



SWISS ITALIAN VENTURE CAMP

MILAN, 2ND JULY 2013. SALA MEILI, CENTRO SVIZZERO.

13 selected innovative start-ups.

The presented Italian start-ups, are active in the green economy and renewable energies sectors and they have been selected among scientific and technological parks. The 13 start-ups have been selected on the basis of the high level of technological innovation and interest that the Swiss market, investors, industrial purchasers and research institutes may potentially express. Five of those startups are characterized by the high level of technological innovation and simplification in the process of generating energy from renewable sources:

1. In the field of **wind energy** one of them has developed a new generation of wind turbines for urban and small scale application for a distributed renewable energy production; the other had the vision to create light, dynamic and intelligent machines in order to reach and exploit the high altitude wind);
2. In the field of **solar energy** they developed photovoltaic panels which are the first mono and polycrystalline flexible panels appeared on the market;
3. In the field of **tidal energy** they developed an innovative and unique marine current device of which a first prototype has already been built and tested in slow current.

The last start-up of the renewable energy production group has developed **energy stirling engines** that can be used in multi energy sources such as micro CHP and concentrator thermal solar systems or to convert industrial waste heat into electricity in the industrial process, working with low temperature compared to the competitors.

Other two companies belong to the **home automation** sector: one provides a smart control systems able to control and optimize energy consumption related to gas, electricity and water usage and the other one has developed a product which is a full digital, class A++, next generation building automation solution that anticipates user's gestures regarding lighting, entertainment, communication, security & energy consumption control.

The remaining start-ups belong to the following sectors:

- **Corporate Energy Savings:** they provide a solution improving the economics of virtualized data centers with an intelligent and secure software platform;
- **Chemical industry:** they provide relevant chemical compounds to produce materials exploiting raw materials and local labor while lowering transport, logistical costs and CO2 emissions;
- **Industrial biocatalysis:** they offer economically affordable and environmentally friendly biotech solutions to industries willing to switch from traditional chemical to biocatalysed processes;
- **Waste Management:** they provide the New Generation System for Reuse/Recycle/Recovery of MSW based on Hydro-Mechanical technology;
- **Smart Building:** they create ecothermal products to save energy and maintain the right temperature, with anti-bacterial and sanitizing features, and able to ionize the environment around them;
- **Aerospace Engineering:** they developed a convenient solution to counter Space Pollution and to minimize the risk of collision among spacecrafts.

01**COSENZA, UNICAL, INCUBATORE TECHNEST**

The Data Center Infrastructure Management (DCIM) solution improves the economics of virtualized data centers with an intelligent and secure software platform reducing the energy bill and increasing the efficiency and the reliability.

CORPORATE ENERGY SAVINGS.

Target: Funding and new clients

02**COSENZA, UNICAL, INCUBATORE TECHNEST**

The company provides a smart control systems called IRC (Intelligent Remote Controller) able to control and optimize energy consumption related to gas, electricity and water usage. Moreover, the smart control is able to control more environments going towards an advanced control system for the smart cities context. It is interoperable with the main automation standard and it is enriched by advanced feature derived by semantic web, artificial intelligence for the user profiling, ambient intelligence and big data analysis. It is suitable for large organized distribution, shops (also chains of shops), offices, home and buildings. Its system contributes to improve significantly the security, safety, comfort and energy efficiency of the places where we live.

DOMOTIC.

Target: Funding and new clients

03**VIBO VALENTIA**

The company operates mainly in the chemical industry for construction by providing relevant chemical compounds for the production of dry mortars with its innovative patented production plant Origami 5 (only 6 m²): a more efficient system to produce such materials exploiting raw materials and local labor while lowering transport, so lowering logistical costs and CO₂ emissions.

CHEMICAL INDUSTRY.

Target: New clients

04**TRIESTE C/O BIC INCUBATORI FVG**

The company offers economically affordable and environmentally friendly biotech solutions to industries willing to switch from traditional chemical to biocatalysed processes. Thanks to its scientific experience and partnerships, customers are assisted in all needs, from the selection of the right product at the early stage of the project, to industrial scale production. Biocatalysed processes avoid the use of organic solvents and allows to re-cycle the biocatalyst, thus lowering energy consumption and production costs.

INDUSTRIAL BIOCATALYSIS.

Target: Funding and new clients

05**TECHNO AREA C/O AUTOPORTO GORIZIA**

The company has developed ITS Energy Stirling engines with innovative patented configurations (size: from 1 to 24 kw) that allow to optimize performances and reliability related to the competitors. Energy Stirling engines are extremely customizable, with very high global efficiency that can be used in multi energy sources such as micro CHP and concentrator thermal solar systems or to convert industrial waste heat into electricity in the industrial process, working with low temperature (350-400°C) compared to the competitors (800°C).

RENEWABLE ENERGY PRODUCTION AND HEAT RECOVERY.

Target: Funding and new clients

06**TRIESTE C/O AREA SCIENCE PARK**

Waste & CO2 BUSTER PLANT – The New Generation System for Reuse/Recycle/Recovery of MSW based on Hydro-Mechanical technology - allows recover of 90% of recyclable materials by type. With Multiphase Biological Treatment all organic material is used to produce up to 40% more biogas with 75% of methane. The plant is modular, with low construction and management costs, high economical gain and high ROI.

WASTE MANAGEMENT.

Target: Funding and new clients

07**TORINO**

The company is a radical innovation in renewable energy and it originates from a radical change of perspective. The vision is to create light, dynamic and intelligent machines in order to reach and exploit the high altitude wind. In the air, airfoils or power kites automatically controlled to harvest high-altitude wind. At the ground, the equipments required to generate electricity. Two cables link the kite to the generator and transmit the traction forces which are converted into electrical power. The “core” of the system is the software that automatically controls the flight of the kite in order to optimise the energy generation.

RENEWABLE ENERGY PRODUCTION (EOLIC ENERGY).

Target: Funding and academic partners

08**TORINO**

Photovoltaic panels which are the first mono and polycrystalline flexible panels appeared on the market. They are extremely light (2 kg/mq, 8 times lighter than rigid panels in cristallin silicon) and thin (1,7 mm of thickness). Their efficiency is nearly 3 times higher compared to the other flexible panels in amorphous silicon. They are unbreakable (thanks to the absence of glass and frame) and totally recyclable. Thanks to the certifications IEC EN-61215 and IEC EN-61730, these panels are a viable alternative to standard photovoltaic panels for civil and industrial covers.

RENEWABLE ENERGY PRODUCTION (SOLAR ENERGY).

Target: Funding and new clients

09**TORINO**

The company, a newco in the field of nanotechnology, presents together with Energy Solve a range of integrated services called “EcoQualify: Qualify the new, Re-qualify the built”. It is a certified method that aggregates competencies and solutions to give smart-green solutions for buildings: energy savings, environment protection, maintenance savings and effectiveness, thus quick return on investment plus energy-environment qualification. One example product over all: EcoThermo Paint Interior and Exterior, EcoThermo Sheats – ecothermal products to save energy and maintain the right temperature, with anti-bacterial and sanitizing features, and able to ionize the ambient around.

SMART BUILDING.

Target: New clients

10**TORINO**

The company developed 3 main products: “Facile” is a full digital, class A++, next generation building automation solution that anticipates user’s gestures regarding lighting, entertainment, communication, security & energy consumption control. It is optimal for alternative energy sources exploitation as well as proactive element in Building Integrated Smart Grids. “Tag” : Objects of Delight : new emotions with the integration of technology into gemstones. “Teraluca”: translucent stones like onyx back-lighted with fiber optics (patented).

DOMOTIC.

Target: Funding

11**MILANO**

The company offers smart propulsive devices to be installed on satellites before launch and able to decommission them at the end-of-life in a quick, safe and control manner. At the same time, the effective and convenient solution for Space Pollution minimizes the risk of collision with other spacecrafts or people and assets on Earth, giving the chance to space operators to have a positive impact on our society: the first step towards a Sustainable Space Exploitation.

AEROSPACE ENGINEERING.

Target: Funding and academic partners

12**LECCO**

The new generation of wind turbines for urban and small scale application for a distributed renewable energy production.

Noisless, free of maintenance, environmentally-friendly and with innovative technological concept, it is the real alternative to photovoltaic in green city design for a safe investment and high profitability.

RENEWABLE ENERGY PRODUCTION (EOLIC ENERGY).

Target: Funding

13**NAPOLI**

The company has developed an innovative and unique marine current device named GEM, The Ocean's Kite, of which a first prototype has already been built and tested in slow current. Next objective is to built and test a bigger prototype to be deployed in Messina Strait where strong currents are present. It has also been working from long time to obtain permits to develop an open field laboratory in Messina Strait where it will be possible to test different types of marine and river current devices.

RENEWABLE ENERGY PRODUCTION (TIDAL ENERGY).

Target: Funding and academic partners

In collaboration with and with the support of:

