JSW STEEL LIMITED

SUSTAINABILITY - LINKED BOND FRAMEWORK

PRE-ISSUANCE 2ND PARTY OPINION BY DNV

Scope and objectives

DNV GL Business Assurance India Private Limited, India (henceforth referred to as "DNV") has been commissioned by JSW Steel Limited (henceforth referred to as "JSW Steel", "JSW" or "Issuer" - (CIN No: L27102MH1994PLC152925)) to provide a 2nd party opinion on JSW's Sustainability-Linked Bond Framework – June 2021 (the "Framework").

JSW Steel is India's one of the leading integrated steel manufacturer and the flagship company of the JSW Group. JSW Steel is listed on the NSE and BSE Stock Exchanges and headquartered in Mumbai, India.

The Framework enables issuance of Sustainability-Linked Bonds (referred to as "Sustainability-Linked Securities" or "Securities"), to finance general corporate purposes in JSW Steel, where JSW commits to future sustainability improvements within a predefined timeline and has chosen to develop this Sustainability-Linked Bond Framework (the "Framework") to link its funding with JSW Steel's sustainability objectives and leverage ambitious timelines to achieve an improved sustainability performance that is relevant, core and material to both its business and the wider steel sector they operate in.

JSW Steel has chosen to measure performance against the Sustainability Performance Target (SPT) through one Key Performance Indicator (KPI), CO_2 emissions intensity, calculated as tonnes CO_2 per tonne of crude steel produced (tCO_2/tcs) covering its Scope 1 and Scope 2 emissions from the three integrated steel plants (JSW Steel Vijayanagar Works, JSW Steel Dolvi Works, and JSW Steel Salem Works, together covering 100% of JSW Steel's crude steel production) in India.

JSW will assess its sustainability performance against SPT for the period FY 2020 to 2030, providing a target towards reducing the CO_2 emission intensity from its three integrated steel plants in India by ≈23% by FY 2030 to a level equal or less than 1.95 tCO_2/tcs, compared to FY 2020 CO_2 emission of 2.52 tCO_2/tcs taking account of direct (Scope 1) and energy indirect (Scope 2) emissions together.

Our objective has been to provide an independent assessment on whether the Sustainability-Linked Securities 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). Our methodology to achieve this is described under 'Work Undertaken'.

Responsibilities of the Management of JSW Steel and DNV

The information and data used by DNV during the delivery of this review has been provided by JSW Steel and also sourced from publicly available sources that deemed appropriate. Our statement represents an independent opinion and is intended to inform JSW 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 JSW'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 methodology, which incorporates the five requirements of the SLBP, to create a JSW Steel-specific Sustainability-Linked Bond 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 a Sustainability-Linked Bond 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:

- **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**. Issuers 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.

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 JSW Steel 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 2nd Party Opinion;
- Assessment of documentary evidence provided by JSW 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 JSW 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 CO_2 emission data for FY 2020 has been applied to derive JSW Steel's FY 2020 average CO_2 emission intensity;
- Review of how the available CO_2 emission data for FY 2020 and historical data for its three integrated steel plants' operations;
- 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 (SLBP). The review included i) checking whether the provisions of the SLBP are consistently and appropriately applied, and ii) the collection of evidence supporting the review. DNV's findings are listed below:

1. **Principle One: Selection of Key Performance Indicators (KPIs).** DNV confirms that JSW Steel's environmental sustainability KPI (CO_2 emissions intensity) is 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 in accordance with the SLBP.

2. **Principle Two: Calibration of Sustainability Performance Targets (SPTs).** DNV concludes that the SPTs are meaningful and relevant in the context of JSW Steel's broader sustainability and business strategy and represent a material improvement over a predefined timeline. DNV concludes that JSW's target of a 23% reduction in carbon intensity compared to its FY 2020 baseline is ambitious and deemed to go beyond what is considered 'business-as-usual'. DNV has also reviewed the credibility of JSW's strategy to achieve the SPT by reviewing CO_2 reduction planned activities and concludes that this macro level plan is viable and possible to meeting the SPT outlined in the Framework, and could exceed the Intended Nationally Determined Contributions (INDC) set out by Government of India's Ministry of Steel as included in its National Steel Policy 2017, which refers to specific reduction targets of GHG emissions in the Indian iron and steel sectors. The SPT contributes in advancing SDGs 12 and 13.

3. **Principle Three: Bond Characteristics.** DNV reviewed the disclosures related to bond 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. This impact includes, but is not limited to, margin adjustment, coupon adjustment or re-payment amount adjustment etc. The specific security documentation for an instrument issued under the Framework will determine relevant target observation dates for specified trigger events. The Framework may include appropriate fallback mechanisms as applicable.

4. **Principle Four: Reporting.** DNV concludes that the Framework includes the required information on annual reporting of JSW Steel's GHG annual performance including strategy, management approach and measurement and monitoring mechanism including chosen standards for reporting in its annual sustainability/integrated reports and meets the requirement as outlined in the SLBP. JSW confirms that JSW's sustainability/integrated report will be published at an annual interval and made publicly available.

5. **Principle Five: Verification.** DNV confirms that JSW will have its performance against the SPT independently verified annually 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 an issued security 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 Bond).

On the basis of the information provided by JSW and the work undertaken, it is DNV's opinion that JSW Steel's Sustainability-Linked Bond Framework meets the criteria established in the Protocol and that it is aligned with the stated definition of Sustainability-Linked Bonds within the SLBP.

for DNV Business Assurance India Private Limited

Bengaluru, India / 10th September 2021

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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: DESCRIPTION OF JSW'S KEY PERFORMANCE INDICATOR (KPI) AND SUSTAINABILITY PERFORMANCE TARGET (SPT)

KPI

CO_2 EMISSIONS INTENSITY, CALCULATED AS TONNES CO_2 PER TONNE OF CRUDE STEEL PRODUCED (TCO_2/TCS) (SCOPE 1 AND 2)

JSW has chosen to measure performance through one KPI, i.e CO_2 emissions intensity, calculated as tonnes CO_2 per tonne of crude steel produced (tCO_2/tcs) (Scope 1 and Scope 2)

The Scope 1 and Scope 2 GHG emissions are voluntarily reported in JSW's Annual Integrated Report and being disclosed to CDP on an annual basis. The reported emissions are being verified by third party on a voluntary basis is publicly accessible to all stakeholders. JSW Steel has presented DNV with its verified GHG data for FY 2020 during our assessment.

SPT

Scope 1 and Scope 2 emissions together, measured in tCO2 per ton of crude steel production (tCO2/tcs), should be equal to or lower than 1.95, by 31st March 2030 (FY 2030), a reduction of ≈23% from a FY 2020 baseline.

JSW Steel is committed in playing an important role in the transition to a low carbon economy. The company has developed a multi-prong plan on climate change mitigation and the sustainability linked securities are an important element to demonstrate JSW's commitment to their sustainability strategy. JSW Steel's SPT is out in the framework are as follows:

Year (end of period)	FY 2020	FY 2030
Projected CO2 Intensity, tCO_2/tcs	**2.52**	**1.95**

SCHEDULE 2: SUSTAINABILITY LINKED BOND 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	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. The KPI should be of high strategic significance to the Issuer's current and/ or future operations. 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.	Review of: - JSW Steel - SLB Framework (June 2021) - Sustainability Vision - "www.jsw.in/sustainability/sustainability-about-us-overview" - JSW Sustainability Strategy, based on seven key elements - JSW Steel Annual Integrated Report 2019/2020 - JSW Steel Operations – Website https://www.jsw.in/groups/sustainability-homepage - JSW Policies on climate change, Energy, Resource conservation, Water etc. - GHG emissions reported in sustainability disclosures. - CDP Report Discussions with JSW's management team including Sustainability and Environment teams.	DNV has reviewed JSW's sustainability KPI (**CO_2 emissions intensity, calculated as tonnes CO_2 per tonne of crude steel produced (tCO_2/tcs) (Scope 1 and Scope 2)** and can confirm that the chosen KPI is material and relevant to the company's core sustainability and business strategy for steel making using predominately BF-BOF route of iron and steel making (ore to metal) JSW Steel's climate change policy and sustainability strategy focusses on reducing environmental footprint and more specifically on reducing GHG emissions in the production process. This is evidenced by JSW's climate change policy, goals and targets, all being focused on emission reductions from its Steel Business activities towards a 23% emissions intensity reduction by 2030. This is clearly communicated in the Framework. The chosen KPI is outlined in more detail in Schedule 1, and entails: • JSW Steel's operations, measured in tonnes of CO_2/ tonne of crude steel produced (tCO_2/tcs). The metrics (tCO_2/tcs) is a widely used metric in the steel sector to monitor and report the annual GHG performance efficiency of a plant. The set CO_2 emissions intensity KPI is therefore of high strategic relevance for the Issuer now and for the foreseeable

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				future to measure relative carbon intensity reduction of its Steel making process and associated operations. Further factors/elements which make up the KPI are under management control, JSW has adopted an operational control approach for consolidation of its GHG emissions in line with the World Steel Association's CO_2 data collection programme and methodology. Based on our own review of the steel sector in India, the selected KPI is material, as carbon intensity impacts JSW Steel's own value creation including carbon pricing and is of interest to external stakeholders such as its customers who use steel of various applications. Further, the Government of India is expecting corporates to proactively undertake measures to reduce GHG emissions and thereby bring in positive impact on climate change. DNV believes that the focus on deploying CO_2 emissions intensity reduction over time as a KPI will enable a targeted effort to deliver on JSW's overarching decarbonisation targets. The chosen carbon intensity KPI aligns with JSW Steel's broader decarbonisation aims and facilitates the incorporation of tangible and transparent annual milestones that will facilitate measurable and transparent implementation of JSW's broader environmental sustainability/ climate change policy. In terms of JSW's broader business strategy, DNV acknowledges that continual improvement including energy audits, technological upgradation including adoption of BAT, progressive enlarging use of renewable energy and other measures such as sourcing scrap steel will help in reducing relative GHG emissions, and will be a key driver of lowering operational costs for steel making operations. As such, the

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				carbon intensity KPI will also be instrumental to JSW Steel's performance beyond that of delivering on environmental sustainability targets.
1b	KPI - Measurability	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. 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.	Review of: - JSW Steel - SLB Framework (June 2021) - JSW GHG measurement – SOP based on the worldsteel Association (WSA) latest version - JSW Annual Integrated Report 2019/2020 - CDP report - JSW Steel SD Targets 2030 Discussions with JSW Steel's management from Sustainability.	DNV concludes that the GHG KPI is measurable (JSW Steel has adopted GRI standards along with worldsteel Association (WSA) guidelines, Version 9/10, to determine its Scope 1 and Scope 2 GHG emissions in terms of tCO_2/tcs on a consistent methodological basis, externally verifiable and able to be benchmarked to external references – sustainability disclosures. DNV concludes that the measurement methodology is a robust and reliable metric to measure carbon intensity for steel making. The unit in terms of tCO_2/tcs is already an accepted steel industry standard for reporting on carbon intensity. JSW Steel has been reporting its GHG values on an annual basis since FY 2005 and plans to report its GHG emissions based on its data collection and gathering system based on fuel/energy consumption on an annual basis. JSW's management team is committed to follow the established methodology on a consistent basis and will be subjected to externally verification on an annual basis. The KPI can therefore be benchmarked to external references of other steel companies. We confirm that JSW Steel has provided GHG data since FY 2005; Review of past sustainability reports confirm that JSW Steel has put in place a reliable and accurate system of GHG measurement and monitoring; further, JSW's management team confirmed to DNV that significant resources have been allocated to ensure that the reported GHG performance data is factual, accurate and reliable. GHG data is also presented at various levels within JSW, including to the Board level

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				sustainability committee on a six monthly basis and have started disclosing to all stakeholders on a quarterly basis (w.e.f Q3 FY 2021) during its financial results declaration.
1c	KPI – Clear definition	A clear definition of the KPI(s) should be provided and include the applicable scope or perimeter as well as the calculation methodology	Review of: - GHG calculations based on WSA latest version 10. - Guidance for Sustainability Performance Review by EC - R1 Discussions with JSW Steel's management team	DNV confirms that the KPI (**CO_2 emissions intensity)** chosen by JSW Steel provides a clear scope and calculation methodology. The KPI uses relevant parameters including material, fuel and energy consumption, and is reported in **tCO_2/tcs**. This KPI is already an industry standard and widely reported on, as outlined in 1b.

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	Review of: - JSW Steel - SLB Framework (June 2021) - JSW Steel SD Targets 2030 - WSA Guidelines & GRI standards - Target setting process presentation by JSW - JSW Strategy on Climate change - CDP Disclosures	DNV confirms that the SPT (**CO_2 emissions intensity reduction to equal or less than 1.95 tonnes CO_2 per tonne of crude steel produced (tCO_2/tcs), equivalent to a reduction of 23% from a FY 2020 baseline, by FY 2030)** is consistent with the Issuer's overall strategic sustainability/ESG strategy, as it is fully aligned with one of JSW's climate targets and supports the decarbonisation strategy. This target is meaningful to the Issuer considering various challenges in the Steel business, as it addresses the

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
			Discussions with JSW's management and sustainability team	environmental challenge for Steel making using the BF-BOF route, e.g. the quality of ore, availability of scrap steel, etc. After review of JSW Steel's GHG reduction plan, discussion on strategy and management approach including commitments and targets set out by the JSW board - DNV concludes that the SPT is specific, realistic, viable and achievable/ possible to meet as outlined in the Framework. JSW Steel has stated that its GHG intensity was 3.39 tCO_2/tcs in FY 2005 (as verified from the reported data in the respective year's sustainability report), and its most recently reported figure is 2.52 tCO_2/tcs in FY 2020; JSW Steel is targeting a 23% emissions intensity reduction by FY 2030 from FY 2020. A predetermined annual GHG reduction year-on-year, totalling a 23% GHG reduction by FY 2030 relative to a FY 2020 baseline, will build on carbon intensity reductions already achieved since FY 2005. In our opinion this will add impetus to JSW's environmental sustainability strategy implementation efforts. DNV notes that the ambition associated with the proposed level of performance is considered in the national context where there is currently a low concentration of embedded renewable energy generation within the national electricity grid and a low level of scrap metal supplementation in the steel making process due to availability of the resource.
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	Review of: - JSW Steel - SLB Framework (June 2021) - JSW Steel SD Targets 2030 Discussion with JSW management team	DNV confirms that the chosen SPT represents a material improvement of the KPI, being year-on-year reductions culminating in a 23% reduction in 2030 vs. 2019/20 baseline. The overall GHG reduction goes beyond "business as usual", as JSW Steel will not achieve the targets without the deployment of technical and other operational measures as detailed in the framework.

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
		timeline, set before (or concurrently with) the issuance of the bond.		The planned activities for GHG reduction highlight that improvements beyond what is considered the industry standard will have to occur and can thus be deemed to go beyond what is considered 'business-as-usual'. The SPTs for FY 2021 and FY 2030 are a direct reflection of the projected carbon/GHG management plan, the plan highlights the stepped-up incremental approach to GHG reduction over next 9- 10 years. India's Intended Nationally Determined Contribution (INDC) commits to reduce the emissions intensity of GDP by 33%–35% by 2030 below 2005 levels and is a 2-degree compliant towards Paris agreement commitments. Aligned with the NDC, the steel Sector target was set as 2.2 - 2.4 tCO_2/tcs in BF-BOF route and 2.6-2.7 tCO_2/tcs through DRI-EAF Route to be achieved by 2030 as documented in section 4.11.6 of the National Steel Policy 2017. JSW Steel's target to achieve a CO_2 emissions intensity of equal to or less than 1.95 tCO_2/tcs by FY 2030 exceeds the levels targeted by the Government of India in its National Steel Policy. IEA announced the Iron and Steel Technology Roadmap in 2020 that details emission reduction pathways for the global as well as Indian Iron and Steel sector. The Roadmap sets out a Sustainable Development Scenario (SDS), an ambitious pathway to net-zero emissions for the energy system by 2070. The report presents an outlook on the Indian Iron and Steel sector reduction pathway where the total sectoral emission intensity of crude steel production falls by over 60% in 2050 (i.e from 2.98 tCO_2/tcs in 2020 to 1.17 tCO_2/tcs in FY 2050, when Scope 1 and Scope 2 emissions are considered). Therefore, the set target by JSW to a level of 1.95 tCO_2/tcs by FY 2030 from its FY 2020 level of 2.52 tCO_2/tcs follows the IEA

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				SDS trajectory for Indian Steel Industry and could be concluded as ambitious.
2c	Target Setting – benchmarks	The target setting exercise should be based on a combination of benchmarking approaches: 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 2. The SPTs relative positioning versus the Issuer's peers where comparable or available, or versus industry or sector standards 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	Review of: - JSW Steel - SLB Framework (June 2021) - JSW's Annual Integrated Report 2019/20 - JSW Steel SD Targets 2030 Discussions with JSW's management team.	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: 1.DNV confirms that the Framework provides a KPI performance track-record going back to FY 2016 and provides forward year-on-year guidance leading up to FY 2030 – in accordance with the ICMA Principles. 2.DNV concludes that the SPT outlined goes beyond that of the industry standard as highlighted in Ref 2b. 3.DNV concludes that the SPT is put in an appropriate context of national climate change mitigation efforts. The Framework highlights JSW's ambition to "do what we can achieve the goals of the Paris targets". The SPT can be seen as aiming to be exceeding INDC's carbon intensity targets in line with the IEA's SDS trajectory - which are also in line with the Paris agreement. Broader aims adopted by JSW Steel include: - Reduction of CO_2 emission intensity by 23% by FY 2030 compared to FY 2020 by energy conservation measures, better resource utilisation, improving operational efficiency through internal R&D; - Adoption of Best Available Technologies (BATs); - Increased use of renewable energy and elimination of steam coal use in power generation - Sourcing and use of scrap steel and increase use of scrap in steel making

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				- Improve raw material quality through iron ore beneficiation and reduce coke rate in hot metal production; - Use of Natural Gas (NG) in Blast Furnaces (BFs) injection and Direct Reduced Iron (DRI); - Improvements in process and energy efficiency in line with the top performing iron and steel making assets in the world, through The World Steel Association's "step up" global benchmarking process etc.
2d	Target setting – disclosures	Disclosures on target setting should make clear reference to: 1. The timelines of target achievement, the trigger event(s), and the frequency of SPTs 2. Where relevant, the verified baseline or reference point selected for improvement of KPIs as well as the rationale for that baseline or reference point to be used 3. Where relevant, in what situations recalculations or pro-forma adjustments of baselines will take place 4. Where possible and taking into account competition and confidentiality considerations, how the Issuers intend to reach such SPTs	Review of: - CDP report, sustainability Report - Objectives and targets - JSW Steel - SLB Framework (June 2021) - JSW Annual Integrated Report 2019/20 - JSW Steel SD Targets 2030 Discussions with JSW's management team nad presentation on target setting	DNV confirms that the relevant disclosures on target setting are appropriately referenced: 1. The timelines of SPT target achievement are clearly referred to, at an annual frequency leading up to FY 2030. Securities issued under the Framework will need to deliver on applicable SPT(s) – in accordance with corresponding target observation dates for specified trigger events. These can vary depending on the security issued. It is noted by DNV that the SPT may extend beyond the potential maturity dates of some financial securities. For securities with maturity before FY 2030, relevant trigger events based on KPI performance under SPTs within the maturity timeline of the instrument will determine performance and JSW will define the same in the Final Terms of the relevant Sustainability-Linked Bond. 2. The reference point for the SPT will be a baseline from FY 2020. The rationale for JSW Steel to use its overall FY 2020 GHG emissions is that it provides a clear reference point to compare against and the overall business is performing in normal manner. 3. Based on the review and discussion with JSW's management team we are of the opinion that the JSW has carried out an interim risk assessment to identify the situations that could lead

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				to a recalculation of the KPI baseline/trajectory, and JSW Steel plans to bring this out in the Final Terms of the relevant Sustainability-Linked Bond. 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 FY 2030. Based on our interactions with JSW - leading up to FY 2030, GHG reductions will be through various energy efficiency measures along with enhanced usage of renewables, BAT identification, evaluation and implementation with low-carbon intensity technology will drive GHG improvement, together with enhanced sourcing and use of renewable energy. After review of JSW Steel's overall policy strategy, management approach and decarbonisation plan, DNV concludes that the SPT is realistic and that the plan is viable and possible to meeting the SPT outlined in this Framework.

3. Bond Characteristics

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
3a	Bond Characteristics – SPT Financial/structural impact	The SLB 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: JSW Steel - SLB Framework (June 2021) Discussions with JSW management and CS team	JSW Steel has informed DNV of the potential challenges/ trigger event(s) and DNV is of the opinion that JSW Steel may bring this out as appropriate in this Framework in line with the requirements outlined by ICMA's SLBP. 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. JSW 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 Term Sheet to confirm if it fulfils the requirements of the ICMA SLBP regarding Bond Characteristics. Impacts to the coupon of a Bond issued in relation to this Framework are proposed and associated with the achievement of the SPT as set out in the Bond Terms. This structure is considered to be typical within a Sustainability-Linked Bond instrument and appropriate for the format. DNV makes no assessment on the magnitude of the coupon adjustment.
3b	Bond Characteristics – Fallback mechanism	Any fallback mechanisms in case the SPTs cannot be calculated or observed in a satisfactory manner should be explained. Issuers may also consider including, where needed, language in the bond documentation to take into consideration potential exceptional events	Review of: - Presentation of Risk in CDP report. - JSW Steel - SLB Framework (June 2021) Discussions with JSW management team and risk team	Based on the discussion with JSW Steel on fall back mechanism- DNV concludes that JSW Steel has considered the following events for cases when the SPT cannot be calculated or observed in a satisfactory manner: 1. Changes in regulatory framework; 2. Serious/ adverse impacts of climate change – JSW is assessing the risk and opportunities based on TCFD guidelines. 3. BAT not in line with input material or its integration to existing processes.

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
				4. Industrial relations issues. 5. Others – e.g. pandemic.

4. Reporting

Ref.	Criteria	Requirements	Work Undertaken	DNV Findings
4a	Reporting	Issuers of SLBs should publish, and keep readily available and easily accessible: 1. Up-to-date information on the performance of the selected KPI(s), including baselines where relevant 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's financial and/or structural characteristics 3. Any information enabling investors to monitor the level of ambition of the SPTs 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.	Review of: - JSW Annual Integrated Report 2019/2020 - JSW Steel - SLB Framework (June 2021) Discussions with JSW's management Team	DNV concludes based on the management discussion that JSW Steel's existing GHG measurement and monitoring system including the articulations in this Framework and other policy/ governance documents has required information including JSW Steel's commitment to meet requirements of the SLBP. Further, JSW Steel is committed to disclose and publish its GHG emissions on an annual basis in its Sustainability/Integrated Report and CDP disclosures, and make available the GHG information publicly, including: 1. KPI performance relative to the SPT targets will published annually based on GRI standards reporting requirements, as well as after an applicable target observation date making up a trigger event as outlined in the documentation of any specific security issued under the Framework. The information will be made publicly available through the Sustainability/Integrated Report after year-end or the relevant target observation date. 2. JSW Steel's performance relative to the outlined SPT will be subject to an annual verification from an independent reviewer and made public alongside JSW Steel's Sustainability/Integrated report and disclosure to CDP 3. JSW Steel's Sustainability/Integrated Report /CDP disclosures will provide updates on new or proposed regulations, including mandatory reporting relevant to monitoring the level of ambition of the SPT.

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.	- JSW Annual Integrated Report 2019/2020 - JSW Steel - SLB Framework (June 2021) Discussions with JSW's Sustainability Management Team	DNV confirms that JSW Steel has committed in their Sustainability-Linked Bond 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 of Sustainability/ Annual Integrated Reports that includes non-financial disclosures including CO_2 emission intensity have been externally reviewed and an assurance statement includes a review of Scope 1 and 2 GHG emissions.

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.