

Taking energy efficiency to a new scale: the climate change action plan in Nord-Pas de Calais region

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Abstract

Through the experience of a new climate change action plan in the French region “Nord-Pas de Calais”, the paper highlights the urgent necessity as well as the inherent difficulties for energy efficiency strategies to penetrate everyday practices and policies in order to reduce emissions in line with national and international commitments.

Nord-Pas de Calais takes pride in two decades of sustained promotion of energy efficiency and renewable energy. Nevertheless, observation shows that regional consumption grows at roughly the same rate as does national consumption.

The paper will present the history of energy efficiency in the region and relate the steps in elaborating a new climate change action plan that moves away from a focus on innovative projects towards the integration of easily replicable practices in business as usual. It then discusses some of the practical roadblocks that are faced in attempting to change the scale of achievements. Surprisingly, the main barrier met with until now seems not to be lack of interest and motivation towards energy efficiency from the general public but the way energy efficiency practitioners traditionally work and think.

Is Nord-Pas de Calais an energy efficient region?

THE NORD-PAS DE CALAIS REGION: THE CHOICE OF SUSTAINABLE DEVELOPMENT

France is divided into 22 regions and 95 mainland departments. The Nord-Pas de Calais Region is composed of two departments: Nord (North) and Pas de Calais, in the heart of North-western Europe. With the high-speed train (TGV), Lille, the regional capital is in the centre of the circle composed by the large London, Paris, Brussels, Cologne, Amsterdam metropolises. The Region also fits into the European backbone, the “blue banana” which from Birmingham to Milan gathers the great industrial and urban parks of Europe.

The Region counts 4 million inhabitants, i.e. 6% of the national population. It is relatively young with 25% of the population under 15 years old (France: 19%) and has a population density of 322 per km², i.e. three times the national density. Nord-Pas de Calais is highly urbanised with about 95% of the population living in cities and towns.

A troubled economic history

For the past 40 years, the regional economy, traditionally turned towards industry, has suffered great upheavals with the strong decline in mining, the iron and steel industry, the textile and chemical industries. This decline, and the corresponding increase in the service sector, in particular large retail, is illustrated in Table 1. Current economic dynamics favour the development of the tertiary sector: the largest mail-order firms and many supermarket chains have their

headquarters in Nord-Pas de Calais, the agro-food and car industries are developing. The arrival of Toyota in 2000 symbolised this new economic impulse where the Region seems to profit from its accessibility, youth, know-how, industrial and scientific environment.

The economic crisis that the Region has endured is revealed by the collapse of whole basins of employment, specialised in extraction and other traditional industries, with a considerable rise of unemployment, social exclusion, and with the abandonment of degraded and polluted spaces.

Thus, more than most French regions, Nord-Pas de Calais inhabitants have felt firsthand the effects of a non sustainable development. The Region had very good reasons to take immediate interest in the sustainable development concept and incentive to develop a strong political framework to pursue such an objective, with in particular the arrival of an ecologist as regional president in 1992. Straight away, the Region became a precursor by featuring sustainable development at a high priority, as attested in each multi-annual State-Region contract since then. Throughout these years, Nord-Pas de Calais has endeavoured to integrate sustainable development in all regional policies and to apply it to all activity spheres.

Energy in Nord-Pas de Calais

In 2003, the final energy consumption of the Region is approximately 14 Million tons of oil equivalent (Mtoe), 9% of national consumption. Indeed, the weight of industry, in particular of energy-intensive industries, like cement manufacturers, iron and steel, paper production, and the density of the population makes the Region an atypical region with a per capita consumption much higher than the national average (3.5 versus 2.6 toe per capita). Figure 1 presents the distribution of final energy consumption in the Region.

A LONG-STANDING COMMITMENT TO ENERGY EFFICIENCY

Since 1980, the Region has never ceased to stimulate and accompany public energy efficiency and renewable energy policies, even in the 90s when cheap energy led to the decline in energy efficiency promotion at national level and in other regions. This commitment is reflected both by the institutional framework which has been set up in the Region, and by some of its major programmes.

The regional framework

ARE, the regional energy agency

To accompany and structure the local actors, the Region created a regional energy agency (ARE) in 1982, whose mission was to disseminate technical and organisational solutions, to be a place of expertise and independent debate upstream of decision-making. For political reasons, the ARE was disbanded in June 2003 and most of its personnel integrated in the regional administration, in the Energy, Environment and Waste Management Directorate of the Regional Council. Nevertheless, throughout its numerous projects, ARE was most successful in establishing a framework for partnership with various regional actors (working with the retail sector, training social assistants, setting up local ambassadors who promoted selective household waste sorting for recycling, etc.).

FRAMEE, the regional fund for energy management and the environment

Today, the implementation of the regional policy is essentially based on a financial tool: the Regional Fund for Energy Management and Environment¹ (FRAMEE), co-financed in parity by the Region and ADEME, the French Agency for the Environment and Energy Management. This part-

Table 1. The Nord-Pas de Calais region yesterday & today – Selected economic indicators.

Global indicators	Yesterday		Today		Evolution	
Regional / National GDP	8.3%	1962	5.6%	1995	↗	33%
Purchase power	100	1946	300	1996	↗	200%
Number of jobs						
Industrial activities						
Coal industry	220 000	1947	538	1996	↗	100%
Agriculture and foodstuffs	42 800	1968	37 000	1996	↗	14%
Naval construction	6 000	1974	0	1996	↗	100%
Glass industry	7 200	1946	14 400	1996	↗	100%
Automotive industry	4 000	1962	40 000	2002	↗	900%
Steel industry	42 000	1962	16 000	1996	↗	62%
Textile industry	160 000	1962	28 000	1995	↗	83%
Service sector						
Trade	103 400	1968	142 800	1996	↗	38%
by mail order	3 500	1962	14 500	1994	↗	314%
large scale retail	290	1964	15 200	1994	↗	5140%
Commercial services	98 600	1968	275 900	1993	↗	180%
for domestic customers	41 700	1968	134 250	1993	↗	222%
for enterprises	18 900	1968	70 000	1993	↗	270%
financial organisations	11 250	1968	20 700	1993	↗	84%
insurance	3 300	1968	6 300	1993	↗	91%
Non commercial services	160 000	1958	280 000	1993	↗	75%

Source: INSEE

nership was initiated in 1983. The Fund supports energy management, waste treatment, air quality, high environmental quality building (HQE), environmental observation and management, and the knowledge of polluted sites and soils. Between 1983 and 2000, the FRAMEE supported 2 500 operations and distributed over 60 Million Euro in subsidies that in turn induced over 200 Million Euro in investments. ADEME estimated that 2 Mtoe were thus saved in 2000, 1 Mtoe produced with local resources (renewable energy + waste management) and 6 MtCO₂ emissions avoided (ADEME 2000). A more recent estimation based on the FRAMEE's annual reports shows that the FRAMEE directly generated 12 000 toe of energy savings from 2000 to 2002 (ICE 2003).

Annually endowed with 9 Million Euro over the 2000-2006 period, this Fund is managed jointly and makes it possible to accompany companies and municipalities in the implementation of their projects. The Fund delivers subsidies for investments, supports feasibility studies and audits, as well as capacity and network building.

The incentives of the FRAMEE are supplemented by those of the regional European Development Funds (FEDER) which bring an additional 43,4 Million Euro under the topic "Prevention of pollution and flow management" over the 2000-2006 period.

NORENER, the statistical observatory of energy consumption

Most French regions have no tool to observe energy consumption on their territory: there are only 10 regional energy observatories operating in France (Bailly 2004). Nord-Pas de Calais has thus been a forerunner, by establishing the NORENER program – the statistical observatory of energy consumption – in 1992. The program provides each year a consolidated energy balance by product (including non commercial and renewable energies), by sector and by use. The factors which determine energy demand, such as the climate, the economic context and energy saving programmes are measured using the "method of effects". The observatory precisely measures the regional impact of efforts to save energy and evaluates sector by sector the associated greenhouse gas emissions.

Networks of dissemination

The regional energy agency was quite instrumental in federating and accompanying regional actors. Some of the networks of dissemination it set up continue to operation, in particular, a network of environment counsellors for industrial firms, one in each of the Region's Chambers of Commerce and Industry, created in 1998. For the general public, the Region and ADEME have set up and supported an information network for more than 15 years. These centres have recently been reinforced within the framework of the national network of energy advice centres, "Espaces Info⇒Energie".

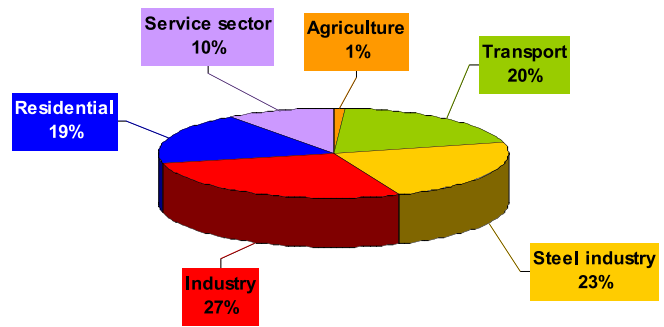


Figure 1. Final energy consumption in 2001, by sector. Source: NORENER.

Selected programmes

The Region carries out at present, or has carried out in the past, a number of energy saving and environment protection projects, both on its own property and in partnership with other regional actors. Some of the main programmes are briefly described below.

Regional property

The Regional Council wished to show the example by setting up an "eco-management" programme in its administrative buildings for its own personnel. The Region thus participates in an on-going EU SAVE Project, with comparable regions in Belgium and the United Kingdom, under which provisions are made to use recyclable products, to generalise paper recycling, and to save water and energy. An operation to recover special waste in the high schools under the Region's authority² and a programme aimed at encouraging the use of the bicycle and collective transport for its agents and elected officials are also part of the SAVE project.

Furthermore, the Region has invested to improve the effectiveness of energy installations and to reduce their consumption in several high schools. The Regional Council also chose to adopt the high environmental quality protocol, HQE, for building new high schools. Two new high schools have been built according to the HQE protocol. The Region aims to widen this approach to other high schools.

With other local authorities and hospitals

The actions carried in priority concern the building stock of municipalities of less than 4 000 inhabitants. Between 1997 and 2000, 180 municipalities in the Region benefited from this policy and obtained financial support from the FRAMEE, mainly in the form of subsidies for energy audits.

In hospitals, the Region accompanied a small dozen of combined cogeneration projects in the cities of Calais, Douai, Maubeuge, Roubaix, Valenciennes, and Lille.

Energy efficient household appliances

When the energy label for cold appliances was in its first stages, the Nord-Pas de Calais Region initiated a co-operation with the retail sector to facilitate the implementation of the label and augment its efficacy in orienting consumers to-

2. Since 1986, in France, the responsibility for building, managing and renovating schools is divided between national, regional and local authorities: universities are dealt with at national level, high schools (grades 10 – 12) at regional level, middle schools (grades 6-9) at department level, primary schools (grades 1-5) and kindergartens at municipal level.

wards more efficient appliances. The project, carried out by the regional energy agency ARE, proposed to accompany retailers in introducing the label through training of sales personnel, rationalisation of the product range on sale (notably to ensure that A- and B-rated products were marketed at “acceptable” prices) and information and communication support. Two distributors, Boulanger (specialised in home appliances and electronic equipment) and CORA (supermarkets, some of which include a home appliance department), chose to participate in the regional project. The direct savings generated by the project, which was evaluated with sales data from the participating distributors, corresponds to the annual specific electricity consumption of 840 households. The indirect results are more interesting: this regional pilot experience helped raise awareness at national level on the need to accompany the introduction of the energy label in order to obtain a fuller lever effect on the sales of efficient appliances. In particular, the training course developed at regional level is still used to develop training courses and information packages for similar projects in other regions and, updated to include more recently labelled appliances, is the basis for the national training course proposed to appliance retailers today³.

Initiatives in favour of renewable energies

The Nord-Pas de Calais has also been very active in supporting the development of renewable energies, in particular fuelwood and wind power.

Conclusion

In short, the Nord-Pas de Calais Region, in partnership with the regional branch of ADEME, is today rich in experience and considered one of the most dynamic regions in France in the field of sustainable development.

RESULTS, PROSPECTS & LESSONS LEARNED

Regional energy consumption has increased...

On average, from 1990 to 2003, the annual increase in energy consumption has been of the order of 1,2% at national level and 1,3% in the Region: an additional 2,2 Mtoe per year in the Region and 24 Million in France. Essentially, the

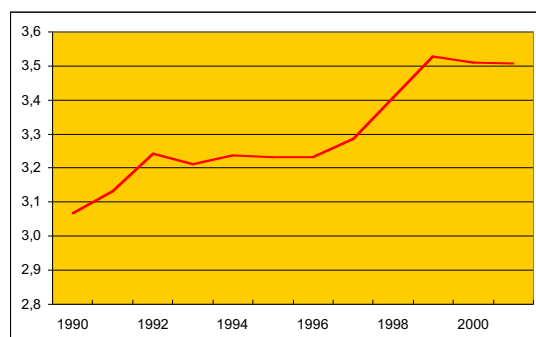


Figure 2. Energy consumption per capita 1990 - 2002, in toe.
Source: Norener.

residential, tertiary, and transport sectors are responsible for this increase.

Transport consumption increases at a faster rate in Nord-Pas de Calais than at national level: since 1990, regional consumption has increased 44% while national consumption has increased “only” 15%. In 1990, the rate of equipment of regional households was well under the national level. Today, regional inhabitants have “caught up” with their compatriots in terms of car possession. This is also true for the residential and service sectors, which have increased on average by 0,8% and 2,7% respectively since 1990. Figure 2 illustrates the global increase in regional per capita consumption.

Finally, it should be noted that the energy intensity of the Nord-Pas de Calais has decreased (about 0,4% per year between 1990 and 2001) but at a rate slower than that of the whole of France (0,9% per year over the same period): despite twenty years of political will, sustained funding of energy efficiency programs and a number of notable achievements, the economy of Nord-Pas de Calais is not very efficient.

Furthermore, to reach the Kyoto emission reduction targets, a 2% annual improvement in energy intensity is necessary. Despite twenty years of sustained political and financial support of energy efficiency and many innovative programs, with only 0,4% annual decrease in energy intensity, the Region is still quite far from the target.

... and will continue to increase

An energy forecast was carried out for the Nord-Pas de Calais in 1997. In this exercise, two scenarios were retained: a business-as-usual scenario – what would occur if no additional measures were taken? – and an alternative scenario where the best energy efficiency techniques were disseminated. When prolonged until 2020, the two scenarios reach an overall final energy consumption of 17,7 Mtoe for the high scenario and 13,9 Mtoe for the low scenario. The low scenario, which supposes a strong effort in energy efficiency beginning in 1994, gives an overall consumption in 2020 slightly lower than that of 2001. This point is of interest since France has committed to a 0% increase in energy consumption in the framework of the Kyoto Protocol, i.e. to have in the period 2008 – 2012 energy consumption no higher than that of 1990.

Figure 3 compares the evolution of energy consumption observed between 1990 and 2002 with the high and low scenarios issued from the forecast. It shows that if the current trend of final energy consumption is continued, the line produced virtually merges with the high scenario of the forecast. This means concretely that, if the national commitment were grossly “regionalised”⁴, the Nord-Pas de Calais region, one of the most dynamic in supporting energy efficiency, would still be far from the mark.

If Nord-Pas de Calais is to meet with the targets set in the framework of the Kyoto Protocol, a dramatic change of scale in energy efficiency uptake must be achieved. This is the

3. ADEME is currently proposing a new partnership with appliance retailers at national level that includes all labelled appliances.

4. It is not expected that France would “regionalise” the national commitment; nevertheless, such an analogy could be useful in evaluating the amount of effort required to meet the Kyoto objectives.

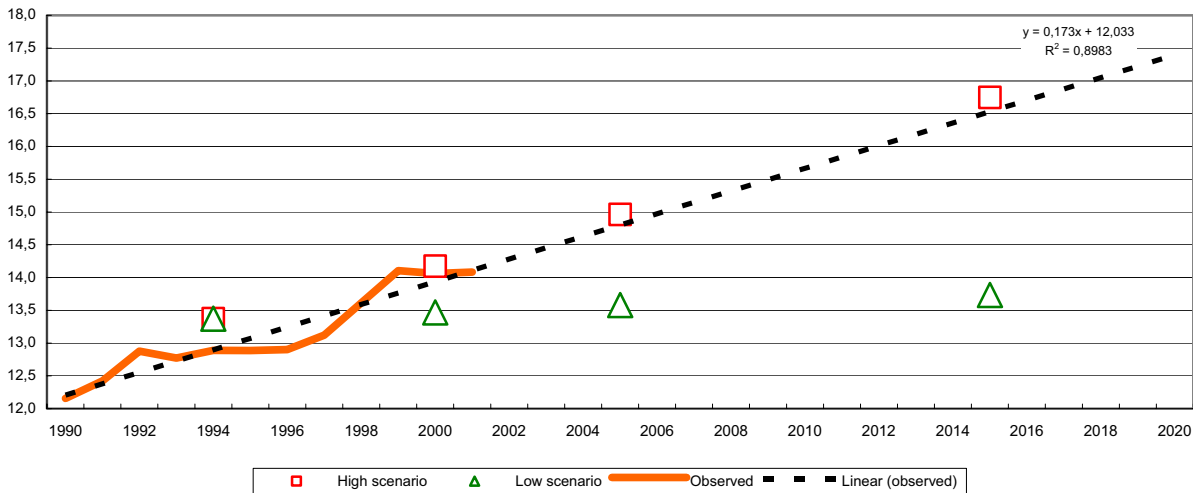


Figure 3. Forecast and real evolution of final energy consumption in Nord-Pas de Calais, 1990 – 2020, in Mtoe. Source: Norener.

major goal that is pursued in developing and implementing a new climate change program in the region.

The climate change programme

THE STUDY

In December 2002, the Regional Council launched a study aimed at defining the instruments and measures that could permit the mobilisation of all types of regional actors in combating climate change. The study was piloted by the Energy, Environment and Waste Management Directorate⁵ and carried out by International Consulting on Energy.

In most other French regions, such studies have more or less consisted of presenting what would resemble a “guide-book for energy efficiency policy” that begins with measuring present energy supply and demand, and forecasting their future evolution, then listing various instruments and measures for each activity sector while somewhat discussing how such actions could be adapted to the local conditions. The lack of regional energy observatories mentioned above (only half of the 22 regions have set up a regional energy observatory and most of them only recently) signifies that funds available for studies at regional level must first go towards developing an energy balance.

Given the history of energy efficiency in Nord-Pas de Calais, it seemed possible to attempt to identify actions that could bring about the necessary change of scale.

After about nine months of discussions with regional councillors, agents of the regional administration, experts and specialists, representatives of the businesses and NGOs, etc., the project team elaborated a proposal for a “regional climate change action plan” which consists of 16 actions under 5 headings: institutional, service sector, transport, financial mechanisms and communication. Below we briefly present the actions proposed. The action plan is not inherently innovative; on the contrary, it is composed of measures that have been successfully implemented else-

where. In fact, the “novelty” for the Nord-Pas de Calais region lies in the very move away from innovation.

THE PROPOSED “REGIONAL CLIMATE CHANGE PROGRAMME”

Institutional actions

Within the course of the study, the project team qualified the Regional Council as having three complementary roles to play in acting against global warming:

- to be a model by taking action on its own property (administrative buildings, high schools...) and by ensuring that energy efficiency is integrated into all the policies it implements (initial education and professional training, transportation, environmental protection and waste management, relations with other local authorities...);
- to be a reference on climate change and to disseminate information and communication towards all types of regional actors, in particular towards other local authorities and enterprises, on the tools of energy efficiency policy implementation;
- to be a promoter, by developing new methods of financing energy efficiency projects and programmes, that permit a large number of such projects and programmes to come to light.

Institutional arrangements were proposed to permit the Regional Council to adopt these three roles:

- a political stance on climate change as one of the priorities of regional action;
- the creation or continuation of a forum where the Regional Council and other regional actors could discuss, concert and orient the regional climate change action plan;
- administrative arrangements;

5. By Bertrand Lafolie, in charge of “Strategic Monitoring and Energy Observation”.

- reinforcement of partnerships and networking.

Climate change as a priority for regional action

The aim of this proposal was to implement some sort of public declaration that climate change constitutes one of the priorities of regional action in order to send a clear and strong signal to all regional actors and ensure their mobilisation.

A regional forum on climate change

The former regional energy agency, ARE, had successfully practiced working with all types of regional actors and had formalised this practice through its Board of Directors, that was composed of representatives of the entire “civil society”: energy enterprises, public housing organisations, hospitals, decentralised State organisms, environmental organisations, consumer protection associations, etc. When the agency was disbanded, the Regional Council decided to continue its relations with these partners by creating a sort of consultative commission.

The Commission served as the steering group of the strategy study and as a sounding board for all the proposals that were made in that framework. It thus appeared that to have such a forum where the regional climate change action plan could be discussed and oriented, and partners from without the Regional Council could be constantly mobilised would be an advantage. The project team thus proposed that this Commission would be maintained and given an official role in the future development of the regional programme.

Proposals concerning the regional administration

In line with the roles devolved to the Regional Council described above, the project team proposed the creation of a climate change cell with a three-fold mission:

- An assignment linked with the role of the Council as a model: the person(s) holding this position would principally work inside the Regional Council with all Directorates to initiate and accompany their actions dealing with regional property and regional policies. This assignment includes the monitoring of national and international climate change policies and the dissemination of information on these policies and on best practices within the Regional Council.
- An assignment to mobilise other regional actors through information dissemination and networking. The person(s) holding this position would have a good knowledge of the regional actors, their projects and the means in which the Regional Council could help them implement these projects.
- The third assignment would concern relations with other local authorities (municipalities and inter-municipal structures, departments and “new territories” such as agglomerations, natural parks, etc.). The Region could assist diverse local authorities in developing and implementing “climate change” projects and programmes.

The second proposal concerning the regional administration consisted in widening the scope of the existing Energy Observatory to include climate change. The Observatory would monitor and analyse current data as well as establish and interpret forecasts.

The project team also suggested changes in the work habits of the regional agents, in particular those of the Energy, Environment and Waste Management Directorate in order to improve networking and mobilise partners outside the Regional Council.

Service sector

The very large diversity of stakeholders and stakes within the tertiary sector makes it a difficult target to cover by previous energy efficiency strategies in France. Nevertheless, its rising energy consumption makes it an emergency to find solutions that either overcome, or make use of, the diversity barrier.

Within the sector, the team considered that the hotels, hospitals and retail sub-sectors constituted important targets of action. All three present large potentials for the widespread dissemination of energy efficiency actions and an institutional context that favours the establishment or reinforcement of partnerships with the Regional Council.

The precise contours of these three actions remain as yet undefined; however, the approach proposed is of a different nature than those adopted previously in the region: the idea is not to support a single actor in implementing a highly innovative project and expecting this exemplary practice to be spontaneously adopted by similar actors, but to institute a working relation with a group, organisation or federation representing a significant part of a sub-sector around “proven” operations: i.e. operations that have been implemented elsewhere on a large scale.

Hotels

The 413 accredited hotels in the region are represented by the Regional and Departmental Committees on Tourism, that are 90% financed by the Region and Department. These committees participate in the elaboration of the Regional (Departmental) Planning Scheme for Tourism and carry out concerted actions to market tourist products, promote the regional infrastructure on foreign markets and generally support the economic development of tourism. The action proposed for hotels consists in a voluntary agreement, preferably with a professional federation, to promote energy efficiency, renewable energies, water use management, waste management and general environmental protection. In the framework of the agreement, hotels which undertake relevant operations could benefit from subsidies from the Tourism Directorate of the Regional Council. The possibility of associating a label with the voluntary agreement is also under discussion.

Hospitals

A network of 140 health establishments that aims at exchanging knowledge and know-how already exists in the Region. Furthermore, the Regional Council has previous experience of working with many of the large hospitals on combined heat and power through the FRAMEE. The action proposed is to create within the health establishment network a working group on energy supply, energy efficiency and greenhouse gas emission reduction. This working group would be linked with and led by the Energy, Environment and Waste Management Directorate and the regional

branch of ADEME. Other relevant regional directorates would be associated.

The retail sub-sector

Like elsewhere, the Nord-Pas de Calais has a number of very large supermarkets, department stores and specialised shops on its territory but the Region is also specific in the sense that several large national and international retail chains have their headquarters in Nord-Pas de Calais. There are historical links between these regional enterprises and the Regional Council. Furthermore, as described in above, a successful pilot project linked with the introduction of the energy label on cold appliances had been carried out with two of the regional retail firms. While the previous operation aimed to exploit the marketing power of the retail sector to increase the sales of efficient products, the action proposed in the framework of the regional climate change programme intends to introduce energy efficiency and environmental protection in the management of the sector's own property and operations: stores, warehouses, fleet and transport management, waste management, etc.

Transport

The measures proposed concerning transport will not be described in detail in this article. The transport issue is a complex one at regional level since most of the real decision-making lies with the central State on one hand (highways, national road, rail and water infrastructures; large national and international projects, etc.) and with local authorities on the other (urban transportation). While the Region plays a role in the planning and forecasting phase, and in the final stages of project finance, it actually has little power to enforce the priorities it has determined. Also, much of the funds it devotes to transport are swallowed by the maintenance of "regional" roadways.

Nevertheless, regions are responsible for the "TER" (express regional train systems) and the Nord-Pas de Calais is particularly dynamic in developing an efficient and attractive network and promoting it. Close to 30% of the regional budget is devoted to the upkeep and development of the regional rail transport system. While this important regional competency has a direct and positive effect on greenhouse gas emissions, it remains out of the scope of the study and the proposed regional programme.

The transport section of the regional climate change action plan thus contains proposals that aim to reinforce existing measures such as company travel plans, school transport plans and promotion of soft transport modes.

FINANCIAL MECHANISMS

The financial mechanisms are the part of the proposed action plan that attracted the most attention – both positive and negative. As previously explained, the Nord-Pas de Calais already possesses a strong financial instrument, the FRAMEE, which has supported innovative projects for over twenty years. The intention of the project group was not to question the existence or the efficacy of existing financial tools, but to develop a means of supporting generalisation instead of single operations. Reasoning behind this endeavour is simple: available regional funds represent peanuts

compared to the funds required to meet emission reduction objectives.

The project team therefore proposed and explored three financial mechanisms, based on what is generally termed "public-private partnerships" and inspired by concrete operations set up in Germany, Canada, and the Alsace region in France. The detail of two of the three mechanisms is explained in depth by Métreau and Lopez 2005. Here, we will only very briefly present the schemes proposed.

The soft loan mechanism for housing

The idea, already implemented in the Alsace region, consists of loan softened by the Region and voluntary banks for individuals carrying out targeted operations: roof insulation or "secondary" insulation such as wall cavity, floor, double glazing, etc. The Region aims to bring 6 Million Euro over three years to finance this mechanism with equal funding from the participating banks. Over three years, the loans should allow the thermal rehabilitation of almost 25 000 residences built before 1975.

The energy partnership for schools

The Nord-Pas de Calais region is responsible for the construction, maintenance and rehabilitation of about 200 high schools, many of which were built before 1980. The Region spends close to Euro 20 million each year for their energy consumption. The mechanism proposed aims to support energy efficiency improvements on the schools and to thus reduce the Region's energy expenses.

The proposal on energy partnerships for schools is based on the third party financing concept implemented in Berlin where performance contracts are passed between ESCOs and pools of schools. The project team ran a simulation using hypotheses from the Berlin partnerships. Under this simulation, with a minimum investment corresponding to the management of the scheme, the annual energy bill of the 160 participating schools could be reduced by over 3 Million Euro.

The regional investment fund for local authorities

The objective is to create a Regional Investment Fund that would support financially but also technically investments in the fields of energy efficiency and renewable energy of the local authorities and service sector SMEs. The financial participation of the Region – around 10 Million Euro – will on one hand limit the risks for private investors and thus increase the attractiveness of the Fund. On the other hand, it enables the Region to preserve some decisional capacity on the Fund's strategic guidelines (validation of projects). The Fund will provide various forms of financing: equity for the setting up of ESCOs, subordinated loans and loan guarantees, etc.

Communication

The activities that fall under this heading were designed to raise general awareness of the global warming issue, in the general public as well as within certain influent actor groups (e.g. regional enterprises), to increase the visibility of the regional action plan, in particular, the future financial mechanisms, and to establish in-depth partnerships with specific

actor groups in order to set up additional greenhouse gas emission reduction activities.

A regional citizen's conference on climate change mitigation, a roaming exhibition on global warming, the development of a dedicated section on the Region's website, a series of thematic conferences targeting trade unions and employer organisations, local authorities, school directors, etc. were among the measures proposed to raise awareness on the climate change issue in general and the regional action plan in particular.

A one-year programme for three custom-made work shops for decision-makers in industry (around the introduction of the European quota directive), from large inter-municipal structures ("agglomerations") and in the building and rehabilitation sub-sector was also proposed.

THE TECHNICAL ASSISTANCE PROJECTS

The study was finalised in March 2004, right before regional elections were to be held. It was then necessary to wait for the outcome of the elections and present the study results and proposals to the new regional team. The new Vice-president in charge of environment and sustainable development rapidly adopted global warming mitigation as one of his two priorities of actions, a fact which gave an extra boost to the project team to pursue work on an action plan.

Two technical assistance projects were launched by the regional administration aimed at:

- On one hand, further defining the selected financial mechanisms and assisting the Regional Council in setting them up. This project is described in detail in Métreau and Lopez 2005.
- On the other hand, further exploring and setting up activities of awareness raising, networking building and communication on the regional climate change actions, in particular on the new financial mechanisms under development. These activities are those under discussion in the present paper.

At the launch of the technical assistance projects respectively in May and September 2004, no official decision had been made by the Regional Council on which proposals were adopted. The project team, constrained by a contractual framework that somewhat limited its action (the Consultants had not enough time to cover all the activities proposed) continued to work on the actions it considered the most "promising". However, while the projects advanced in full view of and often in co-operation with regional agents from various directorates, it can be said that they existed in a sort of institutional vacuum, not attached to pre-existing programmes, not formally validated, without clear indications on how and by whom each measure, once adopted, would be implemented.

This uncertainty was only resolved in early 2005: first through a formal decision of the Executive Bureau of the Regional Council to implement certain of the proposed measures, then through a decision of the regional administration concerning how they would be implemented and by

whom. Under the new framework, certain aspects of the regional programme have been significantly changed as illustrated in Table 2.

THE CURRENT REGIONAL CLIMATE CHANGE ACTION PLAN

The interim period brought about a number of changes in the regional action plan. While some measures were adopted in a modified form, others were postponed or abandoned; new measures emerged and sometimes then immediately vanished...

The action plan is now strongly centred on the two financial mechanisms (soft loan for thermal rehabilitation and regional investment fund for local authorities). The communication activities have been streamlined and readjusted to focus on the setting-up and operation of these two mechanisms through:

- The use of the Regional Council's existing communication tools (a newsletter delivered to all regional inhabitants around 3 or 4 times each year, a website, the possibility to create and disseminate brochures, publicity campaigns, and press relations).
- The identification of relays that could disseminate information on the new mechanisms to a larger or different public than reached by the Regional Council's means. This includes the energy advice centre network and other sustainable development promotion organisations, of course, but also notary organisations, health officials, mayor associations, social assistants, etc. These relays will be contacted and an information package prepared for those who wish to advertise the region's action plan.
- The organisation of a visit tour for the Vice-president, to each of the main local communities of the Region, to present the regional action plan and discuss local actions related to climate change.

Table 2 summarizes the current status of the main measures of the action. Some "interim"⁶ activities have not been included in the table to avoid confusion. Among these, many could strongly contribute to the success of the action plan but no human or financial means have been identified to support them. In particular, the level of training of local craftsmen in selecting and installing insulation is an issue that needs urgent attention if the soft loan mechanism envisaged manages to create a large demand for such operations. Although the problem is recognised and in spite of the fact that professional training is a regional competency, the topic remains unexplored.

Discussion: Will it work?

THE LEGITIMACY OF A REGIONAL CLIMATE CHANGE ACTION PLAN

It seems paradoxical to some that a region would feel the need to intervene on an issue that is of a global nature such as climate change. When questioned on the causes of climate change, these primarily refer to industry, or transporta-

6. Actions neither described in the strategic study nor adopted in the final action plan.

Table 2. Measures of the planned regional climate change programme and their status.

	Measure	Current status	Observation
Institutional	Climate change as a regional priority	adopted	The Vice-President has declared climate change one of his two priorities of action.
	A regional forum on climate change	adopted	The creation of a Partnership Commission on Climate Change was formally decided. The Commission's President and members have yet to be designated.
	Administrative arrangements	not adopted	A general reorganisation of the regional administration is underway and will condition any future administrative arrangements. A "Climate Change" Project Group has recently been set up within regional administration.
	Reinforcement of partnerships and networking	not adopted	No reactions on these proposals.
Service sector	Hotels	adopted	A working group is to be set up within the regional administration
	Hospitals	adopted	A working group is to be set up within the regional administration
	Retail sector	adopted	A working group is to be set up within the regional administration. A technical assistance project may be proposed to solicit assistance from outside consultants to implement this action
Transport		not adopted	No reactions on these proposals.
Financial mechanisms	The soft loan mechanism for the residential sector	adopted	The mechanism has been officially adopted but the Regional funds needed to finance the soft loan are not yet identified. Furthermore, a decision was taken not to launch the mechanism in its initial form (Region + financial institutions) but to negotiate with selected local communities for additional financial support. To do so, it was decided to postpone the launch of the mechanism from early summer 2005 early 2006.
	Energy partnership for schools	adopted	This mechanism was first abandoned then re-adopted, most likely under a new form. A working group is to be set up to advance on this issue.
	The regional investment fund for local authorities	adopted	The Fund needs further definition, which implies new technical assistance projects.
Communication	Citizen's council on climate change	not adopted	Regional administration tends to prefer other means of citizens' involvement and generally considers this action as not very high in priority.
	Roaming exhibition on global warming	not adopted	The Regional Council is reticent to fund "yet another" exhibition and has launched an audit aimed at identifying and analyzing existing exhibitions.
	The use of existing regional dissemination tools (website, newsletter, press relations cell, etc.)	adopted	A meeting with the Head of the Regional Communications Directorate has been held. Although an agreement "in principle" is secured, budgetary issues have been raised that may slow down or interrupt the action.
	Thematic conferences for influent actor groups	not adopted	This measure has been abandoned in the current programme.
	Custom-made workshops for decision-makers	not adopted	This measure has been abandoned in the current programme.

tion, at the same time stating: "You can't expect us to give up our cars". While this is characteristic of general public opinion as shown in the recent polls on the global warming issue, it is also true of many active policy-makers: urban planners, elected officials at local and regional levels, waste management specialists, company managers, energy and environment experts, etc. Many of these argue that more stringent regulations, dedicated taxes and financial incentives could and should be defined at the national and international levels in order to meet national and international commitments. Furthermore, in a national context where regions are attempting to wrest more power from the central State and simultaneously resisting actual devolvement in the fear that increased responsibility will come with no financial counterpart, some interlocutors have clearly stated that climate change is not a regional competency and that Nord-Pas de Calais should therefore avoid stepping into the hornets nest.

To the project team and to many of its partners inside and outside the Regional Council, it seemed on the contrary that a Region was probably the one of the best strata in which climate change mitigation activities could be set up. On one hand, since greenhouse gas emissions originate in a multitude of dispersed activities, it makes good sense to get as close to the emission sources as possible. On the other hand, the most decentralised public authorities, i.e. the departments, municipalities, inter-municipal structures and the "new territories" such as agglomerations, natural parks, etc., have a difficult time trying to cope with climate change. It is true that these local authorities have access to planning and intervention tools that permit them to develop policies that favour energy efficiency (in particular, but not limited to, land use planning) and to improve their own substantial building stock (kindergartens, primary schools, municipal sports infrastructure, public buildings, etc.). Nevertheless,

the uptake of these tools and the number and scope of energy efficiency and renewable energy programmes implemented by the local authorities remain limited when compared to the objectives set at national and international levels. We therefore believe that a region, such as the Nord-Pas de Calais, can play an important role in helping other local authorities to take on the climate challenge. Regions have a strong experience in intermediating between the international (European) level, the national level (notably through the multi-annual State-Region contracts) and the decentralised level ("Agglomeration" contracts, etc.) that could be bought to positively bear on this "new" issue.

Furthermore, we asked ourselves what would happen if all policies relating to global warming mitigation *were* actually defined nationally at a level strong enough to meet the French emission reduction objective. If quotas on industrial emissions were even stricter, how would the Region's energy-intensive industry fare? If petroleum and fuel for heat cost significantly more, how would regional households manage, who have only just managed to catch up the national rates of equipment, who largely reside in old non insulated homes or in newly built suburban neighbourhoods unserved by public transport? Could the regional mail order industry rapidly transfer their product delivery to the rail? Would regional craftsmen have the know-how to promote and install energy saving products and equipment in the public and private buildings? And so on.

Indeed, the competency of regions to formulate and implement an economic and social development project is recognised by the "decentralisation laws". In practice, this means that a region has the knowledge and the legitimacy to develop policies that take into account both the local opportunities and constraints better than it could be done at national level. A region has more means to identify problems of equity and redistribution when formulating a new policy and to adopt the policy to avoid such problems.

DEFINING THE ACTION PLAN

The second topic that we feel merits discussion, at least a rapid justification, is the composition of the action plan. In the very first stages of the strategy study, the project team chose to disregard certain potential measures in favour of others, setting aside otherwise important aspects of regional policy, such as waste treatment, management of natural landscapes, greenhouse gas emissions other than CO₂, the expression regional train system and transport in general, etc. This choice can be explained by several factors: firstly, the very large part of regional greenhouse gas emissions are CO₂ emissions and the very large part of these emissions are due to energy consumed in the region; secondly, the project team searched to intervene in fields not already satisfactorily covered by policies already in force; and most importantly, the approach adopted by the project team was to go beyond even large-scale pilot projects towards widespread generalisation of efficient practices.

Renewable energy development is another important policy area that the action plan does not directly address: the regional investment fund for local authorities will most likely include renewable energy production by local authorities and large service sector enterprises or public institutions but no specific measures have been proposed in the action plan

to develop domestic-level renewable energy products, for example. Here again, the project team reasoned that energy consumption needs to be decreased or at least its rise curbed, before renewable energies can be expected to significantly contribute to emission reductions. It is also true that renewable energy development usually receives much more attention than energy efficiency and benefits from other support programmes.

Many of these choices go against the way a regional council works and this fact has emerged as one of the main barriers to the success, and even the implementation, of the action plan. In fact, the measures proposed in the plan have met with more positive support from unexpected quarters outside the Regional administration, such as banks and other financial institutions, craftsmen organisations, notaries... than within the Regional Council itself, and likewise from other directorates (Economic development, Prospective, Transport, Legal Matters...) than within the Energy, Environment and Waste Management Directorate. The central issue is that proposing a new action plan is regarded as a criticism of previous policies and actions and therefore directly of people whose daily tasks are to implement these policies and actions.

It is not without reason that the Region and ADEME have traditionally concentrated regional public action on experimentation: as stated previously, public regional funds for energy efficiency are limited. That the energy efficiency policy has been in place for over twenty years and the extraordinary diversity of measures it has supported, most of which could not be listed in this article, are marks of its pertinence and efficacy. It is the change of scale required to meet Kyoto and future Factor 4 objectives that provoke the need to re-evaluate and adjust the previous policy. In that sense only is the new action plan a "criticism" of old policies. The question is not whether it should have been done differently before but what needs to be done now.

The implicit hypothesis in the existing scheme is that by carrying out pilot projects and disseminating their results, best practices would become general ones. In fact, the FRAMEE is clearly defined as a tool that supports experiments. The internal organization of the regional institution also reflects this assumption: services are structured according to techniques and staffed with technical experts who seek out innovative projects. Most agents moreover complain that they spend 90% of their work time appraising individual projects and have hardly any time to identify, activate and accompany actors other than those who spontaneously bring projects to them. Funding procedures are complex and lengthy and, as each project is a "different kind of experiment" from the previous, there is no hope to streamline appraisal methods in order to augment the number of projects implemented. This concretely means that, in essence, existing regional partnerships and actions remain limited to a "happy few": already convinced local actors who have the capacity to work with the regional administration.

Another result of the regional policy is that it has not until now been necessary to prioritize actions. Any action, as long as it fell under one of the regional strategies and was technically feasible, could be promoted.

The necessary change of scale requires a new way of working:

- a move away from best practices to easily replicable practices;
- a definition of priority sets of actions of a nature sufficiently homogeneous to permit the streamlining of procedures, and possibly even the total or partial outsourcing of project appraisalment;
- an active seeking out of latent partners by agents specialized in networking, awareness raising, capacity building, etc.;
- and finally, a stronger transversal flow between directorates in order to ensure that all regional policies strive in the same direction.

These are the small adjustments or the vast revolution that the project team considers necessary to meet the global warming challenge at regional level. And although these first steps are meeting with strong cultural and organizational resistance in spite of or because of the past history of energy efficiency in the region, we believe there is no better chance to achieve such an ambitious plan anywhere else in France, than today in Nord-Pas de Calais.

References

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