

# INDORAMA VENTURES PUBLIC COMPANY LIMITED

## SUSTAINABILITY - LINKED FINANCE FRAMEWORK

### SECOND PARTY OPINION

#### Scope and objectives

DNV Business Assurance Australia Pty Ltd (henceforth referred to as "DNV") has been commissioned by Indorama Ventures Public Company Limited (henceforth referred to as "IVL" or "Issuer") to provide a second party opinion on IVL's Sustainability-Linked Finance Framework, (the "Sustainability-Linked Finance Framework" or the "Framework").

Indorama Ventures Public Company Limited, is one of the world's leading producers in the intermediate petrochemicals industry and a global manufacturer of wool yarns. The company is headquartered in Bangkok, Thailand and started its operations in 1994.

The IVL Framework enables issuance of Sustainability-Linked Bonds and Sustainability-Linked Loans, to finance general corporate purposes in IVL, where IVL commits to future sustainability improvements within a predefined timeline and has chosen to develop this Framework to link its funding with IVL's sustainability objectives to achieve an improved sustainability performance that is relevant, core and material to both its business and the wider sector it operates in.

IVL has chosen to measure performance using three Key Performance Indicators (KPIs):

- **KPI 1:** Scope 1 and 2 GHG emissions intensity, calculated as tonnes CO<sub>2</sub> per tonne production (tCO<sub>2</sub>/tProd) covering its Scope 1 and Scope 2 emissions globally for total production including intercompany sales.
- **KPI 2:** Post-consumer PET bale input into recycling measured in tons.
- **KPI 3:** Renewable electricity consumption.

IVL will benchmark its sustainability performance using Sustainability Performance Targets (SPTs) for the period FY 2020 to 2025 for KPI 1 and use outright performance within the given year for KPI 2 and KPI 3 with stated baseline year performance. These include:

- **SPT 1:** Reduce IVL GHG emissions intensity by 10% by 2025 from a 2020 base year.
- **SPT 2:** 750,000 tons of PET bale input for recycling in 2025.
- **SPT 3:** 25% renewable electricity consumption in 2030.

Our objective has been to provide an independent assessment on whether the Sustainability-Linked Bonds and/or the Sustainability-Linked Loans to be issued under the Framework meet the criteria established on the basis set out below. The scope of this DNV opinion is limited to the Sustainability-Linked Bond Principles, June 2020 ("SLBP"), set out by the International Capital Market Association (ICMA) and the Sustainability-Linked Loan Principles, July 2021 ("SLLP"), set out by the Loan Market Association (LMA). Our methodology to achieve this is described under 'Work Undertaken'.

## Responsibilities of the Management of IVL and DNV

The information and data used by DNV during the delivery of this review has been provided by IVL and also sourced from publicly available sources that deemed appropriate. Our statement represents an independent opinion and is intended to inform IVL management and other interested stakeholders in the Securities as to whether the established criteria for the Framework have been met, based on the information available with us. DNV is not responsible for any aspect of the nominated assets referred to in this opinion and cannot be held liable if estimates, findings, opinions, or conclusions are incorrect. Thus, DNV shall not be held liable if any of the information or data provided by IVL's management and used as a basis for this assessment were not correct or complete.

## Basis of DNV's opinion

We have adapted our Sustainability-Linked Bond Principles and Sustainability-Linked Loans Principles methodology, which incorporate the five requirements of the SLBP and the SLLP, to create an IVL-specific Sustainability-Linked Bond and Loans Assessment Protocol (henceforth referred to as "Protocol"). Our Protocol includes a set of suitable criteria that can be used to underpin DNV's opinion. The overarching principle behind the criteria is that Sustainability-Linked Bonds and Loans should "provide an investment opportunity with transparent sustainability credentials". As per our Protocol, the criteria against which the Framework has been reviewed are grouped under the five Principles of the SLBP:

- **Principle One: Selection of Key Performance Indicators (KPIs).** The Issuer of a sustainability-linked loan or bond should clearly communicate its overall sustainability objectives, as set out in its sustainability strategy, and how these relate to its proposed SPTs. The KPI should be reliable, material to the Issuer's core sustainability and business strategy, address relevant ESG challenges of the industry sector and be under management control.
- **Principle Two: Calibration of Sustainability Performance Targets (SPTs).** The SPTs should be ambitious, meaningful and realistic. The target setting should be done in good faith and based on a sustainability improvement in relation to a predetermined performance target benchmark.
- **Principle Three: Bond Characteristics.** The bond will need to include a financial and/or structural impact depending on whether the selected KPIs reach (or not) the predefined SPTs. The bond documentation needs to require the definitions of the KPI(s) and SPT(s) and the potential variation of the SLB's financial and/or structural characteristics. Any fallback mechanisms in case the SPTs cannot be calculated or observed in a satisfactory manner, should be explained.
- **Principle Four: Reporting.** Issuer should publish and keep readily available and easily accessible up to date information on the performance of the selected KPI(s), as well as a verification assurance report (see Principle 5) outlining the performance against the SPTs and the related impact and timing of such impact on the bond's financial and/or structural characteristics, with such information to be provided to those institutions participating in this securities/ loan or to investors participating in the bond at least once per annum.
- **Principle Five: Verification (Post-issuance).** The Issuer should have its performance against its SPTs independently verified by a qualified external reviewer with relevant expertise, at least once per annum. The verification of the performance against the SPTs should be made publicly available.

The Framework has also been reviewed and are grouped under the five Sustainability-Linked Loan Principles:

- **Principle One: Selection of Key Performance Indicators (KPIs).** The Borrower of a sustainability-linked loan should clearly communicate its overall sustainability objectives, as set out in its sustainability strategy, and how these relate to its proposed SPTs. The KPI should be reliable, material to the Borrower's core sustainability and business strategy, address relevant ESG challenges of the industry sector and be under management control.
- **Principle Two: Calibration of Sustainability Performance Targets (SPTs).** The SPTs should be ambitious, meaningful, and realistic. The target setting should be done in good faith and based on a sustainability improvement in relation to a predetermined performance target benchmark.
- **Principle Three: Loan Characteristics.** The loan will need to include a financial and/or structural impact depending on whether the selected KPIs reach (or not) the predefined SPTs. The loan documentation needs to require the definitions of the KPI(s) and SPT(s) and the potential variation of the SLL's financial and/or structural characteristics. Any fallback mechanisms in case the SPTs cannot be calculated or observed in a satisfactory manner, should be explained.
- **Principle Four: Reporting.** Borrowers should publish and keep readily available and easily accessible up to date information on the performance of the selected KPI(s), as well as a verification assurance report (see Principle 5) outlining the performance against the SPTs and the related impact and timing of such impact on the Loan's financial and/or structural characteristics, with such information to be provided to those institutions participating in this securities/ loan or to investors participating in the Loan at least once per annum.
- **Principle Five: Verification (Post-issuance).** The Borrower must have its performance against its SPTs independently verified by a qualified external reviewer with relevant expertise, at least once per annum. The verification of the performance against the SPTs should be made publicly available.

## Work undertaken

Our work constituted a high-level review of the available information, based on the understanding that this information was provided to us by IVL in good faith. We have not performed an audit or other tests to check the veracity of the information provided to us. The work undertaken to form our opinion included:

- Creation of a project-specific Protocol, adapted to the purpose of the evaluation of the Framework for proposed Securities as described above and in Schedule 2 to this second party opinion;
- Assessment of documentary evidence provided by IVL on the Framework and supplemented by a high-level desktop research. These checks refer to current assessment of best practices and standards methodology;
- Discussions with IVL management and relevant functions/departments, review of relevant documentation including energy conservation/ GHG transition plan and review of historical implemented measures to improve the GHG emissions;
- Review of how the available data for baselines has been applied to derive performance data and assess the accuracy of this data where that has not been conducted;
- Documentation of findings against each element of the criteria. Our opinion as detailed below is a summary of these findings.

## Findings and DNV's opinion

DNV conducted the external review engagement in accordance with the Sustainability-Linked Bond Principles, June 2020 (SLBP) and the Sustainability-Linked Loan Principles, July 2021 (SLLP) for the Framework. The review included i) checking whether the provisions of the SLBP and the SLLP are consistently and appropriately applied, and ii) the collection of evidence supporting the review. DNV's detailed findings are listed for the proposed issuance below:

- **Principle One: Selection of Key Performance Indicators (KPIs).** DNV confirms that IVL's KPIs including:

- **KPI 1:** Scope 1 and 2 GHG emissions intensity
- **KPI 2:** Post-consumer PET bale input into recycling
- **KPI 3:** Renewable electricity consumption

are core, relevant, material and consistent with the company's overarching sustainability strategy. The rationale and process for KPI selection, as well as its definition, measurability and verifiability, are deemed to be robust, reliable and consistent with the SLBP and the SLLP.

- **Principle Two: Calibration of Sustainability Performance Targets (SPTs).** DNV concludes that the SPTs are meaningful and relevant in the context of IVL's broader sustainability and business strategy and represent a material improvement over a predefined timeline. DNV concludes that:

- IVL's target of a 10% reduction in carbon intensity compared to its FY 2020 baseline is ambitious in the context of its sustainability position and work to date and deemed to go beyond what is considered 'business-as-usual'. DNV has also reviewed the credibility of IVL's strategy to achieve the SPT by reviewing CO2 reduction planned activities and concludes that this macro level plan is viable and possible to meeting SPT 1 outlined in the Framework. SPT 1 contributes in advancing SDG 13.
- IVL's target of 750,000 tons of PET bale input for recycling in 2025 represents a significant increase in the volume of PET recycling inputs compared to its BAU scenario. IVL had increased PET bale inputs for recycling from 146,470 tons in 2016 up to 222,288 tons in 2020. The SPT 2 benchmark is considered ambitious and achievable in the context of IVL's broader plan to scale up sustainability objectives. The SPT 2 contributes to advancing SDG 12.
- IVL's target of consuming 25% renewable electricity in 2030 is considered to be ambitious and a significant departure from its BAU trajectory. IVL had consumed 1.27% renewable electricity in 2016 up to 2.89% in 2020. IVL's SPT 3 is considered achievable in the context of its broader renewable electricity generation and consumption strategic plans through to 2030. SPT 3 contributes to advancing SDG 13.

- **Principle Three: Bond and Loan Characteristics.** DNV reviewed the disclosures related to bond and loan characteristics stated in the Framework and in our opinion the financial characteristics of securities to be issued under the Framework that could be impacted based on KPI performance under SPTs, are in line with the SLBP and the SLLP. This impact includes a coupon adjustment, or a margin adjustment, or premium payment, or purchase of Energy Attribute Certificates (EAC), or purchase of voluntary carbon offsets, or a combination of the above. DNV has reviewed the fallback mechanism included within the Framework and consider it to be reasonable to maintain the ambition and integrity of the

instruments issued under the Framework. The specific security documentation for an instrument issued under the Framework will determine relevant target observation dates for specified trigger events. The Framework includes appropriate fallback mechanisms as applicable. Fallback mechanisms have been proposed by IVL to account for external factors that may impact the performance associated with the SPTs and are considered appropriate with specified requirement for external verification of changes to or recalculation of the SPTs.

- **Principle Four: Reporting.** DNV concludes that the Framework includes the required information on annual reporting of IVL's annual performance including measurement, monitoring mechanism and performance including chosen standards for reporting in its annual sustainability/integrated reports or equivalent and meets the requirement as outlined in the SLBP and the SLLP. IVL confirms that IVL's sustainability/integrated report or equivalent will be published at an annual interval and made publicly available.
- **Principle Five: Verification.** DNV confirms that IVL will have its performance against the SPT independently verified upon the SPT testing date by an independent third party as part of its sustainability/integrated report verification, and at a more frequent interval if required by the specific terms of the issued securities under the Framework, i.e. as to be stated/specified in the relevant documentation of the specific transaction (e.g. the Final Terms of the relevant Sustainability-Linked Bonds or Sustainability-Linked Loans).

On the basis of the information provided by IVL and the work undertaken, it is DNV's opinion that IVL's Sustainability-Linked Finance Framework meets the criteria set out in the SLBP and the SLLP.

#### for DNV Business Assurance Australia Pty Ltd

Sydney, Australia / 16 September 2021



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Mark Robinson  
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#### About DNV

Driven by our purpose of safeguarding life, property and the environment, DNV enables organisations to advance the safety and sustainability of their business. Combining leading technical and operational expertise, risk methodology and in-depth industry knowledge, we empower our customers' decisions and actions with trust and confidence. We continuously invest in research and collaborative innovation to provide customers and society with operational and technological foresight. With our origins stretching back to 1864, our reach today is global. Operating in more than 100 countries, our 16,000 professionals are dedicated to helping customers make the world safer, smarter and greener.

## SCHEDULE 1: IVL SUSTAINABILITY LINKED LOAN SPT

IVL's KPIs and SPTs have been presented to DNV and are summarised as follows:

KPI	BASELINE (2020)	2022	2023	2024	31 DECEMBER 2025	31 DECEMBER 2030
KPI 1: Scope 1 and 2 GHG emissions intensity (tCO2e/t)						
Target (tCO2e/t)	0.608	N/A	N/A	N/A	0.547	N/A
KPI 2: Post-consumer PET bale input into recycling (t)						
Target (t)	222,288	N/A	N/A	N/A	750,000	N/A
KPI 3: Renewable electricity consumption (%)						
Target (%)	2.89	N/A	N/A	N/A	N/A	25%

## SCHEDULE 2: SUSTAINABILITY LINKED BONDS & LOANS ELIGIBILITY ASSESSMENT PROTOCOL

### 1. Selection of Key Performance Indicators (KPIs)

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
1a	KPI – material to core sustainability and business strategy	<p>The Issuer’s sustainability performance is measured using sustainability KPIs that can be external or internal. The KPIs should be material to the Issuer’s core sustainability and business strategy and address relevant environmental, social and/or governance challenges of the industry sector and be under management’s control.</p> <p>The KPI should be of high strategic significance to the Issuer’s current and/ or future operations.</p> <p>It is recommended that Issuers communicate clearly to investors the rationale and process according to which the KPI(s) have been selected and how the KPI(s) fit into their sustainability strategy.</p>	<p>Review of:</p> <ul style="list-style-type: none"> <li>- IVL’s Framework (September 2021)</li> <li>- IVL’s Sustainability Report 2019, 2020</li> <li>- IVL’s publicly available policies.</li> <li>- GHG emissions reported in sustainability disclosures.</li> </ul> <p>Discussions with IVL’s management team including Sustainability and Environment teams.</p>	<p>DNV has reviewed IVL-s KPIs including:</p> <ul style="list-style-type: none"> <li>• <b>KPI 1:</b> Scope 1 and 2 GHG emissions intensity</li> <li>• <b>KPI 2:</b> Post-consumer PET bale input into recycling</li> <li>• <b>KPI 3:</b> Renewable electricity consumption</li> </ul> <p>and can confirm that the chosen KPIs are material and relevant to the company’s core sustainability and business strategy for petrochemical industries including PET product production.</p> <p>IVL’s climate sustainability strategy focusses on reducing environmental footprint and on reducing GHG emissions in the production process. This is evidenced by IVL’s policy, goals and targets contained within their sustainability reporting. This is clearly communicated in the Framework.</p> <p>Based on our own review of the petrochemical sector, IVL’s historical performance and initiatives, the selected KPIs are material, as:</p> <ul style="list-style-type: none"> <li>- <b>KPI/SPT 1:</b> Carbon intensity impacts IVL’s own value creation including carbon pricing and is of interest to external stakeholders such as its customers who use their products.</li> </ul>

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				<ul style="list-style-type: none"> <li>- <b>KPI/SPT 2:</b> Increasing the proportion of post-consumer waste in the production of PET products is a critical factor in the advancement of circular economy and waste reduction globally to meet the sustainability needs of stakeholders and the environment.</li> <li>- <b>KPI/SPT 3:</b> The proportion of renewable electricity consumed for IVL’s operations is a key factor in IVL’s Scope 1 and 2 GHG emissions.</li> </ul> <p>DNV acknowledges that the focus on deploying CO2 emissions intensity reduction over time as a KPI will enable a targeted effort to deliver on IVL’s overarching decarbonisation targets. The KPIs align with IVL’s broader decarbonisation aims and facilitate the incorporation of tangible and transparent annual milestones that will facilitate measurable and transparent implementation of IVL’s broader environmental sustainability/ climate change policy. Similarly, the increase in the proportion of renewable energy generated electricity will facilitate a transition towards sustainable operation of IVL’s core business.</p> <p>The increase of the volume of post-consumer waste product as a raw material in IVL’s manufacture of PET products is a key factor in reducing plastic waste to landfill and advancing the goal of circular economy and sustainable manufacturing.</p> <p>In terms of IVL’s broader business strategy, DNV acknowledges that continual improvement including technological upgrade, progressive expansion of the use of renewable electricity will help in reducing relative GHG emissions, and will be a key driver of lowering operational costs for their operations. As such, the 3 KPIs will also be instrumental to IVL’s performance beyond that of delivering on environmental sustainability targets.</p>



Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
1b	KPI – Measurability	<p>KPIs should be measurable or quantifiable on a consistent methodological basis; externally verifiable; and able to be benchmarked, i.e. as much as possible using an external reference or definitions to facilitate the assessment of the SPT’s level of ambition.</p> <p>Issuers are encouraged, when possible, to select KPI(s) that they have already included in their previous annual reports, sustainability reports or other non-financial reporting disclosures to allow investors to evaluate historical performance of the KPIs selected. In situations where the KPIs have not been previously disclosed, Issuers should, to the extent possible, provide historical externally verified KPI values covering at least the previous 3 years.</p>	<p>Review of:</p> <ul style="list-style-type: none"> <li>- IVL’s Framework (September 2021)</li> <li>- IVL’s Sustainability Report 2019/2020</li> <li>- IVL’s Targets 2025/2030</li> </ul> <p>Discussions with IVL’s management team including Sustainability and Environment teams.</p>	<p>DNV confirmed that the KPIs are measurable through review of the baseline data supplied.</p> <p><b>KPI 1</b> utilises emissions performance data and production data which were reviewed from a sample of sites and confirmed to be in a format of data records that are measurable, recordable, traceable and robust.</p> <p><b>KPI 2</b> utilises a raw metric for the input of production materials in tons. This is a fundamental production and materials metric that DNV confirmed to be in a format of data records that are measurable, recordable, traceable and robust.</p> <p><b>KPI 3</b> relates to the consumption of electrical energy. This is noted to potentially include onsite generation and grid purchased electrical energy. Review of the records provided demonstrated that the data is available for the sites reviewed and should reasonably be obtainable from financial records, meter readings and supplier invoices.</p>
1c	KPI – Clear definition	<p>A clear definition of the KPI(s) should be provided and include the applicable scope or perimeter as well as the calculation methodology</p>	<p>Review of:</p> <ul style="list-style-type: none"> <li>- Guidance for Sustainability Performance Review by EC - R1</li> </ul> <p>Discussions with IVL’s management team including</p>	<p>DNV confirms that the KPIs selected have a clear definition and metric associated.</p> <p><b>KPI 1: Scope 1 and 2 GHG emissions intensity (i.e. CO<sub>2</sub> emissions intensity)</b> chosen by IVL provides a clear scope and calculation methodology. The KPI uses relevant</p>

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
			Sustainability and Environment teams.	<p>parameters including material, fuel and energy consumption, and is reported in <b>tCO2/tProd</b>.</p> <p><b>KPI 2: Post-consumer PET bale input (measured in tons)</b> is a clear metric associated with input materials.</p> <p><b>KPI 3: IVL renewable electricity consumption (MWh)</b> divided by total IVL electricity consumption (MWh), shown <b>as a percentage</b>.</p>

## 2. Calibration of Sustainability Performance Targets (SPTs)

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
2a	Target Setting – Meaningful	The SPTs should be ambitious, realistic and meaningful to the Issuer’s business and be consistent with the Issuers’ overall strategic sustainability/ESG strategy	<p>Review of:</p> <ul style="list-style-type: none"> <li>- IVL’s Framework (September 2021)</li> <li>- IVL’s Targets 2025/2030</li> <li>- WSA Guidelines &amp; GRI standards</li> <li>- Target setting process presentation by IVL</li> <li>- IVL’s Strategy on Climate Change</li> </ul> <p>Discussions with IVL’s management team including Sustainability and Environment teams.</p>	<p><b>SPT 1:</b> IVL’s target of a 10% reduction in carbon intensity compared to its FY 2020 baseline is ambitious in the context of its sustainability position and work to date and deemed to go beyond what is considered ‘business-as-usual’. DNV has also reviewed the credibility of IVL’s strategy to achieve the SPT by reviewing CO2 reduction planned activities and concludes that this macro level plan is viable and possible to meeting the SPT 1 outlined in the Framework. The SPT contributes in advancing SDG 13.</p> <p><b>SPT 2:</b> IVL’s target of 750,000 tons of PET bale input for recycling in 2025 represents a significant increase in the volume of PET recycling inputs compared to its BAU scenario. IVL had increased PET inputs for recycling from 146,470 tons in 2016 up to 222,288 tons in 2020. The SPT 2 benchmark is considered ambitious and achievable in the context of IVL’s</p>

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				<p>broader plan to scale up sustainability objectives. The SPT 2 contributes to advancing SDG 12.</p> <p><b>SPT 3:</b> IVL’s target of consuming 25% renewable electricity in 2030 is considered to be ambitious and a significant departure from its BAU trajectory. IVL had consumed 1.27% renewable electricity in 2016 up to 2.89% in 2020. IVL’s SPT is considered achievable in the context of its broader renewable electricity generation and consumption strategic plans through to 2030. The SPT 3 contributes to advancing SDG 13.</p> <p>DNV confirms that the targets set are meaningful to the issuer’s business and are ambitious in the context of the industry and organisation. IVL has selected a recent baseline for KPI 1 with a short-term target of 10% reduction in intensity. This is considered meaningful, achievable and ambitious. The KPI 2 target represents a meaningful and very ambitious increase in the use of post-consumer waste materials and KPI 3 represents a significant increase in the consumption of renewable electricity for the organisation.</p>
2b	Target Setting – Meaningful	SPTs should represent a material improvement in the respective KPIs and be beyond a “Business as Usual” trajectory; where possible be compared to a benchmark or an external reference and be determined on a predefined timeline, set before (or concurrently with) the issuance of the bond / loan.	<p>Review of:</p> <ul style="list-style-type: none"> <li>- IVL’s Framework (September 2021)</li> <li>- IVL’s Targets 2025/2030</li> </ul> <p>Discussions with IVL’s management team including Sustainability and Environment teams.</p>	<p>DNV confirms that the chosen SPTs represent a material improvement of the KPIs.</p> <p>KPI/SPT 1 represents a 10% improvement on the FY 2020 baseline by 2025, which is a short term and material improvement for global emissions intensity. It represents a significant improvement in the trajectory of emissions intensity for the business.</p> <p>KPI/SPT 2 is a dramatic improvement of the post-consumer PET bale consumption for the business and is a significant departure from the BAU trajectory for recycled materials consumption for PET bales.</p> <p>KPI/SPT 3 also represents a significant improvement in the trajectory associated with the consumption of renewable</p>

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
2c	Target Setting – benchmarks	<p>The target setting exercise should be based on a combination of benchmarking approaches:</p> <ol style="list-style-type: none"> <li>1. The Issuer’s own performance over time for which a minimum of 3 years, where feasible, of measurement track record on the selected KPI(s) is recommended and when possible forward-looking guidance on the KPI</li> <li>2. The SPTs relative positioning versus the Issuer’s peers where comparable or available, or versus industry or sector standards</li> <li>3. Systematic reference to science-based scenarios, or absolute levels (e.g. carbon budgets) or official country/regional/international targets or to recognised Best-Available-Technologies or other proxies</li> </ol>	<p>Review of:</p> <ul style="list-style-type: none"> <li>- IVL’s Framework (September 2021)</li> <li>- IVL’s Sustainability Report 2019/20</li> <li>- IVL’s Targets 2025/2030</li> </ul> <p>Discussions with IVL’s management team including Sustainability and Environment teams.</p>	<p>electricity for the business, albeit with a slightly longer timeframe.</p> <p>Based on our discussions and review of documents, DNV confirms that the SPT target setting exercise has been based on an appropriate combination of methodologies including benchmarking approaches:</p> <ol style="list-style-type: none"> <li>1. DNV confirms that the Framework provides all KPIs performance track-record going back to FY 2016 and provides forward target setting to FY 2030.</li> <li>2. Insufficient information is currently available for the selected KPIs to be meaningfully assessed in terms of industry benchmarks and competitor performance due to confidentiality restrictions.</li> <li>3. DNV concludes that the SPTs are put in an appropriate context of climate change mitigation efforts and circular economy and recycling efforts. The Framework highlights IVL’s ambition to address and advance its sustainability as an organisation.</li> </ol>
2d	Target setting – disclosures	<p>Disclosures on target setting should make clear reference to:</p> <ol style="list-style-type: none"> <li>1. The timelines of target achievement, the trigger event(s), and the frequency of SPTs</li> <li>2. Where relevant, the verified baseline or reference point</li> </ol>	<p>Review of:</p> <ul style="list-style-type: none"> <li>- Objectives and targets</li> <li>- IVL’s Framework (September 2021)</li> <li>- IVL’s Sustainability Report 2019/20</li> <li>- IVL’s Targets 2025/2030</li> </ul>	<p>DNV confirms that the relevant disclosures on target setting are appropriately referenced:</p> <ol style="list-style-type: none"> <li>1. The timelines of SPT target achievement are clearly referred to, 31 December 2025 for SPT 1 and 2, and 31 December 2030 for SPT 3. Securities issued under the Framework will need to deliver on applicable SPT(s) – in accordance with corresponding</li> </ol>

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
		<p>selected for improvement of KPIs as well as the rationale for that baseline or reference point to be used</p> <ol style="list-style-type: none"> <li>3. Where relevant, in what situations recalculations or pro-forma adjustments of baselines will take place</li> <li>4. Where possible and taking into account competition and confidentiality considerations, how the Issuers intend to reach such SPTs</li> </ol>	<p>Discussions with IVL’s management team including Sustainability and Environment teams and presentation on target setting</p>	<p>target observation dates for specified trigger events. These can vary depending on the security issued.</p> <ol style="list-style-type: none"> <li>2. The reference point for the SPTs will be a baseline from FY 2020 or outright performance within the given year. The rationale for IVL to use its FY 2020 GHG emissions intensity is that it provides a clear and recent reference point to compare against and the overall business is performing in normal manner.</li> <li>3. Based on the review and discussion with IVL’s management team, we are of the opinion that the IVL has carried out an interim risk assessment to identify the situations that could lead to a recalculation of the KPI baseline/trajjectory, and IVL plans to bring this out in the Final Terms of the relevant Sustainability-Linked Bonds or Sustainability-Linked Loans.</li> <li>4. The Framework provides sufficient information on how carbon emissions intensity reduction progress will be achieved, references how progress to date has been achieved and the likely measures to be implemented to meet the emissions intensity reduction trajectory outlined leading up to 2025. The PET bale recycling inputs for 2025 and the renewable electricity consumption target for 2030.</li> </ol> <p>After review of IVL’s overall strategy, management approach and plan, DNV concludes that the SPTs are realistic and that the plan is viable and possible to meeting the SPTs outlined in this Framework.</p>

### 3. Bond and Loan Characteristics

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
3a	Bond and Loan Characteristics – SPT Financial/structural impact	The SLB/SLL will need to include a financial and/or structural impact involving trigger event(s) based on whether the KPI(s) reach the predefined SPT(s).	Review of: - IVL’s Framework (September 2021)  Discussions with IVL management	<p>IVL has informed DNV of the potential challenges/ trigger event(s) and DNV is of the opinion that IVL has articulated this in this Framework in line with the requirements outlined by ICMA’s SLBP and LMA’s SLLP. Trigger events, with corresponding target observation date(s) and performance requirements under a specific SPT - as outlined in each specific financial security issued under the Framework - will ensure that the financial characteristics of the security changes in accordance with performance.</p> <p>IVL has informed that the extent of this impact will be outlined in the specific security documentation. DNV did not carry out a review of an indicative Bond or Loan Term Sheet to confirm if it fulfils the requirements of the ICMA SLBP and the LMA SLLP regarding Bond and Loan Characteristics, respectively.</p> <p>Impacts to the coupon of the securities issued in relation to this Framework or additional requirement to purchase Energy Attribute Certificates (EAC) or voluntary carbon offsets are proposed and associated with the achievement of the SPT as set out in the Final Terms of the relevant Sustainability-Linked Bonds and/or the final terms of the relevant Sustainability-Linked Loans. This structure is considered to be typical within a sustainability-linked bond and sustainability-linked loan instrument and appropriate for the format. DNV makes no assessment on the magnitude of the coupon adjustment or the value of the purchase of Energy Attribute Certificates (EAC) or voluntary carbon offsets.</p>

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
3b	Bond and Loan Characteristics – Fallback mechanism	<p>Any fallback mechanisms in case the SPTs cannot be calculated or observed in a satisfactory manner should be explained.</p> <p>Issuers may also consider including, where needed, language in the bond or loan documentation to take into consideration potential exceptional events</p>	<p>Review of:</p> <ul style="list-style-type: none"> <li>- IVL’s Framework (September 2021)</li> </ul> <p>Discussions with IVL management team and risk team</p>	<p>Based on the discussion with IVL on fallback mechanism- DNV concludes that IVL has considered this in a satisfactory manner. IVL has provided that:</p> <p>“The KPIs and SPTs set out in the Framework will remain applicable throughout the tenor of any security issued under the Framework. A “Sustainability Review Event” will occur if IVL notifies that any SPT is no longer an appropriate sustainability performance target for the purpose of sustainability interest rate adjustment or any additional covenants imposed under the terms and conditions of any security issued under IVL’s Sustainability-Linked Financing Framework including (but not limited to), a case where any SPT cannot be calculated or observed in a satisfactory manner taking into consideration potential exceptional events (such as significant change in perimeters through material merger and acquisition activities) or extreme events, including drastic changes in the regulatory environment that could substantially impact the calculation of the KPIs, the restatement of the SPTs and/or pro-forma adjustments of baselines or KPI scope.”</p> <p>“In making such determination and amendments, IVL will act in good faith and reasonably, have regard to the Group’s business and the then current market standards, the performance against the SPTs, the status or availability of any relevant external organization or body and best industry practice for sustainability objectives, and provide evidence to stakeholders that the relevant SPT or KPI is considered no longer an appropriate sustainability performance target.”</p> <p>DNV understands that the intention of the mechanism is to maintain the ambition of the target and facilitate relative performance assessment in the event of changes to the corporate structure.</p>

## 4. Reporting

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
4a	Reporting	<p>Issuers of SLBs should publish, and keep readily available and easily accessible:</p> <ol style="list-style-type: none"> <li>1. Up-to-date information on the performance of the selected KPI(s), including baselines where relevant</li> <li>2. A verification assurance report relative to the SPT outlining the performance against the SPTs and the related impact, and timing of such impact, on the bond or loan's financial and/or structural characteristics</li> <li>3. Any information enabling investors to monitor the level of ambition of the SPTs</li> </ol> <p>This reporting should be published regularly, at least annually, and in any case for any date/period relevant for assessing the SPT performance leading to a potential adjustment of the SLB's financial and/or structural characteristics.</p>	<p>Review of:</p> <ul style="list-style-type: none"> <li>- IVL's Sustainability Report 2019/2020</li> <li>- IVL's Framework (September 2021)</li> </ul> <p>Discussions with IVL's management Team</p>	<p>DNV concludes based on the management discussion that IVL's existing GHG measurement and monitoring system including the articulations in this Framework and other policy/ governance documents has required information including IVL's commitment to meet requirements of the SLBP and the SLLP. Further, IVL is committed to disclose and publish the data on relevant GHG emissions intensity, PET recycling, and renewable electricity consumption, on an annual basis in its Sustainability Report or equivalent, and make available the information publicly, including:</p> <ol style="list-style-type: none"> <li>1. Up-to-date information on the performance of the selected KPI, including the baseline where relevant;</li> <li>2. A verification assurance report on the basis of limited assurance relative to the SPT outlining the performance of the KPI against the SPT; and</li> <li>3. Any other relevant information which may enable investors to monitor the progress of the selected KPI.</li> </ol> <p>IVL has proposed that the reporting is included as a part of their existing sustainability report (or any report that is equivalent) and/or that it be made available on their website.</p>



## 5. Verification

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
5a	External Verification	Issuers should have its performance against each SPT for each KPI independently verified by a qualified external reviewer with relevant expertise, at least once a year and for each SPT trigger event.	Review of: <ul style="list-style-type: none"> <li>- IVL’s Sustainability Report 2019/2020</li> <li>- IVL’s Framework (September 2021)</li> </ul> Discussions with IVL’s Sustainability Management Team	DNV confirms that IVL has committed in their Sustainability-Linked Finance Framework to obtain external and independent verification of its annual KPI performance relative to the SPT and in connection with any trigger event as specified in specific security documentation. The last three years (2018 – 2020) of Sustainability/ Annual Integrated Reports that includes non-financial disclosures including GHG emissions intensity, PET recycling and renewable electricity consumption have been externally reviewed and data not subject to that review has been evaluated by DNV during the course of this assessment.

### About DNV

Driven by our purpose of safeguarding life, property and the environment, DNV enables organisations to advance the safety and sustainability of their business. Combining leading technical and operational expertise, risk methodology and in-depth industry knowledge, we empower our customers’ decisions and actions with trust and confidence. We continuously invest in research and collaborative innovation to provide customers and society with operational and technological foresight. With our origins stretching back to 1864, our reach today is global. Operating in more than 100 countries, our 16,000 professionals are dedicated to helping customers make the world safer, smarter and greener.