

Green Entrepreneurship

Successful business cases of Green Entrepreneurs in the Mediterranean



Regional Activity Centre
for Cleaner Production



Moncada Energy Group SRL: A leading Italian producers of renewable energy

60

Name: Moncada Energy Group SRL
City, country: Agrigento, Italy
**Name of entrepreneur/
founder:** Salvatore Moncada

Description

Moncada Energy Group is one of the main private Italian producers of renewable energy. The Group, while specialising primarily in wind energy, is also moving towards solar, biomass and merchant transmission lines, with a portfolio of projects worth 340 MW. Moncada Energy Groups has developed sufficient internal knowledge to become a leader in the Italian renewable market. Years of research and development into wind-turbine technology enabled the company to develop the prototype for an aerogenerator (WPR 850/58), based on an innovative 'direct drive' technology. In the solar energy field, the company launched the first factory in Italy producing thin film solar cells using amorphous silicon. It has a presence in Italy and abroad, with over 320 employees, and plans to grow and become one of the key players of the renewable energy sector on the international stage.

Investment Not available.

Stakeholders Not available.

Employment generation 320 employee.

Timeline

Significant stages:

- 1991: The Group is born in Agrigento thanks to the dedication and willpower of the Moncada brothers. The Group's core business is in the construction sector.
- 1991 – 2000: The company's activities in the construction sector go from housing to industrial estates, from hydraulic systems to urban illumination and public road works. All completed work was done in accordance with the standards set by the management quality control system (the latest being UNI ENI SO9001).
- 2001: Following the liberalisation of the Italian Electricity Market (Bersani decree), the company enters the renewable energy market, and starts building its first wind farm.
- 2005: The first Moncada-built wind farm is inaugurated on Monte Mele near Agrigento. It has an installed energy power of 9,25 MW, and features a 750 Kw wind turbine generator prototype, which was manufactured and planned by the Sistemi Elettronici company within Group.
- 2007: Four more wind farms, situated in Agrigento, Monte Malvizzo, Monte Durrà, Monte Narbone and Altopiano Petrasi come into production with combined energy power of 96,05 MW.
- 2008: The Holding Moncada Energy Group is created. The Moncada group purchases a production line of solar panels in thin film and starts work on a production site. The Swiss Atel purchases 30% of all Italian projects managed by M&A Rinnovabili.
- 2009: The first Sunfab in Italy is opened. Work begins on the building of 2 more wind farms in Sicily. One in Cattolica with a power equal to 40 MW and another one called Aerorossa with a power of 84 MW.
- 2010: The solar plant called Serre Narbone enters into production with a power equal to 7 MW. An integrated solar plant in Campofranco enters into production with a power equal to 1 MW. An integrated solar plant on a factory in Porto Empedocle enters into production with a power equal to 730 Kw. An integrated solar plant on the Sport centre of Porto Empedocle enters into production with a power equal to 200 Kw.
- 2011: Moncada purchases in Dresden (Germany) the Signet Solar equipment. The total output production is over 100 MW. The wind farm in Cammarata (AG), Castronovo di Sicilia (PA), Vallelunga Pratameo (CL) come into production with an installed energy power of 84 MW. The wind farm in Cattolica comes into production with an installed energy power of 40 MW.

Feasibility study

Not available.

Geo-social-economic setting

Not available.

Key features

Taking an active interest in renewable energy means being environmentally friendly. Energy allows economical and social progress.

Overall rational and motivation

Not available.

Strenghts

Not available.

Challenges and constraints

Not available.

Direct activities and Impacts	Not available.
Use of innovative Technologies	<p>With regards to solar energy, Moncada is currently working on a prototype which will:</p> <ul style="list-style-type: none"> – Pre-assemble the conversion module to be installed at the target site. – Lower production costs, thus lowering cost per kWh. – Reduce CO₂ emissions. <p>In 2009, the Group completed the procurement phase to enter into wind turbines' production. Moncada develops small and large wind systems from 200kW to 2 MW. Some of the components (motors, washers, bearings, etc.) were acquired from other manufacturers who designed the parts according to Moncada specifications, and others, (main frames, rotors, extenders, etc.) were personally designed by Moncada and produced by other manufacturers. The most important changes were made to the structure of the stator, since some difficulties were encountered during the processing of chip removal. A collaboration with Mita Teknik, during the commissioning phase of WPR750, led to some improvements to the control system that was subsequently incorporated into the PLC WPR850. Since 2009, Moncada Energy has begun research and development in biomass aimed at designing an algae cultivation system to produce electricity. These organisms, cultivated in the laboratories of Moncada, are marine microalgae, single-celled plants or organisms that grow in sea water with just the addition of dissolved nutrients, sunlight and CO₂. This type of cultivation happens in coastal areas that are not usually suitable for agriculture: thus the algae aren't in competition with the crops for soil and water resources destined to food production.</p>
Evidence of a holistic approach/world view	Not available.
Scale of benefits	Not available.
Policies, incentives and regulations needed	Not available.
Lessons and recommendations	Not available.

References

Dott.ssa MONTANA
 Tel.: +39 0922 441952/53
 Fax: +39 0922 441946
 e-mail: info@moncadaenergy.com