

Science & Innovation Organization

Ministry of New & Renewable Energy (MNRE)

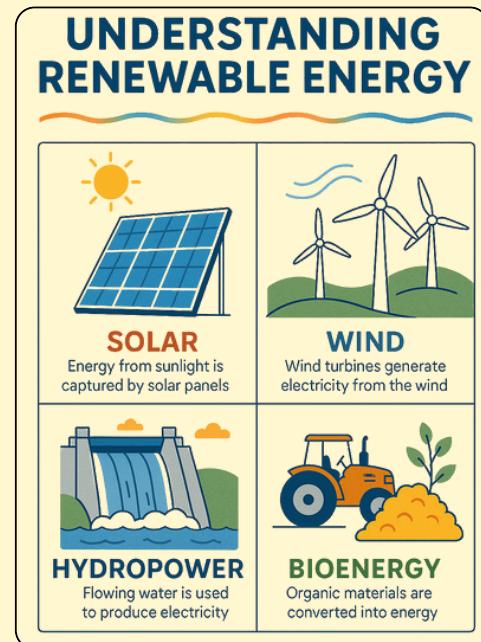
Have you ever wondered where the electricity powering your fan, phone charger, or streetlight comes from? More and more often, the answer is **nature**. Energy from sunlight, wind, and flowing water is all around us—and making sure India uses this clean energy wisely is the job of the **Ministry of New and Renewable Energy (MNRE)**.

Renewable energy comes from sources that don't run out. The sun rises every day, the wind keeps blowing, and rivers keep flowing. MNRE, set up in 1981 and renamed in 2006, works to turn these natural forces into reliable power for homes, schools, farms, and industries across India. Headquartered in New Delhi, the ministry focuses on solar power, wind energy, small hydro projects, biogas, battery storage, and even futuristic fuels like green hydrogen.

Here's something you can easily relate to: **solar panels on rooftops**. Under schemes like PM Surya Ghar Muft Bijli Yojana, families can install rooftop solar and get free or very low-cost electricity. This means lower bills and fewer power cuts—helpful during online classes or summer vacations. MNRE also supports **solar streetlights**, which store sunlight during the day and light up roads at night without wires.

For those of you from farming families, MNRE-backed **solar water pumps** are a big deal. These pumps replace diesel ones, saving money and reducing air pollution. It's cleaner farming powered by sunlight! MNRE also looks to the future.

Through the **National Green Hydrogen Mission**, India is investing billions to develop clean fuel that could one day run buses, trucks, and factories – without smoke or noise. Imagine travelling in a bus powered by clean fuel made using water and sunlight!



As of 2025, India has achieved around **172 gigawatts of renewable energy capacity and aims to reach 500 GW by 2030**. That's enough clean power to light up millions of homes. Institutions like the National Institute of Solar Energy and the Indian Renewable Energy Development Agency help turn research into real projects on the ground.

In simple terms, MNRE connects **science, technology, and everyday life**. It shows how ideas from classrooms and labs can become solar panels, windmills, and clean energy solutions all around us. For students, MNRE proves one exciting thing: learning science today can help power India tomorrow.