



Category: Renewable energy.

Sub Category: Fuel Cells.

Company profile

CellEra is developing and bringing to market a new Platinum-Free Membrane fuel cell technology, with the objective of dramatically reducing costs, and allowing fuel cells to finally achieve their market potential.

Year of establishment: 2007

No. of employees: 17

Background of the company

CellEra's goal is to deliver a clean, efficient, and highly-affordable energy storage & conversion technology, replacing lead-acid batteries, diesel generators, and internal combustion engines in 1 kW - 100 kW applications. The company's disruptive technology is Platinum-Free Membrane Fuel Cell (PFM-FC) for which CellEra is a first commercial mover. PFM-FC will allow CellEra to achieve price parity with incumbent battery and ICE based solutions.

Examples of projects

- Secured Vodafone as a strategic investor
- Secured USD multi-Billion telecom solution provider as launch partner
- Secured joint development with global auto OEM.
- Secured joint development partnerships with USD multi-billion polymer firm
- World's first and only PFM fuel cell engine working prototype at the kW scale
- Selected as recipient for prestigious US - Israel Bi-national Industrial R & D Funding (www.birdf.com)
- Twice named a Global Cleantech 100 (Y2010 & Y2012)

Technologies & products

General description:

CellEra is the first commercial mover with solid IP in disruptive Platinum Free Membrane based fuel cells, enabling a 50% and above reduction in materials and manufacturing costs. Since inception, the company has developed this from technology concept through to kW-scale working prototype system. CellEra has filed to date for 7 patent families, the first 2 of which have already been granted.

Function of the product(s):

CellEra's primary product is targeted at the USD 3 billion telecommunications backup market utilizing widely-available ammonia, as well as compressed hydrogen as a fuel. Follow-on mass market application is in portable and distributed power generation and storage. In the automotive sector, CellEra has launched a collaborative R&D program with one of the world's leading automotive companies towards the development of a PFM-FC based EV range extender.

Objectives / Target companies

The company will be headed into field trials within the coming months, and following will be raising its next tranche of financing geared towards:

- Productization and fabrication of critical power product.
- Develop and bring to market distributed / portable power generation product, utilizing ammonia as the fuel source.
- Develop combined Non-Pt energy storage and power generation solution
- Lead PFM-FC automotive R&D consortium including tier 1 automotive company.

The company's current investors include top-tier VC's Vodafone Ventures, Carmel Ventures and Israel Cleantech Ventures.