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ENERGY

Generating a powerful pact

THIS is not a lot of gas, but a welcome news for India's energy security. Cummins India (CIL) have partnered Indian Institute of Science (IISc), Bangalore, for the commercial launch of a bio-mass gasification power generation system. IISc's Advanced Bioresidue Energy Technology Society (ABETS) has developed an open down-draft biomass gasification system and CIL will use these gassifiers to develop a new range of generator set systems in a range of 25 KWe-1.5 MWe capacity.

At a life-cycle cost per unit of Rs 3.5-3.8, these bio-fuel generators promise a 20-30 per cent reduction in costs as compared to alternative energy sources. Plus, these can be used in energy-intensive industries like textiles, pharmaceuticals and auto ancillaries, besides rural and agricultural industries. Talking about distribution, Rampraveen Swaminathan, vice-president (power generation business), Cummins, cites the example of Arashi Hi-Tech Bio-Power in Sultanpet, Tamil Nadu: "The 1.5 MWe plant operates as an independent power producer and supplies power to end customers who are able to leverage a low-cost source of power."

In the ABETS model, woody shrub, coconut shells, rice husk and other dry biomass is fed into a high open draft gassifier, which converts the fuel into a rich gas which can be used as a fuel for the specially designed gas generators.

Though the initial capital cost is more than that of diesel gensets, a subsidy from the Ministry of Non-conventional Energy Sources will make it cheaper. Coconut shells can be put to powerful uses. ■

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