Sustainable Regions in Action

Platform where regional and local actors exchange and learn from each other

January 2015
SINCE 6TH JUNE 1990...

In the early 1990s, regional actors, encouraged by the European Commission, wanted to assert their role and see its importance in the energy field recognised. Thus FEDARENE - European Federation of Agencies and Regions for Energy and the Environment - was created on 6th June 1990 by 6 regional authorities – Rhône-Alpes, Provence-Alpes-Côte-d’Azur, Wallonia, Basque Country, Aquitaine and Nord-Pas de Calais – who shared an ambition to adopt pro-active regional policies and actions for sustainable energy. EU programmes helped kick-start many regional and local energy agencies across Europe, who act as facilitators, some of which became members of FEDARENE.

FEDARENE is now the premier European network of regional and local organisations which facilitate or implement sustainable energy policies and measures at the regional and local levels. A non-profit organisation, the network counts today more than 65 members from 18 EU and EEA countries. These members are mostly regions and regional or local energy agencies. These levels of governance offer high possibilities for targeted and adapted sustainable energy measures through:

- a greater flexibility than national governments;
- the responsibility for many policy areas relating to energy: buildings, transport, industry;
- a more thorough knowledge of the territories covered;
- the proximity to citizens.

OBJECTIVES

- Represent, promote and lobby for the regional dimension in EU energy policy towards the EU Institutions;
- Facilitate the development of inter-regional partnerships and EU projects;
- Serve as a platform for the exchange of best practices to foster replication.

ACTIVITIES

- Provide an ongoing information service - in particular on EU policy developments and funding programmes - to our members;
- Promote our members’ activities and disseminate information on their behalf;
- Keep an up-to-date online database of best practices to encourage replication;
- Facilitate the forming of project partnerships for Calls for proposals;
- Prepare position papers on European legislation and programmes;
- Participate in consultations to represent regions’ voice.
18 EU and EEA countries currently covered by FEDARENE

Austria
Belgium
Bulgaria
Croatia
Cyprus
Czech Republic
Denmark
Finland
France
Germany
Ireland
Italy
Norway
Romania
Slovenia
Spain
Sweden
United Kingdom
STRUCTURE

The federation’s most important decisions are voted on during an annual General Assembly. This meeting also represents the occasion for the members to meet face-to-face and exchange experiences and ideas from their different regions throughout Europe.

In 2015, the General Assembly will be organised in Paris, in December, in parallel to the UNFCCC’s “COP 21”.

The Board of Administration is composed of 16 members of which a President, a Secretary General, a Treasurer, 13 Vice-Presidents. The Board’s members are representatives of the following Regions/Provinces: North West Croatia (HR), Provence-Alpes-Côte-d’Azur (FR), Berlin (DE), Rhône-Alpes (FR), Oberösterreich (AT), Nord-Pas de Calais (FR), Abruzzo (IT), Ile-de-France Region (FR), Ploesti Prahova (RO), Comunidad Valenciana (ES), Central Finland (FI), Severn Wye (UK), Liguria (IT), Southeast Sweden (SE), Wallonia (BE).

“European regions are often the brightest examples of how to use energy sustainably at the global scale. They bring EU policy alive by providing practical, local examples of how European policies and programmes relate to citizens in their own regions.”

Julije DOMAC, President of FEDARENE and Managing Director of REGEA (North West Croatia Energy Agency)

“Local and regional achievements in sustainable energy are crucial to Europe’s energy future. We help Brussels benefit from them.”

Michael GEISSLER, Secretary General of FEDARENE and CEO of the Berliner Energieagentur

“Citizen engagement is one of the key ways to reduce energy consumption. We are thus closely working with citizens, particularly by providing support measures for them to improve the energy efficiency of their residential buildings.”

Dominique SIMON, Treasurer of FEDARENE and General Inspector of the Energy and Sustainable Building Department of the Walloon Region
“Energy efficiency and renewable energy sources are mostly seen as a means to combat climate change and generate green growth. However, the scope of their benefits reaches much further. They can also play a crucial role in lessening energy dependence and, thus, increasing energy security.”

Christiane EGGER & Gerhard DELL, Vice-Presidents for Renewable Energy of FEDARENE and Directors of OÖ Energiesparverband (Upper Austria Energy Agency)

“Access to reliable data on energy and GHGs emissions at the local level remains one of the major challenges of local energy planning. The creation of a European network of regional observatories is enabling the comparison of data acquisition and accounting methodologies towards informing the design of local sustainable energy action plans.”

Serge NOCODIE, Vice-President for Climate Action of FEDARENE and President of Rhônalpénergie-Environnement (Rhône-Alpes region energy and environment agency)

“The energy and ecological transition is the track we must follow to combat the threats of climate change, to improve the quality of life of the most vulnerable citizens, and to boost an economic activity anchored in the 21st century.”

Annick DELHAYE, Vice-President for Energy Efficiency / Behaviour of FEDARENE and Vice-President of the Provence-Alpes-Côte-d’Azur Region

“I see the vice presidency being focused on the involvement of European regions in the transitions needed to address climate issues. As such, it will consist, in my view, in highlighting the experiences already implemented, particularly those on the governance of transition processes led by regions and their territories.”

Paulo-Serge LOPES, Vice-President for Climate Action of FEDARENE and Councillor of Nord-Pas de Calais Region

“A sustainable utilization of forest bioenergy increases energy security and has positive impacts on local economies. It also contributes to climate change mitigation.”

Rolf NYLHOM, Vice-President for Renewable Energies of FEDARENE and Councillor of Central Finland Region

“Joint collaboration is the best way to reach sustainable energy and IRE Liguria works hard to stimulate and transfer good practices at local and European levels.”

Maria FABIANELLI, Vice-President for Energy Efficiency of FEDARENE and Director of the Energy Division of IRE Liguria (regional energy agency)
“Regions across Europe and the world share the challenge of finding a way to a sustainable future, with safe, clean and affordable energy for all. FEDARENE helps us also to share the practical solutions, exchanging knowledge and experience with colleagues across the EU.”

Catrin MABY, Vice-President for Energy Efficiency in buildings of FEDARENE and Chief Executive of Severn Wye Energy Agency

“Fighting climate change and promoting the energy transition are our daily challenges. We are working diligently to facilitate the development of relevant territorial projects by promoting the best practices at national and European levels.”

Marc LIPINSKI, Vice-President for Energy Transition of FEDARENE and President of ARENE (Ile-de-France region energy and environment agency)

“Regions and municipalities in Europe are the drivers of change in the field of energy efficiency, renewable energy sources, sustainable mobility systems, and climate protection. Supporting regions and municipalities in these fields means transforming strategy into action.”

Thekla HEINEL, Vice-President for Climate Protection in cities and regions of FEDARENE, Head of Department at B&SU agency (Berlin)

“Being part of a European network is a fundamental opportunity for the Abruzzo Region and for all regions to share local solutions, and more widely to contribute to ensuring a better world for the future generations.”

Iris Flacco, for the Vice-President for Renewable Energy of FEDARENE and Coordinator of the Energy Division at ARAEN (Abruzzo region energy agency)

“The contacts our organisation gets through FEDARENE are invaluable! The partnerships established have made it possible to run projects contributing significantly to a sustainable development in our own region.”

Ulf HANSSON, Vice-President for Mobility and Transport of FEDARENE and Manager of Energikontor Sydost (South-East Sweden Energy Agency)
"The Valencia Region has its own energy model that pivots around four priorities: energy independence, energy efficiency, technical and economic efficiency of energy networks, and the promotion of renewable energy sources."

Antonio CEJALVO, Vice-President for Energy Efficiency of FEDARENE and General Manager of IVACE (Valencian Institute of Business Competitiveness)

"With the support of FEDARENE, we want to make the most of our potential in renewable energy sources, boost investments and strengthen the economy of Prahova County."

Bogdan POTLOGIA, Vice-President for Renewable Energy of FEDARENE and Manager of AE3R (Ploiesti-Prahova energy agency)

"With its presence across Member States of the European Union, FEDARENE provides a fantastic place for regional energy and environment agencies and their Regions to be informed, to network, to exchange best practices, to imagine new common projects, and ultimately to build a Europe of territories for sustainable future development."

With the support of Christian LABIE, Deputy Secretary General of FEDARENE and Director of Rhônalpénergie-Environnement, (Rhône-Alpes region energy and environment agency)

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25th ANNIVERSARY in 2015

A few words from Dr. Julije DOMAC, president of FEDARENE since October 2013 and Managing Director of REGEA (North-West Croatia Energy Agency):

“I see regions as the building blocks of a grassroots Europe, co-operating with one another across national boundaries, implementing joint projects and identifying common solutions to shared problems. Regions often make that critical step to disseminate European information to the citizens, municipalities and cities, translating it into a language that citizens understand. They bring European policy alive - by providing concrete, local examples for how policies, programmes and initiatives relate to our stakeholders on the ground.

One important framework within which regions take a central role is the Covenant of Mayors initiative, where regions (provinces, counties) can be Territorial Coordinators assisting the signatory municipalities within their territory. These are all reasons why we recognise a crucial role of the regions, with the precious support of their energy agencies and the European federation of these agencies – FEDARENE, which is celebrating its already 25 years of existence in 2015.

I would also like to point out that more importance has to be given to the development of collaboration models in sustainable energy planning between regional and local public authorities – what is called multilevel governance. This should be recognised in our key policy documents in the future – the Green Paper “2030 framework for climate and energy policies”, for example. In this regard, the lack of expertise and the consequent need for capacity building also need to be emphasised.”

Launch of the Roger Léron Award created by FEDARENE

The Roger Léron Award has been created to celebrate outstanding contributions to the transition towards sustainable energy at the regional and local levels across the EU.

Indeed, FEDARENE knows that the regional and local levels of governance play a central role in energy and climate issues, through their responsibility for many policy areas (energy, transport, housing,...), their proximity to citizens, their thorough knowledge of the territory, and their greater flexibility than national governments.

The Award is named in memory of Roger Léron, a pioneer of regional sustainable energy in Europe and one of the FEDARENE founders who also served as its President for over a decade (1995-2007). Deeply rooted in local and regional development, he had a far-reaching vision for greater sustainability in Europe.

The trophy will be awarded every year as from 2015 to an individual or organisation during an award ceremony in June, in Brussels.
Combating Energy Poverty

Fuel Poverty - also known as ‘Energy Poverty’ - is acknowledged to be a serious and widespread issue in the UK, with estimates of the number of households affected rising from 1.2 million in 2004 to 4 million in 2009. This problem is increasingly recognised in other European countries, and in the face of widespread financial crisis many households have to make tough decisions about their priorities. In her report on social housing in the European Union, MEP Karima Delli indicates that the numbers affected by fuel poverty in the European Union might be as many as 50-125 million.

Fuel Poverty affects the most vulnerable in our society. It happens when households on low incomes live in energy inefficient homes, so that the cost of the energy required to provide their basic needs is unaffordable. The rising costs of energy are a significant contributory factor, as is the ever-growing range of household, communications and entertainment equipment that consume electricity – but most significant is generally the thermal efficiency of the home and the equipment for heating or cooling and hot water. Households particularly at risk of fuel poverty are those with young children, the elderly, or living with a long term illness or disability, as well as the long term unemployed – all of whom tend to be in the home for longer hours than average. In some cases there may also be less ability to cope with uncomfortable or inadequate temperatures, or a need for more hot water for washing and laundry.

The effects of fuel poverty and low (or too high) indoor temperatures include fuel debt, poor health and even death. In a cold country, lower indoor temperatures increase the risk to occupants of impaired respiratory and cardiovascular function, with children living in cold homes more than twice as likely to suffer from a respiratory problem than those with adequate heating. Mental health can be negatively affected, the frequency of minor illnesses such as colds increased, and conditions such as arthritis exacerbated. Indirect effects include lower education attainment, reduced dietary choices, social exclusion and the risk of trips and falls due to lowered dexterity.

A lot of initiatives are developing at local and regional level in many other EU Member States to tackle fuel poverty, with local and regional stakeholders already leading the way in implementation. Actions are wide-ranging, including awareness-raising for behavioural changes, detailed advice and home energy surveys, replacing older inefficient equipment or appliances, programmes of thermal insulation, financial support for building energy measures, organising competition between energy suppliers, joint energy purchasing...

FEDARENE supports Mrs Karima Delli who calls on the Commission to adopt a Communication on Combating Energy Poverty that urges the Member States to introduce a definition of energy poverty based on common parameters, but adjusted for each Member State to take into account the specific national context, with targeted financial schemes.

January 2014
Claim for binding targets for increasing Sustainable Energy in Europe

Europe must be ambitious in its 2030 framework and tap local and regional authorities’ potential to deliver the EU climate and energy objectives

The European Union is debating on the post-2020 framework for climate and energy policies. Currently a world leader with its “20-20-20 targets”, Europe must keep its aspirations up. An ambitious 2030 framework is not only necessary for meeting the European Council commitment to reducing greenhouse gas (GHG) emissions by 80 to 95% until 2050.

FEDARENE considers that binding targets – of at least 30% of energy efficiency and of renewable energy sources - would be a necessary and a good signal for increasing sustainable energy in Europe. Considering security matters such as security of supply and the geopolitical situation, energy efficiency becomes of even greater importance in future years.

It is also an opportunity to translate the EU’s climate and energy objectives into a multitude of actions at the local and regional level, which already contribute to improving the quality of life of citizens and to boosting EU competitiveness. Local and regional authorities are continuously increasing their efforts for climate action and the transition towards green growth.

FEDARENE is concerned about the European Commission’s proposal on the future of climate and energy policies in the EU. In particular, the Commission’s communication:

- does not address the potential of local action to contribute to EU climate and energy goals;
- does not sufficiently include local and regional stakeholders and political leaders that are committed to mitigating climate change through different initiatives;
- fails to seize the potential of decentralized low-carbon production and lower energy use.

On the other hand, we very much welcome that the European Parliament resolution on the dossier

- recognizes the essential role played by local and regional authorities in promoting and implementing the measures needed to move towards a low-carbon economy;
- encourages the Commission and the Member States to remove any obstacles that hamper local and regional authorities in delivering on the EU’s climate and energy objectives;
- promotes greater use of the EU financial instruments for smart investments in sustainable technologies.

It is now in the hands of the European Council to send an encouraging signal to citizens, investors, communities, local and regional authorities by confirming the EU’s ambition to take a leading role in international climate talks. It is an opportunity for national governments that local governments are committed to act and to lead the way forward.

Local and regional authorities supported by their energy agencies are the key to delivering the EU’s objectives to achieve a low-carbon future. Urban areas are responsible for 80% of energy consumption and CO2 emissions. Because they have significant legal powers and responsibilities and are closest to citizens, they drive societal and technological innovation within their constituencies. Local and regional authorities thus hold an important and often untapped potential for the delivery of the EU climate and energy objectives.

Thousands of local authorities have already committed to taking action at their level, by joining the Covenant of Mayors, European Energy Award®, E5, PECT or other initiatives. They present a win-win situation: while the EU needs a strong involvement of local and regional authorities to attain its climate and energy objectives, local and regional authorities need an ambitious EU policy environment to scale up their actions.

The European Council will discuss the 2030 framework for climate and energy policies on 20-21 March. Member states must seize this unique opportunity to place local and regional authorities at
the heart of the EU’s climate actions and to recognize the Covenant of Mayors as a key instrument of this policy framework, alongside the Smart Cities and Communities initiatives.

- place local and regional authorities at the heart of the EU’s climate actions and to recognize the Covenant of Mayors as a key instrument of this policy framework, alongside the Smart Cities and Communities initiative already mentioned in the Communication from 22 January;
- ensure continued EU and national support to regions, cities and towns to translate long-term strategy into actions at local level, be it through financial support or support for capacity building and exchange of good practices.

Local actions are key to European energy security

Energy Security is of increasing relevance in Europe. Recent geopolitical turmoils show the vulnerability and high dependence of Europe on a few suppliers. Energy security is of increasing relevance and a responsibility shared by everyone, whatever their level of governance or sector, including citizens.

Local and regional authorities are voluntarily committed to EU climate and energy objectives through the Covenant of Mayors and other engagements, hence contributing to Europe’s energy independence.

We welcome the Energy Security Strategy issued by the European Commission on 28 May 2014, which recommends that Member States support an “accelerated implementation of the Sustainable Energy Action Plans submitted by municipalities participating to the Covenant of Mayors”, hence recognising the initiative as an instrument to improve energy security in Europe.

The main victims of disruptions to energy supply in the upcoming winter period will be citizens, and local and regional authorities will be in the front line to meet their needs and demands. Therefore, we believe that local and regional authorities are key to contribute to Europe’s energy security in the short, medium and long term by:

- Taking immediate actions aimed at moderating energy demand notably through efficient energy management of their municipal assets, using more efficient means of producing and distributing energy, and communicating with citizens;
- Accelerating the implementation of their Sustainable Energy Action Plans, including measures for higher energy efficiency in sectors such as buildings and transport and more decentralised energy production, which contribute to making their territory more energy autonomous.

We, European networks of local and regional authorities, will:

- Launch a campaign of information towards cities, towns and regions across Europe to take immediate action on energy savings in the context of energy security;
- Empower local communities by providing them with good examples and practical solutions for sustainable energy actions;
- Monitor short, medium and long-term actions implemented in the framework of the Covenant of Mayors and disseminate the results in order to boost their replication;
- Continue reinforcing relationships with the European institutions and national governments in order to accelerate the implementation of the action plans, particularly of short-term actions;
- Support, where applicable, initiatives and policies that can further enhance local and regional capacities for action, including the EU 2030 framework for climate and energy policies or the international negotiations on climate change.

Joint declaration signed by Climate Alliance CEMR, Energy cities, Eurocities, ICLEI and FEDARENE

June 2014
Julije Domac, President of FEDARENE - speech at COP20 in Lima

The regions of Europe along with many others globally, follow the United Nations Framework Convention on Climate Change with great interest, respect and concern. FEDARENE representing the regions has been present for many years – in Warsaw, and now here in Lima, supported by our partners like the Committee of the Regions of the European Union and many others.

Regions form the building blocks of our global society and represent the people, the reason and the meaning of the climate change mitigation process and of every other process that is important for mankind and for our future. Regions co-operate with one another across national boundaries, implementing joint projects and identifying common solutions to shared problems. Our problems – or challenges, today more than ever, do not recognise borders. Our regions (and also every other form of local and sub-national government – municipalities, cities, provinces...) is the primary focus for the people to address and solve their problems, often supported by their Energy Agencies.

People living their everyday lives filled with work, recreation and travel, often do not comprehend the importance of the need for action on climate change. The world meanwhile cannot wait for international agreements and national policies to convince them otherwise. In the absence of that change, the regions (municipalities, cities, provinces) and the energy agencies must act and make changes – through projects and initiatives, often implemented together with other regions and various partners. In reality, only in this way can we hope to bring about the necessary changes – through partnerships and implementation.

In that context, we thank the COP Presidency and the UNFCCC for making it possible to open a subnational dialogue between regions and cities, together with national governments at the UNFCCC, here in Lima. At this moment in time and in the future, FEDARENE will be proud to actively contribute to the global climate change mitigation process. We believe that the critical contributions have to come from all levels – global, national and regional. But essentially, it is the regional level where the people live and where the projects are implemented.

We sincerely hope that these interactions between the global, national and regional levels – will enable greater facilitation of action as it is the only way to bring benefits to the people – people must remain at the centre of everything. The interaction between global organisations, national governments and regions will enable the production and implementation of an efficient roadmap for energy transition and climate change mitigation. We, in the regions and energy agencies, who implement projects and interact with people every day – believe that this is the only way forward!

We believe that every effort and commitment must be made to protect our climate and thereby our planet. Indeed we expect that every effort will be made. Our concerted action is well justified and much needed.

December 2014
OUR MEMBERS
Regional / local energy agencies
Regional / Local Councils

The regional and local energy agencies, and the energy department of regional councils, drive the energy and environmental policies of their regions. As autonomous entities, they elaborate and manage their own plans, acquire experience and knowledge, whilst engaging with local stakeholders. In particular, these entities intervene in the demand and supply side of energy management, development of renewable energy sources, waste management, mobility, air quality and urban development.

FORMS OF ACTION

- Advising regional decision makers in defining regional energy and/or environmental policy
- Supporting regional council in implementing regional energy and/or environmental policy
- Taking part in innovative EU projects (demonstration)
- Supporting the setting up of projects (community based)
- Providing technical assistance to municipalities
- Promoting the development of local SMEs (eco-clusters,...)
- Anticipating the implementation of European legislation
- Facilitating financing of projects (promoting the subsidies from the Regional Councils, initiating regional zero rate loans, or ESCO)
- Leading awareness-raising campaigns
- Participating in European and national networks
- Etc.
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ENERGY AND GHG EMISSIONS MONITORING

Coordinated by FEDARENE - ENERGee Watch network

Fifteen FEDARENE members are also member of ENERGee Watch, the European network of Regional GHG emissions and energy data Observatories. This initiative derives from the INTERREG IVC project CLIMACT Regions which identified in 2012 more than 20 regional GHG and energy observatories, some of which decided to join forces in this platform to better share experiences and methodologies in monitoring. Indeed, monitoring regional and local energy and GHG emissions data is the first and foremost, crucial, step towards identifying priority areas of intervention and thus defining regional and local energy and climate strategies (including SEAPs - Sustainable Energy Action Plans) which are relevant to the context.

www.energee-watch.eu

EAZK - Energy Agency of the Zlín Region, CZECH REPUBLIC – Energy concept of the Zlín Region

The Regional Energy Concept of the Zlín Region has been updated by the Energy Agency of the Zlín Region in 2014 within the European project CEP-REC, co-financed by the Central Europe Programme. The updated version of this Energy Concept is unique within the Czech Republic as it provides reliable energy data sorted by sector and by primary source with the breakdown to each of the 307 municipalities of the Zlín Region.

The main benefits of the new Energy Concept lie in:
- showing the present energy situation as a baseline inventory
- showing the potentials for energy efficiency and renewable energies
- creating a base to exchange knowledge between the regions.

The concept was presented as an innovative tool for implementing the regional energy policy in various events throughout Europe such as the peer-learning workshop of the DATA4ACTION project in Bilbao in October 2014, at the final conference of the CEP-REC project in Munich in November 2014, and at the conference "Czech energetics in changing times" in Prague in November 2014.

www.cep-rec.eu
RAEE – Rhône-Alpes Regional Energy Agency, FRANCE – OREGES- Rhône-Alpes Energy and GHG emissions Observatory

Established in 2002, OREGES - the Rhône-Alpes Energy and GHG emissions Observatory embodies the regional ambition to provide the general public, local authorities and other energy stakeholders with a monitoring and information tool. The Observatory’s steering committee is co-chaired by the State and the Rhône-Alpes regional council, and funded by the National Energy Agency and the regional council. The technical work is conducted by two structures: the regional energy agency (RAEE) since 2002, later joined by Air Rhône-Alpes (the regional air quality monitoring structure) in 2009.

Those involved with the observatory meet every month to discuss current topics relating to OREGES: «small wind turbine sector», «the place of gas in the Rhône-Alpes region», «the Aarhus convention»... These exchanges allow a shared vision of the situation concerning energy consumption, the production and emissions of greenhouse gas in the Rhône-Alpes region to gradually be created. This vision is built up from data shared by all players, within the scope of a data exchange agreement.

www.oreges.rhonealpes.fr

EREN - The Regional Energy Agency of Castilla y León, SPAIN – Online tool for the monitoring and optimization of energy usage in regional buildings

The Regional Energy Agency of Castilla y León (EREN) is carrying out a plan to monitor and optimize energy usage in the regional public buildings. An on-line tool has been developed by civil servant staff to have a detailed inventory of all the energy contracts and consumptions in regional buildings such as schools, hospitals, sports facilities, social facilities, office buildings, as a baseline. The first phase is managing 1,100 buildings and 150,000,000 kWh/year of electric consumption (70% of the total), with improvements in 550 electric contracts with annual savings of 1,900,000 €. In next phase of the tool is being implemented to monitor and optimize thermal energy as well. Investments in energy efficiency measures will be implemented in identified priority buildings using diverse financing mechanisms (PPP agreements, ESCOs, EPC, ESI funds, etc). The use of the tool will be extended to local entities’ buildings and could be used to support their Sustainable Energy Action Plans.

www.energia.jcy1.es
The Energy Agency of Plovdiv (EAP) is developing a Municipal Energy Monitoring System within the European project iURBAN (2013-2016) in collaboration with the company EVN Bulgaria. The iURBAN energy monitoring platform can serve as real-time management system for both local authorities and private households. The platform gathers and displays real-time electricity and heating consumption data from private and public buildings and electricity and heating production data from prosumers in the city of Plovdiv. It simulates future consumption data, provides dynamic tariffs, compares energy performances, makes local energy production prognosis through a Virtual Power Plant, and gives energy advice. Its adoption at the municipal level is estimated to contribute to an up to 20% decrease in energy bills. The Energy Agency of Plovdiv connects iURBAN functionalities to advanced local energy planning software, air quality modelling software, and local energy observatory databases for an in-depth analysis of current and future trends in energy consumption and production in the city of Plovdiv (the second largest city in the country) as a whole.

DEVELOPING INNOVATIVE FINANCING SCHEMES

The Picardy region is engaging in the energy transition by launching the very first French energy efficiency public service company, with a specific management system, named “SPEE”. This new public service company will rely on a network of existing local energy information points, to become a reference. It will be experimented for three years, under which it will support the renovation of 2,000 buildings. It has the ambition to be an instrument to prevent fuel poverty by providing financial aid to households who do not have access to ordinary bank credit. The experimentation phase is financed with the EIB’s support. The initiative is moreover expected to create 650 jobs in the buildings sector.

On 15 November 2013, the President of the Region, the vice president for Climate and Energy, the Region Prefect and the Director of the French national energy agency present the SPEE initiative
Berliner Energieagentur GmbH, GERMANY – Expertise in energy service models: Energy Performance Contracting (EPC)

For more than two decades now, the Berlin Energy Agency GmbH (BEA) has been a leading expert in the development and implementation of innovative energy service models, e.g. Energy Performance Contracting (EPC). It is currently leading the EU co-funded project ‘EESI 2020 - the European Energy Service Initiative towards the EU 2020 energy saving targets’ (running from 2013 to 2016), which focuses on the establishment of long-lasting EPC schemes in nine large European cities and metropolitan areas (Antwerp, Barcelona, Berlin, Dublin, Graz, Oslo, Prague, Sofia and Zagreb), not least through capacity building and collaboration with local project facilitators. With this follow-up project to similar initiatives in the past, BEA and its partners are continuing their commitment to define EPC standards and to transfer lessons learned across Europe. In the framework of these initiatives, BEA has also been managing the European Energy Service Award (EESA), which honours best practice examples from all over Europe.


Aligned with the Energy Performance of Buildings Directive (EPBD) objectives, the Catalan Government is committed to boosting the demand side of the energy services market. To do so, the Catalan Government is increasingly tendering Energy Performance Contracting for its public buildings. The idea is not only to reduce its energy bills, but also to promote the Energy Performance Contracting financial model to the whole building sector in Catalonia by “showing by doing”. About 60% of the total number of Catalan governmental buildings is suitable for Energy Performance Contracting: sports facilities, museums, hospitals, universities, offices and residential building are main targets. First tenders have been completed and a series of projects are already in the pipeline in order to achieve a 4.4% energy costs reduction by 2014 and a 15.2% energy costs reduction by 2020.
RAEE - Rhônalpénér-Environnement, FRANCE – Photovoltaic Plants Villages led by “citizen companies”

Photovoltaic Plants Villages is a community renewable energy investment programme set up and coordinated by RAEE with the support of European funds, in the Rhône-Alpes region. The project aims to promote participative sustainable energy projects in rural areas, primarily located within regional Natural Parks, mobilizing inhabitants to build an “entreprise collective” («citizen company») legal entity for the production of local renewable energy. Local stakeholders including citizens, local energy agencies and local public authorities have been involved from the beginning of the project during which a special attention was paid to the integration of the photovoltaic plants in the existing landscape and architecture. The further aim of this initiative is to demonstrate that such community projects are possible, and encourage more of them to follow suit.

www.raee.org

Upper Austria Energy Agency (OO ESV), AUSTRIA – Streetlight energy efficient refurbishment (LED technology) using Energy Performance Contracting

Street lighting is an important contributor to traffic and public safety, and requires a substantial amount of electricity and money. The European Regulation 245/2009 setting the phasing out of traditional, poorly efficient lightbulbs by 2017, and the recent market introduction of LED technology, offer high energy savings potentials. However, substantial upfront investments constitute a major market barrier for municipalities to install LED technology.

Energy Performance Contracting (EPC) constitutes an innovation financing solution where energy efficiency investments are pre-financed and carried out by an energy service company (ESCO). The subsequent annual energy and maintenance cost savings then cover the investment and capital costs.

The project "Streetlight-EPC", funded by the Intelligent Energy Europe Programme and launched in April 2014, precisely aims to trigger the market uptake of Energy Performance Contracting (EPC) through street lighting refurbishment projects.

The City of Wels upgraded 50 % of its street lighting system between 2011 and 2014 (7,700 lights and 9,100 lamps) to energy efficient LED technology. A third of the street lighting is dimmed to 50 % between 21:30 p.m. and 5:30 a.m. resulting in increased savings without compromising road safety. Prior to the retrofitting, mercury vapour discharge lamps (HQL), sodium lamps, plug-in solutions and fluorescent lamps were in use, of which 4,500 were older than 15 years.

www.esv.or.at
Province of Milan, ITALY - Energy Performance Contracting for schools with ELENA assistance

All the municipalities in the Province of Milan have signed the Covenant of Mayors. Thanks to the “Energy Efficient Milan Covenant of Mayors project” designed with the financial support of the ELENA technical assistance facility, 98 public buildings (mainly schools) owned by 16 small municipalities in the Province are to benefit from energy efficiency improvement measures.

A second tender has been awarded for the refurbishment of 38 schools owned by the City of Milan using Energy Performance Contracting (EPC). The first EPC contract value amounts to € 13 million, invested by a consortium made up of four ESCOs (Olicar, Carbotermo, Evolve and PrimaVera). The contract spans 15 years, guarantees a 35% reduction in final energy costs, 5% of which will translate into budgetary relief for the municipality. The second EPC contract is worth € 5 million invested by the PVB Group. It guarantees a 35.5% reduction in energy costs, 15.5% of which will translate into budgetary relief for the City of Milan.

www.provincia.milano.it

MULTI-LEVEL GOVERNANCE

ALESA - Province of Chieti Energy Agency, ITALY – Territorial Coordinator in the Covenant of Mayors

The work of the Chieti energy agency has led to investments of over EUR 90 million in energy efficiency in this rural region. Through a series of energy efficiency, energy management and transport upgrades, the Province of Chieti now aims to achieve a 25 % reduction in CO2 emissions by 2020. Located in the Abruzzo region, the Province of Chieti has signed into the Covenant of Mayors as a Territorial Coordinator, where it commits to assisting signatory cities within its territory to design and implement their Sustainable Energy Action Plan (SEAP). For this, the local energy agency ALESA has stepped in, designing and developing over 100 SEAPs for municipalities in the province.

www.alesachieti.it
IRE Spa – Regional Energy Agency of Liguria, ITALY - Liguria infrastructure, urban regeneration and energy

The regional energy agency of Liguria (IRE Liguria) supports the regional government, provinces and municipalities in Liguria with their energy planning, financing, and project development:

- It promotes the Covenant of Mayors (CoM) and develops the related SEAPs. In 2014, the energy agency signed the newly available CoM pledge for local energy agencies;
- It developed the successfully approved “ELENA” technical facility proposal submitted by the Province of Savona in 2014;
- It monitors and evaluates, for the regional government, the implementation of the global contract for the energy retrofitting of Ligurian hospitals carried out by a group of ESCos;
- It manages the regional process of certifying buildings (training of certifiers, software development, validation of the certificates, development of technical regulations);
- It actively contributed to the foundation of the Liguria Energy Consortium for electrical energy and gas purchasing in the liberalized market. Now the Consortium counts over 100 public members;
- It has expertise in the field of smart cities gained by supporting the City of Genoa in its regeneration process, through the European project "TRANSFORM" and the European Innovation Partnership on Smart Cities and Communities.

www.ireliguria.it

CEA - Energy Agency of CYPRUS – Reinforcing the Covenant of Mayors

The SEAP-PLUS project aimed to increase Covenant of Mayors (CoM) activities in Cyprus, by bringing more signatories and more Territorial Coordinators who can provide them with assistance in preparing a Sustainable Energy Action Plan (SEAP), and trigger cooperation between local authorities and energy stakeholders.

The results of the actions of the Cyprus Energy Agency through the SEAP-PLUS project have been:

- Political commitment and approved SEAPs aiming to exceed the EU “20-20-20” targets by three local authorities in Cyprus including the capital city Nicosia.
- Signing of a Memorandum of Cooperation between the Cyprus Energy Agency and key energy stakeholders.
- Recognition of the Cyprus Energy Agency as an approved Supporting Structure of the Covenant of Mayors in Europe

www.cea.org.cy
ALEA - Alba County Energy Agency, ROMANIA – The energy agency as the main supporter of CoM signatories in Alba County

ALEA provides assistance to Alba County municipalities who signed the Covenant of Mayors (CoM) to design and implement their Sustainable Energy Action Plans (SEAPs), as part of the broader ‘Alba County Energy Master Plan’.

In practical terms, ALEA’s assistance is multi-faceted. The Agency identifies and mobilizes the stakeholders to involve in the preparation and implementation of the SEAP. It provides technical support for a municipality to make its energy consumption databases and Baseline Emissions Inventory which informs the priorities of the SEAP; it helps with the actual drafting of the SEAP; it runs information, communication and educational campaigns, and it works hand-in-hand with the public authorities during the implementation phase of their SEAP.

Currently, ALEA is supporting 10 municipalities which are at different stages of their SEAP:
- Design phase: Teius, Pianu
- Implementation phase: Alba Iulia, Aiud, Zlatna, Ciugud, Berghin, Sîntimbru
- Evaluation phase: Ighiù, Avrig

All of the agency’s ongoing IEE European projects support CoM signatories in different domains (green procurement, urban mobility, nZEB, raising awareness amongst citizens).

www.alea.ro

ARAEN – Regional Energy Agency Abruzzo, ITALY – The CoM and an agro-forestry CO2 certification scheme

The Abruzzo Region is strongly convinced that local governments can play a decisive role in mitigating the effects of climate change. For this reason the need for a “bottom up” approach, which starts from individuals and individual communities, is a top priority.

In this framework, regional governments play a strategic role as an intermediary body which is aware of the needs of the local level and coordinates the actions to meet these specific needs. This is called “multilevel governance” and an outstanding example of it is the Covenant of Mayors framework.

In Abruzzo, all 305 municipalities and 4 provinces have signed individual commitments into the Covenant of Mayors. In this context, the Abruzzo Region is developing an experimental initiative to quantify the absorption of agro-forestry related GHG emissions in the region in order to certify local carbon credits and to create a platform for a local market of voluntary carbon credits in the agro-forestry field. The objective is to incite good practice behaviours by remunerating voluntary activities which avoid GHG emissions.

www.regione.abruzzo.it/xAraen/
CKEA - The Carlow Kilkenny Energy Agency, IRELAND - Kilkenny Better Energy Communities

The Carlow Kilkenny Energy Agency is an award winning team who delivered in 2014 more than €12 million investments into the Carlow and Kilkenny region in energy efficiency and renewable energy actions (Photovoltaic, Wind, Hydro, Biomass, Fuel Cells).

For example, the Kilkenny Better Energy Community project is a unique community collaboration which brings together many different parts of the community: the local authority, small and medium enterprises, a GAA (Gaelic Athletics) Club, local hotels, sports clubs, community centres, social and voluntary housing. The Kilkenny Better Energy Community project has afforded the community energy efficient upgrades in lighting, insulation, cooling systems, heating controls, as well as more use of renewable energy sources and improved energy management systems. This collaboration between several local community groups, including energy suppliers and contractors, demonstrated the benefits of working in a collective approach. Energy savings of up to 30% are now being realized by all participants, including 178 social houses in Kilkenny.

http://ckea.ie/

LONG TERM TERRITORIAL PLANNING

Nord-Pas de Calais Regional Council, FRANCE - Implementing the ‘3rd Industrial Revolution’

In 2014, the Nord-Pas de Calais regional council adopted an ambitious roadmap to turn the Nord-Pas de Calais region into a pioneering region for the “third industrial revolution”. This forward-looking approach places the Nord-Pas de Calais region at the cutting-edge of the development of post-carbon territories and economies.

In order to support an effective implementation of this plan, the Region has started working on financial engineering (Fund of funds) in cooperation with the European Investment Bank. This aims to mobilise public-private co-investments, including European Regional Development Funds and benefitting from a revolving and leverage effect. In this funding framework, two financial tools devoted to housing retrofitting (“Plan 100 000 logements”) and to renewable energy will be created in 2015. Other initiatives, ranging from a guide to finance “third industrial revolution” projects, to crowdfunding, to a platform for equity stake investments, are already operational.

AMET - Timis County Energy Management Association, ROMANIA – Integrating Energy Management Systems (EnMS) with Sustainable Energy Action Plans (SEAPs)

AMET is implementing the “50000&1 SEAPs” project which provides a coherent approach to integrating Energy Management Systems (EnMS) with Sustainable Energy Action Plans (SEAPs) according to energy management standards such as ISO50001. The main objectives of the project are:

- To develop an energy management system integrated with the SEAP in the towns of the target group by facilitating support structures
- To disseminate the project results widely in order to increase the number of trained supporters of the Covenant of Mayors, coordinators and municipalities that implement this “5000 & 1 SEAPs” approach

An experienced consortium of 13 partners from across Europe is ready to support local authorities in integrating Sustainable Energy Action Plan with Energy management Standards. The target group supported by AMET included the municipalities: Lugoj, Resita, Caransebes, Ineu, Sannicolaul Mare, Faget, and Red Oțelu.

www.amet.ro

B&SU mbH Berlin, GERMANY - European Energy Award® (eea) for municipalities

The European Energy Award® (eea) is a quality management and certification scheme for municipalities committed to sustainable municipal energy, climate and transport policies. From spatial planning to energy supply, from mobility to communication – the eea comprises all the tested and proven energy and climate protection measures municipalities can undertake at their level. It takes into account the characteristics of individual regions and countries, yet provides for benchmarking to be established between municipalities at a European level. The eea is therefore the most comprehensive quality management system for municipalities in the field of energy efficiency. The Forum European Energy Award e.V. is moreover working towards having the eea recognised by ISO/CEN as a quality management tool for municipal energy and climate protection policy.

As of February 2014, there are more than 1,200 European municipalities actively participating in the eea-programme. It can be used in symbiosis with other municipality-level energy efficiency and climate protection initiatives such as the Covenant of Mayors or Smart City projects.

www.bsu-berlin.de
The private financial sector (banks, investors) is often hesitant to invest in sustainable energy. Public funding is an alternative or complementary source for these investments. But the financial volume of national financial support schemes in most EU countries is limited and they often lack continuity or are difficult to acquire. These limitations of the funding ‘market’ are holding back realisation of the targets set by EU regions in their sustainable energy strategies. Regions with the ambition to be leaders in sustainable energy must therefore themselves create innovative instruments and facilities to generate these financial flows and investments in their territory.

Regions4GreenGrowth is an initiative of EU regions that have defined high sustainable energy ambitions and now encounter this obstacle. The overall objective of the project is to equip these regions with regional policy instruments, mechanisms and approaches to improve access to finance for and speed up investments in sustainable energy projects (e.g. renewable energy generation capacity, energy efficiency measures) in their territories. Project activities include the collection and documenting of effective policy instruments in this field from partners and other actors.

www.ae3r-ploiesti.ro

CAPACITY-BUILDING ACTIVITIES

LIT - Limerick Institute of Technology, IRELAND – Building the skills of construction workers to achieve quality low energy buildings

Research has shown that there is a significant skills gap with building construction workers when it comes to achieving low energy buildings. BUILD UP Skills is a strategic initiative of the European Commission to address this bottleneck using funding allocated under the Intelligent Energy Europe and Horizon 2020 programmes.

In Ireland, the QualiBuild project, which has been developed following the publication of the Irish Build Up Skills Roadmap, will produce a Foundation Energy Skills Programme aimed at increasing the capacity of building construction workers to renovate and construct high quality low energy buildings. The project will oversee the recruitment and training of 100 trainers and 200 building construction workers. A “train the trainer” programme will begin in November and the first Foundation Energy Skills pilot courses will be delivered in April 2015.

www.qualibuild.ie
www.lit.ie/default.aspx
EAP - Energy Agency of Plovdiv, BULGARIA — Training students to fight energy poverty

The Energy Agency of Plovdiv (EAP) implemented the ACHIEVE project (2011-2014, IEE programme) on tackling fuel poverty in a context of a predominantly elderly population, inefficient multifamily buildings, high energy usage per m², electricity used for heating, low-quality heating facilities and polluting fuels. There were not many incentives for energy efficiency in households and only the Winter Supplement Programme provided social support for households with difficulties affording their winter energy bills.

EAP trained students from professional vocational schools in their final year to visit energy poor families, make small energy audits and give them small pieces of energy equipment and advice. Thus, students, practitioners, and energy users were brought together to fight energy poverty. EAP’s ACHIEVE project experience helped improve the policies for the energy retrofitting of multifamily buildings, the changing of heating fuels used in households, and the social aid to meet energy needs by households.

www.eap-save.eu

AEMVA - Valladolid Municipal Energy Agency, SPAIN — Workshops for technicians and citizens

The Valladolid City Council has signed into the Covenant of Mayors, and AEMVA has been supporting it with its new commitments: fitting in energy efficient light bulbs, installation of biomass boilers in buildings with electric air conditioning, installation of photovoltaic systems in municipal buildings (schools, civic centres, offices). Moreover, workshops have been held to inform both technicians and citizens on the energy saving measures they can undertake.

Valladolid notably hosted the Ceremony of the National EnerAgen Awards 2013 (EnerAgen is the Spanish Network of Energy Agencies). These Awards honour best energy efficiency and renewable energy actions and has become the annual meeting point of Spanish energy agencies.

www.aemva.org

EC Network, DENMARK — Leader of capacity building under EU ManagEnergy

EC Network is a Danish company of energy consultants and planners, with a high European dimension of its activities. An important contract in recent years has been as operator of ManagEnergy, EU’s platform to reach out to local and regional actors on sustainable energy policies and actions. It concerns a three year period 2012-15 in cooperation with Pracsis, Energy Cities and FEDARENE.

EC Network’s main role is to lead the holding of 45 capacity building workshops around Europe, some of them with FEDARENE members as local partners.

In the contract’s first year the main focus was to help local authorities on the design of local Sustainable Energy Action Plans (SEAP), in 2013 it was to pave way for the Energy Performance Contracting concept, and in 2014 until the end of the contract mid-March 2015 the focus is to help ensure the actual implementation of sustainable energy actions.

www.ecnetwork.dk
AMEMM - Energy Management Agency of Maramures County, ROMANIA – Sustainable Energy Education Demonstration Centre (“SEED”)

AMEMM in cooperation with Maramures County Council is developing in the municipality of Baia Mare a sustainable energy educational and demonstration center (SEED Center) where children and students as well as teachers and the general public can learn about energy efficiency and renewable energy sources, i.e. how they can use energy in their homes and buildings more efficiently, what a sustainable or carbon neutral building means, how to evaluate the energy performance of a building, and how to use renewable energy to provide the buildings with electricity, heating, cooling and water heating.

The center will be equipped with specific installations to give everyone a chance to see the various forms of renewable energy in operation, to learn about the technologies used to harness them, to see how the energy consumed in a building can be monitored and saved, and understand the resulting benefits for the environment and humanity.

The Sustainable Energy Education Demonstration Center - SEED - is an innovative project which promotes an integrated concept centered on both people and technologies and whose impact and implications will go beyond the creation of a state-of-the art educational tool, as it will provide concrete results such as: the reduction of energy consumption in dwellings, schools and public buildings and consequent savings on energy bills, the creation of green jobs and the development of SMEs in the fields of energy efficiency and renewable energy technologies.

www.amemm.ro

Regional Energy Agency North (Sjever), CROATIA - Implementation of Green Public Procurement

The Regional Energy Agency of North Croatia has detected a strong need in the public sector for technical help in the implementation of Green Public Procurement (GPP). This led to the development and current implementation of an IEE project called “Procurement in Municipalities focusing on Energy Efficient Solutions” (PRIMES).

The purpose of the project is to develop skills and provide support for public organizations to overcome barriers and implement GPP. Several GPPs have been implemented: joint procurement of green energy, procurement of electrical equipment, of electrical buses, of solar thermal system for county hospital, etc.

The final aim of the project is to create a fundamental understanding of the economic and environmental benefits of GPP, encourage “mainstreaming” of GPP into all public sector tenders by building capacity and political will in similar organizations.

www.rea-sjever.hr
ARENE - Île-de-France regional energy agency, FRANCE – Video as material for training sessions for local officials

ARENE Île-de-France supports Paris region’s local authorities. They are supported individually to define and implement their sustainable energy and climate action plan through different tools. To enable local authorities to engage in innovative approaches, ARENE also organizes collective activities on various topics, e.g. training courses for project managers or for elected officials on mobility, on the role of the local authority in the implementation of smart grid projects, on the development of RES district heating, etc.

In preparation for the UNFCCC’s “COP21” in Paris in December 2015, ARENE is organizing training sessions throughout the Île-de-France Region to improve elected officials knowledge on the issues which will be negotiated. For these training sessions, ARENE produced a short film to help raise the awareness of local authorities, companies and the public on how climate changes are affecting Île-de-France Region. The film centres on the threats of water scarcity, social health dangers, loss of biodiversity.

www.areneidf.org

IMPLEMENTING ENERGY EFFICIENCY MEASURES

eNu - Energy and Environment Agency of Lower AUSTRIA – The Lower Austria Energy Efficiency Law (NOE EEG)

The Lower Austrian Energy Efficiency Law came into force in 2012. The main actions inscribed in it are on the one hand the assignment of energy agents and on the other hand the establishment of an energy accounting system for each community. Energy agents must be educated in energy efficiency with a minimum 40-hour training course. By now already 530 Communities (more than 90 % of Communities in the region) have an assigned energy agent and 450 Communities are using the online energy management system provided for free by Lower Austria. eNu (Energy and Environment Agency of Lower Austria) performed 11 training courses in 5 major areas; more than 3,000 buildings were recorded in its database by the end of 2013. With this, for the first time, huge amounts of energy consumption data are being collected and evaluated in communities in Austria, which provides the basis for strategic decisions to boost energy efficiency.

www.enu.at
REGEA - North-West Croatia Regional Energy Agency, CROATIA – Revitalization and energy retrofitting of the City of Zagreb downtown

Together with the City of Zagreb, REGEA recently launched an ambitious project focusing on the revitalization of the capital’s downtown and increasing the overall level of energy efficiency directly in the heart of the city. The project has a very complex nature dealing with several aspects that need to be accounted for - from technical aspects, cultural heritage preservation aspects, innovative financing models, to socio-economic effects.

By the end of 2014, technical documentation will be prepared encompassing specific energy efficiency measures aimed at a pilot block consisting of 14 (mostly) residential buildings - all under conservation protection as they are cultural-historic heritage. The estimated investments for the pilot block are 4 million Euros whilst the expected decrease in energy consumption is set at 15%.

By the end of 2020, the aim is to retrofit altogether 10% of buildings' combined square area total with an investment of approximately 58 million Euros, distributed through a newly established revolving fund. In the long-term perspective, 2030, the amount of buildings to have undergone an energy retrofit should be 30%.

www.regea.org

AGIRE - Energy Agency of the Province of Mantova, ITALY – LiCEA tool for a Life-Cycle based Energy Audit

AGIRE Energy Agency developed the “LiCEA” tool together with its European project partners. It is a comprehensive tool for a comprehensive energy auditing of SMEs taking into account the whole life-cycle of the production chain (products, processes).

LiCEA has been applied to hundreds of SMEs in Italy, Austria, Poland, Slovak Republic and Hungary, proposing possible energy efficiency improvement measures in the core, upstream and downstream parts of the Companies. International and National Training seminars have contributed to the dissemination of the LiCEA tool to a large number of European Energy Agencies and Energy Experts, giving them the opportunity to provide more comprehensive energy audits to SMEs.

The LiCEA model has now been incorporated in the Regional Policy of some EU Countries to stimulate Energy Auditing in SMEs and for the identification of synergies in Industrial Clusters (such as textile, food...).

www.agiren.it
Kent County Council, UNITED KINGDOM – *Fostering innovation to save money and carbon*

KCC is also working with over 50 Kent schools to convert to LED lighting. Ten schools have implemented LED so far, generating savings of £600 - £20,000 per year. KCC has also worked across the health, social care and sustainability specialisms to create the UK’s first health and sustainability assessment called the JSNA. Across local communities, Kent County Council and partners have launched the ‘Warm Homes’ initiative to reduce energy bills and address fuel poverty. To date, energy improvements have been implemented in 1,000 households, with average household savings of £100 per year. Through the EU-funded Low Carbon + project, KCC has further fostered innovation and growth for low-carbon businesses, awarding over £500,000 in grants, unlocking more than £900,000 of private sector funds.

www.kent.gov.uk

Energy Department of Wallonia Region, BELGIUM – *Grant scheme for exemplary buildings*

The call for projects ‘Exemplary buildings in Wallonia’ is a new action aiming at the refurbishment and/or construction of buildings with ambitious energy and environmental criteria with regards to architectural quality, cost-effectiveness and reproducibility. A technical annex lists the criteria and minimum levels of requirement to be met for submitting a project. The projects selected by the jury receive a grant and technical guidance to ensure compliance with their commitments. This action aims to prepare the building sector to NZEB (Nearly zero energy buildings) requirements.

The first call ended in December 2012. 70 residential building projects were submitted, out of which 23 were selected by the jury, representing 7,415 m² of buildings. At this time construction works are ongoing and 8 projects are being finalized. A second call ended in December 2013. 14 projects of non-residential buildings were submitted out of which 7 were selected, representing 24,159 m² of buildings.

http://energie.wallonie.be

ESS - Energy Agency for Southeast Sweden Ltd, SWEDEN – *Online tool to help select the right sustainable energy system*

The energy agency of south-east Sweden (ESS) has worked on about 30 projects in 2014. One recently finished project is RES-Chains, aimed at identifying sustainable renewable energy source chains to encourage sustainable development within the South Baltic Region. The project focused on biomass, biogas, solar power, wind power and hydro power. RES-Chains has, among other things, developed a web tool to help with selecting a sustainable energy system. Indeed, there is no certain way to evaluate the pros and cons of different energy systems. One must take into consideration the three aspects:

- Which renewable energy source do you have access to?
- What do you deliver?
- What does the client want?

The web tool is designed as a matrix so that one can go through the various energy systems.

www.energikontorsydost.se
Provence-Alpes-Côte-d'Azur regional council, FRANCE – AGIR+ Regional programme funding local sustainable actions

The Provence-Alpes-Côte-d'Azur Regional Council launched its “AGIR+” (Action Globale Innovante pour la Région) programme in October 2010 with a total budget of € 60 million over 4 years (2011-2014). It follows the previous AGIR programme (2007-2010) and keeps the same objective, which is to increase the involvement of regional stakeholders in energy issues, through 5 fields of action:

- Territories as dynamics places for the energy transition
- Renovation of buildings for lower energy consumption
- Innovative renewable energy projects
- “Showing by doing” principle of exemplarity
- Citizens implication for larger acceptance and long-term success

The first results of the programme show a massive impact on the regional territory:

- 1,200 projects received funding
- 34 million kWh energy saved
- 22 million kWh renewable electricity produced
- 1 million inhabitants impacted
- 1.2 billion Euros of economic activities generated

7th annual AGIR Forum with the Vice-President of the Region to Sustainable Development, Energy and Climate

www.regionpaca.fr

Mälardalen Regional Energy Agency, SWEDEN – Supporting the Swedish participation in the WWF’s “Earth Hour City Challenge”

One of the Energy Agency’s primary missions is to enhance and develop municipalities, municipal companies and SMEs through energy efficiency and increased use of renewable energy. The Earth Hour City Challenge (EHCC) is a year-long competition among cities to promote renewable energy and prepare themselves to climate change. Mälardalen Energy Agency is supporting Swedish municipalities participating in EHCC and providing feedback on implementation, in partnership with WWF – the World Wide Fund for Nature. The good practices will be highlighted internationally to inspire replication in Sweden and elsewhere. The project contributes to the municipalities’ work in transitioning to efficient energy systems and 100% renewable energy. It also works to increase public participation in their efforts to reduce their carbon footprint.

www.energikontor.se
NENET - Norrbotten Energy Agency, SWEDEN – Test pilots for energy efficiency in practice

The energy agency of the Norrbotten region has been involved in a three-year project “Test pilots for energy efficiency in practice”. It is now completed and the results achieved are impressive. What NENET did through this project is offer various property owners, property managers, corporations and those who live and work in different buildings, the opportunity to review their situation in terms of energy use, and then effectively implement improvement measures in their business, property or facilities.

The experience has demonstrated many good examples of practical energy efficiency measures, which can reduce the overall energy consumption of the participants by 1,240,000 kWh per year. A final report in the form of a small book has been printed for people to read, and in December a Christmas play was held to show practical energy efficiency actions, with the opportunity to win a prize.

www.nenet.se

DEVELOPING RENEWABLE ENERGY SOURCES

EVE - Basque Country Energy Agency, SPAIN - Innovative ocean energy pilot project

Biscay Marine Energy Platform (bimep) is an infrastructure for testing and demonstrating marine energy converters, located off the coast at Armintza. With a capacity of 20 MW, the purpose of the platform is to demonstrate the technical and economic viability and safety of the converters before they are rolled out on a large-scale commercial level. bimep is due to be energized before the end of 2014. The converters will be moored for several months, though never installed permanently; the primary goal will not be power production, since these are technologies that are not yet mature enough for commercial operation. Once it is fully operational, the bimep is intended to be not only a test bed, but also a research infrastructure. In order to reach a sufficient degree of maturity in marine technologies to allow significant reductions in the cost of the energy generated, it is necessary to research and learn from the prototypes installed on the bimep so they can be improved to an optimum level of commercial development.

www.eve.es
Skåne Regional Energy Agency, SWEDEN - Biomethane as fuel for transport (grid injection)

The Skåne regional energy agency is participating in BIOMASTER - biomethane for transport - a project co-funded by the European IEE programme. The project intends to demonstrate that biomethane for transport can be an operational and viable option in spite of the regulatory and fiscal barriers that hamper its replication. A key ambition of the project is to focus on biomethane grid injection. The goal is to bridge the knowledge and operational gaps fragmenting the biomethane chain and to establish local alliances of stakeholders to foster open dialogue and stimulate investment in the biomethane market. The project addresses the entire production chain and will treat new commodity options, the total production potential, deployment options, and regulatory, organizational and financial hurdles.

www.energikontoretskane.se

Regional Authority of the Usti Region, CZECH REPUBLIC – Discovering the potential of geothermal energy in municipalities

Litoměřice, Děčín and other municipalities in Ústí region (Northern Bohemia) are planning exploratory drilling to analyse the potential of geothermal energy. The Czech Republic has only one fully commercially operating geothermal (hydrothermal) heating plant located in Děčín so far, which uses the groundwater of an aquifer that is located some 550 metres underground. Litoměřice is the first town in the country that has been preparing a project consisting of 5-6 km deep exploratory boreholes intended for heat production in the later stage of the project. Nonetheless, experts have already identified about 60 other locations that could be potentially suitable for generating heat using so-called enhanced geothermal systems (EGS). The total heat production might reach up to 2,000 MWh and some 200 MWe.
The Municipality of Litoměřice has been very actively engaged in actions for improving its environmental conditions for the last two decades. Due to relatively little knowledge about the geological conditions in the depth of 5-6 km, uncertainty concerning the temperature, related investment risks, as well as the newness of the proposed EGS method, a preparatory scientific exploration phase is necessary. The estimated capacity of the final output oscillates between 10-30 MWh. It will be used for the heat production and co-generation of electricity, too.

www.kr-ustecky.cz
Regional Council of Central Finland, FINLAND – Using the forests for renewable bioenergy

In the energy and environment sectors, the Regional Council of Central Finland works in close co-operation with the local universities, research institutes and companies. Central Finland has over the past years successfully developed local renewable energy sources, in particular forest bioenergy. In 2012, renewable energy sources accounted for 68% of the region’s energy production and 44% of total energy consumption (this number includes traffic). Central Finland has a strong focus and knowledge of forest based sustainable bioeconomy. The ambitious goal of the region is to increase the share of the renewable energy (total consumption) to 60% by 2020. Central Finland works hard in creating new business opportunities in bioeconomy. The goal is to create new bio-based products and services to global markets. The region has actively shared its knowledge notably through several EU funded projects, e.g. BalticClimate (Baltic Sea Region Programme); BIOCLUS (FP7) and BERST (FP7).

www.keskisuomi.fi

APEA – Province of Avila Energy Agency, SPAIN – Biomass development at the municipal level

The province of Avila has areas with varying biomass potential, as there are areas with crop production and other areas with a tradition or forest use. The energy agency of the province, APEA, has focussed on boosting the potential of each area to develop biomass sources and thus contribute to rural development. For this, studies on forest biomass potential and agrarian potential for biofuels were carried out across the entire province’s territory. Thanks to forest biomass research, especially under the Biorreg Floresta project (INTERREG European funding programme), a biomass district heating system was installed in the municipality of Las Navas del Marqués in 2006. APEA has since worked with Junta de Castilla y León (Council) and several municipalities to install more biomass systems, notably in public schools. As a result of this work, five biomass boilers have been installed in municipalities with high biomass use potential. All of these actions are showcasing that biomass is a real and smart option to be considered in areas of Spain where good potential exists.

Regarding the agrarian use of biomass, thanks to other European projects such as PORBIO, BIOREF and BIOENAREA, APEA has taken part in activities to develop the “Integrated promotion of the biodiesel chain”, to “Improve regional policies for bioenergy and territorial development”, to study the “Potential of integral use of energy crops analysis and its importance within biomass action plans”. In order to cover both sectors, APEA also took part in an IEE (another European funding programme) project Efficient20, which focussed on supporting farmers and forest companies to save energy and its related bills in the machinery use, therefore increasing their competitiveness.

APEA is still working on increasing the development of biomass within the forestry and agrarian sectors, as it still has a high untapped potential.

www.apea.com.es
IVACE-ENERGY – Valencian Institute for Business Competitiveness, SPAIN - Regional Wind Energy Plan

IVACE-ENERGY has supported the Regional Government of Valencia with the development of its Regional Wind Energy Plan. The Plan covers 15 areas located in the three Valencian provinces. It plans for 67 wind farms producing around 5,500 GW yearly (i.e. approximately 80% of the electricity consumption of the residential sector in the Region), avoiding the emission of 2.1 million tons of CO2, and reducing the Region’s dependence on fossil energy. In addition, the Plan includes the creation of a local Wind Energy industrial infrastructure through public-private partnerships in order to boost the local economy. The plan moreover includes a compensation fund dedicated to the municipalities where wind fields are installed. For the year 2011 the amount allocated to improve local infrastructures or finance environmental projects was € 2.8M.

www.energia.ivace.es

Regional Energy Agency Kvarner, CROATIA – Solar heating & cooling demonstrative plants

The regional energy agency of Kvarner has set up two demonstration solar cooling plants, one at the University of Rijeka Faculty of Engineering building and the other in the Thalassotherapia Crikvenica Medical Center. The aim is to fulfill the cooling requirements of both premises, increase the share of solar energy in hot water preparation, save energy, but also showcase these emerging technologies and raise awareness among public and private bodies in the region about the importance of increasing the energy efficiency of buildings. Even though using the sun’s power to cool a building sounds counterintuitive, this technology has already been proven efficient in various Mediterranean projects, consuming a lot less energy compared to traditional mechanical air conditioners. This new cooling technology also sees a significant drop in GHG emissions.

www.reakvarner.hr

Photo: Solar cooling @ Thalassotherapia Crikvenica Medical Center, Croatia (© REA Kvarner, 2014)
FAEN – Principality of Asturias Energy Agency, SPAIN – Developing hydroelectric technologies through two pilot projects

FAEN is participating in two public-private cooperation projects for the demonstration of two technologies pertaining to making use of the energy contained in the water which circulates in hydraulic infrastructures, which currently is left untapped. One of the projects is developing a turbine for the exploitation of small jumps (discharge channels, WWTP, diversion canals...) according to the Archimedean screw technology. The pilot device has a power of 100 kW and can make use of jumps of 1-5 meters and flow rates of 1 to 4 m$^3$/s. The other project is developing a technology to harness the energy from water in the pressure relief valves in water supply and treatment networks. The pilot device has a power of 90 kW, and will be installed in the water supply network of the City Council of Mieres (Asturias), making use of an average flow of 0.3 m$^3$/s and a jump of 30 meters.

With these projects, FAEN hopes to raise awareness on the need to further exploit the potential for local renewable energy sources, which mean increased independence and thus security of supply, as well as lower environmental impact (compared to traditional fossil fuels).

www.faen.es

Tipperary County Council, IRELAND – Ireland’s largest solar photovoltaic project

This project involved the installation of solar photovoltaic (PV) panels on 9 Tipperary Local Authority buildings to provide clean renewable electricity and reduce demand from the grid by 171,000 kWh annually. A range of Local Authority buildings were chosen based on suitability and economic viability including 3 Civic Offices, 2 Fire Stations, 2 Libraries, a Machinery Yard and a Leisure Centre. The role of Tipperary Energy Agency was from initial feasibility studies and project creation, through to procurement and project management. Tipperary Energy Agency worked closely with the contractors and Tipperary County Council to ensure the project was delivered to a very high standard. All PV arrays began generating power in early November 2014. PV panels have an expected life in excess of 25 years. There are no moving parts involved in PV systems, so very little maintenance is required. The power produced from these panels will equate to an average annual reduction in electricity demand of approximately 11% across the 9 buildings, making a significant impact on energy bills over the life time of the systems. This was the largest project of its kind in Ireland and saw the country’s total PV capacity being increased by 44%.

www.tea.ie
ENGAGING VARIOUS LOCAL STAKEHOLDERS

SWEA - Severn Wye Energy Agency, UNITED KINGDOM – Energy savings to reduce crime!

Prisons are a central feature of the lives of thousands of people. For many, the reasons they are linked to a prison are also the reasons they are experiencing, or at risk of fuel poverty; for example, social deprivation, unemployment, debt etc. Energy efficiency issues and fuel poverty are inextricably linked in both cause and solution, as are poverty and crime. For these reasons Severn Wye saw a potential in working with prisons on energy issues as a means of supporting improved efficiencies in a stretched public sector, improving overall sustainability and quality of lives and, supporting efforts to reduce reoffending. In 2011 Severn Wye led a European consortium to pilot an international award scheme for sustainable energy. The European Sustainable Energy Award for Prisons (E-seaP) acknowledges that people based solutions are valuable for a contribution to reduced consumption through behaviour and also, for embedding systems and processes. These can underlie a lasting change in approach to assimilating energy issues into all aspects of prison activity that has a benefit to the wider community of the prison, in particular, families of staff and prisoners.

www.severnwye.org.uk

EAP, TEA, ESS, B.&S.U. mbH and SWEA agencies – ‘Energy Neighbourhoods’ contest for households

Various energy agencies, such as EAP, TEA, ESS and SWEA, have been involved in organising ‘Energy Neighbourhoods’ (2007-ongoing) in their region. The aim of the Energy Neighbourhood project is to inspire and encourage neighbourhood teams (condominiums) to achieve energy savings by taking specific actions to reduce energy consumption through changes in behaviour only. Seminars and lectures were organized in order to support participants in their efforts and they also received tips and information through newsletter mailings and the project website. The results are inspiring: 500 teams from 10 different countries participated and achieved an average energy saving of 10%. The winning team from Sweden managed an impressive 37% saving through simple and cost effective measures such as using energy saving lamps, disabling the use of standby systems and changing their habits.
County of Harghita Energy Management Agency, ROMANIA – Annual competition for student teams

The Harghita County Council’s Energy Management Agency is organizing a competition for students each year in the field of energy efficiency and renewable energies. The competitors are teams from the county's high schools, consisted of three students and one professor. In the first round, teams have to answer 50 questions, in the second one they have to write an essay on the given topic, and in the final one they have to present their ideas in front of the jury.

The main aim of the competition is to raise the awareness of teenagers regarding energy issues, to make them use what they have learned at school to solve more practical problems. The competition is a good instrument to mobilize the youth and is also useful to harvest fresh ideas. This year will see the fourth edition of the competition.

PROMOTING ECO-MOBILITY

Region of Örebro, SWEDEN – Setting an arena for dialogue between the offer and demand side for the development of greener logistics

The Region of Örebro has in the last few years implemented a project for a more energy-efficient and climate-friendly transportation of goods (freight transport) in its territory. One of the actions has been to create an arena where 25 companies and organizations, both purchasers and sellers of transportation systems, have met. The purpose was to enable dialogue on: the tools and methods needed, in the procurement phase and during the contract period, for more energy-efficient freight transport; companies’ internal green business development projects. Over the past year, 60 % of the participating companies have improved services and products to be less harmful to the environment. In addition, all shippers developed their environmental requirements for the procurement of freight transport.

The project has been funded through the European Regional Development Fund managed by Örebro Regional Development Council and the Swedish Energy Agency.
East Sweden Energy Agency, SWEDEN – Changing public employees’ habits in commuting and business trips

This action tackles how employees in the public sector can improve their travel habits in terms of daily commuting to and from work, and punctual business trips. It has involved over 4,000 employees who were given information on how to have more energy-efficient travel habits. Such a transition to more energy-efficient mobility contributes to reaching the region’s energy and climate policy objectives, and thus the national ones too.

Test activities focusing on electric bicycles and public transport will be implemented. A situational analysis and survey will then be carried out, to identify the success factors of the participating public organization in fostering improved mobility habits in their employees.

www.energiost.se/en/

The Inland Norway Energy Agency, NORWAY – Encouraging more active cycling as a win-win transport option

The Inland Norway Energy Agency has among other things focused on reducing car usage, since transportation accounts for about 55% of all GHG emissions in its region. In summer 2014, it ran a project on active transportation, as it is a transport option which has many benefits: positive impact on health (exercise), low costs (no fuel costs), pollution-free. The initiative started with the identification of good practices in increasing the uptake of cycling in both urban and rural areas in Norway, which were synthesized in sheet format. This material was disseminated electronically to the region’s 50 municipalities and counties. In addition, several cities (including the number 1 city in terms of cycling in Norway) presented their good practice to the other municipalities via a webinar. By using a webinar communication channel instead of a regular face-to-face seminar, people from throughout the region (which is very large) were able to participate without creating additional transport-related emissions.

Cycling course for immigrants (photo: Gjovik municipality)

www.energirad-innlandet.no