

Regional Hub: Italy



Projects supported:

4

Technical support services:

0

Business support services:

4

Project:

Divine City (IT)

Supported by:

APRE

Support measure:

Business Support

DESCRIPTION OF PROJECT

Consumerism has led to a critical environmental situation with important negative effects on the health of people and all living beings. The use of energy from renewable sources combined with new efficient heating systems that do not use fossil sources, allow the reduction of atmosphere pollution and contribute to the achievement of the objectives of the fight against climate change.

The heat generator that **Divine City** markets makes all of this concrete: it is efficient, it does not burn fuels, it does not emit any type of substances into the atmosphere and it optimizes the use of energy generated by photovoltaic and solar thermal systems.

Since the Divine City boiler does not produce pollution, running on electricity it allows to make the most of the energy generated by renewable energy plants. Divine City's goal is to raise awareness of this type of boiler and its potential; make known the climatic, structural and building situations suitable for installing the boiler and the optimal system setting.

DESCRIPTION OF SERVICE

APRE is supporting the Divine City project through trainings on R&I funding programmes and on how to access EU grants to further develop the technology, focusing specifically on EIC.

FOR MORE INFORMATION

Project: [11th STREET](#)

Regional Hub: [Italian Hub](#)

Support Provider Contact: Serena Fabbrini – [APRE](#) - fabbrini@apre.it



Project:

HEROES - Continuous Hybrid Heat-Electricity Generation from Solar in Engineered Smart Materials (IT)

Supported by:

APRE

Support measure:

Business Support

DESCRIPTION OF PROJECT

In the current renewable energy market, solar energy has a major role. However, the grand success story represented by solar PV in the electricity sector, is not shared in the “heating” sector despite its global energy demand is much larger than that of “electricity.” In fact, renewable sources account for 10% heating energy (in 2017) of which only 7% is produced by solar thermal collectors (STC). Clearly, decarbonizing the heating sector is a priority to succeed in the transition towards a net-zero carbon future. In addition, the demand of electricity produced by renewable sources is expected to substantially increase to meet the CO2 reduction goals. To expand the deployment of solar, some technical issues are yet to be countered such as low efficiency compared to fossil fuels, intermittency, load matching and stability.

HEROES addresses these issues proposing a brand new and potentially disruptive solar technology for the co-generation of heat and electricity for all types of buildings by integrating novel smart materials and temperature chaining concepts into a single system, offering 24/7 undisrupted supply of heat and power.

DESCRIPTION OF SERVICE

APRE is supporting HEROES through trainings on how to develop and write a good proposal in the framework of Horizon Europe, with specific reference to the impact section and IPR management.

FOR MORE INFORMATION

Regional Hub: [Italian Hub](#)

Support Provider Contact: Serena Fabbrini – [APRE](#) - fabbrini@apre.it



Project:

SMYLE (IT)

Supported by:

APRE

Support measure:

Business Support

DESCRIPTION OF PROJECT

SMYLE proposes a brand new and potentially disruptive approach to generate electric power from concentrated sunlight with higher efficiency and dispatchability than existing systems by integrating two novel direct power generation technologies and novel energy storage solutions into a solar tower Concentrating Solar Power (CSP) system. The system will thus overcome variability issues connected to both solar source and demand, supporting highly dispatchable power production.

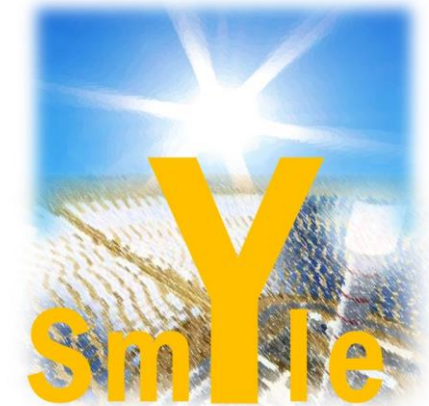
DESCRIPTION OF SERVICE

APRE is supporting SMYLE through trainings on how to develop and write a good proposal in the framework of Horizon Europe, with specific reference to the impact section and IPR management.

FOR MORE INFORMATION

Regional Hub: [Italian Hub](#)

Support Provider Contact: Serena Fabbri – [APRE](#) - fabbri@apre.it



Project:

Solar-driven residential energy system (IT)

Supported by:

CIVI

Support measure:

Business Support

DESCRIPTION OF PROJECT

The development and demonstration of an integrated and modular **solar-driven residential energy system** designed for combined heat, cold and electricity production is an Italian project that aims to design, develop, and demonstrate an economically efficient and sustainable concept of solar-driven system for supplying heat, cold and electricity for domestic and e-mobility purposes in the residential sector (new and existing buildings).

DESCRIPTION OF SERVICE

Through W4RES, they are receiving business planning support and support in the identification of possible funding options at the national and European levels.

FOR MORE INFORMATION

Regional Hub: [Italian Hub](#)

Support Provider Contact: Martina Di Gallo – [CIVI](#) - martina.digallo@civiesco.it

Innovative U tubes-in-tank metal foam-PCM thermal storage optimized towards maximization of solar exploitation as well as weight and cost reduction



High-efficiency small size adsorption chiller



Technical innovation: patented zeolite coating technology, reducing the unit's volume and cost by about two times