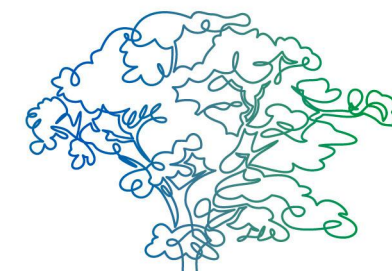




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# NATURAL CAPITAL



NATURAL CAPITAL

MATERIAL TOPICS

- » Climate Change
- » Air Emissions
- » Water Management
- » Waste Management
- » Environmental Awareness
- » Biodiversity Conservation



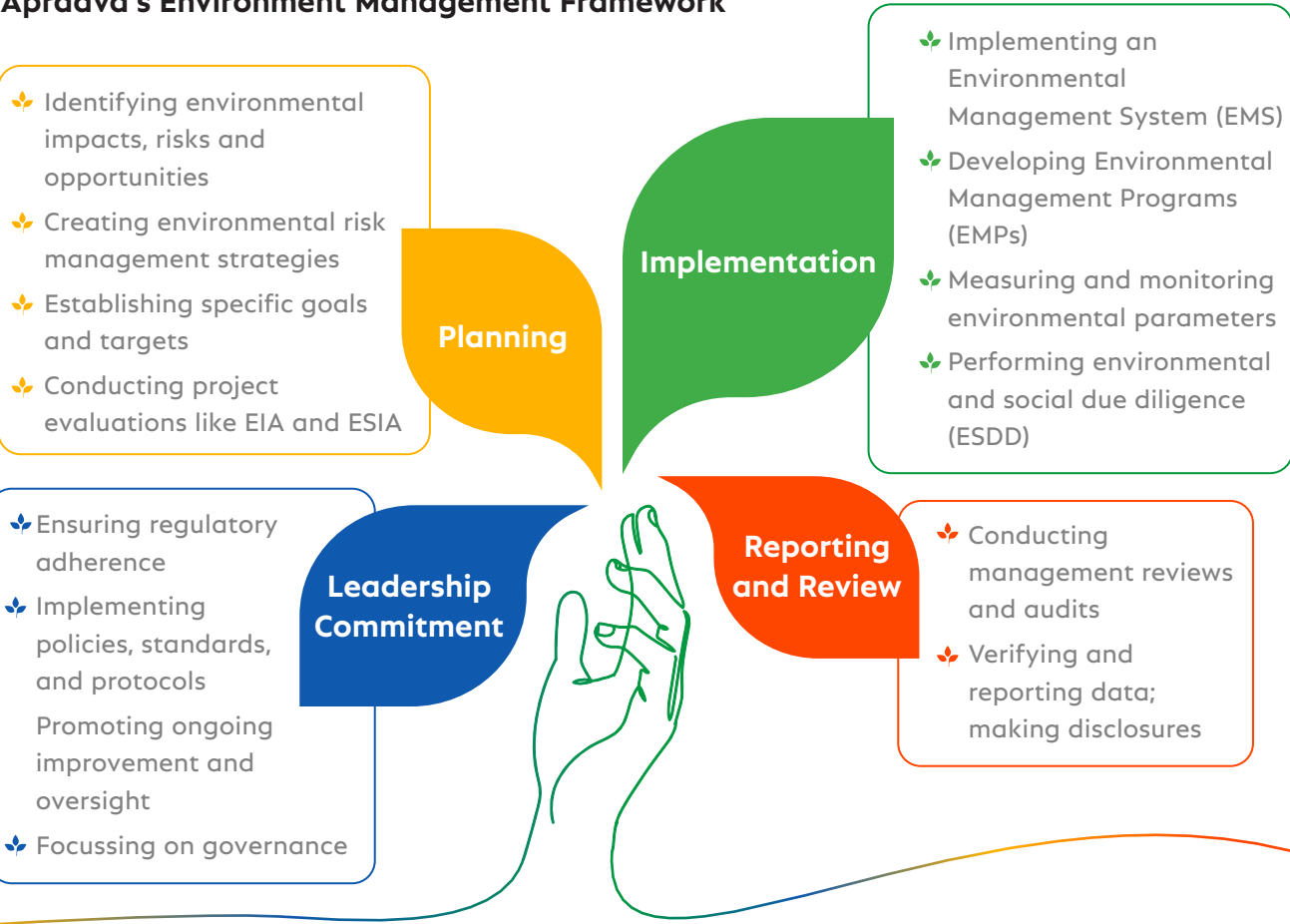
As an organisation that utilises natural resources for producing electricity and services, it is our responsibility to understand and manage them effectively to thrive in a rapidly changing world. **By embracing sustainability, innovation, and responsible stewardship, we not only mitigate risks and build resilience but also create lasting value for ourselves and the planet.** Recognising the importance of natural capital, Apraava Energy has made it a priority to integrate considerations of natural capital in everything we do. We are committed to improving our impact on the environment and ensuring a happy planet that provides for the needs of present and future generations.

Apraava Energy pursues sustainable growth with responsible consumption. To achieve this, we have been taking measures to ensure minimal carbon footprint, optimal utilisation of resources (natural and man made) and efficient management of our inventory. Our approach to natural capital is underpinned by initiatives focused on low-carbon transition, minimising dependence on freshwater consumption, controlling air pollution, eliminating plastics, managing waste responsibly, exploring circular economy opportunities, and enhancing biodiversity.

As we progress towards building a low-carbon business, we are incorporating sustainable practices across our operations. Initiatives such as dry cleaning of solar panels instead of wet cleaning, use of solar pumps instead of electric pumps, ensuring zero waste to landfill, elimination of single-use plastics, biomass co-firing, etc. are symbolic of how far we have embedded sustainability across our operations.

We have been successful in implementing Environmental Management Systems (EMS) aligned with ISO 14001:2015, a robust framework ensuring compliance with regulations and improving environmental performance. By 31 March 2024, nineteen assets of Apraava Energy, comprising twelve wind assets, five solar assets, one thermal asset, and one transmission asset, received certifications for ISO 14001:2015 – Environmental Management System; ISO 9001:2015 – Quality Management System (QMS) ISO 27001:2022 for maintaining standards on cybersecurity and ISO 45001:2018 – Occupational Health and Safety (OHS). Throughout FY 2023-24, there were no instances of Apraava Energy’s non-compliance with respect to environmental regulations that led to fines or legal actions by relevant authorities.

Apraava’s Environment Management Framework



Decarbonising our business

The power industry is a significant source of global greenhouse gas (GHG) emissions. In order to foster a happier planet, every power sector entity must endeavour to contribute towards mitigating its GHG emissions. At Apraava Energy, we are taking steps to decarbonise operations by implementing operational excellence practices, expanding our low carbon portfolio with a focus on investments in renewable energy projects and by undertaking emission reduction initiatives.

We have reached a significant milestone in our climate action journey by committing to the Science Based Targets initiative (SBTi) in FY 2021-22. SBTi has validated our targets, recognising our concerted efforts to reduce Scope 1 and 2 GHG emissions intensity (tCO<sub>2</sub>e/MWh) by 46.3% by 2027 from a 2022 base year. This marks a notable advancement from our earlier assessments. Our focus is on aligning all efforts to meet the SBTi commitment by consistently improving operational processes, thereby enhancing efficiency and effectiveness across our operations.

In FY 2022-23, we observed higher level of GHG intensity within our operations. This served as a pivotal moment for us to evaluate our strategies and strengthen our efforts towards sustainable goals. Consequently, as compared to the previous year, we have managed to reduce our GHG (Scope 1 & 2) Emission intensity by ~7%. Details have been provided in the Scope 1 and Scope 2 emission table.

Central to our sustainability journey is the increased power generation from renewable energy sources and co-firing biomass in our thermal power plant. We also recognise the importance of transitioning towards cleaner energy alternatives to mitigate our environmental impact. This strategic shift not only contributes to our overall GHG reduction goals but also reinforces our dedication to promoting environmental stewardship. We will continue to prioritise operational excellence, process innovation, and renewable energy integration to drive meaningful and lasting environmental progress.

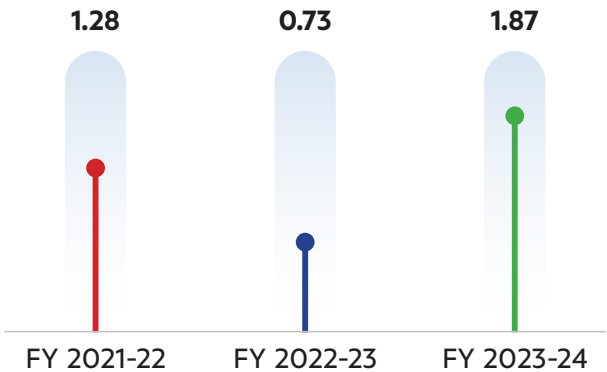


Carbon Credits

Carbon credits are a key element in the global transition to a lower-emission economy. Apraava Energy is committed to generating clean energy from renewable sources, simultaneously producing carbon credits that align with international best practices. The sale and purchase of these credits, possible both domestically and abroad, are crucial for the economic viability of other environment-friendly initiatives.

Apraava Energy is rapidly gaining recognition as a leading and reputable entity in the carbon offset market. Our wind and solar endeavours are officially accredited by the distinguished United Nations Framework Convention on Climate Change (UNFCCC) Clean Development Mechanism (CDM) and the Voluntary Carbon Standard (VCS) managed by Verra, affirming our commitment to genuine environmental stewardship.

Carbon Offsets Issued against Reduction Activities (million tonnes)



Carbon Offsets Issued to Apraava Energy Assets over Three Years (million tonnes)

| Assets                                                   | FY 2021-22 | FY 2022-23 | FY 2023-24 |
|----------------------------------------------------------|------------|------------|------------|
| Apraava Energy Private Limited                           | 0.25       | -          | 0.39       |
| Apraava Renewable Energy Private Limited                 | 0.96       | 0.51       | 1.16       |
| Apraava Wind Energy (Khandke) Private Limited            | -          | 0.04       | 0.23       |
| Apraava Wind Energy (Theni - Project II) Private Limited | -          | 0.13       | -          |
| Divine Solren Private Limited                            | 0.04       | 0.04       | 0.05       |
| Cleansolar Renewable Energy Private Limited              | 0.03       | 0.02       | 0.03       |

GHG Emissions

Apraava Energy started reporting the Direct GHG Emissions-Scope 1 (emissions from stationary combustion, mobile combustion, industrial process and fugitive emissions) and Indirect GHG Emissions-Scope 2 (emissions from the procurement of electricity), from FY 2015-16. We expanded our GHG Emissions monitoring and reporting to include Scope 3 Emissions from FY 2021-22, covering eight categories. This expansion is a significant step in our journey toward decarbonisation and enhancing the sustainability of our supply chain, allowing us to oversee emissions throughout our entire value chain.

Furthermore, Apraava Energy maintains an eco-conscious presence, with all our locations being devoid of Ozone-Depleting Substances, except for Jhajjar Power Plant (JPL), which is undergoing a systematic phase-out of R-22. During the reporting period, JPL’s ODS consumption was recorded at 0.03 MT CFC 11 equivalent.

Apraava Energy’s Scope 1 & Scope 2 Emissions

| GHG Emissions             | Unit                   | FY 2021-22 | FY 2022-23 | FY 2023-24 |
|---------------------------|------------------------|------------|------------|------------|
| Scope 1                   | CO <sub>2</sub> e (kt) | 6,516.8    | 6,847.1    | 6,761.2    |
| Scope 2 ( Location based) | CO <sub>2</sub> e (kt) | 7.50       | 11.20      | 11.74      |
| GHG Intensity             | tCO <sub>2</sub> e/MWh | 0.70       | 0.71       | 0.66       |

Biogenic CO<sub>2</sub> emission with Co-firing of Biomass in JPL: 109.19 CO<sub>2</sub> (kt)

Apraava Energy’s Scope 3 Emissions

| GHG Emissions                                   | Unit                   | FY 2022-23* | FY 2023-24 |
|-------------------------------------------------|------------------------|-------------|------------|
| Scope 3 - JPL                                   | CO <sub>2</sub> e (kt) | 130.20      | 394.27     |
| Scope 3 (Other businesses)                      | CO <sub>2</sub> e (kt) | 31.01       | 64.97      |
| Total Scope 3                                   | CO <sub>2</sub> e (kt) | 161.22      | 459.24     |
| Total GHG Emissions (Scope 1+ Scope 2+ Scope 3) | CO <sub>2</sub> e (kt) | 7,019.52    | 7,232.18   |
| Scope 3 as a % of Total GHG Emissions           | %                      | 2.29        | 6.35       |

\*Note: Refer note under table on Break-up of Scope 3 Emissions (in ktCO<sub>2</sub>e) on next page.

Break-up of Scope 3 Emissions (in ktCO<sub>2</sub>e)

| Scope 3 Category                                     | Method                  | FY 2022-23 |                   |        | FY 2023-24 |                   |        |
|------------------------------------------------------|-------------------------|------------|-------------------|--------|------------|-------------------|--------|
|                                                      |                         | JPL        | Other Businesses* | Total  | JPL        | Other Businesses* | Total  |
| Category 1: Purchased goods & services               | Hybrid data method      | 4.38       | 3.47              | 7.84   | 4.55       | 3.64              | 8.19   |
| Category 2: Capital goods                            | Spent-based method      | 0.98       | 24.08             | 25.06  | 1.29       | 57.19             | 58.48  |
| Category 3: Fuel and energy related activities       | Supplier - based method | 121.8      | 3.26              | 125.06 | 384.83     | 3.67              | 388.50 |
| Category 5: Waste generated                          | Average data method     | 0.04       | 0.006             | 0.046  | 0.06       | 0.004             | 0.06   |
| Category 6: Business travel                          | Hybrid data method      | 0.07       | 0.18              | 0.25   | 0.06       | 0.32              | 0.38   |
| Category 7: Employee commute                         | Average data method     | 0.1        | 0.02              | 0.12   | 0.04       | 0.15              | 0.19   |
| Category 9: Downstream transportation & distribution | Average data method     | 2.84       | -                 | 2.84   | 3.44       | -                 | 3.44   |
| Total                                                |                         | 130.20     | 31.01             | 161.22 | 394.27     | 64.79             | 459.24 |

\*Other Businesses include RE, transmission, Paguthan, AMI and corporate offices at Mumbai, Delhi and other offices in Ashta, Ahmedabad and Ranchi.

Note 1: Scope 3 emissions calculated using spend based method for Categories 1, 2 & 6 for FY 2022-23, the 'Greenhouse Gas Protocol Quantis' tool was used. However, the tool was decommissioned in August 2023 and is not available for use. For FY 2023-24, we have considered the USEPA EEIO Supply Chain v1.2 emission factors to calculate the emissions for the above mentioned categories. To ensure that the previous year data is comparable, we have restated data for these categories using the updated emission factors.



Progressing on the Path of Decarbonisation

In FY 2021-22, Apraava Energy took a significant step towards decarbonising our business by committing to the Science Based Targets initiative (SBTi). In June 2023, we celebrated an important milestone of having our target to reduce generation-related greenhouse gas (GHG) emissions intensity by 46.3% by 2027 w.r.t. base year 2022 validated by SBTi, in alignment with the 1.5°C scenario. Despite this progress, we encountered obstacles in meeting these targets due to shortfall in renewable energy capacity additions in the last two years, with similar challenges projected for FY 2024-25. This situation led to a deviation from the original plan of adding 700 MW of renewable capacity annually. Despite all hurdles, this year, we have managed to reduce our GHG intensity by ~7%, as compared to the previous year.

To address this further, we have set a new investment target for CY 2024 to add capacity only across our non-carbon businesses, including renewables, transmission, and AMI or any other business opportunity. This expansion, along with energy transition measures at JPL, with 3-5 % biomass firing, is expected to help meet the SBTi target.



Air Emissions

Power generation emits considerable amount of air pollutants which is why Apraava Energy is consciously working towards reducing air emissions, especially for JPL. We voluntarily installed a Flue Gas Desulphurisation (FGD) unit at JPL to curtail Sulphur Oxide (SOx) emissions, much before it was mandated by the Government of India for all thermal power plants. We have been consistently operating the same since the last five years with significant reduction in SOx emissions. Advanced air pollution control technologies such as use of fabric filters with electrostatic precipitators and use of Nitrogen Oxide (NOx) burners with Separated Over Fire Air (SOFA) dampers have enabled us to keep Particulate Matter (PM) and NOx emissions well below statutorily mandated levels.

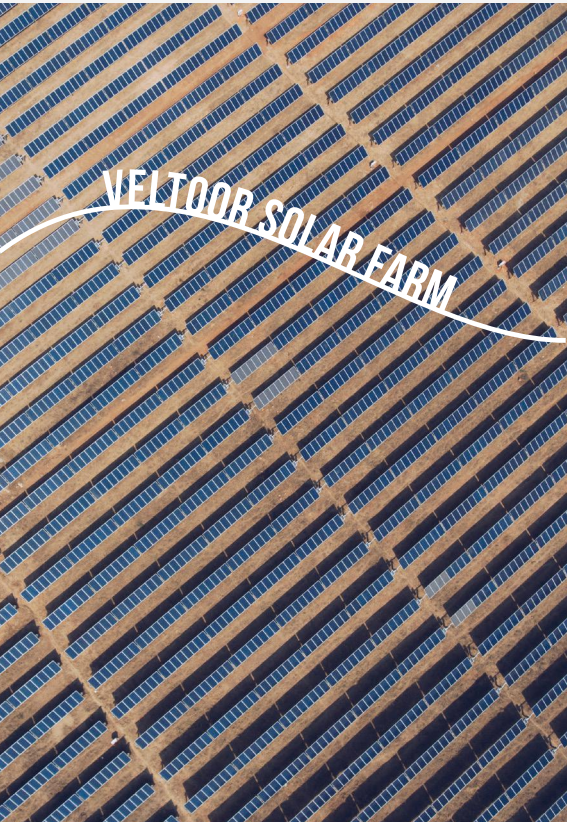
Apraava Energy's Air Emissions

| Parameter    | Unit          | FY 2021-22 | FY 2022-23 | FY 2023-24 |
|--------------|---------------|------------|------------|------------|
| PM           | Metric Tonnes | 986        | 1,006      | 909        |
| SOx          | Metric Tonnes | 5,243      | 5,770      | 5,877      |
| NOx          | Metric Tonnes | 7,334      | 8,055      | 8,965      |
| Specific PM  | Kg/MWh        | 0.14       | 0.13       | 0.12       |
| Specific SOx | Kg/MWh        | 0.72       | 0.76       | 0.76       |
| Specific NOx | Kg/MWh        | 1.01       | 1.06       | 1.16       |

Water Stewardship

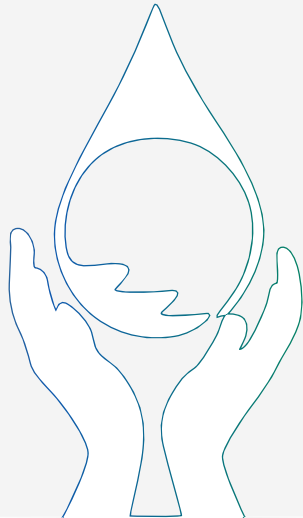
At Apraava Energy, we fully understand the vital significance of water as an essential resource and the pressing challenges faced by communities in water-stressed regions of India. Our dedication to sustainable water utilisation spans across all facets of Apraava Energy's operations. The JPL plant, despite its high dependency on water, has successfully achieved Zero Liquid Discharge (ZLD) status, underscoring our efforts to eliminate wastewater outflow. Located in a water-deficient area in Haryana, JPL is undertaking necessary measures to conserve and maximise water efficiency on site. At the plant location, JPL has initiated rainwater harvesting by installing charging wells and collecting rainwater from surfaces like rooftops, roads and other impermeable areas. JPL contributes to 99% of our water use, obtaining its supply solely through the Jawahar Lal Nehru (JLN) feeder canal. Additionally, our RE sites covered in Water Availability and Consumption table on page 96 maintain a zero discharge protocol and restrict water use and discharge for essential requirements like drinking and sanitation. By incorporating robotic dry cleaning technology for our solar photovoltaic panels, we have managed to reduce dependence on freshwater significantly across our all solar assets.

Moreover, we have established water recharging pits at all our solar energy locations, promoting rainwater collection and aiding in the recharge of groundwater reserves. Our efforts have been recognised and validated with the recently earned 'Water Neutrality Aspiring Company with Scope 1 Certification' from CII for our Veltloor and Khandke operations. This is a testament to our steadfast commitment to conscientious water governance and efforts towards reducing our ecological footprint. We are continually dedicated to integrating advanced water-saving methods throughout the entire spectrum of our activities.



Blue Rating System at Khandke and Veltloor

At the Khandke Wind Farm and Veltloor Solar Farm, we have undertaken a comprehensive assessment of our water activities, both within and beyond the fence, to evaluate water neutrality and positivity. Cognisant of the fact that water availability and quality are uncertain, we proactively applied for CII's Blue Rating System pilot project under the renewable energy category for these two sites. This forward-looking approach aligns with the Company's commitment to staying ahead of the curve and setting new benchmarks in the sector. The assessment has provided us with recommendations for further improvement, enabling us to implement learnings across other renewable assets. After the final evaluation, both sites have received "Gold" rating based on an analysis of various indicators under the category 'Within the Fence' and 'Beyond the Fence' with a potential to achieve significant progress by implementing recommended suggestions. By pursuing this path, the Company is positioning itself as an industry leader in water management and conservation.



Water Neutrality (Scope 1) Award

Dedicated and responsible water use at RE sites is a priority for us at Apraava Energy as part of our larger Environment, Social and Governance (ESG) commitment. The water status study was initiated as a first step in achieving the Water Neutrality Status, complying with the criteria of NITI Aayog Guidelines involving quantitative and qualitative real water resource offsets. The study also aimed to understand availability, quality and usage of water along with watershed management and initiatives on water conservation.

Although Renewable Energy sites consume less water as compared to conventional thermal power plants, responsible water use at all sites is a priority for Apraava Energy. As part of our long-term initiatives, we carry out research and studies to identify areas of improvement for better water management. We have conducted water studies at Khandke and Veltor sites, including hydrology research and expert analyses, resulting in actionable insights. These studies aim to improve water management across our operations, eventually leading to water neutrality. Recognition for Veltor and Khandke sites as ‘Water Neutrality Aspiring Companies’ in the CII Water Innovation Summit is demonstrative of industry leadership in sustainable water practices. Apraava Energy’s efforts reflect its commitment to environmental sustainability and responsible water use.



Water Availability and Consumption across Apraava Energy locations

| Parameter                                 | Unit   | FY 2021-22 | FY 2022-23 | FY 2023-24 |
|-------------------------------------------|--------|------------|------------|------------|
| Water Withdrawal (JPL)                    | Kl     | 16,864,036 | 16,612,531 | 15,326,696 |
| Water Consumption (JPL)                   | Kl     | 15,597,492 | 15,979,790 | 15,950,175 |
| Water Withdrawal (RE sites)               | Kl     | 36,301     | 39,675     | 29,904     |
| Water Consumption (RE sites)              | Kl     | 36,301     | 39,675     | 29,904     |
| Water Withdrawal (Consolidated)           | Kl     | 16,900,337 | 16,652,206 | 15,356,600 |
| Water Consumption (Consolidated)          | Kl     | 15,633,793 | 16,019,465 | 15,980,079 |
| Specific Water Consumption (Consolidated) | kl/MWh | 1.67       | 1.66       | 1.56       |

Note 1 : The above table does not include the data for Paguthan, Sidhpur Wind site, transmission, AMI and corporate offices at Mumbai & Delhi and other offices at Ashta, Ahmedabad and Ranchi.

Note 2 : Water consumption for JPL does not consider the water stored in the reservoir at the beginning & end of the reporting period.

Waste Management

Apraava Energy follows a comprehensive approach to waste management, focusing on both prevention and responsible disposal. We have robust waste management procedures in place that account for all waste generated and ensure proper handling on site. The waste collection system is managed by Apraava Energy, while recycling and disposal are carried out through third-party agencies authorised by state pollution control boards.

We have consistently prioritised waste minimisation by implementing the 5R approach (Refuse, Reduce, Reuse, Repurpose and Recycle) through our Environment Management Programs (EMPs). These departmental initiatives have enabled us to implement various measures such as reusing conveyor belt scraps, repairing and reusing actuator cards to reduce e-waste generation and repurposing metal scraps. As a result of these initiatives, JPL has succeeded in being recognised for zero waste to landfill status by achieving 91.64% of waste diversion from landfill.



EMP Initiatives and Results at JPL

| EMPs                         | Unit                                | FY 2021-22       | FY 2022-23       | FY 2023-24       |
|------------------------------|-------------------------------------|------------------|------------------|------------------|
| Reuse of conveyor belt scrap | Amount reused from total generation | 73%              | 60%              | 79%              |
| Actuator card repair         |                                     | 43 cards         | 25 cards         | 21 cards         |
| Reuse of metal scarp         |                                     | 22 metric tonnes | 15 metric tonnes | 15 metric tonnes |

Waste Generated at Apraava Energy

| Waste Type    | Unit   | Units         | Mode of Disposal                     | FY 2021-22 | FY 2022-23 | FY 2023-24 |
|---------------|--------|---------------|--------------------------------------|------------|------------|------------|
| Hazardous     | Solid  | Metric tonnes | Incineration, Recycling, Landfilling | 91.24      | 117.98     | 173.43     |
|               | Liquid | Kilolitres    | Recycling                            | 66.64      | 31.48      | 14.18      |
| Non-hazardous | Solid  | Metric tonnes | Incineration, Recycling              | 718.53     | 379.85     | 770.26     |

Note : The table above does not include data for offices other than corporate office, Paguthan, transmission & AMI.

Raising ECO Champs and Developing Eco-conscious Communities at JPL

Apraava Energy has been taking measures to promote environmental awareness and responsible practices in communities around our sites, especially JPL. We are identifying and training children as stewards of eco-consciousness - ECO Champs, to build awareness about sustainable practices at home such as water and energy conservation and avoiding Single-Use Plastics (SUPs).

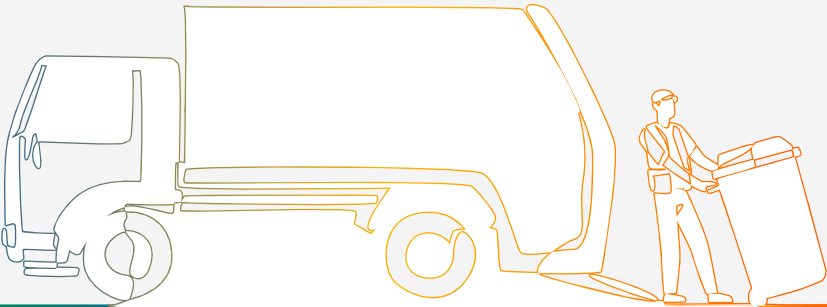
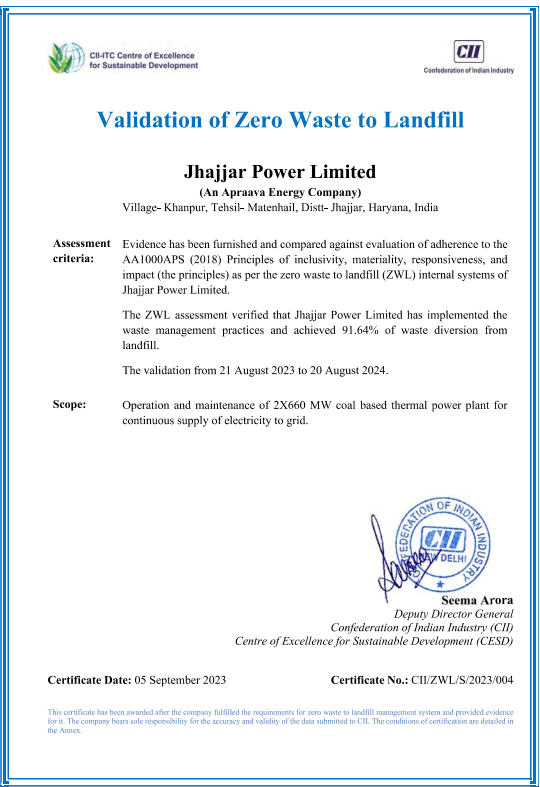
To further raise consciousness around the harmful effects of SUP, the Company has strategically placed awareness signages on lampposts throughout the JPL township. A mass cleaning campaign was accomplished in the 'Matenhail' forest area,

covering a stretch of 1.25 Kms. **A fruitful result of this initiative was the responsible collection and disposal of about 2.3 metric tonnes of plastic waste.**

Keen on extending this awareness beyond the immediate community, JPL initiated an awareness campaign on elimination of SUP at a nearby metro market. The JPL team set up creative booths adorned with engaging banners and slogans, enlightening local sellers about the cons of using SUP. The entire program was successfully conducted by company employees and the committed team of ECO Champs.

Zero Waste to Landfill at JPL

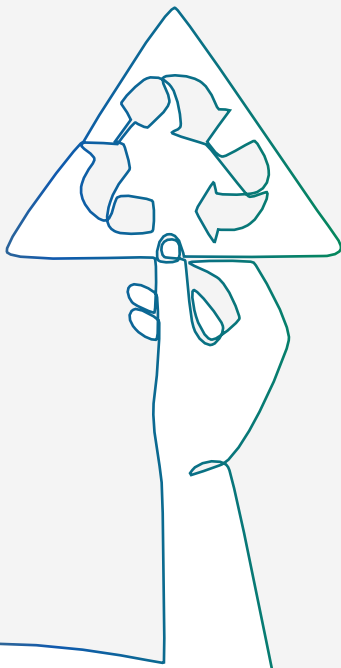
JPL aimed at achieving Zero Waste to Landfill (ZWL) to prevent adverse environmental impacts of waste disposal at landfill sites in the long term. The journey towards ZWL certification involved a thorough evaluation based on AA100APS (2018) principles including inclusivity, materiality and responsiveness. The certification requires an extensive, integrated waste management strategy, covering all operational aspects of the power plant. JPL's commitment to this end was validated by CII, with an impressive 91.64% diversion of waste from landfill which includes fly ash and gypsum. For these diligent efforts, JPL was granted the Zero Waste to Landfill certification by CII in August 2023.



Reuse of Conveyor Belts

JPL tackled the rubber waste issue at its Coal Handling Plant (CHP) by repurposing 1,549 meters of scrap conveyor belts; replacing 1,200 mm sized belts with 1,400 mm old belts, saving costs on purchasing new ones. The remaining old belts are used as rubber skirt pads in coffin boxes and rubber pads in wagon tippler lean plates in the CHP operation area.

This ongoing, zero budget initiative has shown impressive results. Approximately 79% (1,216 meters) of the scrap conveyor belt was reused, resulting in **savings of INR 7.41 million and reducing CO<sub>2</sub> emissions by 118,506 kgCO<sub>2</sub>e.** This demonstrates significant resource conservation and innovation towards waste management.



E-waste Management at Corporate Office

E-waste is a major source of waste that needs to be managed and properly disposed off, not just to ensure legal compliance but also to minimise environmental impact. Apraava Energy's commitment to responsible waste management extends across all sites, and authorised vendors handle various waste streams including e-waste.

At the corporate office, the Company has engaged key stakeholders, including the Environment and Sustainability, Administration and IT teams, to adopt a comprehensive approach. Authorised vendors are engaged to dispose e-waste in a compliant and environmentally responsible manner. Additionally, Apraava Energy has organised e-waste drives to encourage employees to dispose their household e-waste through proper channels. During FY 2023-24, the corporate office responsibly disposed a significant quantity of IT-related e-waste, including printers, mice, keyboards, headsets, and chargers. A total of 513.1 kgs of e-waste items were safely disposed off, demonstrating Apraava Energy's commitment to environmental stewardship.



## KMTL Efforts to Walk the Green Path

Kohima Mariani Transmission Limited's (KMTL) Kohima Substation has undertaken comprehensive measures to reduce its environmental impact through implementation of various initiatives. Key programs include a strict ban on single-use plastics aimed at curbing plastic pollution. The substation has also spearheaded tree plantation drives for enhancing green cover, sequestering carbon and supporting local biodiversity. Robust waste management practices have been implemented, emphasising segregation and recycling to minimise landfill waste. Water conservation efforts involve installing efficient water fixtures, repairing leaks and promoting water - saving habits among employees. Recognising the importance of environmental awareness, the substation actively engages employees and the local community through training and educational programs. These initiatives foster a culture of sustainability and responsible stewardship.



### Fly Ash Management

At JPL, fly ash and gypsum are generated as by-products. JPL has partnered with cement, brick and concrete manufacturers to fully utilise these by-products over the past six years. Our dedicated ash management team has enabled consistent 100% utilisation of fly ash and gypsum, diverting these by products from landfills and instead, integrating them into valuable construction materials. This circular approach aligns with our commitment to sustainable practices and efficient resource utilisation.

### Utilisation of Fly Ash and Gypsum at JPL

| Parameter | Detail      | Unit          | FY 2021-22 | FY 2022-23 | FY 2023-24 |
|-----------|-------------|---------------|------------|------------|------------|
| Ash       | Generation  | Metric tonnes | 1,804,515  | 1,886,721  | 2,111,955  |
|           | Utilisation | Metric tonnes | 1,804,518  | 1,880,215  | 2,118,661  |
|           | Percentage  | %             | 100        | 99.7       | 100.32     |
| Gypsum    | Generation  | Metric tonnes | 101,014    | 112,276    | 106,513    |
|           | Utilisation | Metric tonnes | 101,014    | 112,276    | 106,513    |
|           | Percentage  | %             | 100        | 100        | 100        |

## Biodiversity Conservation

Apraava Energy is committed to taking proactive steps to assess, identify and protect biodiversity around our operational sites. Alongside these conservation efforts, we also prioritise building awareness on the subject among our employees.

Our biodiversity conservation goals encompass a range of initiatives including tree plantation and landscape development; protection of local flora and fauna and, the utilisation of advanced pollution control technologies and environmental practices to maintain air quality and safeguard the ecosystems surrounding our facilities. To achieve these objectives, we have created a comprehensive biodiversity roadmap that outlines our short, medium and long-term vision.

Further, we have established a dedicated Biodiversity Committee to support, plan, drive and implement biodiversity-related initiatives across our operations. This cross-functional team, formed through an inclusive nomination process, not only focuses on raising awareness but also contributes to the development of biodiversity management projects and nature-based solutions. As a signatory to the India Business and Biodiversity Initiative (IBBI), we are committed to developing a Biodiversity Index and a Natural Capital Action Plan (NCAP) for all our operational assets, aligning with our long-term biodiversity strategy. A key aspect of our IBBI commitment is raising awareness among various stakeholders on the importance of biodiversity conservation.

## Baseline Biodiversity Assessment at Renewable and Transmission Sites



In September 2023, Apraava Energy embarked on a critical biodiversity management initiative across solar, wind and transmission sites. We partnered with CII to conduct a comprehensive biodiversity assessment, building on learnings from a similar study at JPL. The assessment began with cross-functional training sessions followed by site-specific mapping of critical regions and species. One site each from solar, wind and transmission were selected for this purpose. The outcomes of the initiatives are expected to help us accurately identify key biodiversity hotspots at site, develop and maintain site-specific Biodiversity Action Plans (BAPs) and Natural Capital Action Plans (NCAPs). This ongoing endeavour demonstrates our dedication to environmental stewardship and minimising our impact on surrounding biodiversity. The assessment will enable us to obtain biodiversity scores and implement targeted conservation measures across our diverse asset portfolio.

### Testimonials



**Name: Anguri Bai**  
**Age: 35 years | Place: Baran, Rajasthan**

By participating in the plantation activities, I not only earned some extra money but I also had the chance to learn new skills related to tree care and maintenance. I'm grateful for this opportunity and encourage other women to get involved too. The trees have been providing much-needed shade and cooling during the scorching summers, making our daily walks and outdoor activities much more enjoyable.



**Name: Jamanti**  
**Age: 34 years | Place: Baran, Rajasthan**

I can't express enough how grateful I am for the tree plantation initiative in our village. The presence of these trees has had a profound impact on my daily life. It's incredible to see how the community has come together to create a greener and more sustainable future. The plantation will be beneficial to each and every one in our village as well as the environment.



Environment Awareness

Apraava Energy’s responsibility towards the environment and natural resources extends beyond conservation. We are committed to building sustainability knowledge among our stakeholders.

Throughout the year, we conduct regular awareness sessions to engage employees, workers and partners on environmental conservation and sustainable living. These sessions empower our stakeholders to become agents of positive change, driving environmental and social impacts within their own communities. By nurturing a culture of environmental consciousness, Apraava Energy takes a holistic approach to sustainability, where education and capacity building are crucial for long-term, systemic change.



Observance of World Environment Day

Apraava Energy annually observes World Environment Day, aligning each year’s celebrations with the global theme. The theme for the year in focus was ‘Beat Plastic Pollution’. The celebration at JPL lasted from 18 May to 7 June 2023, involving employees, their families, contract partners and children from the township. A range of creative activities including storytelling contests and poster making witnessed widespread participation. Eco Champs spearheaded an e-waste and used battery collection initiative.

Further, JPL collaborated with the Corporate Social Responsibility (CSR) team to host an awareness event at a local government school featuring educational competitions. These activities not only increased environmental consciousness but also inspired attendees to adopt sustainable habits in their daily lives.

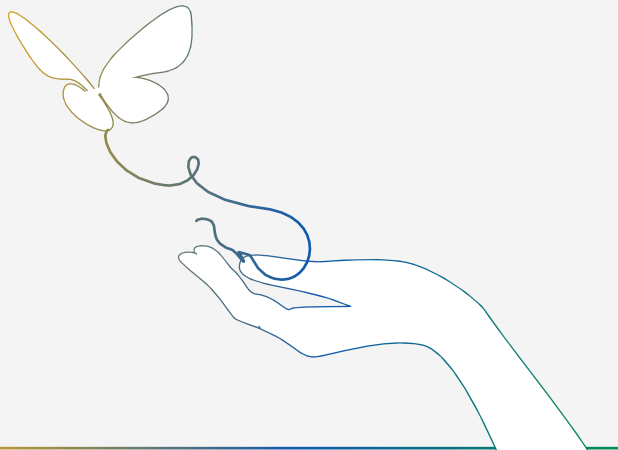
Apraava Renewable sites also celebrated World Environment Day enthusiastically along with OEM and O&M partners. Activities included flag hoisting, awareness sessions by Apraava and OEM team members, a pledge, security march with WED banners, tree plantation, jute bag distribution, drawing competition, prize distribution and sapling distribution, among others.



Butterfly Park at JPL

Butterfly parks are crucial conservation centres, critical to minimising impact of human activities on biodiversity and the importance of conservation. In line with FY 2021-22 India Business & Biodiversity Initiative (IBBI) directives, JPL developed a Natural Capital Action Plan (NCAP) to enhance biodiversity and mitigate potential losses through the establishment of a Butterfly Park.

The park, modelled to be a miniature habitat with diverse butterfly species, is representative of additional ecosystems of nearby forests. The development process involved visiting renowned parks for insights and implementing a comprehensive plan including planting of seasonal flowers, introducing specific herbs and shrubs and constructing an artificial pond with reused materials. Waste concrete slabs were used for pathways, water puddles were created for butterflies and information boards were installed for public awareness. The Butterfly Park stands as an embodiment of sustainable development, unifying ecology, education, and resource management.



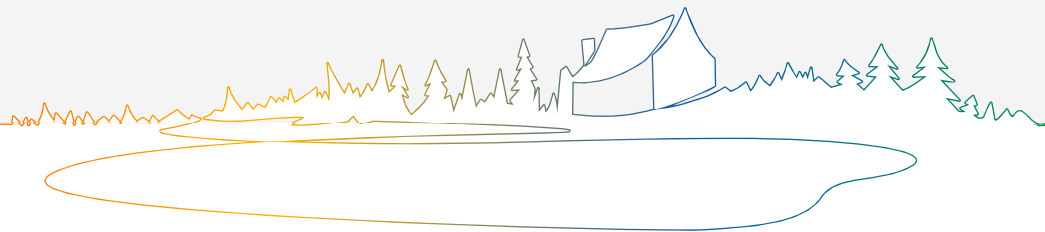


## JPL Commitment to Wetland Development and Conservation

JPL implemented a comprehensive biodiversity assessment following IBBI directives in FY 2021-22 for preserving biodiversity and ecological abundance. This assessment led to the creation of a Natural Capital Action Plan (NCAP) for the region. A key initiative within the NCAP was the development of wetlands, critical ecosystems straddling land and water that bolster biologic diversity and human welfare. Inspired by the Indian government’s initiatives towards wetland conservation through ‘Amrit Dharohar’ project in 2023, which proposed transforming environmentally vulnerable wetlands into sustainable tourist spots, JPL took proactive steps to cultivate its own wetland within the plant premises. A naturally occurring depression within the plant area was chosen and transformed into an ecological haven, following guidelines specified in the CII-Biodiversity Survey Report.

Efforts included the construction of a 1,300-meter wetland drain, which reused waste coal rock boulders, running from the plant to the newly-developed wetland and covering an extensive area of roughly 5,000 m². This wetland was designed to be replenished with overflow from a nearby kaccha pond which is connected to rainwater and treated wastewater. The project culminated in a ceremonial inauguration on World Wetland Day on 2 February 2024. To mark the day, JPL organised a procession led by the plant head, advocating for wetland and water conservation. On the occasion, JPL employees planted 50 native saplings within the wetland area. Jute bags with the message: ‘Say No to Plastics’ and seed notepads made from recycled paper were distributed among them.

The development of this wetland has not only resulted in an ecologically diverse biosphere, home to a variety of plant and animal species but also improved the organisation’s biodiversity index significantly. Additionally, the project demonstrated a cost-effective and environmentally friendly way to reuse waste materials while conserving natural resources.



Apraava Energy’s natural capital strategy is multi-pronged. It involves conscious use of available resources, concerted measures to reuse by-products and waste as well as measures to develop and conserve newer ecosystems. As we work towards broadening our vision and focusing on our ambitions, we are also committed to protecting, nurturing and rebuilding the natural resources that fuel these goals in the first place.



102.4 MW WIND SITE AT BHAKRANI, RAJASTHAN

