

‘Energy Harvest’ to end open field burning unveiled

Ropar IIT, UK’s Aston University collaborate to come up with Pyroformer



Professors from Aston University in UK during the unveiling of Pyroformer.

DP

DP CORRESPONDENT

Ropar

A new renewable energy technology that has the potential to eradicate the problem of open field burning has been unveiled at both the Indian Institute of Technology in Ropar and the British Council in New Delhi.

The Pyroformer container has been developed by scientists at the European Bio-energy Research Institute (EBRI) at Aston University in UK in collaboration with IIT, Ropar.

“Every year, farmers throughout India burn millions of tonnes of crop residue. This burning process has a negative impact on the environment and economy as this straw is wasted and has serious implications on the health and society,” a press release said.

Working in Punjab, this project

- titled “Energy Harvest” - takes agricultural waste and the Pyroformer heats it in controlled conditions. The process generates oil, gas and biochar. Each one of these products is useful and means that harvest waste now has a value as it is put to use rather than simply being burnt.

The oil produced can be mixed with diesel and used in engines, the gas can be used for power generation, while the biochar can be used as a fertiliser to increase crop growth.

Funding from the Oglesby Charitable Trust enabled Aston University to work closely with IIT, Ropar to make this innovative technology available as a pilot phase in three villages of Ropar district: Khuaspura, Hussainpur and Ladal. The Pyroformer is housed in a container unit that can be transported between rural

locations by tractor and is operated by the villagers themselves.

Prof M K Surappa, Director of IIT, said: “Open field burning is an enormous problem for India and I hope this project will provide a socially and economically viable solution for farming communities.”

Prof Dame Julia King, Vice-Chancellor of Aston University, said: “Energy Harvest is an excellent example of the importance of UK and Indian universities working together to solve real-life problems.”

Prof Robert Berry, Executive Dean, School of Engineering and Applied Science at Aston University said the technology has the potential to provide a cost-effective, reliable and sustainable form of decentralised power generation to address the local needs of heat and energy.