

# President Ram Nath Kovind unveils green tech fuel system which can replace air polluting DG sets

TNN | Sep 26, 2019, 10.33 PM IST



NEW DELHI: President Ram Nath Kovind on Thursday unveiled India's first indigenous high temperature fuel cell system which will meet the requirement of efficient, clean and reliable backup power generator for telecom towers, remote locations and strategic applications.

This 5.0 kW fuel cell system, generating power in a green manner using methanol/bio-methane, has the potential to replace diesel generating (DG) sets and help in reducing air pollution.

It is developed by council of scientific and industrial research (CSIR) in partnership with Indian industries under the country's flagship program

named 'New Millennium Indian Technology Leadership Initiative (NMITLI)'.

The President unveiled this system on the occasion of the CSIR foundation day at Vigyan Bhawan. The ministry of science and technology, on the occasion, also announced the Shanti Swarup Bhatnagar award for science and technology for the year 2019, selecting 12 scientists from different institutions for this most coveted award in multidisciplinary science in India.

"The development of the High Temperature Fuel Cell system is most suitable for distributed stationary power applications at places such as small offices, commercial units and data centers where highly reliable power is essential with simultaneous requirement for air-conditioning," said a CSIR scientist.

The system is developed under Public-Private Partnership (PPP) among CSIR's three laboratories (CSIR-NCL, Pune; CSIR-NPL, New Delhi & CSIR-CECRI, Karaikudi -Chennai Center) and two Indian industries - Thermax Limited, Pune and Reliance Industries Limited, Mumbai.

“The developed technology is world class and the development has placed India in the league of developed nations which are in possession of such a knowledge base,” said the science ministry, in a statement.

Claiming that the Fuel Cell distributed power generation systems are emerging as promising alternative to grid power in the field of clean energy, it said, “The Fuel Cells fit well in India's mission of replacing diesel with green and alternate fuels. The development of fuel cell technology is indigenous and carries immense national importance in terms of non-grid energy security”.

Referring to other success stories of the CSIR, Union science & technology minister Harsh Vardhan, on the occasion, spoke about the recent development where the CSIR-Indian Institute of Petroleum, Dehradun developed a technology for converting plastic waste to automotive grade diesel and said this would soon be scaled up both in terms of capacity and plant operations in other cities.

The CSIR-IIP has set up one tonne per day (TPD) capacity of plant within its premises in Dehradun. This plant will convert 1,000 kg of plastic waste to 800 litres of automotive grade diesel daily. The diesel will be made available to government, police and army vehicles for regular use.

Stating that the technology can be scaled up to develop a 10 TPD plant, the minister said he had spoken to lieutenant governor of Delhi so that such plan can be set up in Delhi as well. He said it would be a great help in tackling the menace of plastic waste in the city.