

# PARTNER SEARCH PMI7-EU-BSGSME-45

01 dicembre 2017

## PARTNER SEARCH PMI 7-EU-BSGSME-45

centro di ricerca spagnolo alla ricerca di partner da includere in un loro progetto da presentare nel programma CAPACITIES tematica RICERCA PER LE PMI .

Per maggiori informazioni sulla Ricerca Partner e per conoscere i contatti del proponente, potete consultare il seguente indirizzo web.

<http://www.apre.it/formaAssist/scheda.asp?id=1008>

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<Reference n.: PMI7-EU-BSGSME-45>

<Deadline: 11/04/2008>

<Programme: Ricerca per le PMI >

<Project Title: FREEZSUN- DEVELOPMENT OF A COOLING SYSTEM BASED ON GAS ADSORPTION IN CARBON MATERIALS AND SOLAR THERMAL ENERGY>

<Financial Scheme: Ricerca per il beneficio di gruppi specifici (SME)>

<Description: In countries with great solar energy potential, the exploitation of solar thermal energy is really interesting since it is an abundant energy source and respectful with the environment. This technology is supported by Public administrations which consider it as an opportunity both environmentally and economically. Nevertheless, this energy is barely used in summer time because of the fact heat production is no longer required during hot periods. This project aims at optimising the efficiency of this technology by taking advantage of the equipment to generate not only heat but also cold.

The project intends to develop a cooling system based on the use of a thermodynamic cycle comprised of an adsorbent and a refrigerant. The adsorbents to study are carbonaceous materials (granular activated carbons, activated carbon monoliths, activated carbon cloth and fiber.) whereas as far as refrigerants are concerned, a research looking into the most suitable gases will be carried out.

The cooling system optimization requires a smooth design as well as adsorbents with specific features. Currently, we do have activated carbons on a laboratory scale with great

capacity or active areas available which would need to reach large production so that the project fulfils its goals by means of a pilot plant. At the same time, the integration of domestic solar thermal equipment and air-conditioning or cooling system into one domestic system will be designed and developed.

The final objective is to obtain equipment capable of taking domestic solar thermal energy and turning it into air-conditioning or cooling system.

KEYWORDS: solar thermal energy, cooling system, air-conditioning, activated carbon, adsorption

PROJECT STATUS:

- Planned for submission >

<Organisation Type: Centro di Ricerca>

<Partner Sought: EXPERTISE REQUESTED:

-Solar thermal energy SME to adapt their equipment to product needs and requirements.

-Cooling systems or air-conditioning manufacturing SME.

-Manufacturing SME working in Pyrolysis and thermal treatment ovens.

N.B. Due to the call for proposal nature, these SMEs may join together with a research centre acting as a RTD performer

ROLE:

- Technology development

ORGANISATION TYPE:

- SME

- Research

HOW MANY PARTNERS ARE REQUIRED?

2 SMEs + 1 Reserch Centre (optional)

For further information about this Partner Search, including Contact Person's details, please consult this web address:

<http://www.apre.it/formaAssist/scheda.asp?id=1008>