



Solar panels are seen in a field April 22 in Haryana, India. India imports about 88% of its oil. Renewable energy could cut steel mill emissions, a report says. **RITESH SHUKLA/GETTY**

Report touts switch to renewable energy for small India steelmakers

By Sibi Arasu
ASSOCIATED PRESS

BENGALURU, India — Smaller steel companies responsible for nearly 40% of India's crude steel production could cut their electricity bills by about a third while sharply reducing carbon emissions by switching to renewable energy, said a report released Wednesday.

The report, "Powering India's Secondary Steel Transition," found renewable electricity could reduce annual power costs by about \$250,000 to \$275,000 per unit, or up to 34%.

The report was jointly produced by a consortium of environmental groups and industry bodies including the Confederation of Indian Industry, WWF-India, the nonprofit group Climate Catalyst and the think tank JMK Research.

Electricity accounts for up to 40% of operating costs for many small steel producers, making it one of the industry's largest expenses. Profit margins at many of India's smaller steel companies have been affected by rising fuel costs from the Iran war.

India, the world's most populous nation, is among the largest emitters of carbon dioxide and other green-

house gases contributing to global warming.

The steel sector accounts for as much as 12% of India's annual emissions. Decarbonizing the sector is essential to meet the country's goal of achieving net-zero emissions by 2070.

Shifting to clean power also could help shield Indian steel companies from European carbon taxes that took effect at the start of this year.

"With rising pressure on all industries to reduce their carbon emissions, a high-emitting sector like steel has to look at ways to reduce emissions at the least cost possible," said Prabhakar of JMK Research, one of the report's authors, who uses only one name. "With the huge growth in renewables in India, shifting to renewable electricity is low-hanging fruit for reducing carbon pollution."

The report found the most practical option for small steel producers is to jointly invest in and own a renewable energy project from which they can draw electricity based on their investment and electricity needs.

This approach lowers the upfront financial burden for individual companies and creates projects large enough to be commercially viable,

the report said.

"A cluster-based approach can fundamentally change how small steelmakers access renewable energy," Prabhakar said. "Aggregating demand through industrial associations makes projects more bankable, enables optimal plant sizing and reduces the investment risk borne by any single unit."

Renewable energy adoption remains limited among India's smaller and medium-sized steel companies despite the country's clean power capacity tripling over the past decade. The report estimated only about 11% of smaller steelmakers use renewable power, compared with 22% of India's overall electricity mix.

Helping small and medium steelmakers access clean energy is essential to India's ambitious climate goals, said Vinoth Balakumar of the confederation.

Owners of small steel companies said they are willing to shift to clean power because many of their domestic and international customers prefer steel with a lower carbon footprint.

But high costs, government regulations and a lack of awareness about the benefits of renewable electricity are slowing the transition.