



## Visit to FIGC Building Ripalimosani

Molise Region on 14.03.2017



The building of the New regional headquarters of F.I.G.C./L.N.D. Molise (Italian Football Federation/National Amateur League)

A large building located in the suburbs of Campobasso, in an isolated place, exposed to the weather conditions. For these reasons the building would be subject of high energy consumption both for heating and for cooling; if methodologies improving the energy efficiency and the use of renewable sources had not been used at the design stage first and then in the building phase.

The start of construction was in July 2013, with completion in May 2016, the official inauguration was in July 15th 2016, and the total investment of the building was €1,709,653.29.



**The following design actions were taken on the building:**

- Highly insulated outer walls
- Highly insulated attics border
- Windows frames with, high-performance glazing frames
- Curtains shielding the solar irradiation (interiors)
- Chillers with inverter heat pump, high COP / EER - SCOP / SEER, for winter/summer air-conditioning
- Local plants for fresh air ventilation with air quality control and heat recovery with cross and bypass flows
- Heat pump with high COP, to integrate water heater
- Internal temperature control system (local, both with general timer)
- Solar thermal panels for hot water production
- Installation of interior lighting with LED panel for lighting the spaces with sensor for the automatic adjustment of the brightness
- External lighting system with LED lights
- Photovoltaic system for the self - production of electricity
- Fan coils installed in the false ceiling in order to increase the spaces usable by beneficiaries and furnishings
- Use of components (glass, aluminum, etc.) and materials (stone, asphalt, recycled, etc.) made in Molise Region in order to guarantee locally sourced
- Maximising the recycling of construction waste

**Main outcomes:**

The above actions provided for improved thermal comfort taking into consideration the following technical and economic variables:

- management costs
- emissions in the atmosphere

The above mentioned variables obtained energy independence objectives from fossil fuels and make the offices "greener".

The intervention is seen as a good practice for the territories of the molise region, by adopting a high level of energy efficiency achieved through proper planning and good choice of materials as well as careful management of heating and sanitary water consumption. The best practice can be considered as transferable to other territories contextualising them to the specific situation as well as possibly adopting other systems, renewable energy sources or waste- available in the surrounding area (such as: rain water recovery, reduce of the island of urban heat with adoption of ventilated roofs - roof gardens, use of certified and sustainable timber exploitation, incentives for sustainable mobility (bicycle), reducing water consumption, non-potable water use for watering green areas - for technological purposes, heat pump ground water, low materials emission of pollutants composites,), respectful of the rural and natural heritage of the territory.