



Sustainability-Linked Bond Framework JSW Infrastructure

November 2021

1	Introduction.....	2
1.1	Background of JSW Infrastructure Limited (JSWIL)	2
1.2	Our commitment to sustainability	3
2	JSWIL’s Rationale for Establishing a Sustainability-Linked Bond (SLB) Framework	6
3	Sustainability-Linked Bond Framework.....	6
4	Selection of Key Performance Indicators (KPI)	7
5	Calibration of Sustainability Performance Targets (SPT).....	9
6	Characteristics of Sustainability-Linked Bond.....	9
7	Reporting	10
8	Verification.....	10
8.1	Pre-issuance:.....	10
8.2	Post-issuance:.....	10
	Disclaimer.....	11

1 Introduction

1.1 Background of JSW Infrastructure Limited (JSWIL)

The US\$ 13 billion JSW Group is ranked among India's leading business houses. JSW's innovative and sustainable presence in various sectors including Steel, Energy, Infrastructure, Cement, Paints, Venture Capital and Sports is helping the Group play an important role in driving India's economic growth. The Group strives for excellence by leveraging its strengths & capabilities including a successful track-record of executing large capital-intensive & technically complex projects, differentiated product-mix, state-of-the-art manufacturing facilities and greater focus on pursuing sustainable growth.

JSW Infrastructure Limited (JSWIL), one of India's leading private infrastructure companies, is part of the JSW Group. We are a constantly upskilling and consistently evolving organisation. Our maritime facilities with advanced infrastructure demonstrate our unwavering commitment to nation-building. Our business demonstrates transparency, excellence, and dynamism, combined with a proven track record of high operating efficiencies. In support of the nation's mission to be 'self-reliant', we operate environment-friendly seaports and terminals that provide customers with mechanised and multi-cargo handling services. Our Indian ports have strong rail and road connectivity to the industrial regions of Maharashtra, Goa, Karnataka on the west coast, and Odisha and Tamil Nadu on the southeast shore. Our focus on operational excellence, strategic location and financial discipline has allowed us to grow sustainably ever since inception.

Environmental care is an important component of our sustainability initiatives. Being an integral part of the JSW Group, environment-friendly operations are deeply imbibed in our DNA. We ensure all our actions and decisions lead to strengthening our sustainability approach. There is a paradigm shift in environment, social and governance (ESG) practices globally and we are fully aligned to various commitments linked to social license to operate, climate change, employee, community well-being and preservation of the ecosystem. We believe in sustainable and inclusive growth while protecting the environment and enabling society to reap sustainable benefits.

We contribute to nation-building through our state-of-the-art infrastructure facilities, building scale and efficiency through mechanisation. Our environment friendly operations and community focus ensure long-term value creation for all our stakeholders. Our Ports and Terminals currently have a total cargo handling capacity of 144 MTPA and we are expanding to make our presence in all coastal states of India. This capacity is underpinned by the assurance that comes from JSWIL's track record of timely project implementation and successful operations benchmarked to international standards.

Vision 2024

To become part of the leadership position in the industry, we aim to enhance cargo handling capacity to 200 MTPA through expansion & acquisition and setting a benchmark for efficiency and sustainability in port operations. We would continue to strengthen the market position through a holistic approach by focusing on value added offerings with end-to-end logistic support. We are committed to strengthen our ESG performance across the operational ecosystem by aligning our policies and practices with global standards.

In FY 2020-21, we focused on capacity additions through greenfield and brownfield expansions. Our focus on port based industries including chemical plants, edible oil refineries among others, drives growth and increases hinterlands serviced by us. Among our expansion activities, Paradip Terminal Private Limited (PTPL) is operational from FY 2020-21. Paradip East Quay Coal terminal's work has progressed

significantly and is expected to be made operational in the current year. These two terminals, equipped with large cargo handling infrastructure, will help decongest the port and allow us to improve our market share. In line with the Government's vision to reduce logistics cost to 9% of GDP, we plan to optimise our supply chain by exploring different modes of transportation, reducing the overall logistic cost as well as time and increasing operational efficiency as well as reducing our Carbon Footprint. We endeavour to equip ports with the latest technologies and advanced infrastructure to handle larger ships to make operations more economical, and customer friendly and reduce greenhouse gas (GHG) emissions. Our Group cargo provides us with an added growth opportunity, as our business grows with the growth in Group companies. We have started establishing our footprint in the end-to-end logistics solutions, by way of road transportation, coastal movements, transportation through the availability of railway wagons, which provide a one-stop solution to our end customers. We also plan to diversify our customer base with higher contributions from third-party cargo operations. FY 2020-21 saw the highest volume of third-party cargo handled by us. Key commodities contributing to the commercial cargo included gypsum, sugar, coal and fertilisers. We are also discussing with leading customers to set up a petroleum, oils and lubricants (POL) terminal at Jaigarh Port, which will further diversify our third-party cargo base. Additional investments are being made to handle third-party cargo, address connectivity issues and grow operations to accommodate large ships at the port. The main cargo handled at the ports are bulk and liquid cargo. Our port services include marine, handling intra-port transport, storage, other value-added and evacuation services for a diverse range of customers, comprising terminal operators, shipping lines and agents, exporters, importers, and other port users. This helps us diversify our revenue streams, eliminate revenue leakage, reduce financial risks and compete more effectively.

1.2 Our commitment to sustainability

JSWIL is committed to strengthening its ESG performance across the operational ecosystem and has developed a Sustainability roadmap to ensure that the interests of investors, community and environment are not compromised.

The roadmap is based on formulating appropriate policies, conforming to regulatory norms, making regular disclosures, setting targets of minimising our environment footprint and strengthening corporate governance to meet those targets.

At JSW group level, which encompasses businesses including Steel, Energy, Infrastructure, Cement, Paints, Venture Capital and Sports, we have developed a *Sustainability Vision* that guides our social, ethical and environmental responsibilities. Our Vision is that: We are able, both now and in the future, to demonstrably contribute in a socially, ethically and environmentally - responsible way to the development of a society where the needs of all are met, and to do so in a manner that does not compromise the ability of those that come after us to meet the needs of their own, future generations.

Our commitment of demonstrating fulfilment of our Sustainability Vision emanates from our *Sustainability Strategy*, based on seven key elements:

- **Leadership:** Throughout our organization, we provide our leaders with the skills and knowledge that will systematically enable them to oversee the implementation of our Sustainability Strategy and then ensure that it remains operational and effective.
- **Stakeholder engagement:** Each part of our business is regularly required to identify and subsequently engage with a wide range of people and organizations who have an interest in our activities – our stakeholders – with the aim to gain an understanding of the varied needs and expectations they may have from us and accordingly build our strategy to fulfil these.

- **Communication:** Frequent and effective communication, both within our business and with our stakeholders, is seen as critical to ensure that everyone understands our Vision, our Strategy, and their role in making these things happen.
- **Planning:** Each of our sites are required to gain a thorough understanding of which and to what extent a particular sustainability issue affects them, guiding each site to develop an appropriate approach to manage these relevant issues.
- **Improvement:** Our Strategy requires our sites to explore all the potential opportunities for improvement, which may come in a variety of forms such as improving efficiencies or reducing wastes; it may also be improvements in how we operate, in our processes; it could be improvements in our products or in how we work with our suppliers.
- **Monitoring:** Our Strategy places significant emphasis on identifying, from site to Group, the key performance measures through which we, and our stakeholders, can monitor our progress.
- **Reporting:** Sharing information on our performance, either at a local site level or using international standards such as the Global Reporting Initiative (GRI) and International Integrated Reporting <IR> framework published by the International Integrated Reporting Council (IIRC), is seen as key in fulfilling our commitment to “demonstrably contribute”.

We ensure that our Sustainability Strategy is implemented consistently throughout our business and will continue to operate effectively at all our operations. To this effect, we are developing a *Sustainability Framework*, that takes into consideration the key principles of various fundamental national and international guidelines and frameworks, such as,

- National Voluntary Guidelines (NVG) on Social, Environmental and Economic Responsibilities of Business, 2011
- National Guidelines on Responsible Business Conduct (NGRBC) Principles
- United Nations Sustainable Development Goals (UN SDGs)
- International Finance Corporation (IFC) Performance Standards
- Organisation for Economic Co-operation and Development (OECD) Guidelines
- United Nations Guiding Principles (UNGP) on Business and Human Rights
- International Organization for Standardization (ISO) International Standards on Environment, Energy and Social Responsibility
- Principles of United Nations Global Compact (UNGC).

We determined our focus areas by reviewing our existing set of sustainability policies. We examined globally relevant guidelines and frameworks that can apply to our group operations and took into account the relevant requirements as applicable to our operations while formulating the policies. This ensures that we stay updated with the needs of a dynamic world and are aligned to making it a better place for everyone.



These focus areas have been identified after studying the magnitude of impact and the level of contribution we make to each one of them.

At JSWIL, we have adopted the group vision, strategy and framework for implementation. The group policies as relevant to our operations and activities have been adopted with due approval of the JSWIL board. All our sustainability interventions broadly fall under these focus areas and are managed and governed through the Sustainability Framework.

- To ensure the safety of employees, business partners and stakeholders, JSWIL not only employs ISO certifications, but is adopting innovative approaches by combining digitalisation and sustainability. JSWIL does not only support its own employees, but also local communities.
- Through the JSW Foundation, 2% average net profits are contributed towards the formulation, execution and monitoring of community initiatives, as per statutory norms. The Company's CSR interventions have reached out to communities across all our operations focusing on i) Education; ii) Health and nutrition; iii) Skill and livelihoods; iv) Water, environment & sanitation; and v) Community interventions such as developing public infrastructure and initiatives towards afforestation and water stewardship, among others.
- JSWIL has been investing in cutting-edge technologies at its ports and terminals to ensure that the operations are sustainable and greenhouse gas (GHG) emissions are reduced. We continue to adopt energy-efficient and sustainable technologies such as covered storage yards and windshields around open yards for bulk materials to prevent fugitive emissions, water sprinkling, dust suppression and firefighting systems in the mechanical material handling system. Windshields are used to isolate the cargo areas and protect the surrounding areas from fugitive dust. Closed conveyors along with dust suppression at the transfer towers and stockpiles prevent dust particles emission to the atmosphere. State-of-the-art monitoring systems are used to monitor ambient pollution levels.

- JSWIL is committed to provide a safe and healthy workplace for all. Various initiatives such as mandatory safety training for all employees and contract workers as per the pre-defined training schedule, mechanised handling of cargo with minimum manual intervention to minimise chances of accidents, Safety Tool Box Talks to all the working personnel on a regular basis, mechanism to evaluate contractors' safety culture, are undertaken to ensure that our people, contractual workforce, vendors and other stakeholders comply with health and safety guidelines issued by the government, as well as our management. There is a robust process for safety performance monitoring and management. Mandatory individual and site level KRAs are linked to variable pay based on ESG/safety performance.
- JSWIL has initiated various people-centric programmes, which are designed to supplement its efforts to achieve business outcomes, building capability, developing scalable processes by leveraging digital tools and maximising productivity.
- To ensure that sustainability is successfully implemented across the company, JSWIL has introduced a Board level Sustainability Committee, responsible for approving and reviewing all the interventions on a periodic basis. The management is cohesive and focussed on ensuring enhanced ESG performance and practices, maintaining high operational excellence and improving profitability.
- JSWIL was recognised by the industry with awards and accolades such as Golden Peacock Award for Occupational Health & Safety – 2020, Greentech Environment Award, 2020 in the Environment Protection (Ports) Category for setting Best Available Technology (BAT) for demonstrating best energy, air and water quality management techniques at JSW South West Port Limited (SWPL) and Platinum Award for outstanding achievements in safe workplace management in the service sector by Apex India Foundation.

2 JSWIL's Rationale for Establishing a Sustainability-Linked Bond (SLB) Framework

JSWIL not only acknowledges the impact of its business on the local and global environment, but also recognises that it can be part of the 'solution'. It is such acknowledgement that has motivated JSWIL to develop a comprehensive plan to adopt sustainable solutions for the business to ensure that performance is improved without quality being compromised.

As such, we have chosen to develop this Sustainability-Linked Bond Framework (the "Framework") to link our funding with our sustainability objectives and leverage ambitious timelines to achieve an improved sustainability performance that is relevant, core and material to both our business and the wider sector we operate in.

3 Sustainability-Linked Bond Framework

JSWIL's Sustainability-Linked Bond Framework is aligned to the Sustainability-Linked Bond Principles ("SLBP", June 2020) as administered by the International Capital Markets Association (ICMA), which are voluntary process guidelines that outline best practices for financial instruments to integrate forward-looking ESG targets and promote integrity in the development of the SLB market.

The Framework is aligned with the five core components of the SLBPs, which are:

1. Selection of Key Performance Indicators (KPIs)
2. Calibration of Sustainability Performance Targets (SPTs)

3. Characteristics of Sustainability-Linked Financing Instruments
4. Reporting
5. Verification

DNV has provided a Second Party Opinion on the Framework to confirm its alignment with the above Principles. This Second Party Opinion will be made publicly available alongside the Framework on our website, at <https://www.jsw.in/infrastructure>.

4 Selection of Key Performance Indicators (KPI)

India is expected to become a US\$ 5 Trillion economy by 2024-25. Given such growth projections, the government is continuing to focus on infrastructure as a key sector on building a 'self-reliant' India. JSWIL can play an active role in providing the infrastructure required to facilitate such growth.

India's economic growth is set in a context where climate crisis is one of the biggest threats of the 21st century, something amplified by the publication of the IPCC's AR6 report and COP26 in 2021. Sea ports are estimated to facilitate 80%¹ of global world trade volume. By implementing the sustainability framework at its ports, JSWIL will realise the benefits of system-level consideration that sustainability KPI can bring, whilst also facilitating emissions reductions in ports' direct control and their zone of influence.

Given both domestic and international growth expectations, it is crucial that JSWIL not only meets growing demand for its products & services, but proactively undertakes measures to do it in a way that is consistent with a low carbon economy and national environmental objectives.

KPI: Scope 1 & 2 GHG intensity kg of CO₂e per tonne of cargo handled (kg CO₂e/tch)

Climate change has emerged as one of the paramount perils of the 21st century. The Paris Agreement and India's resulting Intended Nationally Determined Contributions (INDC) assume particular importance in this context, driving calls for active decarbonisation for all industries including infrastructure. Given the context JSWIL has selected KPI(s) based on the premise that it is core, relevant and material to its business operations.

We also view the need to innovate and improve our environmental and carbon footprint as key not just to achieving an environmentally sustainable footprint, but also to an economically sustainable and viable business model that allows us to maintain and develop our strategic position in the future.

Given these growth expectations in the Indian context, we therefore view emissions intensity as a particularly relevant and material metric that captures the need to balance our role in supporting the economic and social development of India with the imperative of improving our carbon footprint.

Our ports and terminals at Southwest Port Goa, Jaigarh Port Maharashtra, Dharamtar Port Maharashtra, Paradip Terminal Odisha, Mangalore Coal Terminal Karnataka, Ennore Coal Terminal Tamil Nadu and Ennore Bulk Terminal Tamil Nadu comprised 100% of cargo handling in Indian ports and terminals during the base year 2020-21 and are therefore the basis of our data collection and emissions intensity calculations. Together, the Scope 1 and Scope 2 emissions from these ports and terminals account for around 70% of the total emissions of the company. Our base/most recent year (2020-21) GHG emissions intensity of Scope 1 and 2, across our ports and terminal operations based in India are provided in the table below.

¹ UNCTA, June 2021

JSW Infrastructure FY21 Emission Intensity					
Location	Cargo Handled (MT)	Scope-1 Emissions (tCO ₂ e)	Scope-2 Emissions (tCO ₂ e)	Scope-1 & 2 Emissions (tCO ₂ e)	GHG Intensity (kgCO ₂ e/MT)
SWPL	6,829,440	1017.79	7538.42	8376.21	1.23
Dharamtar	12,931,542	931.35	7397.92	8329.27	0.64
Mangalore	2,557,695	340.81	2729.17	3069.97	1.20
Paradip	8,428,178	2.15	9363.89	9366.05	1.11
Ennore	6,397,233	1936.06	7745.40	9681.46	1.51
Jaigarh	9,232,554	18116.92	1232.19	19349.11	2.10
Total	46,376,642	22345.08	35826.99	58172.07	1.25

The GHG inventory of JSWIL was prepared in accordance with the requirements of ISO 14064-1 (2018) 'Greenhouse Gases – Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals', and the Greenhouse Gas Protocol – A Corporate Accounting and Reporting Standard (Revised edition) published by World Business Council for Sustainable Development (WBCSD) and World Resources Institute (WRI) and GRI Standards: 2016 - GRI 305-1,2,4.

The assurance of GHG Emissions is conducted in accordance with 'Limited Assurance' procedures as per DNV's VeriSustain™¹ protocol i.e customized engagement was performed based on principles of completeness, accuracy and reliability and this verification applies a ±5% uncertainty threshold towards errors and omissions based on DNV Verisustain.

Scope 3 emissions have been estimated to be less than 30% of the total emissions. These are on account of emissions by third parties and we do not have direct control on these emissions. Accordingly, the Scope 3 emissions have been kept out of the target setting process. However, the Scope 3 emissions will be measured and efforts will be made to reduce the emissions by influencing the third party operations to be in line with our vision and strategy for reduction of GHG emissions such as encouraging our vendors and suppliers to use electric vehicles (EVs), minimising business travel by use of online meeting platforms, running of ship auxiliary power supply through grid electricity during berthing, regular monitoring of the adherence to the supplier codes of conducts for the purchased goods and services, etc.

¹ The VeriSustain protocol is available on request from www.dnv.com

* Assurance Engagements other than Audits or Reviews of Historical Financial Information.

5 Calibration of Sustainability Performance Targets (SPT)

SPT: Reduce Greenhouse Gas (GHG) Scope 1 & 2 Emissions Intensity in Kilograms of CO₂ Equivalent per Tonne of Cargo Handled (kg CO₂e/tch)

	Observation date	Units	Baseline	2025-26
SPT	31.03.2026	Kg CO ₂ e/tch	2020-21	-15%

Recognizing our role as one of the leading infrastructure providers in India, we have set ourselves the target of reducing our CO₂ emissions intensity by FY2025 – 26 to 1.06 kgCO₂e/tch, a reduction of 15% from the base year of FY2020 – 21, which goes beyond India’s commitment to the Paris Agreement through its Nationally Determined Contributions (NDC), which has considered a base year of 2005.

Achieving this target requires us to significantly adjust our processes beyond a “business-as-usual” scenario by 2030-31. We aim to implement the following key initiatives to further reduce our emission intensity

1. Switchover to Renewable Power from existing thermal connected grid supply at our ports and terminal operations;
2. Convert the diesel operated fleet used in our operations to Electric Vehicles;
3. Explore alternate fuels such as biodiesel;
4. Various Improvements in process and energy efficiency based on global benchmarking process.

The SPT as determined by JSWIL is in line with JSWIL’s wider ambition to achieve a 35% reduction in GHG emissions intensity (kg CO₂e/tch) by 2030-31 against a 2020-21 baseline. India, as part of NDC under the Paris Agreement, has set a target to reduce the emissions intensity of its GDP by 33-35% between 2005 and 2030 that was amended to 45% during the COP26 at Glasgow. Comparatively, JSWIL is setting a target to reduce carbon intensity by 35% over a 10-year period from FY2020-21 to be achieved by FY2030-31. To achieve this progressively, a target to achieve 15% reduction has been set to be achieved within 5 years. i.e. by 31.03.2026.

Therefore, JSWIL is actively contributing to India’s decarbonisation target by having its own ambition to achieve a greater reduction in GHG emissions intensity than that outlined by India’s Nationally Determined Contribution (NDC).

6 Characteristics of Sustainability-Linked Bond

Performance against the selected KPI will be tied to the financial structure of any Sustainability-Linked Instrument issued in accordance with this Framework. Specifically, if the SPT associated with its respective KPI is not met, this will result in a coupon adjustment. The step-up margin amount and reference date for the relevant SPT(s) will be specified in the relevant documentation of the specific transaction (e.g. Final Terms of the relevant Sustainability-Linked Bond)

Any recalculation of GHG emissions baseline intensity level will be reported in the Integrated Report to be published annually and verified by an External Verifier. Proceeds will be used for general corporate purposes unless otherwise specified in the relevant transaction documentation.

A Second Party Opinion on the Framework confirms its alignment with the SLBPs.

7 Reporting

A report detailing the progress made on the KPI and SPT will be made publicly available on at least an annual basis and for any date that is relevant for assessing the trigger of the SPT performance. The report will be made publicly available on JSWIL's company website <https://www.jsw.in/infrastructure>.

Reporting may include:

- Up-to-date, information enabling investors to monitor the performance of the selected KPI(s), including the baselines where relevant and the application of any recalculation procedures where relevant (i.e. improved methodology);
- A verification assurance report relative to the SPT(s) outlining JSWIL's performance against the SPT and the related impact, and timing of such impact, on the bond's financial and/or structural characteristics;
- Reporting will also include any documentation used to calculate JSWIL's performance against SPT;
- Information enabling investors to monitor the level of ambition in respect of the SPT (e.g., any update in our sustainability strategy or governance considerations having an impact on the KPI) and more generally any information relevant to the analysis of the KPIs and SPT.

8 Verification

8.1 Pre-issuance:

DNV has been engaged as a Second Party Opinion provider (SPO). DNV has provided an independent external review to confirm the Framework's alignment with the SLBPs and SLLPs, as outlined above. In the event of material changes to the Framework including, but not limited to, any updated versions of ICMA's SLBPs, another SPO will be provided.

The SPO will be publically disclosed on JSWIL's website <https://www.jsw.in/infrastructure>.

8.2 Post-issuance:

Post issuance, on at least an annual basis until the last trigger event has been reached, a qualified external reviewer will be engaged to review the performance of KPI(s) against SPT. The verification will be made publicly available and published on the JSWIL's company website <https://www.jsw.in/infrastructure>.

Disclaimer

This Framework may contain “forward-looking statements” with respect to JSWIL and its subsidiaries’ business, results of operations, and financial condition and JSWIL’s expectations or beliefs concerning future events and conditions. You can identify certain forward-looking statements because they contain words such as, but not limited to, “believes,” “expects,” “may,” “should,” “approximately,” “anticipates,” “estimates,” “intends,” “plans,” “targets,” “likely,” “will,” “would,” “could” and similar expressions (or the negative of these terminologies or expressions). All forward-looking statements involve risks and uncertainties. Many risks and uncertainties are inherent in JSWIL’s industry and markets. Others are more specific to JSWIL’s business and operations. The achievement of the expected results depends on many events, some or all of which are not predictable or within JSWIL’s control. Actual results may differ materially from the forward-looking statements contained in this Framework. Any recipient of this Framework acknowledges that circumstances may change and the contents of this Framework may become outdated as a result. No representation is made as to the suitability of any sustainability-linked securities of JSWIL to fulfil environmental and sustainability criteria required by prospective investors. This Framework does not create any legally enforceable obligations against JSWIL; any such legally enforceable obligations relating to any sustainability-linked securities are limited to those expressly set forth in the legal documentation governing each such series of sustainability-linked securities. Therefore, unless expressly set forth in such legal documentation, JSWIL’s failure to adhere or comply with any terms of this Framework, including, without limitation, failure to achieve any sustainability targets or goals set forth herein, will not constitute an event of default or breach of contractual obligations under the terms and conditions of any such sustainability-linked securities. Factors that may affect JSWIL’s ability to achieve any sustainability goals or targets set forth herein include (but are not limited to) market, political and economic conditions, changes in government policy (whether with a continuity of the government or on a change in the composition of the government), changes in laws, rules or regulations, and other challenges.