Fuel efficient natural gas engine developed

Researchers at the National Renewable Energy Laboratory (NREL), the United States, have developed a prototype natural gas engine that offers increased fuel efficiency without increasing pollutant emissions. Test have shown that the prototype, fitted with a fuel-injected pre-chamber (FIPC) technology system, has good potential. Results showed gains of up to 17 per cent in fuel efficiency and favourable pollutant levels, including nitrogen oxide and carbon monoxide, when compared with present ultra-modern natural gas engines.

During test trials, the prototype FIPC engine was run at full speed and load range. It delivered 800 ft of torque at 1,400 rpm, which is comparable to a diesel engine, and produced 250 hp at 2,200 rpm. The engine can even operate in throttleless mode at most load levels. It burns less fuel than most existing spark-ignited, open-chamber natural gas engines, and realized 40 per cent maximum efficiency while operating at 1,600 rpm speed. *Contact: National Renewable Energy Laboratory, the United States. Website: www.nrel.gov.*

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