FEDARENE - an essential interface between Europe and the regions in the process of limiting the emission of greenhouse gases.

The reality of climate change and the involvement of greenhouse gases in this dynamic is no longer in doubt. Consequently, for the EU 15, the Kyoto objective is to achieve a reduction of 8% in greenhouse gas emissions by 2012, compared to 1990. This is a common objective but each member state of the EU 15 has a different reduction objective that it can achieve by various methods.

Since this commitment was made, consequential efforts have been performed both collectively by the European Commission through framework directives and individually by the states that have adopted them. Some have taken other concurrent measures to reduce the emission of greenhouse gases. Although it is now unquestionable that, without these steps, the level of the emission of greenhouse gases would continue to rise, it seems evident that the objective of reducing them by 8% before 2012 cannot be achieved solely with the tools currently available to us. Consequently, we need to explore other avenues and that is just what FEDARENE has been doing with patience and determination for many years.

Thanks to work carried out on the observation of greenhouse gases, FEDARENE has been able to prove the pertinence of promoting action at the local level. After all, it is at this level that it is confronted with the reality of the situation and has become the driving force for training the various players in the application of more economic and more responsible consumption procedures. It is also at the local level that the necessity of co-ordinating the efforts of all for the common good is evident and is shared by everyone.

FEDARENE is showing the way. Several of its members develop and implement numerous activities that seriously contribute to the reduction of greenhouse gases. In this way, they demonstrate the pertinence of the local level in the development of public policies that are likely to guarantee the reduction objective that it can achieve by various methods.

In this issue you can also read articles about the EU projects “Move” and “Road of Energy”.

OREMIP: a tool for monitoring and interaction

The Midi-Pyrenees Regional Observation Centre for Energy (OREMIP) is an observation and information tool for the regional energy situation and a meeting point for the regional energy players, with the capability of making proposals.

Established in October 2003, its mission is to oversee the regional energy policies. Since its creation, the OREMIP has been part of a plurianual partnership set up between the Midi-Pyrenees Regional Council and the ADEME. Its steering committee is made up of numerous representatives of Midi-Pyrenees institutions and associations and has more than thirty members. It is presided over by the Regional Council of the Midi-Pyrenees; the State assumes the Vice-Presidency through the intermediary of the General Secretariat for Regional Affairs supported by regional services. The observation centre is operated by the Regional Environment Agency of the Midi-Pyrenees.

The understanding of the Midi-Pyrenees energy situation is based on an assessment of the energy consumption, on production figures and on the realisation of inventories of greenhouse gas emissions related to energy consumption. Those emissions currently represent 12.4 Mt of CO\textsubscript{2} for the Midi-Pyrenees or 3.5% of the total of French emissions and cover more than one half of the Kyoto basket (composed of carbon dioxide as well as methane, nitrogen protoxide and the fluorinated gases CFC, HFC and SF\textsubscript{6}).

The Midi-Pyrenees presents strong regional characteristics in terms of energy consumption and therefore of CO\textsubscript{2} emissions. 80% of the emissions are directly linked to the transport and tertiary/residential sectors. An increase of 13% of those emissions was registered between 1990 and 2004.

Although the Midi-Pyrenees is a rural region, its agricultural activity is decreasing (a reduction in cultivated surface area). This phenomenon is reflected in the emissions of methane and nitrogen protoxide - largely products of animal husbandry and the spreading of fertiliser.

In this context and in the framework of the next project contract between the State and the Region, a Regional Climate Plan is in the course of finalisation. The objective is to promote activities aimed at improving energy efficiency and reducing greenhouse gas emissions - notably of carbon dioxide at the regional level.
IN BRIEF

ZERO-RATE BANK LOANS FOR BUILDING ENERGY RETROITS IN MILAN

Since 2005, the Energy Sector of the Province of Milan has created and applied various operative tools aimed at drastically reducing the final consumption of fossil fuels and, as a result, at defeating air pollution.

In order to intervene in existing built-up areas, we have set up an innovative scheme of co-financed credit destined for families, individuals, and home-owners who intend to carry out external thermal insulation work, up-grading of existing equipment, and the installation of equipment which uses renewable energy sources.

The tool chosen to encourage the up-grading of those buildings which consume the highest amounts of energy is the creation of a public-private partnership to provide zero-rates bank loans, with interest shared by the Province of Milano and the banks.

In order to select the banks interested in this partnership, at the end of 2006 a call for proposal has been launched, and finally two banks of the Co-operative Credit (BCC) has been chosen.

1 million Euro is going to be allocated by the Province of Milan in order to cover 50% of interest costs and another million Euro will be invested in the Province of Milan in order to cover 50% of the mission and on the necessity to set up observation centres.

As a result, it appears that the fight against climate change requires a collective effort at all levels of society. Consequently, it is essential to measure the effectiveness of the actions undertaken at European, national and local levels.

FEDARENE and the Nord-Pas de Calais Regional Council have completed a "methodological study for the observation of greenhouse gases".

This study is based on a survey carried out among 105 European regional structures. Thanks to analysis of the inventories carried out by the greenhouse gas observation centres, numerous conclusions have been drawn both on the missions and on the necessity to set up observation centres.

As a result, it appears that the fight against climate change requires a collective effort at all levels of society. Consequently, it is essential to measure the effectiveness of the actions undertaken at European, national and local levels.

The observation of emissions of greenhouse gases is an essential requirement in the evaluation, follow-up and inventory of those emissions.

Numerous missions have been completed, such as the collection, production and diffusion of information at regional level on the production and the consumption of energy and the emission of greenhouse gases as well as the follow-up of indicators over the course of time. Thanks to evaluation and this follow-up, the organisation responsible for observation has the means of defining reduction measures, prospective scenarios and even a plan of action. The establishment of reduction measures or adaptation to climate change evidently depends on the material resources available to those organisations.

The factors that determine the structure of the inventory are the type of territorial organisation of the country and the regional importance on one hand and the transposition of the national climate plan to the regional level on the other.

In fact, the status of the region in the country strongly influences its ability to acquire an inventory of the emission of greenhouse gases at that level.

The organisations in charge of the balance sheet inspire and adapt a methodology defined at international and national level by implementing arrangements linked to the goal of the inventory as well as to the availability of the data at regional level. The differences in methodological approach are explained by the goal pursued during the compilation of an inventory - the estimation of emissions is no more than information correlating to the energy balance sheet or perhaps the inventory is used as a tool to help in the decision making process.

In the latter case, what is sought is the development of decisions in terms of policies and actions in favour of the reduction of the emission of greenhouse gases.

Some inventories are primarily aimed at informing the public and the elected representatives while others are aimed at achieving a more precise and appropriate estimation in a local context.

This study demonstrates that if the observation of greenhouse gases constitutes a key factor for the appreciation of the efforts made and the pursuit of commitments on the part of the European states in the framework of the Kyoto Protocol and the limitation of the impact on the environment, the observation mission must not just appear as algebraic in terms of translation of the correlation between the quantity of gas produced and the resultant impact. It must also be perceived as constituting dialogue between the players (public authorities, energy producers, consumers, etc.) in order to implement the most suitable greenhouse gas limiting actions. While observation is an evaluation for the calculation of emissions linked to a territory and their evolution over the course of time, it particularly facilitates the objectivity of discourse on climate change by offering sound data capable of challenging the elected representatives and citizens, of setting regional dynamics in motion to stimulate consciousness of the problem in the territory, the establishment of public policies at regional level, the taking of decisions in terms of actions for the reduction of emissions of greenhouse gases and the evaluation of corresponding policies.

The surveys carried out and the exchanges that followed have highlighted the main requirements of the missions of a greenhouse gas observation centre:

- The demand for comparability: this will allow for an analysis of the efforts deployed by all involved to limit emissions of greenhouse gases.

- The demand for additionality which will allow measurement of the contribution of measures initiated and implemented at local level compared to those of European or national level.

- The demand for the effectiveness of the measures implemented. Which translates the appropriateness between what is observed and the reduction of its impact within a given period. This demand also requires, as implied, the involvement of the players contributing to the emission of a greenhouse gas, in order to co-construct the best limiting action for them. The setting up of a greenhouse gas observation centre can also be thought of as making a contribution to the development of environmental public policies.

- The demand for contribution at local level to the effort of reduction of greenhouse gases for better effectiveness of the actions. The whole of the European Union is committed to a reduction of 8% of its emissions within the framework of the Kyoto Protocol. A division of responsibility for the reduction of emissions of greenhouse gases between European countries was established. It is primordial that climate change is not thought of simply as a national issue and that the regional and local players are conscious of the necessity to act at their level. This alarming observation proves even more the need to mobilise the players at all levels to sustainably reverse the general trend towards global warming.

You can find more information on that study on www.fedarene.org.

CAMPAIGN "ENERGY EFFICIENT LIGHTING"

The lighting sector is a significant area in which the implementation of energy efficient building solutions can be applied. However, it is an area that is often neglected. In office buildings for example, the share of electricity for lighting can amount to as much as 50% of the total electricity consumption where a saving potential up to 80% of the lighting costs could be harnessed.

With that in mind, the O.O. Energiesparverband recently launched a campaign across Upper Austria to promote energy efficient lighting. That campaign targets various user groups and building sectors, including domestic households, hotels, public and commercial buildings. The activities include targeted publications, media work, web-based tools, the training of experts and the arrangement of events. One highlight of the campaign will be the conference entitled “Innovative and energy efficient lighting”: to be held on 24th April 2007, which will provide an overview of energy efficient lighting technologies and examples of best practice.

Contact: Christiane Egger
O.O. Energiesparverband
office@esv.or.at
Michel DELEBARRE, President of the Committee of the Regions

What place do environmental concerns hold in public policies and, in particular, with regard to the reduction of greenhouse gases at local level?

These concerns are at the heart of our local policies whether in the domains of transport, building, the management and re-use of waste or in urban and energy planning. I would cite an example taken in the district of which I am the Deputy Mayor - programme, “Réflexénergie Dunkerque Grand Littoral“ (Coastal Dunkirk Energy Reflex). Infra-red aerial thermography of all of the public and private buildings of the Dunkirk area was carried out to illustrate the loss of heat through roofs. On the basis of this visually expressive analysis, we decided to grant aid to owners who wanted to carry out insulation work or to install solar panels. Thanks to the system of energy economy certifi- cates - of which EDF, exclusive partner in insulation work, in particular benefits - we can determine the volume of greenhouse gas avoided by these means. This step implies a true commitment on the part of the population.

What are the synergies implemented between the local and supranational levels?

Certainly, on this issue, the concern of all elected European territorial representatives is to act in synergy with all other levels of sometimes region- al but more often national and European compe- tence. Accordingly, the programme cited above benefits from the European EIE programme, dedi- cated to construction and named BELIEF (Building in Europe Local Intelligent Energy Forums). As a result, our application has been submitted to participate in the “Path to RES” (Pathways to Renewable Energy Sources), pro- gramme which seeks to develop natural renew- able energy resources in the territory.

Following the National Climate Plan, in which the French Government fixed its objectives in terms of the reduction of greenhouse gases emissions, numerous French local and regional authorities are involved in the realisation of their Local Climate Plan, which scales those objectives down to their level.

At European level, the synergies can be of several types:
- financial, because the European programmes provide multiple sources of finance in order to achieve these objectives;
- intellectual, through the transfer of experience generated by the European projects, partici- pation in networks or during conferences and meetings between experts;
- economic, when European directives impo- sing the development of biofuels have forced the implantation of such an activity on the dis- trict;
- scientific and technological, since research carried out at European, national and local levels enables us to anticipate and better understand the consequences of climate warming.

What support can the Committee of the Regions provide to the regions to encourage action in terms of greenhouse gases emis- sions?

This is mainly political support. It is incumbent on the Committee of the Regions (CoR) to empha- size at European level, so with the European insti- tutions, the importance of the role of the local and regional authorities in the fight against climate change and also their specific needs in this domain. We did that in 2005 in our opinion on "The contribution of local and regional authorities to the fight against climate change" and we will return to it next October when we shall examine the communication of the Commission "Limit the warming of the planet to 2 degrees Celsius - The route to follow by 2020 and beyond" as well as the "Energy package".

Furthermore, the CoR regularly organises debates on climate change and energy policy with representatives of other European institutions, in order to disseminate our messages as widely as possible.

For example, on 1st February 2007, the CoR held a seminar together with Fedarene on the financ- ing of local and regional options in terms of sus- tainable energy, as part of the first "European Week of Sustainable Energy". This seminar explained what public and private facilities may be available. Examples of successful regional activi- ties were presented. I am convinced that such information is very useful for initiatives activities carried out by local and regional authorities. The presentations are available on the following websites: www.cor.europa.eu and www.fedarene.org. We also have to emphasise the good practices, the territorial initiatives that look to the future of Europe and, I expect in a near future around the world.

As the result of a study, Fedarene has thrown light on the work carried out by the regions. How can we benefit from the work carried out by the regions through regional monitoring of greenhouse gases?

In general, the studies and the results of monitor- ing are very useful for political reflection and con- tribute to decision making. From now on, we will rely on this work to show that the challenge posed by climate change is imminent and that we have to act on an appropriate territorial scale with sound projects.

It could be interesting to compare the level and the results achieved by types of regions (for example, industrial regions, urban zones, coastal regions, etc.), in order to improve our perform- ance and better target the priorities.

In June 2007, the CoR will publish a study on the role of the local and regional authorities in the fight against climate change, starting with an analysis of good practices in the use of renewable energy and efficient energy measures. The local and regional authorities will then have the tools for the successful implementation of their projects.

Energy is consumed mostly in the towns. Consequently, the most suitable framework, in my opinion is that of the district and certainly inter- district co-operation within the urban areas, so as to share the costs and the resources necessary to raise awareness of the suppliers and consumers of energy and to help them carry out the invest- ments for energy efficiency. On this basis, the other players have to find a “broker” who is impor- tant and indispensable to the cohesiveness of the activities in this domain (a mediator, a "one stop shop"), a single telephone number, etc.). As in Agendas 21, it seems to me that it is necessary to share the principles of action, the methodology and the fundamental aims.

Are you optimistic or pessimistic with regard to the capability of “citizens” to change? How can you commit citizens to changes in behaviour?

The question of the climate is a serious matter, the economic, demographic and financial conse- quences of which are still underrated. Different opinion surveys show that our co-citizens are sen- sitive to questions of health and environment but they generally under-estimate the impact of their individual actions and the urgency of change. I am optimistic enough because I think that the virtuous behaviour asked of the citizen requires, above all, that he is shown an example and that is the busi- ness of the regions and the districts in Europe. It is also important that the public authorities commit themselves to this work together with private enterprise, the civil society, the scientific commu- nity, etc.
SUSTAINABLE TECHNOLOGY AT WORK

"Technology at Work" is an FP6 project aimed at the reduction of greenhouse gases through the European ETS (Emission Trading Scheme) and the CDM (Clean Development Mechanism) markets in Asia. It seeks primarily to promote sustainable energy technologies in those markets and to facilitate business contacts.

As part of the project, a side-event and related business-to-business meetings will be arranged on 3rd May 2007 during CARBON EXPO 2007, the global carbon market fair and conference held in Cologne (Germany). ETS companies and equipment suppliers are encouraged to take the opportunity to participate in this project.


Contact: Vanessa Garcia Energy Consulting Network info@setatwork.eu

HYDRO SOLAR 21

In Spain, Burgos Province Energy Agency (AGENBUR) participates in a project entitled "Hydro Solar 21". That is the only project in the region of Castilla y Leon to be approved by the EU under the "Environment-Life 2004" funding programme. For the energy supply to a demonstration building, the Hydro Solar 21 project incorporates an adsorption-based solar-cooling system and an automatic electric lighting system based on the combustion of wind and photovoltaically-generated hydrogen in a fuel cell. The main objective is to develop a zero-emissions renewable energy supply system for buildings. The other project partners are the Strategic Plan of Burgos (co-ordinator), University of Burgos, Burgos City Council, the Technological Institute of Castilla y Leon, Construction Institute of Castilla y Leon and CEEI Burgos.

More information can be found on www.hydrosolar21.com

Contact: Diego Santillán García Provincial Agency of Burgos dsantillan@agenbur.com

ÁVILA ENERGY

The Energy Agency of the Province of Ávila (APEA) organises a European congress on Renewable Energy and Energy Efficiency: "Ávila energy". It will take place in El Barco de Ávila (Spain) on the 25th and 26th April 2007.

Ávila Energy tries to increase the use of renewable energy and to spread the criterion of sustainable consumption on energy, showing to participants best practices on the matter of energy that are carried out by Europe.

Contact: Vanessa García Energy Agency of the Province of Ávila avgarcia@diputacionavila.es

Reducing the environmental consequences of mobility

MOVE is a project involving seven European energy agencies or similar, with a common interest in increasing their skills and commitment to the transport area. One of the results of the project will be a selection of good examples that can be used for benchmarking mobility with a less negative impact on the environment.

The purpose of this project is to select tools, establish methods and standards within the partnership based on existing European initiatives that can be used to achieve changes in attitudes and behaviour leading to a change towards less energy intensive transport modes. The big advantage for the transferability and disseminaton potential of this project is both the European and national focus, which gives higher dissemination and better cost effectiveness (not every country has to invent methods of their own). The Mobility Cluster, Internet site and the regional mobility agencies are therefore important tools to succeed in this project that has the ambition to prepare the ground for a permanent cooperation within Mobility Management between the participating regions.

The main objective is to encourage more European communities to work with mobility issues and to offer alternatives to the use of fossil fuels leading to a reduction in greenhouse gas emissions. These objectives will be obtained in different ways e.g. by:

- Providing with methods that will help communities in their work towards less energy intensive transport modes;
- Providing with good examples and success stories that will encourage more actors to work with mobility issues;
- Showing the reductions in greenhouse gas emissions from single projects in different countries using the tools developed during the project;
- Showing targets that are possible to be reached;
- Showing the cost and health effects that will follow.

The project is supported by the European Commission under the Intelligent Energy Europe programme. You can learn more on www.move-project.org.

Contact: Hannele Johansson Energy Agency for Southeast Sweden Hannele.Johansson@energikontr-so.com

A Road of Energy for sustainable landscape

Following the introduction of technological innovations in the production of energy from renewable sources, the changes in the landscape seem to be falling behind due to a widespread notion of "denial of anything that is new" and a growing "fear" of technological innovations.

Today, it is necessary to promote initiatives that favour a new concept for landscape building and that enhance the culture of the territory.

A working-group, focusing on these matters, has been set up between ARAEN/Abruzzo Regional Energy Agency and DiTAC Department/ G. d’Annunzio Chieti-Pescara University and it is leading an initiative on the touristic didactic oriented trail, for the constitution of a network of sites based on energy from renewable resources for the information and training of current and new generations. The initiative is called the Road of Energy Network and its main goal is the constitution of a European net to promote the accessibility of new technologies for the production of energy from renewable sources in the construction of innovative landscapes.

The Road of Energy focuses on the implementation of an integrated system of training and information activities aimed at specific groups such as tourists, local politicians, technicians, end-users, market operators and school students and it will constitute the platform to start a system of network activities to fill in the cultural and technical gaps that are recurrent in the processing and management of energy sources. It will define a system of alternative good practices and of innovative solutions that tend to speed up the diffusion of new living, political and technical behaviours.

The Road of Energy sites should become the places for the recreational promotion and spreading of an "environmentally advanced" energy culture to enhance the creation of new attitudes and new ways of thinking about sustainable energy resources and the reduction of greenhouse gas emissions.

The working-group is currently focusing on the tools and methodology for transferring the idea of the Road of Energy from the conceptual-strategic stage to the operational landscape stage in the Abruzzo and Adriatic regions.

Contact: Iris Flacco - Francesca Bisesti ARAEN, Abruzzo Regional Agency for Energy iris.flacco@regione.abruzzo.it

Contact: Filippo Angelucci Università degli Studi “G. d’Annunzio” Chieti-Pescara (DiTAC) filangel@tin.it