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REPORT SEES CLIMATE RISK FROM RISE IN INDIAN AC UNITS

Relevant for: Environment & Disaster Management | Topic: Environmental Degradation - GHGs, Ozone Depletion & Climate Change

A technology solution that could help to reduce the impact by one-fifth is the need of the hour.

By 2022, India is expected to have a fourth of the world's air conditioning units, and the risks to climate from this could be immense, according to a report.

The refrigerants used for cooling are the major contributors to global warming, and if left unchecked, they could cause global temperatures to rise by 0.5 degrees Celsius. Several Departments in India, including the Department of Science and Technology and the Ministry of Power, on Monday announced a partnership with the Rocky Mountain Institute (RMI), a U.S.-based institute, and Conservation X Labs, a technology solutions company, to institute a Global Cooling Prize to motivate research laboratories across the world to develop highly efficient cooling technologies.

A technology solution that could help to reduce the impact by one-fifth and ensure that air conditioning units use 75% less electricity would be needed, says Solving the Global Cooling Challenge, a report written by the Rocky Mountain Institute. A technology solution would not only significantly reduce the burden on electricity grids but also save 109 trillion ($ 1.5 trillion).

In 2016, India was a signatory to a compact of 107 countries to "substantially phase" out a potent greenhouse gas, called hydrofluorocarbons (HFC), by 2045 and move to prevent a potential 0.5 C rise in global temperature by 2050.

HFCs are a family of gases that are largely used in refrigerants at home and in car air-conditioners. However, they substantially worsen global warming. India, China, the United States and Europe have committed themselves to reducing the use of HFC by 85% by 2045.

"I urge innovators to rise to this global challenge to develop a super-efficient technology, which provides access to affordable cooling to people around the world," Union Environment Minister Harsh Vardhan said at a function to launch the prize. "We need to mitigate the risks of global warming that will follow the massive deployment of ACs in the near future."

Over 21 crore ($3 million) will be awarded over the course of the two-year competition. Up to 10 short-listed competing technologies will be awarded up to 1.4 crore ($200,000) each in intermediate prizes to support the design and prototype development of their innovative residential cooling technology designs. The winning technology will be awarded at least 7 crore ($1 million) to support its incubation and early-stage commercialisation, according to a press statement.

Under a business-as-usual growth trajectory, about 4.5 billion room air-conditioners are estimated to be installed by 2050 — a nearly four-fold jump from today's installed base, with emerging economies observing a five-fold increase, the report says.

The tigress will be kept in a special enclosure set up at Raiguda inside the reserve.

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