Cleantech

Micro Gas Turbine Based Power Generation

APPLICATION

Based on the proprietary SM-LDI technology, the low-emission, fuel-flexible gas turbine system can be utilized for land-based power production, series hybrid trucks, and as a lightweight power plant for special applications.

COMPANY NAME

Aerostrovilos Energy Pvt Ltd

TECHNOLOGY READINESS LEVEL (TRL)

TRL: 6 (Under testing in field conditions)

INTELLECTUAL PROPERTY

Indian Patent: 414748

FOUNDERS' NAME

Pradeep Thangappan

PROBLEM ADDRESSED

The technology developed by **Aerostrovilos** addresses the critical challenge of decarbonizing power generation. With a strong focus on long-term sustainability, organizations worldwide strive to reduce emissions and achieve net-zero carbon footprints. **Aerostrovilos** recognizes this need and is developing a reliable power generation solution that enables significant emission reduction, ultimately aiming for net-zero emissions. By tackling this problem, the technology contributes to the transition towards cleaner and more sustainable energy sources, supporting the global goal of decarbonization.

ABOUT THE TECHNOLOGY

The general classification of the product that the team is working on is called a **Micro Gas Turbine (MGT),** this is based on the same technology that derives the aircraft engine.

The MGT that they are developing is for land-based power generation applications that can deliver low emissions and low cost of ownership.

Other than the power generation they have also been working with OEM for developing a series of hybrid power plants for heavy-duty electric trucks.

FUNDS RAISED/ACHIEVEMENTS

- Received DST NIDHI PRAYAS (6th Call) worth INR 7 Lakhs
- Grant for Technology Development 2018 – INR 1 Cr
- Rasied Pre-seed Round from Angel Investors worth INR 3.5 Cr
- Selected under the SAMRIDH Cohort at KIIT TBI

PRODUCT IMAGE

USP

- Fuel Flexible (can run on any fuel like – Biogas, Methanol, Diesel, Ethanol, Hydrogen.
- Low emissions – 10 X lower than BS6.
- Overall low cost of ownership.
- Efficiency Electrical – 45%*.
- Efficiency CHP – 80%* (Combined heat and power)

END USERS/CUSTOMERS

- Small and medium-sized industries
- Hospitals
- Hotels
- Office spaces
- Original Equipment Manufacturers (OEMs)

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