

Second Party Opinion

Tamarack Valley Energy Sustainability-Linked Bond Framework

Jan. 31, 2022

Tamarack Valley Energy Ltd. (Tamarack) is an oil and gas producer operating primarily in the Western Canadian Sedimentary Basin. The company's asset portfolio is focused in the Charlie Lake and Clearwater conventional oil plays as well as enhanced oil recovery plays in Alberta and Saskatchewan with all production sold in North America. Tamarack's product mix comprises light oil (42%), natural gas (27%), medium/heavy oil (22%), and natural gas liquids (9%). As of 2020, 11.7% of its proved and 10.3% of its probable reserves were located on or near Indigenous land. In fiscal-year 2020 (Jan. 1, 2020-Dec. 31, 2020), the company generated net revenue of about C\$200 million. Pro forma for its 2021 acquisitions, we expect Tamarack to produce more than 40,000 barrels of oil equivalent (boe) per day.

In our view, Tamarack's Sustainability-Linked Bond Framework, published on Jan 31, 2022, is aligned with:

 Sustainability-Linked Bond Principles, ICMA, 2020

Issuer's Sustainability Objectives

Tamarack's sustainability program is built on its commitment to environmental stewardship, community engagement, and employee empowerment across the lifecycle of its business activities. The program has five key focus areas that are each associated with priority topics: emissions management (priority topic: greenhouse gas [GHG] emissions management), water management (water use), land and biodiversity preservation (asset retirement, land reclamation, ecosystem and biodiversity management, and product leaks and spills), stakeholder engagement (Indigenous rights and community partnership), and ethical governance (safety and ethical governance). The company has established commitments and goals across each of these key areas with the aim of supporting continuous improvement, innovation, and transparency. Tamarack is highly acquisitive and undertakes stringent environmental, social, and governance (ESG) due diligence assessments for all of its acquisitions to ensure they will contribute to these key target areas.

Tamarack developed its Sustainability-Linked Bond Framework to align its financing strategy with the emissions management and stakeholder engagement pillars of its sustainability program by setting targets to reduce its scope 1 and 2 GHG emissions and increase the level of Indigenous representation in its workforce.

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Selected Key Performance Indicators (KPIs) And Sustainability Performance Targets (SPTs)

KPI	SPT	Baseline	2020 Performance
GHG Emissions Intensity, kg CO2e/boe (Scope 1 and 2 Emissions)*	Achieve a reduction in GHG emissions intensity (Scope 1 and 2) of 39% by the end of 2025, relative to the 2020 baseline	37.5 kg CO2e/boe (2020)	37.5 kg CO2e/boe
Indigenous Representation as Percentage of Workforce	Increase Indigenous representation in field and office workforce to 6% by the end of 2025	3.5% (2020)	3.5%


boe--Product sales in barrels of oil equivalent

Second Party Opinion Summary


Selection of key performance indicators (KPIs)

Alignment		Tamarack's Sustainability-Linked Bond Framework is aligned with this component of the Sustainability-Linked Bond Principles (SLBP).			
KPI 1	GHG Emissions Intensity, kg CO2e/boe (Scope 1 and 2 Emissions)	Not aligned	Aligned	Strong	Advanced
KPI 2	Indigenous Representation as Percentage of Workforce	Not aligned	Aligned	Strong	Advanced

Calibration of sustainability performance targets (SPTs)


Alignment		Tamarack's Sustainability-Linked Bond Framework is aligned with this component of the SLBP.			
SPT 1	Achieve a reduction in GHG emissions intensity (Scope 1 and 2) of 39% by the end of 2025, relative to the 2020 baseline	Not aligned	Aligned	Strong	Advanced
SPT 2	Increase Indigenous representation in field and office workforce to 6% by the end of 2025	Not aligned	Aligned	Strong	Advanced

Instrument characteristics

Alignment  Tamarack's Sustainability-Linked Bond Framework is aligned with this component of the SLBP.

The financial and/or structural characteristics of the bonds the company issues under this framework will be linked to its performance relative to the SPTs. The variation will be detailed in the terms and conditions of each sustainability-linked bond issued under the framework.


Reporting

Alignment  Tamarack's Sustainability-Linked Bond Framework is aligned with this component of the SLBP.

Score Not aligned Aligned **Strong** Advanced

Tamarack commits to publish up-to-date information on the selected KPIs and SPTs in its annual sustainability report, which it will make publicly available on its website.

Post-issuance review

Alignment  Tamarack's Sustainability-Linked Bond Framework is aligned with this component of the SLBP.

Tamarack commits to having an independent qualified provider of limited assurance services verify its performance against each KPI annually.

Framework Assessment

Selection of key performance indicators (KPIs)

The Principles make optional recommendations for stronger structuring practices, which inform our relevancy opinion as aligned, strong, or advanced. For each KPI, we consider how relevant the KPI is for sustainability by exploring the clarity and characteristics of the defined KPI; its significance for the issuer’s sustainability disclosures; and how material it is to the issuer’s industry and strategy.

✓ Tamarack’s Sustainability-Linked Bond Framework is aligned with this component of the SLBP.

KPI 1	GHG Emissions Intensity, kg CO2e/boe (Scope 1 and 2 Emissions)	Not aligned	Aligned	Strong	Advanced
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We view the selected KPI as aligned with the Principles because its scope, objective, and calculation are clearly articulated. Furthermore, we believe the KPI addresses an important sustainability challenge for the sector (climate change mitigation through scope 1 and 2 GHG emissions reduction), though its effect on global GHG emission will not be nearly as material as an abatement in scope 3 emissions.

The KPI’s objective, calculation methodology, and scope are well defined in the framework. Tamarack has calculated its GHG emissions intensity (kg CO2e/boe) according to the requirements of the GHG Protocol. The numerator of the KPI covers direct emissions from Tamarack’s own operations (scope 1), including stationary combustion, incineration or flaring, product losses to the atmosphere, and mobile combustion, as well as indirect GHG emissions (scope 2) related to its consumption of purchased energy for electricity, steam, heat, or cooling. In line with the GHG Protocol, Tamarack has selected product sales, in barrel of oil equivalent (boe), as the denominator for the intensity calculation. The KPI covers the company’s entire operations and considers its GHG emission intensity over a full calendar year.

GHG reduction is highly relevant to the company’s sustainability strategy, namely the “emissions management” focus area, which management identified as a priority topic in the materiality assessment it completed in 2020.

We believe this KPI is also relative and material to the sector because oil and gas exploration and production is highly energy intensive and produces significant GHG emissions from combustion-activities, equipment leaks, venting, and flaring (see “Key Sustainability Factors: Oil and Gas”). Gas leakages occurring during the extraction process could lead to significant methane emissions, which have a global warming potential 25x higher than that of carbon dioxide emissions, according to the U.S. Environmental Protection Agency (EPA). That said, the industry’s most material environmental effect is indirect and stems from the end-use of its products (scope 3). Scope 3 emissions accounted for 88% of total emissions from the oil and gas sector in 2019, according to data from IHS Markit. We believe scope 3 emissions are particularly relevant given they are unlikely to abate without oil and gas companies driving significant change across the industry.

Finally, Tamarack is using the recognized and publicly available GHG Protocol to calculate the numerator of the KPI. However, Tamarack has chosen to align the denominator of the KPI with the International Financial Reporting Standards Foundation’s (IFRS) accounting standard for production measurement, which is calculated in terms of sales volume. While using sales production as a denominator leads to a more conservative measure of its GHG emissions intensity, this production measurement does not align with the production measurement it reports to regulators, which it calculates in terms of raw production volumes, including volumes wasted or emitted rather than sold. We believe this limits the comparability of Tamarack’s KPI with those of its peers.

KPI 2	Indigenous Representation as Percentage of Workforce	Not aligned	Aligned	Strong	Advanced
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We view the selected KPI as aligned with the Principles because its scope, objective, and calculation are clearly articulated. Furthermore, we believe the KPI addresses a material, albeit not the most material, sustainability challenge for the sector and the region in which the company operates (creating value for Indigenous communities).

The KPI's objective, calculation methodology, and scope are well defined in the framework. The company will calculate its Indigenous representation by using the number of full time equivalent (FTE) Indigenous employees and contractors, based on voluntary self-reporting, divided by its total number of FTE employees and contractors. The KPI covers the company's entire operations.

Indigenous rights, including employment generation for Indigenous individuals, are relevant to the company's sustainability strategy, given that it includes the topic as a stakeholder engagement focus area and identified it as a priority topic in the materiality assessment it completed in 2020. While Tamarack recognizes that there are many ways to create value for Indigenous communities, it believes increasing employment is a tangible way to achieve this goal and views it as one of the best ways to measure the value it is providing.

This KPI is also relevant and material to the sector, in our view, because an oil and gas company's inability to effectively create value for its local community may affect its social license to operate (see: "Key Sustainability Factors: Oil and Gas"). We believe this KPI is particularly important for Canadian companies given their frequent engagement with Indigenous communities, as well as Canada's agenda to achieve reconciliation with its Indigenous people. However, we do not believe the KPI is linked to one of the most relevant sustainability challenges for the oil and gas industry globally.

Because the metric relies on self-reporting, some challenges may exist in the availability and comprehensiveness of the gathered data, in our view. However, we believe this risk is partially mitigated because, according to Tamarack, the proportion of its employees that self-report across the organization is quite high (over 90%).

Calibration of sustainability performance targets (SPTs)

The Principles make optional recommendations for stronger structuring practices, which inform our ambition opinion as aligned, strong, or advanced. We consider the level of ambition for each target by assessing its clarity and characteristics, how the issuer defines the target with reference either to its past performance, or to external or competitor benchmarks, and how it explains what factors could influence future performance.

 Tamarack's Sustainability-Linked Bond Framework is aligned with this component of the SLBP.

SPT 1	Achieve a reduction in GHG emissions intensity (Scope 1 and 2) of 39% by the end of 2025, relative to the 2020 baseline	Not aligned	Aligned	Strong	Advanced
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We believe the ambition, clarity, and characteristics of the first SPT are aligned with the Principles.

The framework outlines the baseline year (2020), the expected observation date (Dec. 31, 2025), and the relevant trigger events, such as the failure to achieve the SPT on the target observation date. Tamarack is committed to verifying its 2020 baseline to a limited level of assurance by year-end 2022.

The SPT, under which the company aims to achieve a 39% reduction in its scope 1 and 2 GHG emissions intensity, is benchmarked against the group's past performance, which shows that its GHG emissions intensity remained relatively flat from 2018-2019 but increased in 2020. The increase in its GHG emissions intensity in 2020 was due to three main factors: a decrease in its production in 2020 relative to 2019, a change in its calculation methodology to more accurately measure its scope 1 emissions, and two acquisitions it completed during the period, which led to an increase in its absolute emissions. Given this historical performance trajectory, we view the company's target to be at least equal to the improvements it has implemented in recent years because it will likely require significant new capital investments and innovation to achieve and reflects a shift in its business model away from a business-as-usual approach. As outlined in the framework, some of the broad steps the company is taking to reach this target include:

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- Implementing operational improvements, such as the reduction of redundant equipment, the management of pressure and temperature changes to avoid unnecessary flashing, and other system process improvements to minimize product losses;
- Implementing an emissions review and sign-off during facility design and an emission report card for ongoing operations;
- Building new facilities that conserve natural gas or upgrading existing facilities to improve their efficiency; and
- Implementing innovative new technologies as they are developed.

When setting the SPT, the company also conducted a benchmarking exercise against its publicly traded peers in the upstream oil and gas sector (excluding those that focus exclusively on oil sands and dry natural gas producers given their incomparable emissions profiles). However, we believe there are several limitations with the peer analysis its conducted. First of all, the benchmark shows that Tamarack's expected scope 1 and 2 GHG emission intensity in 2025 is in the top quartile of its oil weighted peer group as of 2020. Because we expect significant improvements to be made in emissions management across the sector over the coming years, we view the lack of consideration of its peers' targets or trajectories as a limitation. In addition, the majority of its peers disclose their production as a raw measure, rather than based on sales volumes, which limits the comparability of its disclosed intensity metrics. Furthermore, most peers are based in North America which limits comparability of the SPT in a global context. Finally, we do not believe all of Tamarack's upstream peers are directly comparable with its business, given its product mix, and do not have full visibility into how the SPT compares with those of its closest peers.

We believe the SPT has several additional limitations. Because the KPI for this SPT is based on a relative ratio, it poses some risk that the company will achieve the target solely through an increase in its production volumes. That said, we view this risk as unlikely because the company does not have the capacity to significantly ramp up its production to a level that would offset the incremental increase in its emissions without acquiring new assets. Furthermore, according to the framework, Tamarack may restate its baseline if it undertakes an acquisition or divestment with a materially different emissions intensity profile to its ongoing business. Any change to its baseline, will not result in adjustments to the SPT. The framework commits to follow the GHG Protocol's guidance for base-year recalculations; however, the materiality threshold for when the baseline will or will not be restated is unclear. Finally, the target considers an aggressive reduction Tamarack achieved in 2021 through a sizeable investment in gas conservation on its Clearwater heavy oil asset, which leads us to expect only incremental reductions during 2022-2025 (5% reduction in emission intensity, relative to 2021, annually).

Baseline	Achieve a reduction in GHG emissions intensity (Scope 1 and 2) of 39% by the end of 2025, relative to the 2020 baseline
2020	2025
37.5 kg CO2e/boe	22.9 kg CO2e/boe
	Equivalent to a 39% reduction

SPT 2 Increase Indigenous representation in our field and office workforce to 6% by the end of 2025

Not aligned

Aligned

Strong

Advanced

We believe the ambition, clarity, and characteristics of the second SPT are aligned with the Principles.

The framework identifies the baseline year (2020), the expected observation date (Dec. 31, 2025), and the relevant trigger events, such as the failure to achieve the SPT on the target observation date. Tamarack is committed to verifying its 2020 baseline to a limited level of assurance by year-end 2022.

When setting the SPT, the company conducted a benchmarking exercise to consider the size of the eligible Indigenous labor force in Alberta and all of Canada according to data from the country's

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2016 census. The exercise shows that Tamarack's target of 6% Indigenous representation in its field and office workforce by 2025 is in line with the Indigenous proportion of the eligible labor force in Alberta (5.7%) and above the Indigenous proportion of the eligible labor force in Canada as a whole (4.3%). The ambition of the company's target is also supported by its goal to increase the proportion of skilled Indigenous workers in its office or more senior positions, in our view.


The framework also provides historical performance figures since 2019 when the company first started measuring and disclosing the level of Indigenous representation in its workforce. That said, Tamarack's historical performance, which indicates that its Indigenous workforce representation increased to 3.5% in 2020 from 2.9% in 2019, does not provide enough relative information to effectively benchmark its target. Furthermore, some employees may not have self-reported in the base year but may self-report in the future, which could result in a numeric improvement to the SPT without the realization of associated sustainability benefits. However, that most of its employees self-reported in the base year helps assuage this concern. Our assessment of the SPT calibration is also constrained because the target is not benchmarked against those of its peers, although we understand few of its peers currently report an Indigenous diversity metric in their sustainability disclosures.

Tamarack outlines the relatively broad steps it is taking to achieve the target in its framework. These include identifying new opportunities and areas of business to engage Indigenous workers beyond the field operator demographic, utilizing existing systems and recruitment opportunities, such as job fairs, to ensure a connection to the Indigenous community, and implementing programs and initiatives that facilitate an inclusive workplace. The steps are in line with the Call to Action #92 of the Truth and Reconciliation Commission of Canada, which calls upon all corporations in Canada to adopt the United Nations Declaration on the Rights of Indigenous Peoples as a reconciliation framework and to "apply its principles, norms, and standards to corporate policy and core operational activities involving Indigenous peoples and their lands and resources." This includes ensuring that Indigenous people have equitable access to jobs, training, and education opportunities.

Baseline	Increase Indigenous representation in our field and office workforce to 6% by the end of 2025
2020	2025
3.5%	6.0%
	Increase of 2.5%

Instrument characteristics

The Principles require disclosure of the type of financial and/or structural impact involving trigger event(s), as well as the potential variation of the instrument's financial and/or structural characteristics.

 Tamarack's Sustainability-Linked Bond Framework is aligned with this component of the SLBP.

The financial and/or structural characteristics of the bonds the company issues under the framework will be linked to its performance relative to the SPTs. The potential financial variation in the bonds if the company fails to meet the SPTs include, but are not limited to, a coupon-step up, an increased redemption fee, or changes to the tenor of the bond.

The margin adjustment mechanism or other variations in the financial and/or structural characteristics will be detailed in the terms and conditions of each sustainability-linked bond issued under the framework. The documentation will also include the KPI definitions, calculation methodologies, SPT(s) and trigger events, as well as any fallback mechanisms in case the SPT(S) cannot be calculated or observed in a satisfactory manner. In addition, it will include language that incorporates potential exceptional or extreme events, such as drastic changes in the regulatory environment, which could substantially affect the calculation of the KPI(s) or lead to a restatement of the SPT(s).

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According to the framework, any future SLBs issued with the same KPI(s) and SPT(s) must utilize an SPT of equal or greater ambition. At the issuance of each new SLB, any outstanding SLBs will have their equivalent SPT adjusted to reflect the more ambitious targets, which we view as a best practice.

Reporting

The Principles make optional recommendations for stronger disclosure practices, which inform our disclosure opinion as satisfactory, strong, or advanced. We consider plans for updates on the sustainability performance of the issuer for general purpose funding, or the sustainability performance of the financed projects over the lifetime of any dedicated funding, including any commitments to post-issuance reporting.

 Tamarack's Sustainability-Linked Bond Framework is aligned with this component of the SLBP.

Disclosure score

Not aligned

Aligned

Strong

Advanced

We consider Tamarack's overall reporting practices to be strong.

Tamarack commits to publish up-to-date information on the selected KPIs and SPTs in its annual sustainability report, which will be available publicly on the company's website. The report will be made available within six months of each fiscal year (except for fiscal year 2021 where the delay may be nine months). Furthermore, as required by the Principles, the issuer commits to publish an annual verification report carried out by an external party on its progress against the SPT for each KPI. In the offering documentation for each SLB, Tamarack commits to disclose the SPT observation date(s) (the date on which the company's performance against the SPT(s) will be observed) and the SPT notification date(s) (the date on which the company will report on its actual performance as of the SPT observation date).

A stronger feature of the framework, in our view, is the issuer's commitment to disclosing the drivers of its KPI outcomes, including its mergers, acquisitions, and divestiture activities.

Post-issuance review

The Principle requires post-issuance review commitments including the type of post-issuance third-party verification, periodicity and how this will be made available to key stakeholders. Our opinion describes whether the documentation is aligned or not aligned with these requirements. Please note, our second party opinion is not itself a post-issuance review.

 Tamarack's Sustainability-Linked Bond Framework is aligned with this component of the SLBP.

Tamarack commits to having an independent provider of third-party limited assurance services verify its performance against each KPI annually until after it achieves the SPT trigger event on the bond. Following a target observation date, Tamarack will publish a verification assurance certificate on its website confirming whether its performance on the KPI met the relevant target.

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