



SDG7 Energy Compact of JSW ENERGY LIMITED

A next Decade Action Agenda to advance SDG7 on sustainable energy for all, in line with the goals of the Paris Agreement on Climate Change

SECTION 1: AMBITION

1.1. Ambitions to achieve SDG7 by 2030. [Please select all that apply, and make sure to state the baseline of each target]

(Member States targets could be based on their NDCs, energy policies, national five-year plans etc. targets for companies/organizations could be based on their corporate strategy)

<input type="checkbox"/> 7.1. By 2030, ensure universal access to affordable, reliable and modern energy services.	Target(s): Time frame: Context for the ambition(s):
<input checked="" type="checkbox"/> 7.2. By 2030, increase substantially the share of renewable energy in the global energy mix.	<p>Target(s): To increase the renewable energy share in JSW Energy’s mix generation to 80% by 2030</p> <p>Time frame: 2030 (10 years) Baseline: 2020-21 (30% of mix) Target: 2030 (80% of mix) Operating Capacity of 20GW out of which Renewable Energy Share will be about 16.8 GW.</p> <p>Context for the ambition(s): JSW Energy has set a vision of becoming a 10 GW company by 2025 and 20 GW company by 2030, with all the incremental capacity additions coming predominantly from the Renewable Energy sources. In achieving the vision JSW Energy has committed to become carbon-neutral by 2050. Renewable energy share includes Solar, Wind, Waste Heat Recovery and Hydropower.</p>
<input type="checkbox"/> 7.3. By 2030, double the global rate of improvement in energy efficiency.	Target(s): Time frame: Context for the ambition(s):
<input type="checkbox"/> 7.a. By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology.	Target(s): Time frame: Context for the ambition(s):
<input type="checkbox"/> 7.b. By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programs of support.	Target(s): Time frame: Context for the ambition(s):

1.2. Other ambitions in support of SDG7 by 2030 and net-zero emissions by 2050. [Please describe below e.g., coal phase out or reforming fossil fuel subsidies etc.]

Target(s):
 Time frame:
 Context for the ambition(s):

SECTION 2: ACTIONS TO ACHIEVE THE AMBITION

2.1. Please add at least one key action for each of the elaborated ambition(s) from section 1. [Please add rows as needed].

<p><i>Description of action (please specify for which ambition from Section 1)</i> 7.2 Target: To increase the renewable energy share in JSW Energy’s mix generation to 80% by 2030 We have a clear strategic priority: To grow our generation portfolio by investing in renewable energy: wind, solar and hydro.</p> <ol style="list-style-type: none"> 1. Increase Renewable energy share to 68% by FY 25 2. Increase Renewable energy share to 84% by FY 30 <p>At present around 2GW projects of wind, solar and hydro are under construction and which are expected to be commissioned by FY2023. Further, JSW Energy has signed an MOU with the Maharashtra State Government for development of 6500 MW of renewable power out which 5000 MW shall be wind power and 1500 MW shall be hydropower. These projects are also expected to be developed by 2025 enabling JSW Energy to achieve its expected target of 10 GW capacity by 2025.</p> <p>The breakup of the mix expected is as follows –</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #1a3d4d; color: white;"> <th>Installed Capacities</th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> <th>6</th> <th>7</th> <th>8</th> <th>9</th> <th>10</th> </tr> <tr style="background-color: #1a3d4d; color: white;"> <th></th> <th>2021</th> <th>2022</th> <th>2023</th> <th>2024</th> <th>2025</th> <th>2026</th> <th>2027</th> <th>2028</th> <th>2029</th> <th>2030</th> </tr> </thead> <tbody> <tr> <td style="background-color: #d9e1f2;">JSW Existing Thermal Capacity (MW)</td> <td>3,158</td> <td>3,158</td> <td>3,158</td> <td>3,158</td> <td>3,158</td> <td>3,158</td> <td>3,158</td> <td>3,158</td> <td>3,158</td> <td>3,158</td> </tr> <tr> <td style="background-color: #d9e1f2;">JSW Hydro Capacity (MW)</td> <td>1,391</td> <td>1,391</td> <td>1,391</td> <td>1,631</td> <td>1,631</td> <td>1,631</td> <td>1,631</td> <td>1,631</td> <td>1,631</td> <td>1,631</td> </tr> <tr> <td style="background-color: #d9e1f2;">Total Renewable Capacity (MW)</td> <td>10</td> <td>235</td> <td>2,226</td> <td>3,226</td> <td>5,226</td> <td>7,226</td> <td>9,226</td> <td>11,226</td> <td>13,226</td> <td>15,226</td> </tr> <tr style="background-color: #d9e1f2;"> <td>Total Cumulative capacities (MW)</td> <td>4,559</td> <td>4,784</td> <td>6,775</td> <td>8,015</td> <td>10,015</td> <td>12,015</td> <td>14,015</td> <td>16,015</td> <td>18,015</td> <td>20,015</td> </tr> </tbody> </table> <p>To achieve the above JSW Energy will deploy Life-cycle Approach towards Renewable through the following –</p>	Installed Capacities	1	2	3	4	5	6	7	8	9	10		2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	JSW Existing Thermal Capacity (MW)	3,158	3,158	3,158	3,158	3,158	3,158	3,158	3,158	3,158	3,158	JSW Hydro Capacity (MW)	1,391	1,391	1,391	1,631	1,631	1,631	1,631	1,631	1,631	1,631	Total Renewable Capacity (MW)	10	235	2,226	3,226	5,226	7,226	9,226	11,226	13,226	15,226	Total Cumulative capacities (MW)	4,559	4,784	6,775	8,015	10,015	12,015	14,015	16,015	18,015	20,015	<p><i>Start and end date</i> Apr 2021 to March 2030</p>
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- Project Selection Philosophy
- Project Construction and Land Acquisition
- Power Evacuation
- Selection of Supplier & Vendors
- Implementation of Quality Control
- Develop in house O&M team

JSW has estimated the capital allocation as follows –

Estimated Capex for future projects

INR Crores (1 crore = 10 million)	2022	2025	2030
TOTAL CAPEX	4,955	34088	85813*

TOTAL DEBT	3,716	25566	64360
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TOTAL EQUITY	1,239	8522	21453
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*Cumulative figure upto 2030

- JSW Energy envisages to use a mix of equity infusion from internal accruals & cash flows and securing debt from lending agencies.
- Technology support to increase viability of battery storage and micro grid – JSW Energy will constantly explore and evaluate upcoming technologies related to battery storage in the coming years.
- Land Availability and Site Selection – JSW Energy will focus on energy rich states within India and work with aggregators to ensure the land is available prior to any investment decisions are finalized.

Description of action (please specify for which ambition from Section 1)

Start and end date

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Start and end date

SECTION 3: OUTCOMES

3.1. Please add at least one measurable and time-based outcome for **each** of the actions from section 2. [Please add rows as needed].

Outcome

7.2 Target: To increase the renewable energy share in JSW Energy's mix generation to 80% by 2030

Date

March 2030

Operating Capacity of 20 GW out of which Renewables will have a share of 16.8 GW.

Installed Capacities	1 2021	10 2030
JSW Existing Thermal Capacity (MW)	3,158	3,158
JSW Hydro Capacity (MW)	1,391	1,631
Total Renewable Capacity (MW)	10	15,226
Total Cumulative capacities (MW)	4,559	20,015

SECTION 4: REQUIRED RESOURCES AND SUPPORT

4.1. Please specify required finance and investments for **each** of the actions in section 2.

Capital availability as mentioned under section 2.1

Technology support to increase viability of battery storage and micro grid - as mentioned under section 2.1

Land Availability - as mentioned under section 2.1

4.2. [For countries only] In case support is required for the actions in section 2, please select from below and describe the required support and specify for which action.

[Examples of support for Member States could include: Access to low-cost affordable debt through strategic de-risking instruments, capacity building in data collection; development of integrated energy plans and energy transition pathways; technical assistance, etc.]

<input type="checkbox"/> Financing	Description
<input type="checkbox"/> In-Kind contribution	Description
<input type="checkbox"/> Technical Support	Description
<input type="checkbox"/> Other/Please specify	Description

SECTION 5: IMPACT

5.1. Countries planned for implementation including number of people potentially impacted.

India

5.2. Alignment with the 2030 Agenda for Sustainable Development – Please describe how **each** of the actions from section 2 impact advancing the SDGs by 2030.
[up to 500 words, please upload supporting strategy documents as needed]

The target will help achieve SDG 7: Affordable and clean energy | SDG 8: Decent work and economic growth | SDG 9: Industry, innovation and infrastructure. The targets will help achieve SDG 7: Affordable and clean energy | SDG 8: Decent work and economic growth | SDG 9: Industry, innovation and infrastructure. By contributing towards a more balanced and sustainable world, we aim to play a meaningful role in meeting the country's growing future demand for energy; in meeting the Government's target for adding 450GW of renewable generation by 2030; and in enabling India to outperform its Paris pledges. Refer to JSW Energy Integrated Report FY 20 – 21 - <https://www.jsw.in/sites/default/files/assets/downloads/energy/Financial%20Releases/Annual%20Reports/Integrated%20Annual%20Report%202021.pdf>

5.3. Alignment with Paris Agreement and net-zero by 2050 - Please describe how **each** of the actions from section 2 align with the Paris Agreement and national NDCs (if applicable) and support the net-zero emissions by 2050.
[up to 500 words, please upload supporting strategy documents as needed]

The landmark Paris Agreement accord is the compass, steering numerous nations towards lowering greenhouse gas emissions. To meet 1.5 degrees by 2050, The International Renewable Energy Agency (IRENA) estimates installed renewable energy gigawatts need to increase 10x to 27,000 GW from 2,500 GW today for the mix of electricity in the energy pie to grow to over 50% in 2050 from 21% today. To achieve this the world needs to install ~840 GW/year compared to the ~200 GW/year in recent (record) years.

long term power demand is expected to grow at a CAGR of ~5% between FY21-32. This is in spite of power demand in India declined by 1.2% YoY in FY2021 as compared in FY2020 due to overall weakness in economic activity on account of Covid-19 pandemic. Renewable energy will play an instrumental role in meeting this incremental demand. Renewables are about to disrupt India's Energy System. In order to meet its climate commitments, and to achieve energy security, India has ambitious renewable energy targets by 2030 . India's nationally determined contributions (NDC) at the Paris UNFCCC conference of parties (COP) in 2015, imply 350 GW of renewable energy capacity. In 2019, the aspirations have increased to 450 GW of renewable energy capacity. Refer to JSW Energy Integrated Report FY 20 – 21 - <https://www.jsw.in/sites/default/files/assets/downloads/energy/Financial%20Releases/Annual%20Reports/Integrated%20Annual%20Report%202021.pdf>

SECTION 6: MONITORING AND REPORTING

6.1. Please describe how you intend to track the progress of the proposed outcomes in section 3. Please also describe if you intend to use other existing reporting frameworks to track progress on the proposed outcomes.

Annual disclosures through Integrated Reports and CDP submissions.

SECTION 7: GUIDING PRINCIPLES CHECKLIST

Please use the checklist below to validate that the proposed Energy Compact is aligned with the guiding principles.

I. Stepping up ambition and accelerating action - Increase contribution of and accelerate the implementation of the SDG7 targets in support of the 2030 Agenda for Sustainable Development for Paris Agreement

1. Does the Energy Compact strengthen and/or add a target, commitment, policy, action related to SDG7 and its linkages to the other SDGs that results in a higher cumulative impact compared to existing frameworks?

Yes No

I.2. Does the Energy Compact increase the geographical and/or sectoral coverage of SDG7 related efforts? Yes No

I.3. Does the Energy Compact consider inclusion of key priority issues towards achieving SDG7 by 2030 and the net-zero emission goal of the Paris Agreement by 2050 - as defined by latest global analysis and data including the outcome of the Technical Working Groups? Yes No

II. Alignment with the 2030 agenda on Sustainable Development Goals – Ensure coherence and alignment with SDG implementation plans and strategies by 2030 as well as national development plans and priorities.

II.1. Has the Energy Compact considered enabling actions of SDG7 to reach the other sustainable development goals by 2030? Yes No

II.2. Does the Energy Compact align with national, sectoral, and/or sub-national sustainable development strategies/plans, including SDG implementation plans/roadmaps? Yes No

II.3. Has the Energy Compact considered a timeframe in line with the Decade of Action? Yes No

III. Alignment with Paris Agreement and net-zero by 2050 - Ensure coherence and alignment with the Nationally Determined Contributions, long term net zero emission strategies.

III.1. Has the Energy Compact considered a timeframe in line with the net-zero goal of the Paris Agreement by 2050? Yes No

III.2. Has the Energy Compact considered energy-related targets and information in the updated/enhanced NDCs? Yes No

III.3. Has the Energy Compact considered alignment with reaching the net-zero emissions goal set by many countries by 2050? Yes No

IV. Leaving no one behind, strengthening inclusion, interlinkages, and synergies - Enabling the achievement of SDGs and just transition by reflecting interlinkages with other SDGs.

IV.1. Does the Energy Compact include socio-economic impacts of measures being considered? Yes No

IV.2. Does the Energy Compact identify steps towards an inclusive, just energy transition? Yes No

IV.3. Does the Energy Compact consider measures that address the needs of the most vulnerable groups (e.g. those impacted the most by energy transitions, lack of energy access)? Yes No

V. Feasibility and Robustness - Commitments and measures are technically sound, feasible, and verifiable based a set of objectives with specific performance indicators, baselines, targets and data sources as needed.

V.1. Is the information included in the Energy Compact based on updated quality data and sectoral assessments, with clear and transparent methodologies related to the proposed measures? Yes No

V.2. Has the Energy Compact considered inclusion of a set of SMART (specific, measurable, achievable, resource-based and time based) objectives? Yes No

V.3. Has the Energy Compact considered issues related to means of implementation to ensure feasibility of measures proposed (e.g. cost and financing strategy, technical assistance needs and partnerships, policy and regulatory gaps, data and technology)? Yes No

SECTION 8: ENERGY COMPACT GENERAL INFORMATION

8.1. Title/name of the Energy Compact

JSW Energy Limited

8.2. Lead entity name (for joint Energy Compacts please list all parties and include, in parenthesis, its entity type, using entity type from below)

JSW Energy Limited

8.3. Lead entity type

Government

Local/Regional Government

Multilateral body /Intergovernmental Organization

Non-Governmental Organization (NGO)

Civil Society organization/Youth

Academic Institution /Scientific Community

Private Sector

Philanthropic Organization

Other relevant actor

8.4. Contact Information

Mr. S.Amit Dayal

DGM, Corporate Engineering Services
JSW Energy
amit.dayal@jsw.in

8.5. Please select the geographical coverage of the Energy Compact

Africa Asia and Pacific Europe Latin America and Caribbean North America West Asia Global

8.6. Please select the Energy Compact thematic focus area(s)

Energy Access Energy Transition Enabling SDGs through inclusive just Energy Transitions Innovation, Technology and Data Finance and Investment.

SECTION 9: ADDITIONAL INFORMATION (IF REQUIRED)

Please provide additional website link(s) on your Energy Compact, which may contain relevant key documents, photos, short video clips etc.