversion of our attention to evaluating, negotiating and integrating significant acquisitions and strategic transactions;
- the challenge and cost of integrating acquired operations, information management and other technology systems and business cultures with those of ours while carrying on our ongoing business;
- difficulty associated with coordinating geographically separate organizations; and
- the challenge of attracting and retaining personnel associated with acquired operations.

The process of integrating operations could cause an interruption of, or loss of momentum in, the activities of our business. Members of our management may be required to devote considerable amounts of time to this integration process, which will decrease the time they will have to manage our ongoing business. If our management is not able to effectively manage the integration process, or if any significant business activities are interrupted as a result of the integration process, our business could suffer.

If we fail to realize the anticipated benefits of a significant acquisition, our results of operations may be adversely affected.

The success of a significant acquisition will depend, in part, on our ability to realize anticipated growth opportunities from combining the acquired assets or operations with those of ours. Even if a combination is successful, it may not be possible to realize the full benefits we may expect in estimated proved reserves, production volume, cost savings from operating synergies or other benefits anticipated from an acquisition or realize these benefits within the expected time frame. Anticipated benefits of an acquisition may be offset by operating losses relating to changes in commodity prices, increased interest expense associated with debt incurred or assumed in connection with the transaction, adverse changes in oil and gas industry conditions, or by risks and uncertainties relating to the exploratory prospects of the combined assets or operations, or an increase in operating or other costs or other difficulties, including the assumption of health, safety, and environmental or other liabilities in connection with the acquisition. If we fail to realize the benefits we anticipate from an acquisition, our results of operations may be adversely affected.

A cyber incident could result in information theft, data corruption, operational disruption, and/or financial loss.

The oil and gas industry has become increasingly dependent on digital technologies to conduct day-to-day operations including certain exploration, development and production activities. For example, software programs are used to interpret seismic data, manage drilling rigs, conduct reservoir modeling and reserves estimation, and to process and record financial and operating data.

We depend on digital technology, including information systems and related infrastructure as well as cloud application and services, to process and record financial and operating data, communicate with our employees and business partners, analyze seismic and drilling information, estimate quantities of oil and gas reserves and for many other activities related to our business. Our business partners, including vendors, service providers, co-venturers, purchasers of our production, and financial institutions, are also dependent on digital technology. The complexity of the technologies needed to explore for and develop oil and gas in increasingly difficult physical environments, and global competition for oil and gas resources make certain information more attractive to thieves.

As dependence on digital technologies has increased, cyber incidents, including deliberate attacks or unintentional events, have also increased. A cyber-attack could include gaining unauthorized access to digital systems for purposes of misappropriating assets or sensitive information, corrupting data, or causing operational disruption, or result in denial-of-service on websites.

Our technologies, systems, networks, and those of our business partners have been, and may in the future become, the target of cyber-attacks or information security breaches that could result in the unauthorized release, gathering, monitoring, misuse, loss or destruction of proprietary and other information, or other disruption of our business operations. In addition, certain cyber incidents, such as surveillance, may remain undetected for an extended period. A cyber incident involving our information systems and related infrastructure, or that of our business partners, could disrupt our business plans and negatively impact our operations. There can be no assurance that we will not be the target of further cyber-attacks in the future or suffer such losses related to any cyber-incident. As cyber threats continue to evolve, we may be required to expend significant additional resources to continue to modify or enhance our protective measures or to investigate and remediate any information security vulnerabilities.

Outbreaks of disease in the geographies in which we operate may adversely affect our business operations and financial condition.

Many of our operations are currently, and will likely remain in the near future, in developing countries which are susceptible to outbreaks of disease and may lack the resources to effectively contain such an outbreak quickly. Such outbreaks may impact our ability to explore for oil and gas, develop or produce our license areas by limiting access to qualified personnel, increasing costs associated with ensuring the safety and health of our personnel, restricting transportation of personnel, equipment, supplies and oil and gas production to and from our areas of operation and diverting the time, attention and resources of government agencies which are necessary to conduct our operations. In addition, any losses we experience as a result of such outbreaks of disease which impact sales or delay production may not be covered by our insurance policies.

An epidemic of the Ebola virus disease occurred in parts of West Africa in 2014 and continued through 2015. A substantial number of deaths were reported by the World Health Organization ("**WHO**") in West Africa, and the WHO declared it a global health emergency. It is impossible to predict the effect and potential spread of new outbreaks of the Ebola virus in West Africa and surrounding areas. Should another Ebola virus outbreak occur, including to the countries in which we operate, or not be satisfactorily contained, our exploration, development and production plans for our operations could be delayed, or interrupted after commencement. Any changes to these operations could significantly increase costs of operations. Our operations require contractors and personnel to travel to and from Africa as well as the unhindered transportation of equipment and oil and gas production (in the case of our producing fields). Such operations also rely on infrastructure, contractors and personnel in Africa. If travel bans are implemented or extended

to the countries in which we operate, or contractors or personnel refuse to travel there, we could be adversely affected. If services are obtained, costs associated with those services could be significantly higher than planned which could have a material adverse effect on our business, results of operations, and future cash flow.

Our share price may be volatile, and purchasers of our Shares could incur substantial losses.

Our share price may be volatile. The stock market in general has experienced extreme volatility that has often been unrelated to the operating performance of particular companies. The market price for our Shares may be influenced by many factors, including, but not limited to:

- the price of oil and natural gas;
- the success of our exploration and development operations, and the marketing of any oil and natural gas we produce;
- operational incidents;
- regulatory developments in Canada, the United States, the United Kingdom
- regulatory developments in foreign countries where we operate;
- the recruitment or departure of key personnel;
- quarterly or annual variations in our financial results or those of companies that are perceived to be similar to us;
- market conditions in the industries in which we compete and issuance of new or changed securities;
- analysts' reports or recommendations;
- the failure of securities analysts to cover our Shares or changes in financial estimates by analysts;
- the inability to meet the financial estimates of analysts who follow our Shares;
- the issuance or sale of any additional securities of ours;
- investor perception of our company and of the industry in which we compete; and
- general economic, political and market conditions.

Holders of our Shares will be diluted if additional shares are issued.

We may issue additional common equity shares, preferred shares, warrants, rights, units and debt securities for general corporate purposes, including, but not limited to, repayment or refinancing of borrowings, working capital, capital expenditure, investments and acquisitions. We may actively seek to expand our business through complementary or strategic acquisitions, and we may issue additional equity shares in connection with those acquisitions. If we issue additional equity shares in the future, it may have a dilutive effect on our current outstanding shareholders.

Our controlling shareholder has control over key decision making as a result of its control of a majority of the voting rights attached to our outstanding Shares.

As at the date of this material change report, Shaymar, the nominee holder of Vistra Trust Company (Jersey) Limited ("**Vistra**") (as trustee of the W. David Lyons (2008) Settlement (the "**Settlement Trust**")), is the legal owner of 1,741,975 Class A Shares and 5,392,460 Class B Shares, respectively, which represent approximately 99.51% and 16.6% of the issued and outstanding Class A Shares and Class B Shares, respectively, and approximately 59.5% of the total voting rights attached to the Shares. We are advised that, as trustee of the Settlement Trust, and sole shareholder of Shaymar, Vistra has control and direction over the Shares held by Shaymar, including the power to vote, or to direct the voting of, such Shares and the power to acquire or dispose, or to direct the acquisition or disposition of such Shares. We are also advised Vistra, requires the consent or direction of the person holding the office of "protector" under the instrument constituting the Settlement Trust before it exercises certain powers, discretions or duties. Mr. David W. Ross, our Chairman, has advised us that he currently holds such office with the power to, amongst other matters, remove and appoint the trustees of the Settlement Trust. Our Chairman has advised us that Vistra generally consults with, and takes direction from, Mr. Ross in the exercise of its powers, discretions and duties as trustee of the Settlement Trust, including for voting and investment decisions relating to the shares held by Shaymar.

Our controlling shareholder is able to exercise voting rights with respect to a majority of the voting power of our outstanding Shares and therefore has the ability to control the outcome of matters submitted to our shareholders for approval, including the election of directors and any merger, consolidation, business combination or sale of all or substantially all of our assets or acquisition or other transaction requiring the approval of our shareholders. This concentrated control could delay, defer, or prevent a change of control, merger, consolidation, business combination or sale of all or substantially all of our assets or acquisition or other transaction that our board of directors or other shareholders support, or conversely this concentrated control could result in the consummation of such a transaction that our other shareholders do not support. If the interests of our controlling shareholder, in the exercise of its powers, discretions and duties to the Settlement Trust, conflict with those of our minority shareholders, the minority shareholders may be disadvantaged. This concentrated control could also discourage a potential investor from acquiring our Class B Shares, which have limited voting rights relative to the Class A Shares, and might harm the trading price of our Class B Shares.