

Waste Management

At AGEL, we are committed to minimising our environmental impact by actively reducing waste generation and embracing the five R principles-Refuse, Reduce, Reuse, Recycle, and Repurpose. Our primary focus is on efficiently utilising resources to minimise waste production. We recognise the detrimental effects of improper waste management and have implemented a robust waste management system that enables us to handle and dispose of waste in a scientifically sound manner.

As a company, we have embraced industry-leading practices and consistently adhere to waste management standards that not only meet

but also exceed relevant legal requirements. Our sites are fully compliant with all applicable Environment Health and Safety (EHS) regulations to ensure

Our Commitments towards Waste Management

- Zero-Waste-to- Landfill (ZWL) certified company for 100% of operating renewable energy generation plants by FY 2024-25.
- Continue to operate as Single-use-Plastic-Free (SuPF) certified company for 100% of our operations.

environmentally responsible disposal practices.

The waste generated at our premises encompasses various categories, including hazardous, non-hazardous, and battery waste. To ensure proper management, we have implemented strategies to handle each type of waste appropriately. Our commitment to responsible waste management extends beyond legal requirements, as we aim to make a positive impact on the environment and society as a whole. At AGEL, we aim that 100% of our waste generated is either recycled or reused and zero percentage of waste is sent for either landfilling or incineration.

The generation of electronic waste is in the case of damage of the modules. The damage modules undergoes replacement leading to e-waste generation. We have taken steps to ensure that our systems and processes align with the E-waste Management Rules, 2022, set forth by the Ministry of Environment, Forest and Climate Change.

Circularity at AGEL
We have established mechanisms to handle waste generated from our operations. Waste at AGEL includes hazardous waste (such as used oil, empty oil drums, and oil-soaked cotton waste), non-hazardous waste (metal, wood, paper, plastic, and food waste), and e-waste (damaged solar panels).

Non-hazardous waste is sold to

recyclers or composted, depending on its nature. Hazardous waste is sent to authorised recyclers or a treatment, storage, and disposal facility (TSDF).

E-waste is returned to Original Equipment Manufacturers (OEMs) or authorised recyclers for repair and material recovery. Waste storage yards with pit chambers have been constructed to accommodate solid waste and prevent liquid leakage. We have developed standard operating procedures (SOPs) for waste management, including oil spills, e-waste, biomedical waste, battery waste, and hazardous and non-hazardous waste.

With our concerted efforts we have achieved zero waste-to-landfill certification for all operating locations, with a landfill diversion rate of over 99% in the

reporting period. We also obtained single-use-plastic-free certification for all operating locations in FY 2021-22.



Total waste generated (MT)

Category	FY 2020-21	FY 2021-22	FY 2022-23
Plastic waste	0	3.24	56.14
E-waste	0	0	1.67
Battery waste	0	14.36	0.67
Other hazardous waste	1.06	23.22	7.75
Other non-hazardous waste	2,665.53	4,109	3,023.56
Total	2,666.59	4,149.82	3,089.79

Non Hazardous waste disposal (MT)

	FY 2020-21	FY 2021-22	FY 2022-23
Total waste generated	2,665.53	4,112.24	3,079.70
Waste recycled/reused	2,665.53	4,112.24	3,079.70
Waste disposed at landfill/incinerated	0	0	0

Hazardous waste disposal (MT)

	FY 2020-21	FY 2021-22	FY 2022-23
Total waste generated	1.06	37.58	10.09
Waste recycled/reused	0	14.36	10.09
Waste disposed at landfill/incinerated	1.06	23.22	0



Adani Green's Entire Operating Capacity Is Now Zero Waste To Landfill Certified
At AGEL, we received Zero Waste to Landfill (ZWL) certification for our entire operating capacity. The certification confirms our effective waste management system with a landfill diversion rate of 99%. We constantly focus on minimising waste generation, promoting reuse and recycling and complying with the environmental and health requirements. Our best practices include the involvement of employees at all levels of waste management, implementing proper storage and disposal practices, and adopting waste management policies across all sites.

Life Cycle Assessment of Solar-Wind Hybrid Electricity – Jaisalmer, Rajasthan
For our 390 MW solar-wind hybrid power plant in Jaisalmer district, Rajasthan, India, we conducted a Life Cycle Assessment (LCA) study in accordance with ISO 14040/44 standards.

The study looked at the cradle-to-grave LCA of 1 MWh of solar-wind hybrid electricity generation. It resulted in identifying the major sources of GHG emissions like manufacturing solar photovoltaic modules and wind turbine systems. The float gas used in thin-film PV modules, is a hotspot for GHG emissions, while the aluminium extrusion profile and glass in multi-crystalline and mono-crystalline PV

modules and steel in wind turbine towers contribute significantly to the GHG emissions.

The study also discovered that the use of electricity and fuel sources in the fabrication of PV modules and wind turbine systems contributes to GHG emissions. The detailed lifecycle assessment conducted at the hybrid plant at Jaisalmer is available [here](#).