

Impact Assessment - Renewable Energy

March 2026

Transition to renewable energy has been one of the big projects that Wipro has taken up. An impact assessment study was taken up to assess the impact on GHG emissions, air pollution, water & land. In FY26, Wipro procured ~94 million units of energy through the vendors in the states of Tamil Nadu, Karnataka and Uttar Pradesh.

Present study showcases the impacts of Wipro's renewable energy procurement as compared to the hard coal-based electricity generation. Operational impacts of renewable energy generation can be insignificant but not that of the upstream supply chain. Therefore, to have a fair comparison between renewable vs traditional coal-based electricity generation, a life cycle-based approach has been used. This approach considers the impact of production, transports, installation, operation phases of the electricity generation along with various technology mixes available in the respective markets.

At the site level from where the power was procured, there was little or no displacement of any significant natural resources because in case of wind power through RS Yarns (which is a power aggregator and supplier), the towers are installed in areas that are not part of any designated forest cover by law and also, they did not hinder the pathway of any wild animals.

In case of solar power, Avaada is bordered to a reserve forest, however there are no endangered flora or fauna. They also have their own borewells on site along with rainwater harvesting. Hero Future Energy has implemented a waste management programme, covering compliance.

Below are the quantities saved as a result of the RE transition:

Quantities savings	2024	2025	2026
GHG Emissions (tonne)	95,511	87,609	1,03,330
Air Pollution- PM	155	142	168
Air Pollution- SOx	510	468	551
Air Pollution- NOx	404	370	436
Water Consumption (m ³)	26,16,381	24,01,600	28,34,437
Land Use Change (m ²)	-1,99,267	-1,53,575	-1,56,742

The Impact savings in dollar amount is given below:

Impact savings (USD)	2024	2025	2026
GHG Emissions	1,10,00,000	1,10,00,000	1,30,00,000
Air Pollution	15,00,000	14,00,000	17,00,000
Water Consumption	9,10,000	8,80,000	11,00,000
Water and Land Pollution	14,000	15,000	20,000
Land Use Change	-20,00,000	-16,00,000	-17,00,000
Total savings	1,10,00,000	1,20,00,000	1,40,00,000
Solar unit	5,20,00,000	4,10,00,000	4,40,00,000
Wind Units	3,00,00,000	3,80,00,000	5,00,00,000
Hydel Units	53,00,000	-	-
Total units	8,70,00,000	8,00,00,000	9,40,00,000
Saving (USD/kWh)	0.126	0.151	0.153

All the quantities are converted in terms of dollar values using GIST Impact valuation methodology. Nationalised social cost of carbon is used to keep consistency with EP&L results published by Wipro. For other pollutants, country average LCA models and valuation coefficients are used. Impact due to air pollution and water & land pollution includes negative health impacts of the various toxic pollutants (organic/inorganic/ heavy metal) released in respective compartments. Land use change impacts are calculated based on the land transformation numbers.

Calculations showcase the total impact saving of USD 14 million in FY26. Greenhouse gas savings of 1,03,330 tonnes was achieved through the RE procurement of ~94 million units. Water consumption savings are ~2.8 million m³ which translates into a savings of USD 1.1 million. As renewable energy generation requires more land, the impact due to land use is generating a negative externality of USD 1.7 million.

Based upon the impact assessment, the Corporate Social Responsibility (CSR) Initiative with respect to procurement of renewable energy, the impact on the environment was found to be **“Highly Positive”**.

Note: Electricity procurement data was available for a 10-month period from April 2025 to January 2026, totalling **7,81,21,078** units. An equal distribution of electricity consumption across these 10 months was assumed to estimate the annual consumption. Based on this assumption, the electricity usage for a full 12-month period was extrapolated, resulting in an estimated total of **9,37,45,294** units.