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2022 Sustainability report

TSX: YGR

About the report & intended audience

- Information contained is intended for internal & external stakeholders of Yangarra Resources Ltd. (“Yangarra”) for the operating years of 2019-2022 and is for informational purposes only

- Yangarra has a long history of operating in Western Canada, pursuing multiple investment opportunities through the Western Canadian Sedimentary Basin (“WCSB”).
  - Yangarra has the lowest decommissioning liabilities in its peer group

- Yangarra is employing the TFCFD framework to report on specific ESG risks relevant to the stakeholders of Yangarra
  - Climate risks & opportunities
  - Transition risks & opportunities
  - Physical risks

- Yangarra’s vision is to operate a profitable oil & gas business in the WCSB while adhering to the strictest environmental standards that minimize ESG risks for stakeholders

INTRODUCTION

- In 2022, Yangarra completed multiple initiatives on reducing greenhouse gas emissions
  - Accessed NRCAN funding for carbon & methane reduction
    - Replaced high-bleed pneumatic devices with low-bleed devices
    - Electrified multiple pad-sites to replace instrument gas with instrument air and pumpjacks that used natural gas
    - Installed incinerators on newer pad sites to eliminate methane emissions from tank vents
    - Installed VRUs to capture methane emissions where possible

- In addition, the build-out of bi-fuel skids reduced the usage of diesel on drilling & completions operations
  - Further reduced carbon emissions from the use of natural gas as a fuel versus diesel

- The Company generated additional revenues/savings of approximately $2 million from the above initiatives

- Spent $300,000 on well-abandonments in 2022 and the Company now is in the position of having less than one million dollars of liability as it pertains to suspended wells
  - Abandonment & reclamation accounted for approximately 0.14% of 2022 cash flow; this will not change materially in 2023 due to Yangarra's low non-producing well count

- As a result of the above initiatives, Yangarra delivered the following reductions for emissions:
  - Vent emissions reduction of ~40%
  - Methane emissions reduced by 37%
  - Scope 1 emissions reduced by 12.5%
  - CO2e intensity reduced by 29.6%

GOVERNANCE – BOARD OVERSIGHT

- Yangarra's Board of Directors meets quarterly to review quarterly financial statements. As part of the quarterly review process, the Board and management collectively review climate-related risks and opportunities
  - Due to the diverse background of Yangarra's Board members, the Board has the depth and the breadth to review and assess climate related risk and opportunities that are presented by management
  - The Board works with management to approve an approach to long-term goals for managing ESG related risks
  - At quarterly meetings, the Board may discuss the following with management:
    - Strategic approach to climate related risks & opportunities
    - Any major plans of action, including status updates on previously discussed plans of action
    - Although capital expenditures on risk mitigation are not a material item for Board approval, they are still reviewed by the Board
    - Performance objectives are outlined for the near and medium term

- The Board has developed goals regarding climate related risks
  - Management & the Board are focused on the following carbon & methane reduction objectives:
    - Scope 1 intensity reduction of 5% for 2023
  - The Board relied on management feedback on goals and goal attainment and expects to meet with management quarterly to monitor progress

- Starting in 2022, executive and employee compensation is linked to various performance metrics including ESG hurdles

- Management is the primary driver in assessing and managing climate-related risks and opportunities.
  - Three-person committee formed of the CEO, the President and the CFO to manage the approach to risk assessment regarding climate change (the "Climate Committee")
  - Ongoing feedback loop between the Climate Committee and operations to determine best practices and assess new risks including regulatory risks

GOVERNANCE – MANAGEMENT ROLE

- Top-down collaborative approach resulted in the formation of a three-person committee comprised of the CEO, the President and the CFO to manage climate-related matters
  - It is the job of the Climate Committee to assess and manage climate related risks and opportunities. The Climate Committee is committed to meeting frequently to discuss climate related issues
  - The Climate Committee reports at quarterly Board meetings

- The Climate Committee utilizes a quantitative and qualitative approach for materiality assessment
  - Feedback from the engineering department and field operations is essential to timing and execution of risk mitigation actions on climate related risks and is monitored continuously by the Climate Committee
  - Third-party consultants are retained, when required, to assist the Climate Committee
  - Ongoing feedback between the Climate Committee and operations to determine best practices and assess new risks including regulatory risks

- The Climate Committee is the primary driver of assessing and managing climate-related risks and opportunities, hence it is the job of the Climate Committee to review as a part of operations
  - The Climate Committee and other members of the management team pro-actively search out new technologies and processes with the primary goal of comparing and contrasting new technologies and processes versus existing methods for the purpose of:
    - Reducing technology risk
    - Improving energy efficiency
    - Reducing water usage
    - Improving long-term carbon-related emissions
    - Addressing acute and potentially chronic physical risks such as drought or other weather-related events
  - The Climate Committee also monitors short and long-term climate trends and the potential derivative impacts on operational & capital spending activities at the local level and supply chain concerns at the macro level

STRATEGY

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- Yangarra is committed to reducing carbon and methane emissions with a long-term goal of eliminating carbon & methane emissions

- For the purposes of planning, Yangarra defines the following:
  - Short-term: less than 12 months in scope
  - Medium-term: 1 to 8 years
  - Long-term: 8+ years

- The above time horizons are determined based on immediate ongoing operations, including drilling & completions activity which is defined as short-term. Medium term involves the initial flush production of assets and the ability of the firm to payback investments at twice the capital invested (typically less than 8 years but a higher time horizon allows for future development of PUDs and probable reserves). The long-term horizon involves the tail-end of the Company's production on existing production and ultimately the retirement of assets

- As a result of the assessment of the various risks & opportunities, the impact on the Company's business, strategy & financial planning has been broad in scope

STRATEGY - CLIMATE RELATED RISKS & OPPORTUNITIES

- As per the TFCFD guidance outline, climate related risks can be broadly defined into two key categories:
  - A) Transition risk to a lower-carbon economy
    - Can entail extensive policy, legal, technology and market changes to address mitigation and adaptation requirements related to climate change. Depending on each risk factor and the timing of each factor, transition risk can pose financial & reputational risks
  - B) Physical impacts of climate change

- Additionally, climate related opportunities can arise by adapting to climate change for organizations such as Yangarra. These opportunities include:
  - A) Resource efficiency
  - B) Energy sources
  - C) Products & services
  - D) Markets
  - E) Resilience

CLIMATE RELATED RISKS – TRANSITION

Policy risks to and mitigation strategies include:

- Carbon pricing and escalating carbon pricing are seen as a short- & long-term risks by Yangarra. Policy actions by the Government of Canada and Government of Alberta have been very clear on long-term carbon pricing. Yangarra has invested in projects that will result in lower CO2e emissions to reduce the impact of carbon pricing and generate a positive return. Additionally, by engaging in Alberta's Technology Innovation & Emissions program ("TIER"), Yangarra expects to mitigate the Federal government impact of carbon pricing by using local provincial solutions. Initiatives to reduce emissions include:
  - Electrification of pad sites to reduce on-site fuel usage
  - Conversion of high-CO2e intensity tank venting to carbon via incineration technologies
  - Conservation of gas venting for sale through VRU technology
- Energy efficiency (short-term)
  - Field truck conversion to high-efficiency, low-milage trucks
  - Bi-fuel conversion of drilling rig and frack spread to reduce the use of diesel
- Water usage (short-term & long-term)
  - Potentially reduce stage count to optimize water usage
  - Water recycling, when economical
- Land practices (short-term and long-term)
  - Yangarra's business practices have evolved to minimize the Company's surface footprint during drilling & completion operations. The move to multi-well pad operations reduces the overall footprint on a per well basis and improves efficiency of operations by:
    - Reducing costs related to moving the drilling rig & frack spread
    - Single tie-in point for multi-well pads vs. multiple single well tie-in points
  - Both federal & provincial governments have recently focused on well abandonment and asset retirement (short-term and medium-term risk)
    - Yangarra proactively spends on asset retirement and is one of the industry leaders on number of non-producing wells left to abandon
    - Avoid asset/corporate transactions that are heavily burdened with tail-end of life assets

Climate Related Risks – Transition

Legal risks to and mitigation strategies include:

- Legal & litigation risks have increased in recent years as related to climate change, which can be brought on by property owners, governments (various levels), insurers, shareholders and public interest organizations as a result of failure by organizations to mitigate the impacts of climate change or adapt to climate change. These risks are ongoing and could be classified as short to long-term in nature
    - Litigation risk, as related purely to climate change, is unavoidable at the macro industry level. Yangarra maintains good relations with industry partners and industry associations such as EPAC to manage these risks
    - Failure to adapt to climate change risk, as related to shareholders, insurers, and credit providers is a medium to long-term risk. Yangarra operates in an environment where the weather is extremely volatile between each season. To mitigate the impact of long-term climate change and short-term weather issues, Yangarra:
        - Winterizes operations to minimize the impact of cold-snaps
        - Constructs pad sites to minimize the risk of flooding
        - Pad sites are constructed to limit the spread of forest fires at the lease site, but this cannot be fully contained in the case of rapid forest fires

Technology risk is a long-term risk to Yangarra as the broader economy decarbonizes

- Renewable energy will be a source of competition for carbon-intensive fossil fuels for electrical power, when combined with economically viable battery storage
- Yangarra expects to continue to compete with alternative fuel sources by being the lowest cost producer, even when accounting for carbon pricing
- Longer-term, if pricing warrants, Yangarra expects to source electricity that is from renewable sources for operations
- Timing related to technology risk is uncertain and difficult to assess

CLIMATE RELATED RISKS – TRANSITION

Market risk is a long-term risk:

- Climate change and the public view on climate change mitigation will potentially change consumer behaviour on how they source their energy needs
- The best mitigation strategy will be to reduce carbon footprint and environmental impact of operations (i.e., ethically and responsibly sourced)
    - In a free-market economy, the lowest cost producer of energy (even when carbon prices are factored in), should retain the largest market share

Reputation risk is an ongoing risk for all operators:

- The stigma of oil & gas development may never change. As per the market risk mitigation strategy, Yangarra has to show that the Company has some of the most stringent environmental practices as they relate to:
    - Development of resources (drilling & fracking)
    - Production of resources
    - Transportation of resources
    - Community involvement to provide local employment in the Company's operating area

Climate Related Risks – Physical

Physical risks resulting from climate change can be acute in nature (event driven) or chronic (long-term climate pattern changes). Physical risks can result in financial impacts due to direct damage or indirect impacts

- Acute risks and mitigation for Yangarra include:
  - Flooding – low impact risk as Yangarra operations are situated outside of flood impact zones and pad-sites are designed to flow water away from operations during periods of heavy rain
  - Fire – low to medium impact risk to Yangarra as pad sites are designed to minimize the impact of forest fires. Acute risk of localized fires during heat waves but this is part of long-term HSE policy
  - Drought – short- & long-term impact to Yangarra. Access to water is key for ongoing operations. Yangarra sources water responsibly and uses multiple sources of water for completions. Other mitigation strategies includes the storage and re-use of frack water, storing water in multiple C-rings for fracking operations and field storage when fracking is about to commence
    - If the regulatory environment allowed for it, Yangarra could further accelerate water recycling by storing flowback water in C-rings. Currently, this is not a feasible option but Yangarra is in talks with the regulator to find an economically viable solution
  - Weather related events that cause extreme temperature swings is an acute risk for Yangarra and is usually seasonal.
    - Winter cold snaps result in well-freeze offs and lower production potential. Yangarra winterizes operations to mitigate risk
    - Heat waves may impact operations by reducing operational efficiency of compressors
  - Yangarra maintains a level of corporate insurance for loss events to help mitigate the impact of some of the above events combined with good production practices

- Chronic risks that might impact operations include:
  - Increasing average temperatures due to climate change. Yangarra expects minimal impact on operations if long-term temperatures increase by 2 degrees Celsius
  - Longer-term impacts could be supply-chain disruptions, but Yangarra mitigates supply-chain issues by pro-actively ordering inventory of crucial items such as steel pipe up to six months in advance

Climate related opportunities

Resource efficiency (ongoing)

- Yangarra has strategically positioned itself to be geographically and geologically focused, this has allowed Yangarra to optimize operations and apply new & old learnings to operations
- By investing in an internal oilfield services group (the "OFS Group"), Yangarra is positioned to efficiently operate and generate direct cost savings in operations in the medium and long-term. The OFS Group consists of:
    - 140 pieces of equipment
    - 63 field staff
- Due to the Company's geographic focus, secondary carbon emissions (from the movement of equipment across Western Canada) can be minimized by using the OFS Group
- In addition, by utilizing the same drilling rig & frack spread and developing multi-well pads, the Company helps eliminate carbon emissions from excessive equipment moves
- Focused land & operations allows the Company to develop a practical water recycling strategy, in certain cases, reducing the usage of fresh water
- By minimizing emulsion pipelines, the Company reduces the risk of pipeline spills and avoids over-capitalizing pad sites that have significant flush production (in resource plays, wells will come onstream at high volumes and emulsion pipelines have to be equipped to handle high flow of initial volumes followed by lower volumes)

Energy source (medium term)

- In 2022, Yangarra invested heavily in the electrification of pad sites to reduce fuel usage and reduce Scope 1 emissions. As renewable sources of electricity become widely available at competitive rates, Yangarra is positioned to further reduce Scope 2 emissions by sourcing renewable electricity
- By moving to a bi-fuel system for the drilling rig and frack spread, Yangarra will become less dependent upon diesel as the primary fuel source for operations, further reducing carbon & NOX emissions

CLIMATE RELATED OPPORTUNITIES

Products & services (long-term)

- Yangarra's business model remains focused on the development of oil & gas, however the Company proactively searches out new products & services that can help reduce costs or reduce emissions.
    - A recent example is the development of smaller footprint incinerator units which can be used on pad sites to eliminate tank vent methane emissions
    - In the near-term, the Company is also focused on developing VRU technology that can work efficiently and further conserve vent-gas which could ultimately reduce carbon generated from incineration

Markets (long-term)

- Yangarra's commodity style business limits the Company's ability to source new markets. However, as small-scale co-gen facilities and small-scale carbon sequestration technologies become commercially available, Yangarra will evaluate these opportunities to further reduce emissions
- As the Company continues to execute on the carbon-friendly development of resources and builds a strong track record of emissions reductions, the Company may potentially be able to access sustainability linked financing to replace bank financing

Resilience (long-term)

- Management is focused on having the adaptive capacity to respond to climate change and continuously assesses and implements new processes/technologies that can help reduce emissions. By continuously monitoring, Yangarra is well positioned to quickly respond to transition & physical risks
- By focusing on rate of return and targeting operations that typically have less than one-year paybacks, the Company enhances the long-term ability of the Company to sustain operations by self-financing future capital programs

MATERIALITY ASSESSMENT

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Materiality & assessment process

- Yangarra's review process for materiality levels is done through daily operations meetings & weekly strategy meetings. Feedback from field personnel and non-executive is processed by members of the Climate Committee and actionable items are itemized and discussed for analysis. If a risk assessment involves a financial impact, economic runs are considered, and decisions are based on the outcome of the economic analysis. Some risks might not have a financial impact but are material to the ongoing operations of the Company. The Climate Committee relies primarily on the operational background of the management team to gauge materiality

- As the Company is geographically and geologically focused, most risks and opportunity assessments are carried out in the context of existing operations with assessments on macro issues at the global, federal and provincial levels

- Environment
  - Emissions – methane reduction
  - Emissions – CO_2e reduction
  - Decommissioning liabilities
  - Water use
  - Spill prevention
- Social
  - Safety
  - Human resources
  - Community
- Governance
  - Economic returns
  - Commodity price risk management
  - Legal/regulatory risk

MATERIALITY ASSESSMENT – ENVIRONMENT

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- Emissions
  - Rapid changes due to advances in technology constantly evolving
  - Application of efficient VRUs will be a key component
  - Electrification proceeding as planned, further reducing field gas fuel
    - Electricity prices locked in for 2023

- ARO
  - $14.1 million (discounted)
  - Abandoned & reclaimed 100+ wells in past 4 years
  - 16 inactive wells left to abandon
  - Spent $300,000 in 2022

- Water use
  - Yangarra works to recycle water for fracs where economically feasible

- Spill risk
  - Minimize emulsion pipeline installs
  - Added benefit of avoiding over-capitalizing pads with surface pipelines

MATERIALITY ASSESSMENT – SOCIAL

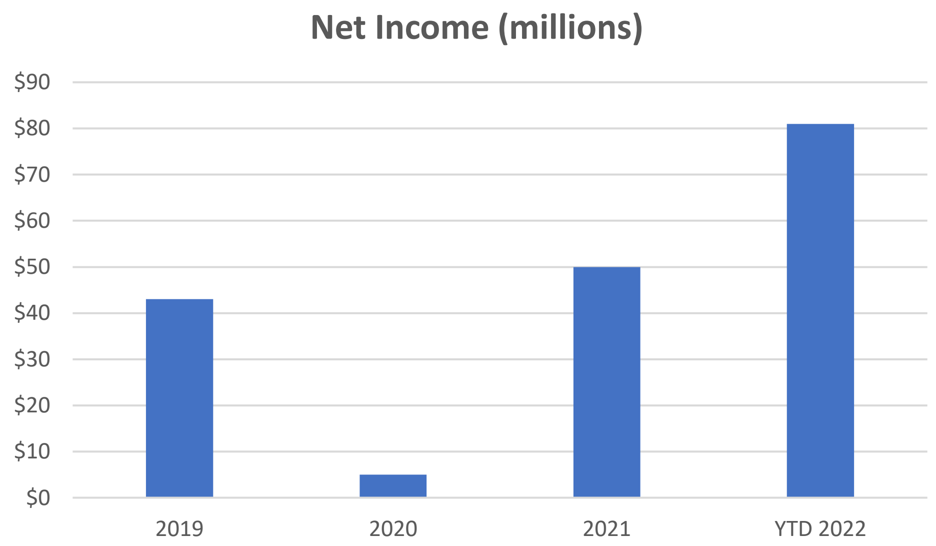
- Safety
  - HSE plan – operational staff to provided direct presentation at annual Board meeting
  - ERP plan
  - Required training for all field-personnel
  - Well-maintained infrastructure & equipment minimizes risk of accidents

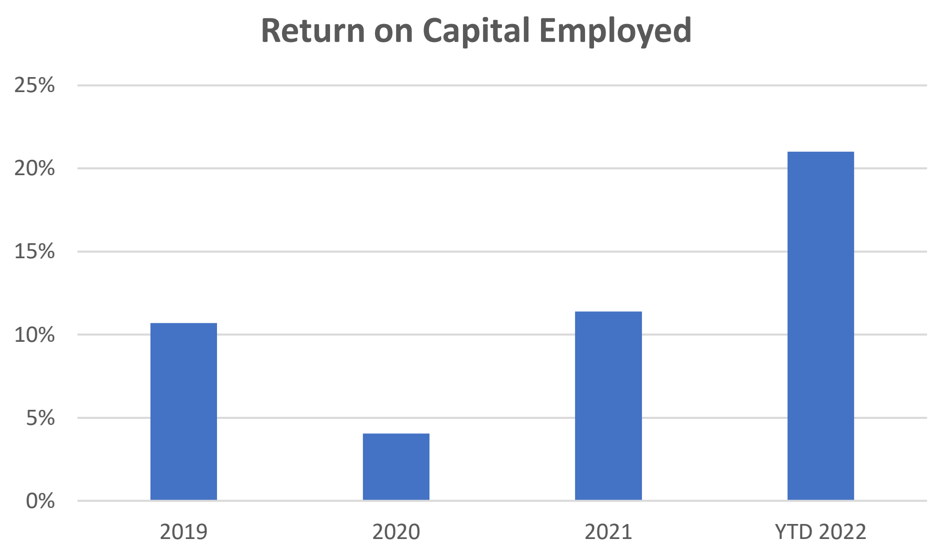
- Human resource development
  - New long-term incentive plan that is linked to ESG targets
  - Yangarra has pro-actively worked to diversify a team of young professionals to carry out operations for the long-term
  - Multi-disciplinarian approach allows for cross-coverage of professions and roles minimizing staffing disruption risk
  - Creation of management committee formalized executive approach to collaborative decision-making process
    - Climate Committee formed to provide a cross-disciplinarian approach to analysis on climate-related risks

- Community
  - Yangarra is a large direct employer in Rocky Mountain House and employees are encouraged to approach the business with an "ownership" mentality
  - Support the community including Classroom Champions for local Aboriginal schools and support for local non-profit entities that add to community culture

Materiality assessment – governance

- Economic returns
  - Rate of return analysis drives all capital & operating decisions, not to manage capital market expectations
  - Focus on low operating costs & low capital costs
  - Organic growth strategy creates net income
  - Investments into greenhouse reductions generates positive economic returns
- Commodity price risk management
  - Hedging strategy utilized to protect capital program when required
- Legal/regulatory risk
  - Primary risk is federal and provincial push on carbon & carbon pricing
  - Yangarra joined the Alberta TIER program
  - Investments in carbon & methane reduction initiatives have resulted in lower carbon intensity





IMPACT ON BUSINESS AND STRATEGY

- Products & services – as a result of Yangarra's assessment of the prior risks & opportunities, the Company will continue to focus on:
  - Balanced mix of oil & gas development, with an emphasis on light sweet oil & sweet natural gas and associated liquids
  - Development of assets via multi-well pads to minimize surface footprint and minimize tie-in points
  - Strategically avoid M&A activity that results in higher ARO and/or higher carbon intensity assets
  - Organic growth remains key fundamental tenant for building a business that is attractive on exit
  - Perceptions on oil & gas continue to evolve but Yangarra's strategy is to develop a sustainable, internally financed, business model that results in spending less than cash flow and harvesting excess cash flow for investors (initially to pay down debt and ultimately to return capital to investors)
- Supply chain / value chain
  - Optimized drilling & completions by focusing on program drilling (better cost structure on drilling and gain purchasing power on raw materials such as steel, sand, etc.)
  - COVID was a leading indicator of how supply chain disruptions can impact operations. Yangarra maps out program drilling for up to six months in advance to ensure the proper materials are available for the execution of smooth operations
- Adaptation & mitigation activities
  - Focus on "weather" proofing operations for both cold-snaps and hot weather
  - Store recycled water (when economically possible) for future completions operations
- Investment in research and development
  - Continuous improvement in place to optimize operations, including drilling and completions, to drive down costs
  - Currently working with third-party firm to study optimal spacing and frack spacing
- Operations
  - Due to distributed nature of Yangarra's asset base, acute physical risk (such as flooding or fires due to climate change) is de minimis in nature relative to overall operations

IMPACT OF CLIMATE RELATED RISKS AND OPPORTUNITIES

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Climate related issues as related to the financial planning process

- Climate related risks are approached holistically in the Company's financial planning process. Transition risks impact the economics of wells drilled in the longer term and shorter-term regulatory risks are accounted for in terms of carbon pricing and a general approach to emissions planning. As a result, the Corporation focuses on:
  - Quick paybacks on investments, typically targeting a payback horizon of approximately 12 months or less (depending on areas drilled and commodity price assumptions)
  - The high-rate flush nature of Yangarra's assets means that the Company quickly recovers the initial investment from wells and then is in "harvest" mode
  - The Company has avoided high-investment costs for natural gas processing and chosen to work with third-party vendors
  - For investment purposes, the short-term is typically defined as less than 12 months, medium term is 1-8 years and long-term is in excess of 8 years

- Climate related risks will also impact the Company's ability to access external capital in the long-haul
  - The Company has consciously focused on spending capital expenditures within cash flow and using the excess free cash flow to retire debt
  - As the debt market becomes more challenged, the Company's debt targets continue to evolve with a long-term expectation that the Company might not be able to rely on debt to help finance capital expenditures

- As part of the drive to reduce emissions intensity, the Company continues to invest capital to improve various parts of the business to reduce emissions

IMPACT OF CLIMATE RELATED RISKS AND OPPORTUNITIES

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Revenues

- Carbon pricing will have a major impact on revenues for oil & gas companies. Alberta's TIER program is designed to ultimately punish & reward producers based on their ongoing emissions profile
  - Yangarra has strategically invested in projects that will reduce the carbon intensity of production and hence create an opportunity for Yangarra to generate carbon offsets

Expenditures

- Although Yangarra's low-cost operating structure makes the Company more resilient to changes in costs resulting from climate-related issues, the Company continues to invest in lower-emission opportunities:
  - Field truck fleet – replacing inefficient trucks with high-efficiency trucking fleet
  - Bi-fuel skids – to power the drilling rig & frack spread
  - The OFS Group investment reduces dependency on external vendors
- The capital required to fund the above initiatives are less than 2% of the yearly capital program

Assets & liabilities

- Oil & gas demand is widely viewed as having a short life cycle of usage with the expectation of being replaced by carbon friendly sources of energy and hence markets ascribe little to no terminal value for oil & gas projects. Yangarra minimizes this risk by investing in short-cycle projects that typically have less than 12-month paybacks and subsequently result in free cash flow to fund either future capital activities or to be potentially returned to shareholders

Capital & financing

- As equity & debt capital markets continue to reduce exposure to carbon-intensive industries, Yangarra has had to adapt the capital structure to reflect this risk. Yangarra's long-term plan focuses on internally financing go-forward capital programs and reducing debt to levels where credit risk becomes minimal

Scenario analysis & resilience

Scenario analysis overview – 2-degree scenario over a 20+ year time period

- Quantitative overview
  - As a result of the Company's existing approach to economic analysis, large swings in commodity prices are captured in most scenarios and provide meaningful feedback on the Company's financial planning and strategy
  - Carbon pricing is well-entrenched at the federal and provincial levels

- Qualitative overview
  - The largest exposure for the Company will be on transition risk and the impact of policy actions or market changes aimed at emissions reduction
    - The Company is pro-actively focused on reducing carbon emissions
    - Market changes that impact the price of commodities is captured in the Company's existing risk assessment when conducting economic analysis
  - Physical risks
    - Acute risks such as fires & floods may become more prevalent. Long-term weather changes could result in drought conditions and result in water access issues
    - Chronic risks such as increasing temperatures are expected to have minimal impact on operations, but supply chain disruptions will be the largest risk factor

Resilience

- Yangarra's existing operations are designed to deal with potential physical risks impacts such as flooding and increased fire risk
- Drought conditions can be seasonal in nature and the Company is not immune to the lack of access to water. The Company is constantly assessing and investing in technologies that could reduce the use of water in fracking operations, as well as recycling water when economically possible
- Supply chain risks became prevalent during the COVID era and highlighted that the Company needs to be pro-active in planning capital operations that might stretch-out 6-12 months into the future

Risk management process

Process for identifying and assessing climate-related risks

- The Climate Committee relies extensively on their backgrounds in oil & gas, other management members and field staff to help identify climate-related risks. Yangarra also depends on third-party help where internal expertise is not available

- Most climate related risk is a macro issue for the Company, however there are some acute & chronic risks that might be impactful at the micro (well or pad levels)
  - Physical risks are addressed by proper pad construction to reduce impact of flooding (minor risk) and fire (minor to medium risk depending on drought risk)
  - Chronic changes in weather might result in drought-induced water shortages. Yangarra continues to research and develop methods that can reduce the use of fresh water in operations
  - Legal & regulatory risk is always "top of mind" but given the well-defined action plan for carbon pricing at the Federal & provincial level, these risks can be priced into the economic analysis of the Company's capital program
  - Transition risks that involve a diminishing demand for oil & gas is considered but the Climate Committee considers these risks to be further in the future (20 years plus). Management conducts research on both supply and demand for oil & gas to consider the long-term impact on commodity prices. Yangarra's thesis is that the transition to a lower secular demand profile, at the global level, will take decades to achieve and research by world-class third parties suggest that oil & gas demand will continue to grow well past 2030

RISK MANAGEMENT PROCESS

- Although climate-related risks are factored into the financial planning process, the overall risk profile relative to the operational risks of drilling & completing wells is not material
  - Largest risk is in the context of long-term commodity price trends due to transition risks but these risks are mitigated by targeting short-cycle investments that result in quick payback periods (i.e., transition risks are accepted)

- Materiality thresholds

Risks	Process	Timing	Materiality
Carbon pricing	Accept	Short & Long	Medium
Energy efficeincy	Mitigate	Short term	Low
Water usage	Mitigate	Short & Long	Medium
Land practices	Mitigate	Short & Long	Low
Legal risks	Accept	Short & Long	Low
Technology risks	Control	Short	Low
Physical - Acute			
Flooding	Mitigate	Short	Low
Fire	Mitigate	Short	Low
Drought	Accept	Long	Low
Weather	Accept	Short	Low
Physical - Chronic			
Increasing temperatures	Accept	Long	Low
Supply chain disruptions	Mitigate	Short & Long	Medium

METRICS AND TARGETS

- The majority of Yangarra's emissions are verified annually by a third-party auditor as part of Alberta's TIER program
  - The auditor conducts an independent review of all facilities under the TIER program, including calculations based on factors and fuel usage at various facilities in the aggregate program
  - Auditor review includes a detailed review with senior management and engineering staff on the tracking of emissions which is corroborated with field visits

- Emissions outside the scope of the TIER program (included in Performance Summary) are based on Alberta Energy Regulator manuals and procedures
  - As part of Yangarra's 2022 program, the Company conducted field studies and tests to determine the accuracy of various fuel calculation factors

- 2023 target is a 5% reduction in CO_2e intensity

- Scope 3 emissions will be reported in future reports when possible

- As part of the Company's long-term incentive structure, the Board has approved a bonus structure that includes an "ESG" component for calculating compensation for the executive team as well as the management team and operational staff

PERFORMANCE SUMMARY

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Performance Summary

	units	2022	2021	2020	2019
Production					
Sales	boe/d (6:1)	11,022	8,931	9,888	12,572
Oil	bbl/d		2,373	2,611	3,941
NGLs	bbl/d		1,709	1,876	2,020
Natural Gas	mmcf/d		29	32	40
Emissions					
Scope 1	C02e tonnes	90,848	103,823	107,973	129,137
Methane	Tonnes	701	1,119	1,379	1,639
Fuel combustions	C02e tonnes	66,365	73,779	72,152	80,468
Flare/Incinerated	C02e tonnes	6,928	2,039	1,293	4,375
Vent	C02e tonnes	15,212	25,578	31,950	41,716
Fugitives	C02e tonnes	2,343	2,426	2,578	2,578
Scope 2	C02e tonnes	687	385	343	380
Total Scope 1 + 2	C02e tonnes	91,535	104,051	108,166	129,359
Total Direct CO2e	C02e tonnes	90,848	103,823	107,973	129,137
Total Indirect CO2e	C02e tonnes	687	385	343	380
Direct CO2e intensity	C02e tonnes/boe	0.0226	0.0318	0.0299	0.0281
Indirect CO2e intensity	C02e tonnes/boe	0.0002	0.0001	0.0001	0.0001
Total intensity	C02e tonnes/boe	0.0228	0.0320	0.0300	0.0282

Flare/Incinerated volumes increased in 2022 as a result of the Company's incinerator installs to reduce tank methane vents. Carbon emissions would have been higher by 7,9000 tons CO2e if Yangarra did not mitigate tank vent volumes through incineration.

PERFORMANCE SUMMARY

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Performance Summary

	units	2022	2021	2020	2019
Water					
Fresh water usage	m3	377,133	420,289	176,008	287,002
Fresh water intensity	m3/boe	0.09	0.13	0.05	0.06
Recovered & recycled water	m3	35,595	28,803	22,939	59,195
Spills					
Number of reportable spills	count	0	0	2	0
Total Volume of reportable spills	m3	0	0	47	0
Spill intensity	m3/boe produced	0.00	0.00	0.00	0.00
Pipelines (emulsion & nat. gas)	kms	264	257	250	219
Emulsion pipelines	kms	1.4	1.4	1.4	1.4
Pipeline incidents	count	0	0	0	0
Pipeline incident frequency rate	count/1000 km	0	0	0	0
Abandonment & Reclamation					
Number of producing wells	count	258	226	199	183
Number of non-producing wells	count	15	16	34	42
Wells abandoned	count	4	18	8	1
Active reclamations	count	68	64	0	0
Reclamation certificates received	count	0	6	30	12
ARO spend	$ millions	0.3	1.0	0.2	0.9

PERFORMANCE SUMMARY

Performance Summary

	units	2022	2021	2020	2019
Health & Safety					
Exposure hours (direct employees)	hours	170,000	156,000	155,000	132,500
Total recordable injury frequency	count	2.35	2.56	3.87	0.00
Fatalities	count	0	0	0	0
Social					
Full-time	count	71	65	65	56
Part-time	count	0	0	0	0
Field	count	58	52	50	41
Corporate	count	13	13	15	15
Corporate, % Female	%	31%	31%	40%	40%
Corporate, % Male	%	69%	69%	60%	60%
Board of Directors, % Female	%	14%	17%	0%	0%
Board of Directors, % Male	%	86%	83%	100%	100%

TRIF was related to two employees that had low-impact occupational injuries that resulted in the lost-time hours above.

ADVISORIES

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There is no single standard system that applies across companies for compiling and calculating the quantity of green house gases, nitrogen oxide, sulfur dioxide and other sustainability metrics attributable to Yangarra's operations. Accordingly, the information provided in this report may not be comparable with similar information reported by other companies. Yangarra's emission statistics are derived from various internal reporting systems that are generally different from those applicable to the financial information presented in the consolidated financial statements and are, in particular, subject to less sophisticated internal documentation as well as preparation and review requirements, including the general internal control environment. Yangarra may change its' policies or methods for calculating these emissions and other sustainability metrics in the future without prior notice.

Natural gas has been converted to a barrel of oil equivalent (Boe) using 6,000 cubic feet (6 Mcf) of natural gas equal to one barrel of oil (6:1), unless otherwise stated. The Boe conversion ratio of 6 Mcf to 1 Bbl is based on an energy equivalency conversion method and does not represent a value equivalency; therefore Boe's may be misleading if used in isolation. References to natural gas liquids ("NGLs") in this presentation include condensate, propane, butane and ethane and one barrel of NGLs is considered to be equivalent to one barrel of crude oil equivalent (Boe). One ("BCF") equals one billion cubic feet of natural gas. One ("Mmcf") equals one million cubic feet of natural gas.

ROCE: Trailing 12-month EBIT divided by (Total Assets less Current Liabilities) for trailing years.

For any forward-looking statements, readers should refer to the Company's last press release dated February 6, 2023.