

WIDE THE SEE



ITALIAN BEST PRACTICE IN RENEWABLE ENERGY

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Wide the see project
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ITALIAN BEST PRACTICE IN RENEWABLE ENERGY

**Where the good practices really born...
in Italy and anywhere else?**



Good politics and good public administrators

People and companies with good ideas

Active citizens

Common vision of the future

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Where do we have to search for good practices?

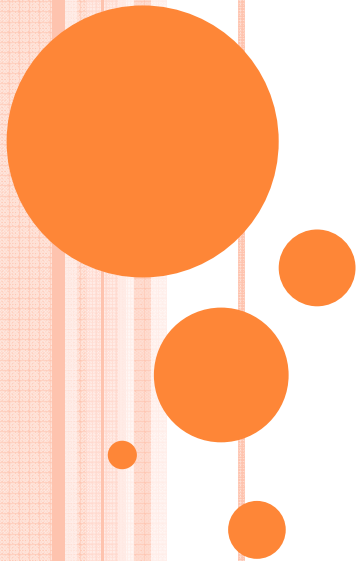
Where good public administrators, people with ideas and active citizens are part of the same process and with common targets....

To save public (citizens) money

To save energy and environment

To create new job opportunity

To be active and feel important for the people



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A good example: Network of virtuous towns



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59 municipalities involved

Themes

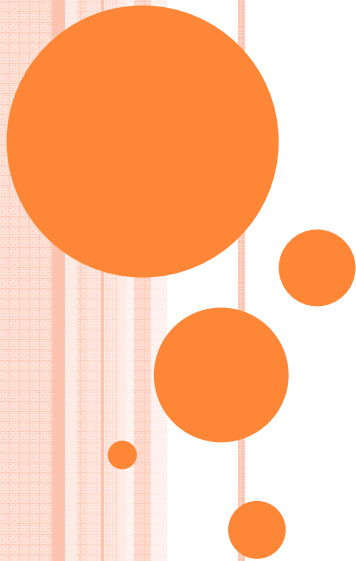
Territory preservation

Ecological Footprint

Wastes management and reduction

Mobility

New way of life (culture, education, school renewal)



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Ecological footprint: Energy management in Capannori, Tuscany

New school built with energy-saving criteria, photovoltaic panels, geothermal and solar thermal



New schools built with energy-saving criteria, photovoltaic panels, geothermal and solar thermal

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Ecological footprint: Energy management in Correggio and Emilia Romagna region

Emilia-Romagna innovative regulation to respect the EU new directive 2010/31 about “nearly zero energy buildings”

PREFIX:

31% of the energy consumption coming from civil use (buildings, offices)

Increasing of air conditioning weight in the energy consumption during summer

36% of the contribution to the particles production is coming from the buildings

The actual regulation considered as mandatory only winter parameters



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Ecological footprint: Energy management in Correggio and Emilia Romagna region

Target: -36% of the energy consumption in the buildings

Thermal energy summer consumption 30 kWh/m²



Municipality rules for new buildings and renovation with high rate of energy savings requested

Renovate public buildings and street lighting with efficient production system: solar thermal, PV



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Merging the technologies to avoid CO₂

“Cool Roofs”: 1 m² white roofs means reduction of 100 kg CO₂ per year saved



Photovoltaic panels: 1 m² of PV panels means a reduction of 70 kg CO₂ per year saved



Solar thermal: 1 m² of panels means a reduction of 100 kg CO₂ per year saved (100 days total use)



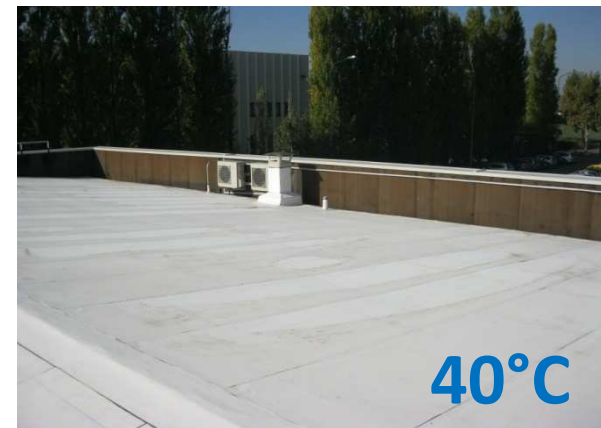
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Some example of cool roofs and PV

Santorini...the most simple and old form of cool roof



PV plant over high reflectance membrane



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Conclusions: thermal solar in Italy

Very simple and known technology

To be merged with other solutions to keep the different advantages without “competition”

Innovative solution: photovoltaic thermal combined panel, able to use the warm air produced below PV panels



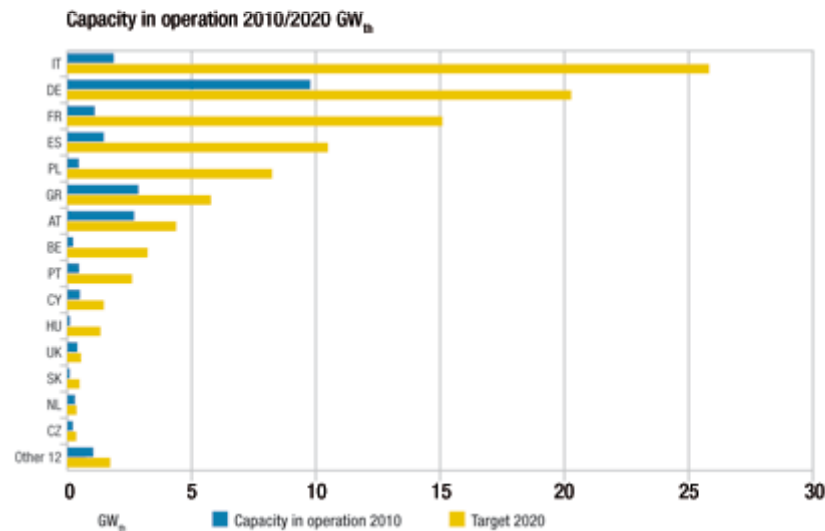
Improvement in the summer performance of both systems (no stagnation, lower temperature)

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Conclusions: thermal solar in Italy

Managed by lots of small companies, with high potential improvement in know-how and technology

High potential growth, looking at other EU countries and solar radiation at our disposal...



Source: ESTIF

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**Thanks for your attention
and have good sun!**

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