No. 27 - Nov. - Dec. 2013 - Jan. 2014

Urban planning A new approach

P. 02

Renewable energy 40 years already!

P. 04

Editorial

DOMINIQUE CAMPANA,

Director of International Affairs at ADEME

20 years of partnership

The annual international meeting for ecoinnovation in France, the Pollutec Horizons

trade show attracted almost 27,000 attendees in December in Paris (France), of whom 18% from abroad. This year, the emphasis was on three cross-sector topics: integrated management of cities, steps to make factories more efficient and incorporating sustainable development in health facilities. Several prizes and awards were presented at the event, including the "Innovative Technology Award" that encourages synergy between public research laboratories and industry, and the "Enterprise and Environment" award presented by the French Ministry for Sustainable Development and ADEME, which this year included a new "circular economy" category. The winning six biodiversity conservation projects are worth especial mention. The third "Eco-company export awards", organised by BPI France, Ubifrance and ADEME, honoured the dynamism of eco-companies on the international stage, especially in the solar energy, hospital waste treatment and remote management in the drinking water and wastewater segments. Finally, this year's Pollutec was also an opportunity to celebrate the 20th anniversary of the productive partnership between ADEME and Pollutec which has helped make eco-innovation the major topic it is today. /



Energy efficiency **A global priority**

Since 1992, ADEME and the World Energy Council have been closely examining energy efficiency around the world. Here are the main findings in their eighth report.

arried out with the technical support of Enerdata, this study involved 85 countries, which together account for over 95% of the world's energy consumption. It reveals that energy efficiency progress has slowed in the world since 2008 (the annual decrease in energy intensity has fallen to 0.6% down from 1.3% since 1990). "The performance discrepancies are particularly indicative of the differing economic contexts, for example, the growing weight of China in global activity and for which the energy intensity continues to outpace the average, and the economic crisis in developed countries that has slowed energy efficiency gains", explains François Moisan, Executive Director of Strategy, Research and International Affairs, Scientific Director of ADEME.

In terms of the sector breakdown, the transport sector's energy intensity decreased by an average 10% in all regions of the world between 1990 and 2011 due to technological improvements to vehicles and a relative saturation of travel in some European countries. In the residential sector, energy consumption per household has fallen 0.8% per year since 1990 due to the improved appliance efficiency. Considerable discrepancies between countries persist with the differences being particularly noticeable for electricity consumption: Indian households consume an average of 750kWh per year, compared with 1,300 in China, 3,500 in Europe, 5,000 in Japan and 10,000 in North America. The figures for the industrial sector are much more

>>> even. François Moisan also pointed out that "the best performances in this sector are no longer the sole preserve of the OECD countries".

GOVERNMENT POLICIES PAYING OFF

Dynamic government policies are responsible for improved energy efficiency. "Energy efficiency has become a global priority and almost three quarters of countries now have a specialised institution similar to ADEME tasked with implementing national energy efficiency policy", added François Moisan. Energy efficiency labelling and minimum standards have spread to almost all countries: 100% of the OECD countries, 90% of the Asian countries and 50% of the African countries included in the study have introduced energy rating labels for household appliances and even for buildings.

Around 70% of the countries included in the study sample have introduced tax measures or financial incentives, mainly in the form of direct investment subsidies, especially low-interest loans in OECD countries.

SOLUTIONS YET TO BE INVENTED

So much for the past, what about the future? "While it is true that 'best practices' are tending to be picked up, the specifics of each country call for new appropriate measures that combine support for innovation, regulations, tax measures, information, guidance and monitoring". This is the angle adopted in the report when it encourages political leaders to implement innovative measures that have already proven their worth. This refers, for example, to developing standards and regulations for appliances and making sure they are complied with, and checking the quality of energy efficiency through certification procedures. The study also encourages the introduction of innovative funding methods to support consumer investment, including the importance of improving the information available to them. "A case study performed in eight countries revealed that smart billing of electricity consumption explaining when power is consumed led to a significant reduction in electricity and gas consumption." Assessing the results of measures rolled out is considered crucial to verifying the impact of energy efficiency policies. In conclusion, François Moisan said, "Boosting regional and transnational cooperation can only be beneficial for gradually harmonising standards and sharing knowledge and best practices".





FEEDBACK /

MEDENER leading the Energy Transition in the Mediterranean

The Mediterranean region is facing significant energy issues given the predicted 45% increase in its population by 2030. This equates to a 40% rise in energy demand and the need for almost 42 million new constructions. It is against this backdrop that MEDENER (Mediterranean Association of National Agencies for Energy Efficiency and Renewable Energies) of which ADEME holds the presidency until mid-2014, with the support of the Tunisian counterpart of ADEME, ANME, and the United Nations Development Programme (UNDP), organised a conference on the "Energy transition in the Mediterranean" in September 2013 in Tunis (Tunisia). This was an opportunity for the public and private regional stakeholders, and funding organisations in attendance to gauge the importance of establishing institutional operators, and policy and regulatory frameworks specifically for energy efficiency, such as the energy label, equipment certification and the creation of training centres, particularly for the building industry. MEDENER reiterated these issues during the compilation of the Mediterranean Solar Plan, the flagship project for the Mediterranean Union, by positioning itself as a regional forum for its implementation in the energy efficiency and diffuse renewable energy segments.



http://www.espaces-ademe.com/synthese/index.html



Urban planning **A new** a

Given the growing demographic pressures, urban planning is increasingly essential to finding solutions to the social and environmental challenges facing the 21st century, such as combatting nuisances, reducing greenhouse gas emissions, adapting to a changing climate, etc.

ver 77% of the French now live in cities. Urban centres concentrate sustainable development challenges: energy consumption, greenhouse gas emissions, air quality, noise pollution, and so forth. "The two sectors that consume the most energy and emit the highest concentration of CO2, transport and buildings, are essential to the urban system", points out Emmanuel Acchiardi, Deputy Director of ADEME's Sustainable Cities and Regions Department. Only in recent times has urban planning started to take stock of energy and environmental concerns.



The urban planning strategy involving the research community, local and town planning authorities, public and private service operators and associations must contribute to the emergence of truly sustainable urban planning.

pproach

Many organisations are active at the local and national levels (ministries, professional associations, etc.) and internationally. "With their expertise and their capacity to involve the various stakeholders, supported by the ADEME's regional departments, local authorities must play a central role," adds Emmanuel Acchiardi. "They are encouraged to use their town planning policies as a tool to spearhead regional sustainable development including such aspects as mobility, resource conservation (energy, soil, etc.) and growth of the local economy."

SET NEW GOALS, DESIGN SYSTEMS AND TRAIN PROFESSIONALS

To factor in the impact of development and urban planning decisions on travel, waste, energy, resources and even the consumption of space, ADEME has devised an urban planning action strategy based on three complementary aspects. First aspect: identify the current research in the field and institute a dialogue between researchers and practitioners in order to set new goals. Second aspect: design the systems needed to analyse and define the policy vision in this area, bolstered by systems to aid decision-making, steering and tracking this policy. Third aspect: improve awareness and information actions to engage the stakeholders in the sustainable development issues facing cities and train professionals so they can keep abreast of the changes in their field. This programme involving the

research community, local and town planning authorities, public and private service operators and associations must contribute to the emergence of truly sustainable urban planning that guarantees, among other things, an improved quality of life.

AEU2: DEVELOP A SYSTEMATIC APPROACH

"In the 2000s, ADEME relied on feedback from the field and the input from its varied areas of expertise (habitat, energy, transport, waste, polluted soil, air and noise, etc.) to develop a systemic approach called the environmental approach to urban planning or AEU", explains Sophie Debergue, Urban Planning Engineer with ADEME. "This approach can be adapted at three project levels: regional, urban and development", adds Sarah Marquet, Engineer at ADEME's Urban Organisations Department. "It provides a method for planning that up until now has only been touched upon in existing systems and which high-

lights the links between the various scales of a project. To take into account the contributions made by the French Grenelle Environmental Forum, it has now been updated and expanded. The 2013 version is a comprehensive tool renamed AEUz. It includes a guidebook, training material, and technical and method handbooks"

ADEME also targets its action and partnership approach at the national and local levels. "These partnerships contribute to pooling our knowledge and practices to create and disseminate systems designed to assist with decision-making and actions", says Sarah Marquet. "They are also a conduit for relaying and strengthening the Agency's actions."



emmanuel.acchiardi@ademe.fr sophie.debergue@ademe.fr sarah.marauet@ademe.fr



www.urbanismedurable-ademe.fr (en français)

Go further

VIVAPOLIS: THE EXPORTABLE SUSTAINABLE CITY

Water, waste, air quality, energy efficiency and mobility, etc.: France has created a showcase with its Vivapolis brand to promote the excellence of French companies ir most areas crucial to the sustainable city. This brand is now also being leveraged to promote these products and services in a shared way on foreign markets and at international trade shows.



www.vivapolis.con



Renewable energy

40 years already!

On 3rd of October 2013, over 300 people attended an international event organised by ADEME, CNRS and UNESCO to exchange views on "Renewable energies in the service of humanity".

orty years after the first international conference "The sun in the service of mankind" in 1973, this event sought to focus on the progress made and the challenges ahead leading up to the strategic date of 2050. The aim was to review the development of renewable energy, putting its contribution into perspective within the global energy transition and to call for greater international solidarity. Under the patronage of the President of the French Republic, it involved two events: a scientific symposium at CNRS headquarters and a ceremony at UNESCO headquarters.

SIGNIFICANT PROGRESS BUT SEVERAL CHALLENGES AHEAD

The symposium attracted numerous scientific experts and representatives of international organisations, such as the International Energy Agency (IEA), the International Renewable Energy Agency (IRENA) and the Renewable Energy Policy Network for the 21st Century (REN21). One of the key figures worth mentioning is that over 138 countries have set targets and introduced policies to promote renewable energy (two thirds of these are developing countries). A significant contributor having been involved in the organisation of the 1973 conference, Wolfgang Palz, Chairman of the World Council for Renewable Energy, pointed out that the world's total installed capacity of wind power, photovoltaic and bio-energy has risen from 47 GW in 2000 to 510 GW in 2013. Concerning the long-term development outlook, the IEA estimates that from 2015 renewable energy will account for the second largest source of electricity generation in the world and that by 2035 they will account for nearly one third of all electricity generated worldwide. "Although the signals are positive, there are still many challenges ahead, such as the costs, large-scale integration into existing energy systems, the limitation of certain resources, etc.", pointed out Virginie Schwarz, Director General of ADEME.

POLITICAL ENGAGEMENT

"We will need a real energy revolution if we are to reduce our dangerous addiction to carbon and provide access for everyone to clean energy at affordable costs", says Marie-Hélène Aubert, Special Advisor to the President of the French Republic for international climate change negotiations and environment. "At the global level, in 2012, renewable energy employed more than 5.7 million people and investment in this segment has been multiplied by 6,5 between 2004 and 2011 but less than 7% of this growth benefited developing countries", explained Bruno Lechevin, President of ADEME. As Kandeh K. Yumkella, Special Representative of the UN Secretary-General and Chief Executive of the Sustainable Energy for All Initiative, has called for "Greater political commitment to address the energy and environment challenges that the world faces". Brice Lalonde, Special Advisor on Sustainable Development to the UN Global Compact, called for greater involvement by the private sector and civil society. Great challenges for the 21st century!



marie.dadesky@ademe.fr





BP 90406 - 49004 Angers Cedex 01 - www.ademe.fr **Publication manager:** Valérie Martin **Editor-in-chief:** Catherine Séguin-Jacques **Co-editor-in-chief:** Denis Tappero

ISSN 1961 - Ref. 7457 - November - December 2013 - January 2014 Subscription on request: international.newsletter@ademe.fr





Toolbox

PUBLICATIONS /

FRENCH KNOW-HOW IN THE FIELD OF ENERGY EFFICIENCY IN INDUSTRY

Aimed at promoting French expertise at the international level, this brochure presents public and private products, services and R&D in the field of energy efficiency in industry. Ref. 7795 (in French) and 7796 (in English) www.ademe.fr/publications

BENCHMARKING STUDY OF KEY PERFORMANCE INDICATORS FOR WASTE TREATMENT

This benchmark study lists the conventions used by the various European countries for reporting structural indicators for municipal waste published by France and five other Member States.

www.ademe.fr/publications

KEY FACTS 2012

Building renovations, local prevention programmes, regional climate plans, supporting innovative enterprises or rolling out the heat fund... In 2012, ADEME stepped up its action, engaged regional entities and society's stakeholders to commit fully to the ecology and energy transition. This document reviews the past year's highlights.

Ref. 7798 (in French) and 7799 (in English) – www.ademe.fr/publications



TO ATTEND/

20 to 22 January 2014 WORLD FUTURE ENERGY SUMMIT

ABU DHABI (UNITED ARAB EMIRATES)

The world's foremost event for the renewable energy, energy efficiency and clean technology sectors.

www.worldfutureenergysummit.com