

EL-EFF Regions

Boosting efficiency in the electricity use in European regions

Newsletter N° 4 - April 2009

Regional Plans

- Ile-de-France regional action plan
- Electricity consumption in South Bohemia
- Regional Action Plan for Navarra
- Energy in action. New climate protection aim in Saxony

Events & publication

- Exhibition in Oberösterreich "The most electricity efficient household appliances"
- Bulb change in Saxony
- Tools for local energy regional energy planning and efficiency

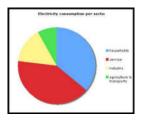
Printable Version

- Regional Event in Navarra
- Regional Action Plan for Pomorskie

IEE - The new call is already launched

REGIONAL PLANS

Ile-de-France regional action plan



Electricity consumption amounts to about 69 TWh in the region (1/4 of the total energy consumption) and the annual growth rate has been of nearly 1,8% per year for the last 8 years. This increase is due, on the one hand, to the economic development and, on the other hand, to the growing part of electricity in energy uses: heating, air conditioning, specific use of electricity.

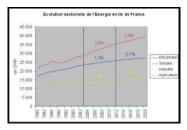
The share of electricity sector is shown in the diagram presented on the left. (Source : RTE):

It shows that the building sector (housing and tertiary sectors) is the main electricity consumer in the region.

RTE (RTE is the company responsible for operating, maintaining and developing the French electricity transmission network) has forecasted the trend of consumption for the region by 2020.

The EL-EFF project is a real opportunity to tackle this increasing trend.

It is the reason why ARENE has chosen to associate regional stakeholders in brainstorming sessions in order to build a better regional action plan. It has been helped by the Wüppertal Institute which is coaching this action by providing key advices regarding the framework and the method.



RTE (system transmission operator),, EDF and POWEO (electricity suppliers), Regional Council (Directorate for the Environment and Directorate for High school, which is managing a huge building patrimony of 470 high schools), ADEME Ile-de-France (the regional branch of the national energy agency), SIPPEREC (syndicate of local authorities for the distribution of electricity), UNARC (real estate properties owners) and CESR (regional economic and social committee) are involved in the working groups. Working groups will are planned to take place once per month until the definition of a common text.



The load curve will be at the heart of the strategy. The group will work on the means leading to the smoothing and the decreasing of the curve that is to say how to better distribute the electricity consumption all over the day (and all over the season) and also how to decrease the electricity consumption.

Main issues identified as priority actions are the following: smart metering, reliable electricity diagnosis, sensitisation and education of electricity consumers, tariffs, public lighting, and low consumption bulbs for lighting in buildings, specific approach for each sub- sector and so on.

The next brainstorming session will take place on June 10th and the goal is to produce a document that would be integrated in the future regional energy plan in 2010.

Daily load curve - Source : RTE
 Marie-Laure Falque Masset, Arene Ile de France, <u>ml.falquemasset@areneidf.org</u> & Judith Cazas, Arene Ile de France, <u>j.cazas@areneidf.org</u>

Electricity consumption in South Bohemia

Electric energy intensity of the Czech Republic is higher than the one of the former 15 EU countries. Average yearly reduction of the electric energy intensity was about 1% in the period of 2000-2004, in the following years the reduction target was increased up to 1,4-2,4%. National programme of energy management and the use of renewable and secondary energy sources (Czech version of NEEAP) sets the target 2,1% of the electric energy intensity reduction in 2009. In 2004, the electric energy intensity was 860 kWh/1000 EUR of GDP and the total electricity consumption was 5 515 kWh/ inhabitant.

Along with the regional energy efficiency strategy, the South Bohemia also has a Regional energy plan. However this Plan contains only very few mentions of electricity efficiency.

However, the Energy Centre České Budějovice elaborated an Action Plan for electricity efficiency comprising mostly promotional activities and projects involving regional stakeholders. Selected targets of the Action Plan are: engagement of 10 municipalities in the Solar heat instead of electric heat incentive by 2010 (50 municipalities by 2015); engagement of 30 municipalities in the Solar league by 2012; reaching at least 30 % of the region population with the campaign "Stand-by switched off" by 2011; 30 % of the region schools will implement the advice of light system modernization by 2012 (100% by 2020); reaching 100 % of the relevant companies with the Heat from cooling system campaign, 20 % of the companies will implement the efficient measures by 2015; 20 % of the region schools will be involved in the School competition by 2011.

The first events for the implementation of the AP measures will be taking place as soon as in spring and autumn 2009.

As a part of electricity efficiency campaign, Energy Centre České Budějovice organized the Minus 10 % competition for householders. The participants were measuring their household consumption during two weeks. The first week they measured "usual" consumption, second week they implemented electricity efficient measures advised by energy experts and again measured the resulting consumption. The winners, selected by lot, were awarded a free tour to the Energiesparmesse 2009 in Wels, Austria.

I Tomáš Avramov, Energy Centre České Budějovice, tomas@eccb.cz

Regional Action Plan for Navarra

Spain has developed, under its Energy Saving and Efficiency Strategy (E4) 2004-2012, a 2008-2012 Action Plan. Its strategic targets are:

- To acknowledge energy saving and energy efficiency as a tool for economic growth and social welfare.
- To create appropriate conditions for a more widespread awareness about energy saving and energy efficiency in society, in particular about the measures contained in the national strategies and the Spanish Climate Change Strategy.
- To encourage market competition in the field of energy saving and efficiency.
- To strengthen the position of Spain at the forefront of energy saving and efficiency.

The new Action Plan for the period 2008-2012 (PE4+) is the continuation of the plan run during the period 2005 to 2007.

The Plan consists of a set of concrete measures which specifically target seven different sectors: Industry, Transport, Construction, Public Services, household and office automation equipment, agriculture, and energy transformation.

The current Plan (PA4+) forms part of the Energy Efficiency Action Plan at the European Community level, thereby contributing to delivering Spain's response not only to achieving the commitments set in Directive 2006/32 EC, which defines a framework for a joint effort to achieve energy savings of 9% in 2016, but the more ambitious target, included in the decision of the European council dated 9 March 2007, namely to achieve savings of 20% by 2020.

Navarre region itself is contributing to achieving the objectives of the E4 and the National Action Plan (PA4+), by developing, in collaboration with IDAE (National Institute for Diversification and Saving of Energy) a yearly working plan that is established with its own objectives. It could be referred to as the Action Plan of Navarre.



Navarre has the goal of reducing electricity consumption for the period 2005-2010 on a figure equivalent to 1.89% of the forecasted consumption for this period on a no change scenario.

The Government of Navarre through the implementation of Energy Plans is carrying out suitable policies on the saving and efficient use of energy and on the use of renewable energies with the maximum respect for the environment.

One of these objectives is to enhance actions in the region of Navarre focused on the electricity efficient consumption.

The Energy Plan horizon 2010 of Navarre says that there is a wide potential for improvement in the energy efficient use field, regarding both the execution of particular measures and the gradual change in the way energy is used to generate the comfort that the society is demanding.

Therefore a group of measures are being promoted in order to decrease the energy consumption, while this reduction is also considered from the angle of a better use of energy resources, thanks to awareness campaigns.

This document as part of the EL-EFF Regions project focuses on two different sectors

- residential sector (domestic sector),
- part of the services sector (public services and retirement homes for elderly people).

Though in Navarre the Industrial sector is still the highest consumer of electric energy, this ratio is being decreased year after year due to the residential and services sector increase.

Energy in action. New climate protection aim in Saxony

In 2001 the Saxonian government passed its "Climate Protection Program". The major targets are:

- 2.5 mio. T-CO2-decrease in the areas of industry, private households, tertiary sector and traffic until 2010 compared to 1998.
- 5 % renewable energies of the end-energy consumption in Saxony until 2010.
- The target related to renewable energies was reached as early as in 2007.

In March 2009 new objectives on climate protection were defined by the federal government:

- minus 6.5 mio tons of CO2 in 2020 compared to 2006
- 24% of electricity to be generated by renewable energies

Energy efficiency plays an important role in this framework.

EL-EFF Regions is one activity within the climate protection strategy of the regional government. Elements of EL-EFF project appear in the "Energy Plan Saxony". The project partner Saxonian Energy Agency (SAENA) is asked to contribute their know-how about efficiency to the design of new grant schemes of the regional government.

The following three projects on electric efficiency are suggested:

Street lighting

10 % of the total electricity in Germany is needed for outdoor lighting. It induces costs of 760 million € per year. For Saxony, it amounts to 30 million € per year. Most of the costs need to be paid by the municipalities.

The often-used mercury vapour lamps are expected to be banned by 2011. LED lamps are introduced into the market. Municipal lighting systems are often old and inefficient. Mid-term savings of 33 % and long-term savings of 50 % are expected.

CFL for households

Lighting causes 10 % - 20 % of the electricity bill of households. CFLs have become

- technically better,
 - more attractive and
- much cheaper.

Nevertheless households react slowly as a result of old habits. Given EU's recent decision to ban incandescent lamps, the timing is right for the promotion of CFL. Different stakeholders will be integrated in the project such as manufacturers, retailers and the federal administration. SAENA will coordinate the action. The Federal Ministry for Environment supports the project idea.

Sector Energy Concept – Agriculture

By the time the EL-EFF Region-project started, agriculture was not at all mentioned in the climate protection strategy of the federal administration. The administration and the representatives of the farmers wanted that to change. This process is underlined by the development of renewables in rural areas. Energy has become a topic for farmers since biogas and photovoltaic systems deliver substantial incomes.

This rising awareness can be used for the implementation of energy efficiency projects.

EI-EFF Region generated benchmarks for several classes of farms. These benchmarks should be more detailed and demonstrated against extensive case studies. Also the influence of the different techniques used shall be examined.

Jörg Ackermann, Gertec, joerg.ackermann@gertec.de
 © GERTEC New agriculture – part of landscape

REGIONAL EVENTS

Exhibition in Oberösterreich "The most electricity efficient household appliances"

As part of the "Minus 10%" campaign, the exhibition "The most electricity efficient household appliances" was organised by the O.Ö. Energiesparverband during the exhibition and trade show "Energiesparmesse". The Energiesparmesse, which was held from 25 February to 1 March 2009, is the leading trade show on energy efficiency and renewable energy sources with more than 1,600 exhibitors and over 100,000 visitors annually.

The information stand was organised by O.Oe. Energiesparverband and Messe Wels in cooperation with the companies BSH, Electrolux, Elektra Bregenz, Indesit and Miele, who exhibited electricity efficient fridges/freezers and washing machines.

The objectives of setting up this information stand were to present the most efficient household appliances to the visitors of the "Energiesparmesse", to raise awareness for electricity consumption and to encourage visitors to exchange appliances where it makes sense.

A lottery for all visitors of the Energiesparmesse was carried out and visitors won the exhibited 10 appliances.

The feed-back received by the visitors was very positive. The visitors very much welcomed the opportunity to get advice on appliances from representatives of the exhibiting companies and from ESV as an independent energy advice provider.

I Christine Öhlinger, O.Ö. Energiesparverband, <u>christine.oehlinger@esv.or.at</u>



Bulb exchange in Saxony



On the 6th of March 2009 the Saxon Minister for Environment and Agriculture Frank Kupfer started a Saxon-wide campaign on efficient lightning in households. This initiative led to the replacement of 5.000 inefficient bulbs with CFLs. The campaign was organised by the Saxon Energy Agency SAENA

in cooperation with the Saxon bulb manufacturer NARVA and the building supply retailer toom. The CFL will save 2.5 million kWh electricity and 1,460 tons of CO2 emissions.

Chemnitz and Freital private households had the possibility to change an incandescent lamp into an 11 W CFL for a nominal fee of two Euros. The sale price would have been seven Euros.



Additionally, two energy experts provided consultations on energy efficiency and handed out information brochures on efficient lighting and electricity efficiency in

households. In Leipzig the first 50 CFL were handed out by the Saxon Minister for Environment and Agriculture Frank Kupfer for free. Furthermore he gave energy saving tips to the people.

Denise Pielniok, Saxon Energy Agency – SAENA, <u>denise.pielniok@saena.de</u> © Photo 1: Thorsten Eckert / © Photo 2: heimrich & hannot

Regional Action Plan Pomorskie

Regional Action Plan for increased efficiency of electricity use has been presented at the Regional Event held at the headquarters of the Regional Government in Gdańsk, 23rd March 2009.

This event was organized with the cooperation and under the patronage of Marshal of Regional Government. The seminar was attended by representatives of Regional Government, local authorities, property administrators and representatives of the agricultural sector.

The characteristics of Pomeranian energy sector, the Regional Development Strategy for Pomerania and the National Action Plan for energy efficiency were presented. The other topics included efficient lighting in buildings, small, dispersed electricity sources, solar energy in heating and electricity production, solar collectors in dairy industry, and economic feasibility of solar collectors in housing and energy certificates for dwellings.

A significant point on the agenda was the presentation of the Regional Action Plan for increased efficiency of electricity use in households in Pomerania developed by BAPE. One of the assumptions of the programme, in line with the National Action Plan, is the reduction of the electricity consumption in Pomerania by 9% by the year 2016, which is 698 GWh per year, including 77,6 GWh of annual reduction in the agricultural sector. The achievement of these targets should be supported by a broad campaign promoting the reduction of electricity consumption in households, public sector, industry and agriculture. This action should by stimulated by "examples of good practice" which will be widely disseminated. Trainings targeting all groups of electricity end-users, press articles and administrative procedures are also to contribute to the implementation of Regional Action Plan for increased efficiency of electricity use in households (RAP). In March 2009 Regional Government of Pomerania started the process of updating Regional Energy Strategy. The present version of the document which is to be updated does not include any targets or measures aimed at the reduction of electricity consumption. The Regional Action Plan, developed by BAPE, was officially handed over to the representative of Regional the Government in order to be used while updating of Regional Energy Strategy and it was well received.

Katarzyna Grecka, Baltic Energy Conservation Agency, <u>kgrecka@bape.com.pl</u>, © Photo1: A.Sykut, BAPE

Tools for local energy regional energy planning and efficiency



The different roles of municipalities, counties and regional administrations as authority, informer, educator, owner and investor give large possibilities to influence and speed up the development of the energy system. Through proactive planning, efficient tools and measures as well as supporting actions the right circumstances for en effective use of energy can be created

The regional energy conference "Energisession" was arranged for the fourth year in Västra Götaland, Sweden. This conference has developed to become the natural meeting point for stakeholders and decision makers involved in the development of renewable energy and energy efficiency within the region. This year 12 different sessions was arranged during the two day conference with over 300 participants. One of the sessions, arranged as part of the EL-EFF Regions project, highlighted

local and regional energy planning and its impact on energy use such as electricity in households, industry and services. The aim of the session was to present a range of tools and measures for improved energy planning as well as a discussion

about the interactions between different stakeholders and needs and barriers. Mats Johansson at KanEnergi Sweden AB, one of the EL-EFF Regions partners, presented strategies for local and regional energy planning in general and a range of measures for electricity savings in specific. One of the key points was that although the municipalities and regional authorities are not competent for energy use in several sectors, lot measures can be done through tax incentive systems, grants and other support systems there is.

By interacting with local and regional stakeholders and other actors to initiate information and awareness raising activities energy saving can be addressed. An example of this is electricity use in households through cooperation with retailers and

warehouses for electric appliances.

Another important measure is to stimulate and increase the knowledge about electricity savings in the industry. Through supporting actions such as local networks and dedicated tools and methods for industrial SMEs the work in favour of energy efficiency can be initiated. The region and municipalities is a key actor through the local energy advisors and the regional energy agency. This should also be considered as a business development action since improving energy efficiency also means improved competitiveness.

There are a lot of measures that can be implemented and cooperation is the key word..

 Mats Johansson, KanEnergi Sweden AB, <u>mats.johansson@kanenergi.se</u> Legend photo The County Governor Mr Lars Bäckström held a much appreciated speech at the final plenary assembly of Energisession 2009



Regional Event in Navarra

On the 20th of June 2008, the Minister of Innovation, Enterprise and Employment of the Government of Navarra, Jose Maria Roig Aldasoro, opened the presentation event for the measures that the Government of Navarra and the IDAE (Spanish National Institute for the Diversification and Saving of Energy), will develop this year to promote energy saving and efficiency in all areas of the society.

The minister Mr Roig was the first to speak; he presented the actions undertaken by the Government of Navarra on energy saving and efficiency. Then Enrique Jiménez Larrea, general director of IDAE took the floor and presented the measures of the Spanish National Strategy on Energy Saving and Efficiency for all Spain (E4+).

Following this, Begoña Urién, General Director of Enterprise of the Government of Navarra presented the grant scheme developed by her General Direction.

The aim of this event was to promote the energy saving and efficiency to achieve the objectives proposed on the Strategy E4+ developed by IDAE at Spanish national level and the objectives of the Energy Plan of Navarra horizon 2010, where local authorities of the Government of Navarra presented the measures for energy saving and efficiency for 2008, within of the Action Plan of Navarra 2008-2012.

Results, follow-up:

The measures target several areas. In the industrial sector investments in energy efficiency and energy audits will be carried out. In the transport sector action plans will materialize in sustainable urban mobility (PMUS), promotion of urban transport in cycling, fleet management of road transport, management audits of transport fleets, setting up of fleet management, driving efficient cars, driving efficient vehicles (buses and trucks), purchase of motorcycles and cars powered by fuels other than gasoline and diesel fuel, transport plans for businesses, and greater participation in collective means of transport by road.

In the area of the building, energy savings in existing buildings will be made by improving the thermal system and energy efficiency improvement of heating plants, and the organization of training courses on the new energy on energy performance in building.

For equipment, measures will be taken as the "Plan Renove" appliances, subsidies to buyers and compensation to the shops.

In the public service sector existing exterior lighting facilities will be renovated, and studies, feasibility analysis and audits of lighting will be carried out.

In the field of energy conversion, aid will be granted to non-industrial cogeneration. Feasibility studies for cogeneration and energy audits in cogeneration will also be carried out.

Finally, in the field of social awareness on the efficient use of energy, there will be various performances to raise awareness among different social sectors on the importance of efficient use of energy.

In this event some new posters/panels developed in the frame of EL-EFF Region were showed, to present and promote the measures for energy saving and efficiency using different data and graphics.

Besides these posters, press articles, radio were used to promote and disseminate this event and the main regional press media were called to attend to the ceremony and to publish different articles the days after.

Pedro García Sotro, Government of Navarra, <u>pedro.garcia.sotro@cfnavarra.es</u>
 © Gobierno de Navarra

IEE - The new call is already launched

Intelligent Energy - Europe programme, part of the Competitiveness and Innovation Framework Programme, dedicates €730 million to fund projects for the promotion of energy efficiency and renewable energy.

The objective of the IEE programme is to contribute to secure, sustainable and competitively priced energy for Europe by providing for action:

to foster energy efficiency and the rational use of energy resources,

- to promote renewable energy sources and to support energy diversification,
- to promote energy efficiency and the use of renewable energy sources in transport.

The 2009 call for proposals is available from the following <u>website</u> The Closing date for submission is the 25/06/09.

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