The business idea

Spin-off project

Innovative Technological Systems (ITS) was born in 2006 as an individual company founded by Claudio Fontana. In 2008 the firm began an important research project aimed at developing a system of micro-cogeneration based on the principle of the Stirling engine. The research team is composed by ing. Davide Gentile, from F.lli Ladini S.r.l and the Department of Energy, University of Udine. The excellent results obtained, the interest earned on the subject and the high degree of compatibility between the main stakeholders in the development of «Project Stirling» pushed the team to promote the new company aimed at making «Stirling engine» besides a passion also a business.

The company aims to develop a variety of applications to be placed on the market independently or through third parties interested to the use of our technologies.

Italy of Innovators

The project joined the list of innovations selected by Italy of Innovators 2011-2012 participating in the mission to China in 2011 organized by the Italian Government through the agency of the Presidency of the Council of Ministers for the Diffusion of Thechnologies for innovation.

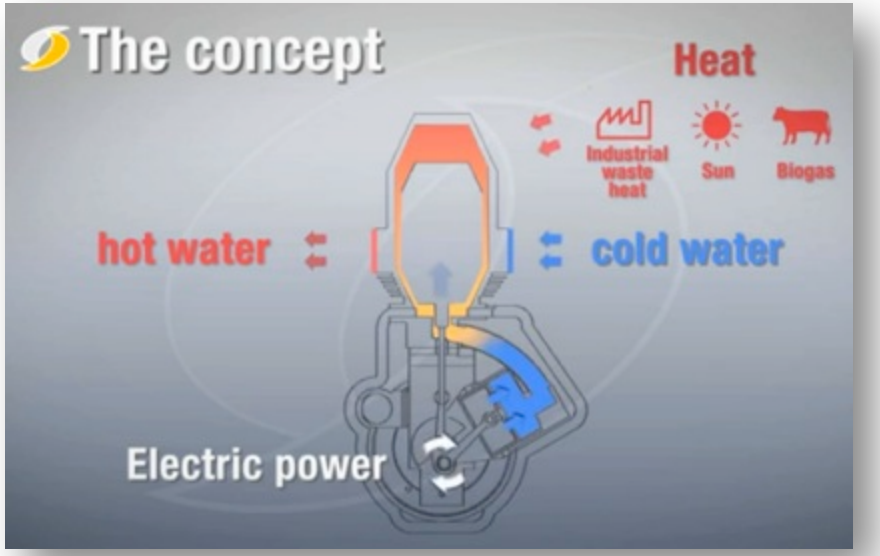
TechnoAREA – Area Science Park

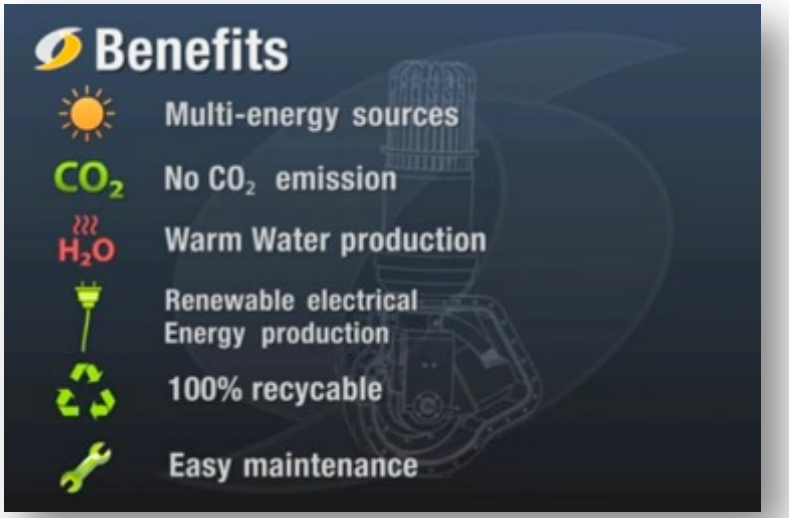
The chamber of commerce of Gorizia in co-operation with Area Science Park of Trieste launched a competiotn for business projects based on industrial research, experimental development and technological innovation to be realized by micro, small and medium companies established at the TechnoAREA of Gorizia technological site. The company proposed its project and was among the winners of the price worth € 90,000.00.

Stirling technology

Technology

Stirling is an external combustion engine, invented by Robert Stirling in 1816. It works in closed cycle using a gas as the termodynamic fluid (usually air, nitrogen or helium or hydrogen in high-performance versions) and starts working when it will be reached an appropriate temperature difference between its hot spot and cold spot. To produce the needed temperature differance it is possible to use solar concentrators, waste heat from industrial processing, biogas, etc.





ITS ENERGY Innovations

- Modulating power of the shaft (patented)
- Low working temperature: 350-400 °C
- Low working pressure: 5 bar max
- Electrical power : From 1 to 24 kW

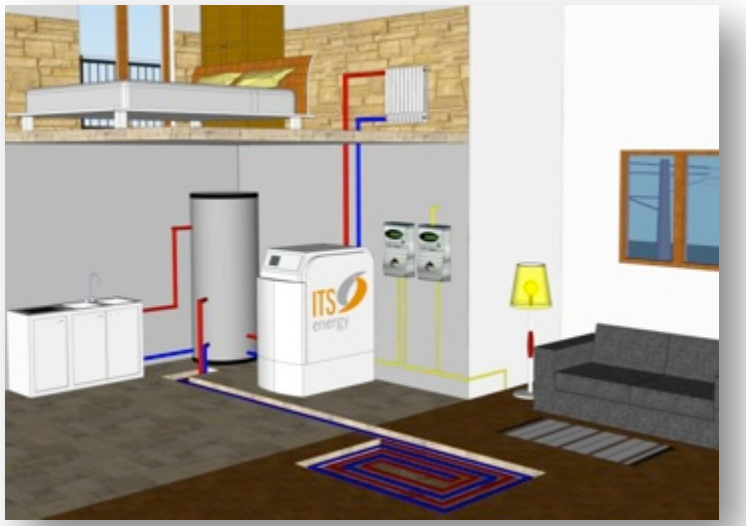
Patents

- Istantaneous modulation on the shaft

Patent is registered in the fallowing countries: Europe, America, China, Japan.

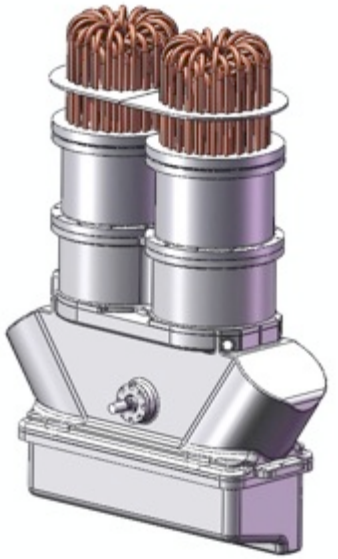
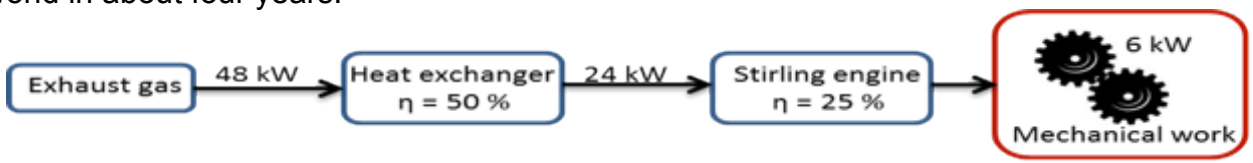
- Innovative configuration is in a state of evaluation in the istitutions of competence (PCT).

Our vision



Product and services

The company intends to impose itself, in coming years, as a leader in engines production for micro cogeneration multi utility (combination with boilers for domestic use and electricity with solar concentrators in isolated rural areas). To meet the market requests, company also intends to develop applications of Stirling engine «on demand», finding from time to time economic-contractual agreements more appropriate in different situations. Marine applications of Stirling for exhaust waste recover of diesel motors will be one of the most interesting applications also.

Future perspectives

Proposing new and advanced solutions technology, with particular reference to applications of cogeneration and micro-cogeneration based on the Stirling engine, and in marine applications, the company aims to become one of the leading design and production of Stirling engines of small size in the world in about four years.