

## August 12, 2008 - Firm has turbo-charged plans

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### Firm has Turbo-charged Plans

By Joe Napsha

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A Westmoreland County company is developing a turbo fuel-cell-powered engine that it hopes would replace diesel engines and make commercial trucks more fuel-efficient and environmentally friendly.

"I think it will really revolutionize the transportation industry," said Owen Taylor, president of Pittsburgh Electric Engines Inc., located in the Mt. Pleasant Glass Centre in Mt. Pleasant Township. Taylor's company hosted several government and economic development officials Monday at the plant.

Pittsburgh Electric Engines is in the process of testing a bundle of 36 solid-oxide fuel cells, Taylor said.

A solid-oxide fuel cell generates electricity from a fuel source -- in this case diesel fuel. Bundles of individual fuel cells are stacked together to create sufficient power to drive a truck. The engine combines the power generation of two sources -- the fuel cell combined with a turbo-alternator, which is a "turbo charger" that produces electricity.

Taylor said benefits include fuel savings of around 40 percent, a 20 percent reduction of nitrous oxide emissions, very low noise, no smoke or particulate emissions and a 40 percent reduction in carbon-dioxide emissions.

Pittsburgh Electric Engines, which has 11 employees, hopes to increase employment once it gets into production. The company has doubled its operations since moving from Derry to the former Lenox glass plant in June 2007.

That move came during a temporary shutdown in its research and development work caused by a halt in funding. This year, the company's research is continuing through a \$1.05 million grant from the Defense Department, Taylor said.

The Defense Department is interested in using alternative engines for its heavy-duty trucks, said Rep. John Murtha, D-Johnstown, who has secured \$6.5 million in federal funding for the company. Murtha has proposed adding \$2 million to \$2.5 million to the Defense Department's fiscal year 2009 budget for the project.

Pittsburgh Electric Engines has not set a timetable for commercializing production.

The failure of a solid-oxide fuel cell project to hit profit targets prompted Siemens Power Generation Inc. in June to announce it would sell a unit that has been developing a solid-oxide fuel cell for 10 years at its facility in the George Westinghouse Research & Technology Park in Churchill.