

ADEME & VOUS

International newsletter

No. 26 - Sept.-Oct.-Nov. 2013

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opportunities

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Editorial

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Ecocity 2013

One year after Rio+20, the 10th World Summit on Sustainable Cities, Ecocity 2013, will be held from 25 to 27 September 2013 in Nantes (France), coincidentally voted 2013 European Green Capital. ADEME, Ecocity's official partner, is organising several events. In a France-USA workshop on sustainable cities, French and American cities will discuss the environmental issues for which they have developed specific expertise and are currently running pilot projects: Portland and Bordeaux for eco-districts; Washington and Nantes for transport and green construction; Pine Crest and Chalon-sur-Saône for recycling and open spaces; and Austin and Issy-les-Moulineaux for renewable energy and smart grids. The Agency will also be chairing, with the support of the MEDENER network, a special session addressing "Sustainable Mediterranean cities", and will participate actively in a roundtable to discuss the topic of mobility and recharging infrastructure in the Global Village. Lastly, a seminar to discuss renewable marine energy is being held jointly by ADEME and its Japanese counterpart NEDO. /



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Energy efficiency **MEDENER's progress**

Starting on 13 February 2012 and for a period of two years, ADEME is holding the presidency of the MEDENER association. Here is a review of its main energy management actions.

Created in 1997, the **Mediterranean Association of National Agencies for Energy Conservation - MEDENER** - groups together twelve Mediterranean Basin organisations responsible for energy efficiency and renewable energy development policies. "This means that the agencies in Algeria, Spain, France, Greece, Italy, Jordan, Lebanon, Morocco, the Palestinian Territories, Portugal, Syria*, and Tunisia are represented in this association", points out Christelle Bedes, responsible for Mediterranean Mission at ADEME's International Affairs Department. "Through MEDENER, they are all focused on encouraging the exchange of energy efficiency experience and best practices." While the promotion of renewable energy is of course one of MEDENER's priorities, it is not the only one. "The association is above all particularly focussed on energy efficiency, which naturally leads into the development of renewable energy. In this context, MEDENER's work obviously concentrates on three major energy-consuming sectors: buildings, industry and transport."

TRIPLE THE PRODUCTION OF RENEWABLE ENERGY

Among other international programmes, MEDENER actively supports the Mediterranean Solar Plan, one of the six projects initiated under the Union for the Mediterranean launched in 2008. "This project specifically concentrates on renewable energy and energy efficiency. It aims to triple production from renewable energy in these countries by 2020 in order to reach a capacity of 20 gigawatt hours." Morocco is one of >>>

>>> the pioneers: its first solar plant, designed to generate 500 MWh (or the equivalent of a city of 250,000 people), is under construction in the Ouarzazate region.

Numerous workshops run in 2012-2013 have led to the compilation of a very comprehensive document that determines the fields of action for the various potential public and private stakeholders in this area. "The results of this work will be adopted at a ministerial conference attended next December by all the member countries of the Union for the Mediterranean", explains Christelle Bedes. "Its adoption will be a decisive turning point. It will provide these countries with the keys to rationalise their approaches by implementing actions to manage energy demand, and an ambitious energy production policy based solely on renewable energy. It will also help them to achieve the targets set." Against this backdrop, MEDENER is involved in the preparation of a Mediterranean energy transition conference that will be held on 18 September in Tunis (Tunisia) by ANME, and which will provide an opportunity to bring together all the region's stakeholders.

ENVISIONING THE SUSTAINABLE CITY

While the adoption of the Mediterranean Solar Plan is an undeniable "plus", there is also no escaping the fact that the MEDENER network member states have already made significant progress in these areas. "The building industry has been the focus of considerable attention. We know that a well-insulated, well-oriented and well-built building in an appropriate urban environment is a guarantee for real thermal comfort and well-managed energy consumption. Among other projects, MEDENER is currently involved in rolling out ambitious programmes in this sector to encourage the use of locally manufactured material."

Significant progress has been made by the industry sector, particularly in Tunisia, where ANME, with the support of the MEDENER network, has implemented a vast energy audit. "Progress in the transport sector is more recent. Among other difficulties, south and east Mediterranean countries are having to deal with an ageing fleet of less energy-efficient vehicles." Innovative solutions have been implemented in Algeria where a programme has been introduced to convert over 4,000 vehicles a year to LPG (also called autogas). Additionally, many of the region's large conurbations are committed to developing urban transit by improving infrastructure and the way transport is organised, for example in Morocco with the development of the Urban Transport Sector Plans. "These examples show that MEDENER adopts a global approach", concludes Christelle Bedes. "And, more than in any other sector, it is committed to ensuring consultation about the ambitious topic of the sustainable city in its entirety."

*Cooperation curtailed at present.

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FEEDBACK /

A project specifically for energy indicators

The project on energy efficiency indicators is one of MEDENER's flagship projects. It closely examines energy consumption in the zone's countries in order to compile a detailed image of the situation and to determine the impact of their energy strategies so that they can be fine-tuned if necessary. Four countries - Algeria, Morocco, Tunisia and Lebanon - have already completed this analysis. Among other findings, the studies have revealed that air conditioning accounts for a growing percentage of household energy consumption and so each country's energy bill. The issue of building energy performance will be discussed in the near future. This project on energy efficiency indicators should gradually be extended to include all the other MEDENER member States.

+ <http://medener-indicateurs.net/uk/>

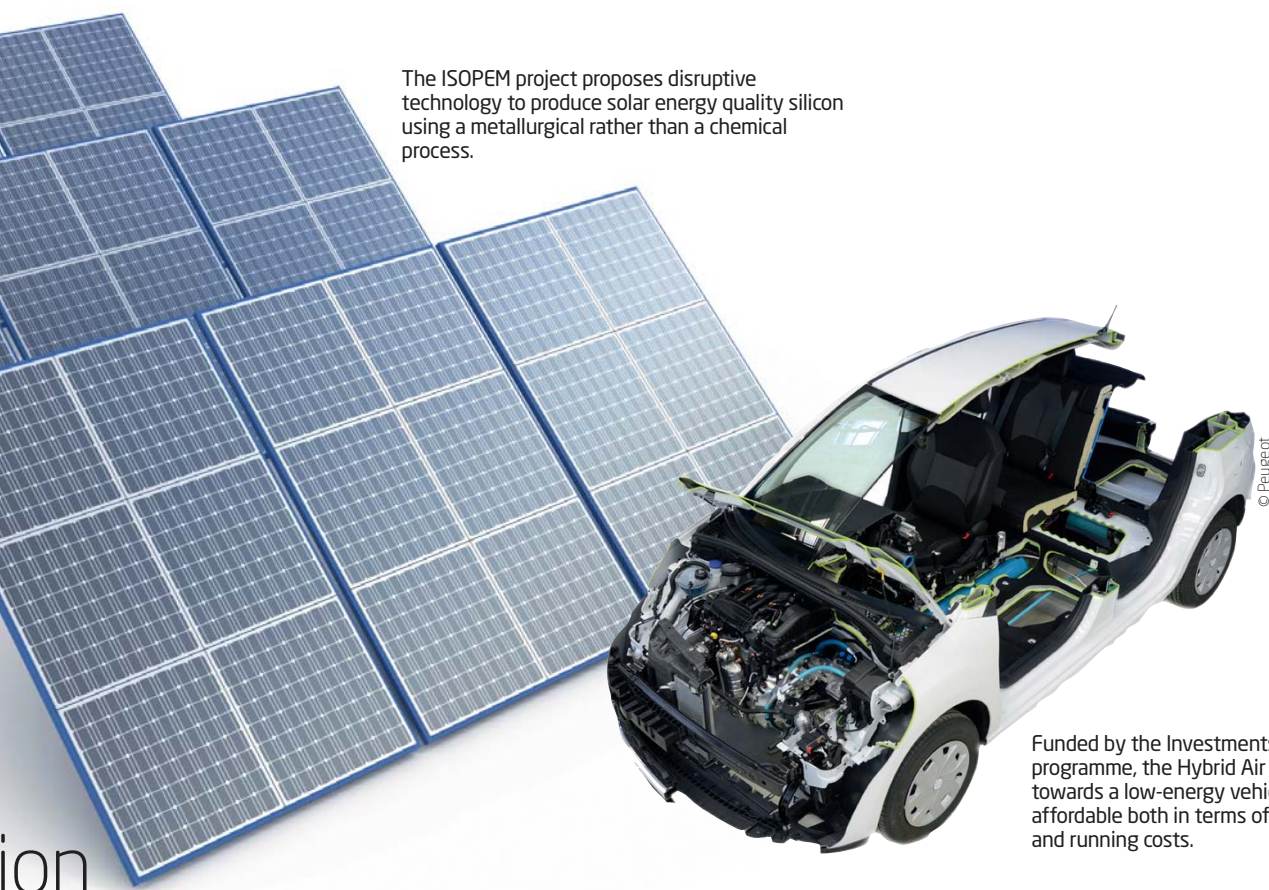


R&D and innovation
Numerous

By helping take innovation to the market, ADEME goes beyond research and acts as a catalyser for innovation in its various fields of expertise.

Action continuity and mutual enrichment: such are the effects of the Investments for the Future Programme (IFP) that ADEME steers for the Agency's R&D activity. For several years, ADEME has been active in research and development with targeted outcomes by financing applied research projects or theses that inform essential forward-looking discussions. Over the years 2007 to 2012, ADEME funded more than 1,400 projects generating around 600 million euros worth of research activity. Consistent with the specified targets, two thirds of the funding provided by ADEME for these projects (€218m) is earmarked for companies. "Helping develop low-energy and clean technology by supporting R&D and bringing developments to market through the IFP since 2010 aims to work towards cutting greenhouse gas emissions by 75% by 2050 (the so-called Factor 4), the target achievable according to the discussions during the French national debate on the energy transition",

The ISOPEM project proposes disruptive technology to produce solar energy quality silicon using a metallurgical rather than a chemical process.



Funded by the Investments in the Future programme, the Hybrid Air motor points towards a low-energy vehicle that is affordable both in terms of its purchase price and running costs.

ion ous opportunities

pointed out Anne Varet, Director of Research and Scenario analysis at ADEME.

Various scenarios for achieving the Factor 4 objective by 2050 were put forward and discussed during the national debate on the energy transition. The scenario developed by ADEME is classified among the so-called "low-energy" approaches and proposes to reduce energy consumption by 40% in the transport and building sectors. This scenario may seem ambitious, but it does not require any major disruptive technology given the progress currently achieved by projects included in the IFP.

MORE SCENARIO ANALYSIS RESEARCH

Introduced in 2010, Investments for the Future Programme provided a significant boost to ADEME's R&D and Innovation activity through calls for expressions of interest. These then led to State funding in the form of subsidies or contributions from its own funds with ADEME becoming in some cases a direct investor in the project company. *"The subjects, here again, are closely linked to the issue of energy transition, and the projects, some of which have evolved out of standard R&D projects, inform new more scenario analysis research thereby creating a sort of retroactive loop"*, says Anne Varet.

In 2014, the emphasis will be on storing energy. Renewable energy is often confronted with the issue of its intermittence, or in other words a mismatch

between periods of production and periods of high energy demand, with hydrogen being one of the avenues to be explored. Among the topics addressed, some concern vehicles and new modes of travel. Others deal with green chemistry and improving industrial processes, or even smart grids* and, of course, the development of renewable energy. Work is also underway in the circular economy (industrial ecology), in particular with a view to encouraging the emergence of new waste treatment streams through the development of innovative technology.

At times, some R&D projects from ADEME also generate Investments for the Future projects. For example, the solution developed by the PHOTOSIL project partners that aims to devise the "minimum necessary" treatment for very low-cost silicon using a metallurgical approach in order to manufacture metal

alloys. This original process has made it possible to achieve a very attractive price of around €25/kg for solar energy grade silicon.

Following on from that, the ISOPEM project, co-funded under the Investments for the Future programme, aims to move on to an industrial demonstration unit with an even more ambitious target of less than €20/kg.

** Smart grids aim to be more flexible and responsive to variations in the balance between electricity generation and consumption.*



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www.ademe.fr/presse (in French only)
<http://investissemmentavenir.gouvernement.fr>
(in French only)

Go further

INVESTMENTS FOR THE FUTURE

ADEME finances applied research projects or theses. The flow of calls for projects in the area of R&D and innovation is in particular driven by the Investments for the Future programme (IFP) through calls for expressions of interest. The exchange of experience and enrichment goes both ways between the ADEME's standard R&D activity and the research projects launched under the IFP. Since 2011, the Agency has used this approach to select 115 projects involving over 400 companies and representing funding of over 3 billion euros.

Morocco Action stepped up

For twenty years now, ADEME and its Moroccan counterparts ADEREE*, which replaced CDER in 2010, have maintained constructive and privileged relations. A European institutional twinning has further enhanced this cooperation.

I mporting over 95% of the energy it consumes, Morocco remains dependent on the outside world for its supplies. "The country is highly attuned to the challenges aimed at reducing this dependency", points out Thierry Méraud, responsible for Neighbouring EU Countries at ADEME's International Affairs Department. "That's why the country has committed to an energy efficiency approach to improve its autonomy." Among other significant actions, it has launched the Moroccan Solar Plan that aims to limit the country's energy consumption (a planned 12% improvement in energy efficiency) and to increase by two gigawatt hours the contribution of solar energy by 2020. "This partnership has, over the past 20 years, taken the form of a series of exchanges and concrete actions that resulted in 2010 in the signing of a bilateral cooperation agreement between ADEME and the newly created ADEREE." The "Sustainable Cities and Regions" and "Energy Efficiency in Buildings" actions, to quote just those two, have been launched against this backdrop. "They have made it possible to identify Morocco's needs in these areas, to bring about the future thermal regulations for the building industry, and to transfer to local authorities numerous tools to assess their public lighting, analyse their urban environment and implement Local Climate-Energy plans, for example."

INSTITUTIONAL TWINNING

In 2012, the durability of these relations led to the launch of an institutional twinning between Morocco and France (leading European partner) and Germany (junior partner). This 30-month programme spans 180 four to five day missions to help Morocco roll out its energy efficiency approach. In all, 65 French and German experts will lead missions divided into five areas of activity: new social housing and the refurbishment of existing stock; equipment in housing and tertiary buildings; industry SMEs and large tertiary sector organisations; regions and local authorities; and lastly, cross-activity actions (public policy strategies and tools, training and communication). The strength of these initiatives lies in their durability, "The bilateral cooperation agreement should shortly be renewed and the twinning can then enter its phase 2. That leaves us the time to carry on with an organised and very useful project." Companies have, of course, their role to play in this project. The fifth Pollutec Morocco trade show, held from 23 to 26 October next, will provide them with an opportunity to gain a better understanding of this programme and to promote their expertise in highly sought-after areas (public lighting, urban transit, etc.).

* Moroccan agency for the development for renewable energy and energy efficiency (ADEREE), created in 2010.



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NEWS /

DAKAR REGION ADOPTS AFRICA'S FIRST CLIMATE PLAN

The Integrated Regional Climate Plan (PCTI) developed by the Dakar Region was launched on 1 July. It is a decentralised cooperation project between the Ile-de-France region (France) (represented by the Regional agency for the environment and new energy - Arene) and the Senegalese capital. A project partner to the tune of 100,000 euros, ADEME is contributing its knowledge and experts to assist this project which could become a reference for other African regions.

www.ademe.fr/presse

PUBLICATION /

GLOBAL ENERGY EFFICIENCY REPORT

ADEME's global energy efficiency report provides a summary of an international study performed on behalf of the World Energy Council (WEC). This study provides a comprehensive overview of energy efficiency in the OECD countries and in the so-called emerging countries. It also offers up strategic recommendations.

www.ademe.fr/publications

TO ATTEND /

7 to 9 October 2013 FIRST GLOBALSOILMAP CONFERENCE

ORLEANS (FRANCE)

This conference targets all people and organisations that produce soil data, and anyone liable to be interested by GlobalSoilMap, currently the most ambitious worldwide soil science project.

www.ademe.fr/manifestations

3 to 6 December 2013 POLLUTEC HORIZONS

PARIS-NORD VILLEPINTE (FRANCE)

The eco-technology, energy and sustainable development exhibition.

www.pollutec.com

4 to 6 December 2013 ENERGAÏA

MONTPELLIER (FRANCE)

Annual meeting of renewable energy professionals from France, Europe and the Mediterranean countries.

www.energaia-expo.com