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# India's True Solar Potential Soars to 10,830 GW: Report

India's solar energy potential has been vastly underestimated until now. A new macro-level assessment by The Energy and Resources Institute (TERI) has recalibrated the country's theoretical solar capacity at 10,830 gigawatts (GW), nearly 15 times higher than the earlier 748 GW projection made in 2014 by the Ministry of New and Renewable Energy (MNRE). The findings provide a multidimensional view of India's solar deployment capacity.

The report expands far beyond the limited scope of previous assessments, which assumed only 3 per cent of wastelands for solar development. The analysis incorporates a wider spectrum of land-use categories such as – barren and unculturable lands, water bodies for floating solar, rooftops, agri-voltaics, building-integrated photovoltaics, and infrastructure-based solar like railways and highways.

At the core of this reassessment is the vast reserve of barren lands, which alone could support 4,909 GW of ground-mounted solar PV capacity. Rajasthan tops this category with 1,234.6 GW, followed by Madhya Pradesh (731.3 GW), Maharashtra (606.7 GW), and Gujarat (592.6 GW). An additional 100 GW could be drawn from floating solar systems over inland reservoirs, ponds, and aquaculture zones.

**Dr. Faruk G. Patel, chairman & MD of KP Group,** has had a front-row seat to this rapid evolution. **"A decade ago, solar power was still seen as an expensive alternative. Grid parity was a distant dream,"** he said. **"Today, India has surpassed 100 GW of solar capacity and is well on its path to meet the ambitious target of 280 GW by 2030 and of 500 GW in renewable energy by 2030."** Patel also highlighted how tariffs have fallen by over **70 per cent**, turning solar into the most affordable source of new energy. KP Group itself has grown from a **1.5 MW plant in 2016 to a ~6 GW portfolio**, with its **largest 645 MWp project underway in Khavda, Gujarat.**