

SiREN: Scenarios for Integrating Renewable Energy technologies in a European cities Network Project

Innova S.p.A.

Summary

SiREN (Scenarios for the Integration of RENewables in a European Cities Network) is a project that aims to overcome the non-technical barriers to the effective dissemination of R&D projects in the renewable energy field in different European cities. Through a scenario workshop approach, SiREN managed to raise awareness, exchange knowledge, opinions and ideas, and conduct a collective discussion on implementing different new RE technologies. Furthermore, the workshops dealt with different solutions for tackling non-technical obstacles to the use of these RET. Workshops were held in the cities of Lisbon, Spoleto, Leicester and Deventer. The workshops resulted in action plans for the introduction of several RE sources and technologies, which are backed by local decision makers.

End-user area	Target Audience	Technical
<input type="checkbox"/> New buildings	<input type="checkbox"/> Citizens	<input type="checkbox"/> Energy efficiency
<input type="checkbox"/> Refurbishment of buildings	<input type="checkbox"/> Households	<input type="checkbox"/> Heating
<input type="checkbox"/> Transport and mobility	<input type="checkbox"/> Property owners	<input type="checkbox"/> Cooling
<input type="checkbox"/> Financial instruments	<input type="checkbox"/> Schools and universities	<input type="checkbox"/> Appliances
<input type="checkbox"/> Industry	<input type="checkbox"/> Decision makers	<input type="checkbox"/> Lighting
<input type="checkbox"/> Legal initiatives (municipal regulations, directives, etc)	<input type="checkbox"/> Local and regional authorities	<input type="checkbox"/> CHP
<input checked="" type="checkbox"/> Planning issues	<input type="checkbox"/> Transport companies	<input type="checkbox"/> District Heating
<input checked="" type="checkbox"/> Sustainable communities	<input type="checkbox"/> Utilities	<input type="checkbox"/> Solar energy
<input type="checkbox"/> User behaviour	<input type="checkbox"/> ESCOs	<input type="checkbox"/> Biomass
<input type="checkbox"/> Education	<input type="checkbox"/> Architects and engineers	<input type="checkbox"/> Wind
<input type="checkbox"/> Other	<input type="checkbox"/> Financial institutions	<input type="checkbox"/> Geothermal
	<input type="checkbox"/> Other	<input type="checkbox"/> Hydro power
		<input type="checkbox"/> Other

Context

SiREN (Scenarios for the Integration of RENewables in a European Cities Network) is a project that aims to overcome the non-technical barriers to the effective dissemination of R&D projects in the renewable energy field in different European cities.

Objectives

The aim of SiREN is to provide non-technical support to foster the dissemination of R&D projects and to help them overcome non-technical barriers in 4 European geographic contexts. SiREN raised public awareness on the potential of Energy R&D Projects by:

- Creating a network of European Cities sharing an innovative consensus building process, the EASW (European Awareness Scenario Workshop) methodology;

- Identifying impediments and factors of success for Energy R&D selected projects;
- Developing a local future vision analysing the impact of selected R&D Projects at the local level;
- Helping R&D projects to match specific socio-economic and environmental local needs and requirements.

Process

The 18 months SiREN project started in February 2001. The final workshop took place on 21 June 2002. The 8 partners from 4 EU countries are: AEA and Ecoazioni (I), LEA (UK), Amerlis+University of Lisbon (P), and Novem+Dialogic (NL). Project co-ordinator is Innova S.p.A.

The partners organised four participatory workshops in Lisbon, Spoleto, Deventer and Leicester. Using a scenario workshop methodology, these workshops were intended to promote RE sources and technologies in sustainable urban development; foster the application of new technology solutions (R&D project results) at urban level; identify non-technical barriers for RES/T; raise awareness and facilitate acceptance; and activate joint/concerted actions and promoting participatory processes for innovation.

Financial resources and partners

SiREN (Scenarios for the Integration of RENewables in a European Cities Network) is a project financed by the European Commission under the Energy, Environment and Sustainable Development programme (2000-2002).

Results

For each of the four cities, the workshops resulted in action plans that are backed by local decision makers:

Action plan for Spoleto:

- Application of CHP technology in a hospital;
- Pilot project for PV, energetic and bio-housing in a high school;
- Other interest: solar cells along the road, passive cooling in buildings.

Action plan for Deventer

- Feasibility study for pilot project heat from asphalt;
- Application of Local Traffic Performance design strategy and instrument in local area;
- Other interest: horizontal wind mills on roofs and PV foil on buildings.

Action plan for Leicester:

- Commitment from farmers and municipality for pilot project biomass plant;
- Application of battery management system for electric bus;
- Other interests: solar rental scheme, passive solar lighting, sustainable housing development.

Action plan for Lisbon:

- Interest in solar rental scheme, solar cells along the road, passive cooling in buildings.

Lessons learned and repeatability

The project proved that a participative approach can assist in the implementation of RE sources and technologies in local contexts. In Lisbon, Deventer, Spoleto and Leicester, SiREN made a real contribution to the implementation of Renewable Energy Sources and Technologies.

The project will conclude by providing examples and generalised materials for replicating the experience in your own city or neighbourhood. This information on the project web site is useful for local bodies interested in creating consensus for new technology solutions to be introduced at local level, technology providers or R&D organisations interested in disseminating/promoting their RE solution, and finally energy agencies and other bodies interested in supporting innovation and implementation.

As the local circumstances are generally different in every case, the examples cannot be simply copied. Therefore we advise you to draw on the experience of the National Monitors and Energy Agencies when you want to use SiREN's potential.

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