

# Materiality

## Approach to Materiality

JSW Energy Limited recognises that gaining a holistic understanding of its societal and environmental impacts—along with related ESG risks and opportunities—is essential for sustaining long-term growth and success. The Company embeds stakeholder insights and expectations into its key decision-making processes.

In addition, JSW Energy is committed to the ongoing identification and disclosure of material sustainability issues through periodic materiality assessments. Conducted at regular intervals, these assessments help ensure that the Company's priorities remain aligned with evolving stakeholder expectations and the dynamic business environment.

## Double Materiality Assessment

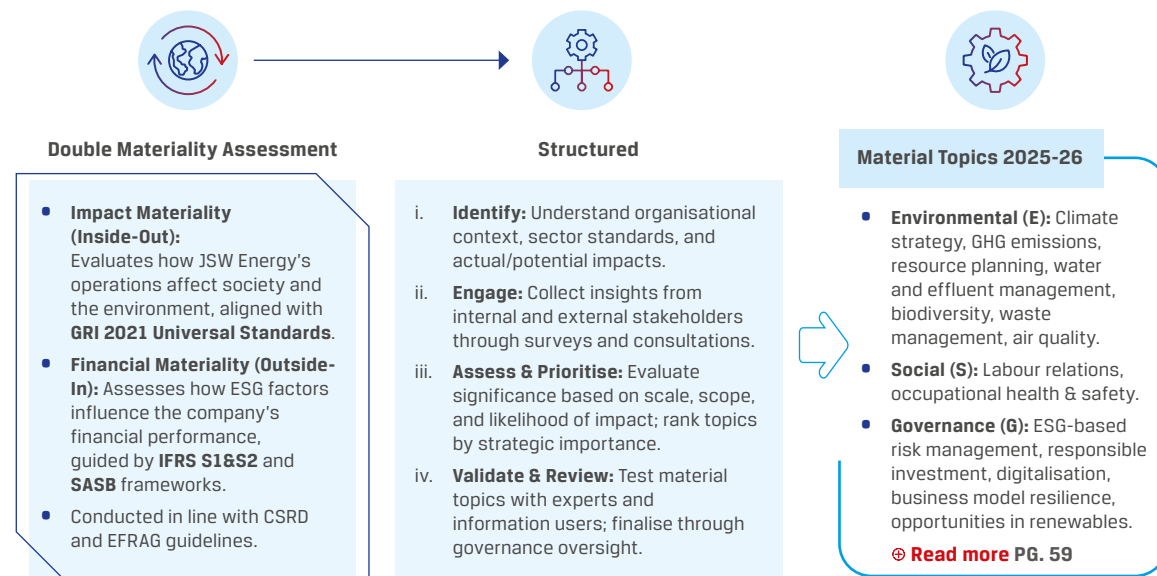
In FY 2024, JSW Energy undertook a comprehensive double materiality assessment, covering both impact and financial dimensions. The impact assessment followed an inside-out approach in line with the Global Reporting Initiative (GRI) 2021 Universal Standards, while the financial materiality analysis adopted an outside-in perspective, guided by the IFRS Foundation and SASB frameworks. No significant changes were identified compared to the previous reporting period.

This integrated approach reflects the Company's recognition of the interlinkages between ESG factors, acknowledging that these factors both affect and are affected by its operations. The assessment was anchored on two key pillars –

stakeholder engagement and impact analysis – in alignment with the Corporate Sustainability Reporting Directive (CSRD) and the European Financial Reporting Advisory Group (EFRAG) guidelines.

Through a structured stakeholder engagement process, the Company captured inputs from both internal and external stakeholders, enabling a deeper understanding of evolving ESG priorities. Parameters such as scale, scope, and likelihood of impacts were systematically assessed to derive quantitative scores for each ESG topic across both materiality dimensions, with the company planning to undertake a comprehensive double materiality assessment in FY 2027.

## Approach



**Frequency:** The company reviews and validates the material topics annually as part of its Integrated Report and Sustainability Report to ensure continued relevance. If significant changes occur, the matrix is updated accordingly.

## Materiality Matrix

Topics that received a materiality percentile score above the defined threshold were identified as material. We present these material topics in the adjacent graph and provide further details in the list below.



### Environment

- Climate Strategy
- Greenhouse Gas Emissions & Energy Resource Planning
- Resource Use and Management
- Life Cycle Management of Assets
- Air Quality
- Waste Management
- Water and Effluent Management
- Impact on Biodiversity

### Social

- Labour Relations
- Occupational Health and Safety

### Governance

- Economic Performance
- Business Model Resilience
- Technology, Product and Process Innovation
- Responsible Investment
- Opportunities in Renewable Energy
- Digitalisation and Automation
- ESG-based Enterprise Risk Management
- End-Use Efficiency & Demand

The material topics were classified under environmental (E), social (S), and governance (G) categories.

## Mapping of Material Topics to Key Risks, GRI Standards and UNSDGs

Material Topics	Linkage to Key Risk	GRI Linkages	SDG Linkages
Climate Strategy	Enhancing RE capacity	GRI 3, 201-2, 305	
Greenhouse Gas Emissions & Energy Resource Planning	Enhancing RE capacity, Battery Energy Storage Systems, Pumped Storage Hydro Power	GRI 302, 305	
Resource Use and Management	Water Stewardship, Waste Water Management, Enhancing RE capacity	GRI 301, 302, 303	
Life Cycle Management of Assets	Resilient Supply Chain, Circular Economy	GRI 3, 301, 308	
Air Quality	Air Emission Management (PM, SOx, NOx)	GRI 305	
Waste Management	Fly Ash Management (100% utilisation)	GRI 306	
Water and Effluent Management	Water Scarcity (Zero Liquid Discharge at all Power Plants)	GRI 303	
Impact on Biodiversity	Biodiversity (Risk Assessment and Mitigation Strategy)	GRI 304	
Labour Relations	Human Rights Risk Assessment, Green job creation through RE capacity enhancement	GRI 402, 407	
Occupational Health and Safety	Occupational Health & Safety (Hazard Identification and Risk Assessment)	GRI 403	
Economic Performance	Adoption of Climate Smart Technologies (Wind, Solar, BESS, Green Hydrogen)	GRI 201	
Business Model Resilience	Enhancing RE capacity	GRI 3, 201-2	
Technology, Product and Process Innovation	Technology Risk (Utilising new technologies Wind, Solar, BESS, Green Hydrogen)	GRI 203, 302	
Responsible Investment	Collaboration for investments in new technologies Wind, Solar, BESS, Green Hydrogen	GRI 201, 203	
Opportunities in Renewable Energy	Shift in consumer preference towards clean energy	GRI 302, 201-2	
Digitalisation and Automation	Integrated Digital Command Centre for Energy Management	GRI 203, 302	
ESG-based Enterprise Risk Management	ESG Risk Management (TCFD Risk Assessment)	GRI 2, 3	
End-Use Efficiency & Demand	Enhancement in Low Carbon, RE generation capacity	GRI 302, 203	


## Quality Certifications

Company	Certifications
<b>JSW Energy:</b>	ISO/IEC 27001:2013 (Operational Technology)
<b>JSW Hydro Energy:</b>	ISO 9001:2015 ISO 14001:2015 ISO 45001:2018 ISO 50001:2018
<b>JSW Neo Energy:</b>	ISO 9001:2015 ISO 14001:2015 ISO 45001:2018
<b>JSW Energy (Barmer):</b>	ISO 50001:2018 ISO 9001:2015 ISO 14001:2015 ISO 45001:2018 ISO 22301:2019
<b>JSW Energy (Ratnagiri):</b>	ISO 50001:2018 ISO 9001:2015 ISO 14001:2015 ISO 45001:2018 ISO 22301:2019
<b>JSW Energy (Vijayanagar):</b>	ISO 9001:2015 ISO 14001:2015 ISO 45001:2018 ISO 50001:2018



# Management of Material Issues – Enterprise Value Creation

## Material issue



**Climate Strategy**

**Business case**

As a significant player in India's energy landscape, we ensure reliable, affordable, and sustainable power while supporting national green transition pathways and Net Zero ambitions. Expanding and diversifying into a low-carbon, clean-energy portfolio de-risks the enterprise and secures long-term competitive returns.

**Business Strategies**

- **Renewable-Led Growth:** Rapidly expanding installed wind, solar, and hydro capacities to achieve 30 GW of operational generation by FY 2030, ensuring over 70% of the locked-in portfolio is powered by renewables.
- **Energy Optimisation & Digitalisation:** Enhancing operational eco-efficiency and lowering auxiliary power consumption (APC) using the JSW PI System and Integrated Digital Command Centre (IDCC) for real-time asset monitoring.

**Business Impact**

Risk

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**Target**

Achieve 30 GW installed capacity by 2030 with >70% RE mix

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**Progress**

~13.5 GW installed capacity achieved with addition of 58% RE capacity



**Water & Effluent Management**

**Business case**

Water is a finite, vital resource for fundamental plant processes like cooling, fire safety, and ash handling. Optimising efficiency, lowering specific freshwater intake, and minimising wastewater discharge are essential to insulate production schedules from worsening regional water stress.

**Business Strategies**

- **Recycling Infrastructure:** Operating industrial Reverse Osmosis (RO) to reduce dependency on raw water sources
- **Water Neutrality Frameworks:** Scaling Scope 1 water neutrality and water positivity assessments under NITI Aayog guidelines across assets to minimise watershed footprints.

**Business Impact**

Risk

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**Target**


Achieve ~38% water intensity till 2030 from baseline\* 2020.

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**Progress**

~10-15% Waste water recycled every year.

\* Sustainability KPI for JSW Energy is defined from a baseline of 1<sup>st</sup> April 2020 with the targets to be achieved on or before 31<sup>st</sup> March 2030.



**Responsible Investment**

**Business case**

Transitioning from a thermal-heavy utility into an integrated green energy platform directly drives capital appreciation, improves financial returns, and safeguards long-term enterprise value for shareholders.

**Business Strategies**

- **Strategic Capital Pivot Toward Renewables:** Aggressively directing capital allocation toward renewable and transition segments – such as solar, wind, hydro, and hydro pumped storage projects (PSP) – with a defined strategic growth pathway to reach 30 GW of capacity by 2030.
- **Embedding the Shadow Pricing Method:** Utilising an Internal Carbon Pricing (ICP) framework that applies a specified shadow carbon cost per tonne of USD 11-12 emissions to systematically evaluate the economic viability of all upcoming low carbon projects.

**Business Impact**

Risk

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**Target**

>70% capex allocation towards renewable and green technologies

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**Progress**

~76% of FY 2026 capex aligned to RE and low-carbon initiatives. Internal Carbon Pricing adopted at USD 11-12/tCO<sub>2</sub>e for project evaluation

## Management of Material Issues – External Stakeholders

Material Issues for External Stakeholders	Cause of Impact	Impact Area	Rationale for Identifying the Issue	Quantitative Impact
1) Addition of RE capacity	Expansion of renewable energy assets and infrastructure	Climate change mitigation, energy transition	Supports Net Zero commitment and reduces reliance on fossil fuels	<b>Output Metric:</b> Installed RE capacity (7,796 MW) <b>Impact Metric:</b> 58% RE in total portfolio; 5.7 million tCO <sub>2</sub> e avoided
2) Reduced GHG Emissions Intensity	Energy mix transition, efficiency improvements, digital optimisation	Climate change, regulatory compliance, investor confidence	Key KPI for decarbonisation aligned with global frameworks (GRI 305, TCFD)	<b>Output Metric:</b> Total GHG emissions (~32 million tCO <sub>2</sub> e) <b>Impact Metric:</b> Emissions intensity (0.59 tCO <sub>2</sub> e/MWh)