



**SUSTAINABLE ENERGY
WEEK 15-19 JUNE 2015**
Take part in shaping Europe's sustainable energy future



The MED Programme, committed to a decarbonized Mediterranean:

**Innovation for Renewable Energy and Energy Efficiency solutions in Mediterranean
regions and cities. An overview of achieved results**

Bruxelles, 18th June 2015

“Cool” materials to counter city overheating

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Project MAIN – MAtériaux INtelligents



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Programme cofinancé par le Fonds Européen
de Développement Régional
Programme cofinanced by the European Regional
Development Fund

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THE PROJECT IN A NUTSHELL

MAIN THEME: “cool” materials for buildings and urban pavements with high and certified capacity to reflect solar radiation (the so-called cool roof and cool pavements) can effectively counter overheating of Mediterranean cities.

PARTNERSHIP: 12 partners (universities, public administrations, public agencies, associations of enterprises, a professional school) from 4 countries (France, Greece, Italy, Spain).

TARGET GROUP(S): technicians of the construction sector, manufacturers of building materials and building elements, policy makers, end users.

OBJECTIVE: dissemination of “cool” materials (cool roof, cool pavements) through qualification of key links in the chain: products, technicians, business proposals.



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THE PROJECT STORY

BACKGROUND:

- The world is urbanizing (50% of world population lives in cities, 70÷80% in developed countries).
- The world is also warming up (due to the greenhouse effect).
- Urban areas are getting even warmer than the surrounding world (the so-called urban heat island effect – UHI) due to high solar absorption of built surfaces.
- Outcomes are increased energy needs for air conditioning, discomfort, and diseases.
- “Cool roof” and “cool pavements”, i.e. materials and elements with high and certified capacity to reflect solar radiation, are an effective, intelligent countermeasure to UHI.
- Such intelligent materials are still underused in Europe, notwithstanding a climate favorable to their use and a relatively wide availability of commercial products.

PARTNERSHIP: in 2012, 12 partners from 7 urban areas of 4 countries decided to launch the Project MAIN – MATériaux INTelligents, aimed at disseminating “cool” materials.

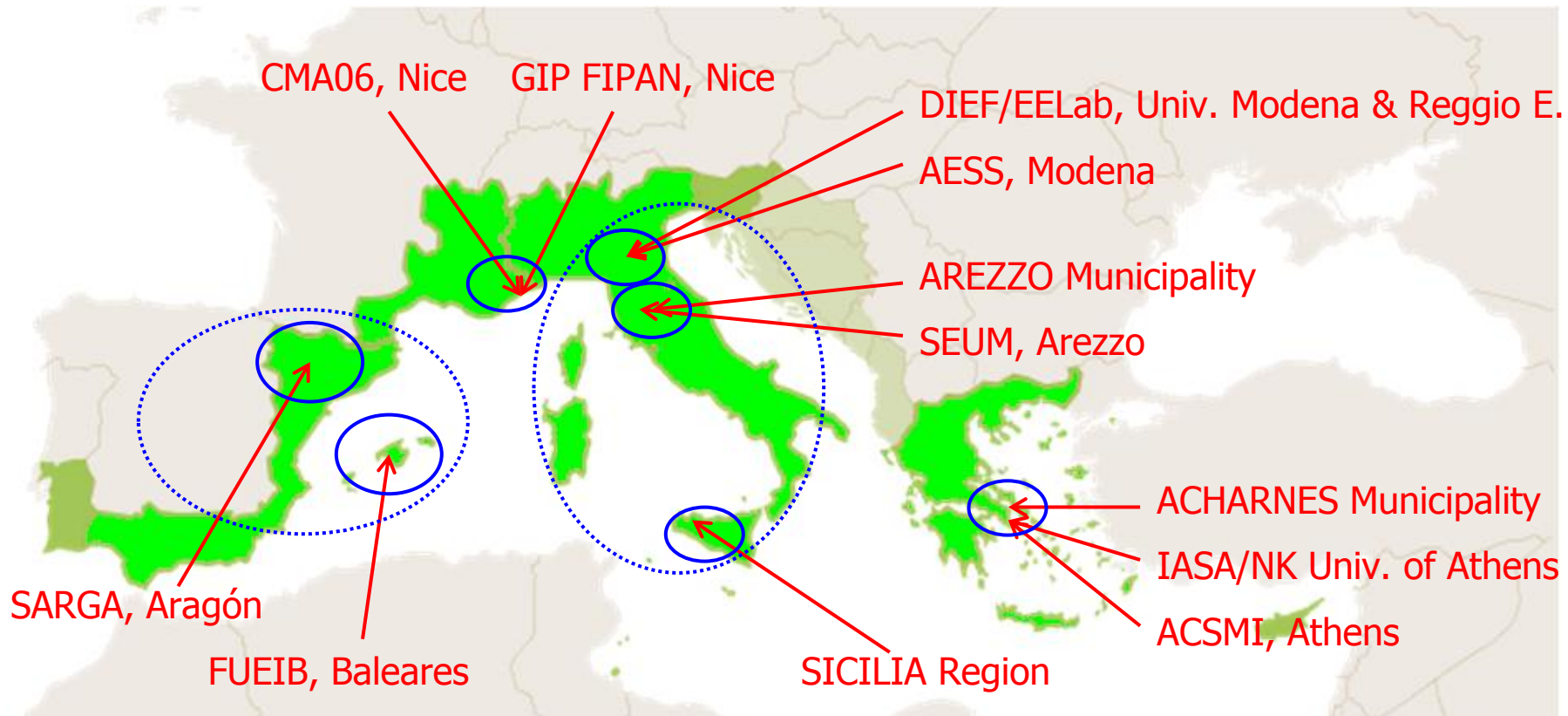


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PARTNERSHIP



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ACHIEVED RESULTS


A MAIN quality label has been created, to be awarded to:

- MATERIALS with performance certified by the European Cool Roof Council (an organization established in 2012 that manages an independent rating program) and exceeding given performance levels.

Promoting materials with high and verified performance will greatly benefit energy efficiency of new and retrofitted buildings in terms of energy needs for air conditioning, often higher than those for winter heating in many Mediterranean cities.




L'Europe en Méditerranée
Europe in the Mediterranean



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COOL ROOF

Brand, Product name
(2-3 lines if needed)



A+

A

B

C

A

MAIN id. CR-0001	Initial	Aged
Solar Reflectance	0.80	-
Infrared Emittance	0.89	-

www.med-main.eu

valid until 12/2015

ACHIEVED RESULTS

A MAIN quality label has been created, to be awarded to:

- MATERIALS with performance certified by the European Cool Roof Council.
- TECHNICIANS of the construction sector (architects, engineers, energy managers, etc.) having attended a training course purposely developed in 5 languages.



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ACHIEVED RESULTS

A MAIN quality label has been created, to be awarded to:

- MATERIALS with performance certified by the European Cool Roof Council.
- TECHNICIANS of the construction sector having attended a training course
- BUSINESS PROPOSALS promoted by a MAIN qualified technician and involving one or more MAIN qualified materials (in case MAIN qualified business proposals are eventually built, they achieve the status of MAIN qualified BUILT CASES).



The MAIN QUALITY label is managed through a PUBLIC DATABASE, where the end-users and other stakeholders can easily access a list of MAIN qualified materials (up to now in the category “cool roof”), a list of MAIN qualified technicians, and a list of MAIN qualified business proposals.

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A larger use of “cool” materials and, as a result, higher energy efficiency for building cooling are expected from training of technicians and information to other stakeholders.



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and



ACHIEVED RESULTS

PILOT ACTIONS on training have been promoted in all urban areas of the MAIN Project, aimed at testing the training program and making the approach replicable.

PILOT CASES have also been realized in all urban areas, involving either new or retrofitted buildings, as well as test installations and cool pavements, in order to showcase the technologies.



Thank you for your kind attention!



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