

Energy efficient procurement as a daily routine in public administrations – obstacles to overcome and perspectives for mainstreaming

Experiences and results from pro-EE

1. Embedding energy efficient procurement into the Green Public Procurement policy of the administration

a. “Green Public Procurement” and “Energy Efficiency” are two minority issues

“Green Public Procurement” and “Energy Efficiency” are two minority issues within public administrations. There is a wide spread consciousness about GPP as an important and promising strategy for a sustainable development but to the extent that it finds application in public administrations it is more than anything else a question of paper, toner, detergents and a few other items. A comprehensive, coherent and incisive policy of buying goods and services environmentally compatible is still only the privilege of a minority of public entities in Europe.

The same holds true for energy efficiency. All experts in the field agree that here are the biggest potentials for reducing energy consumption and the emission of green house gases but as opposed to renewable energy which is a much more clear cut field of action, energy efficiency is considered somewhat tedious and difficult to apply, because there are many different actors involved, a wide range of possible applications (lighting, heating, appliances, infrastructure, mobility) and they require a fair degree of expertise in each of them.

It is therefore of particular importance that public administrations that are active in GPP and intend to step up their activities entering the field of energy efficiency acquire an understanding of what are possible policies and measures that they can put into practice, who would be the departments and decision making staff to be involved and what are realistic goals to pursue.

b. Starting with the state of arts

As guidance for the defining the range of policies and measures for energy efficient GPP that should lead to a coherent strategy and the development of a Municipal Energy Efficiency Plan, Climate Alliance has developed in the context of pro-EE as

a suitable methodology the “Energy Efficiency Scan”: a matrix of measures covering eight fields of activity (public procurement being one of them), as well as detailed descriptions of selected measures, case studies from all over Europe and additional resources.

The Energy Efficiency Scan was applied in all pilot cities of pro-EE, Amaroussion, Cascais, Murcia, San Sebastian, Torres Vedras and has been re-elaborated and modified on the basis of the experiences of the partners in order to assure its applicability. Below an example of the matrix for Energy Efficiency Policy. In the first column there are the possible steps to be taken, in the next four ones the rising levels of ambition.

ENERGY EFFICIENCY POLICY					
Step:	1: getting started	2: moving forward	3: forging ahead	4: taking the lead	
A	Adopt targets and develop a concept	Develop a general commitment to energy efficiency and adoption by top management.	Add a global energy consumption reduction target.	Adopt detailed reduction targets for all relevant sectors.	Set targets to become a “x x % energy efficiency” community.
B	Institutionalise your energy efficiency policy	Determine a responsible officer / department for your future energy efficiency policy.	Inform and involve all relevant departments in your energy efficiency policy.	Report regularly to the political decision-makers about the progress of your energy efficiency policy.	Establish an energy efficiency protection agency (including both involved departments and external parties, stakeholders etc.)
C	Set up and implement the action programme	Decide on first measures for immediate implementation, identify measures for priority areas and formulate basic resolutions (criteria, standards)	Select priority measures taking into account previous activities and upcoming developments in the municipality	Detail the action programme for all relevant sectors in accordance with the targets set.	Mainstream your energy efficiency policy into all local plans.
D	Inform about energy efficiency and your energy policy	Organise a public event on energy efficiency and the local commitment.	Set up an annual campaign on energy efficiency.	Inform and raise awareness regularly for specific target groups in at least one sector.	Elaborate a comprehensive information and communication strategy for target groups in all relevant sectors.
E	Involve the local actors	Set up an approach for participation and involvement of stakeholders.	Define key stakeholders. Establish a permanent working group / round table on energy efficiency policy with external actors.	Establish structures for active co-operation with external actors.	Establish structures to co-operate with private sector partners, stakeholders and individual target groups.
F	Monitoring	Check data availability and define indicators.	Monitor your own facilities and the energy consumption reduction impact of individual measures.	Publish a report about the implementation of the action programme with a rough energy consumption update every 2 years.	Monitor energy efficiency in detail and debit a full set of indicators for all relevant sectors.
G	Regional collaboration	Start joint initiatives with other local authorities in the region.	Continuously communicate and coordinate with main public actors in the region.	Initiate coordinated energy efficiency action with main public actors in the region in specific sectors (i.e. urban planning, transport, ...).	Develop a comprehensive energy efficiency strategy with main public actors in the region.
	Co-operate with other local governments and in networks	Use existing contacts and networks to share experience.	Formulate a local strategy for international co-operation in the field of sustainable energy policy, adhere to an international network.	Start international activities and co-operations in the field of energy efficiency.	Set up a comprehensive co-operation with international partners for the implementation of projects.
	Install energy efficiency as a basic principle in urban planning	Introduce basic energy criteria for all planning processes.	Include energy evaluation/balance as obligatory item/section in all planning documents.	Set up energy efficiency standards for refurbished and new buildings.	Include energy efficient systems, like CHP or district heating, in every new or renovated urban area.
	Stimulate the development of sustainable business	Develop a strategy to involve the business sector in your energy efficiency plan.	Inform local enterprises about the possibility of reducing energy consumption ensuring the company profits.	Implement your action program: achieve energy management agreements.	Establish a local eco-label for energy friendly companies / improve the energy standards of the business sector in your municipality.

Figure 1 – Example of a page of the Energy Efficiency Scan tool

The Tool is divided in four macro categories of interest: Energy Efficiency, Energy, Transport and Procurement and has fundamentally three functions:

1. To verify the state of arts of the energy efficiency policies of the administration visualizing the level of performance in the different fields of action.

2. To create among the decision-making staff members and the political leaders of the city a cross-cutting awareness of the large variety of actions that can be taken and levels of ambition that can be envisaged.
3. Permitting thus to define tailor-made ambitious goals in the field of energy efficient public procurement.

The main problem the five pilot cities encountered in applying the Energy Efficiency Scans seems to have been to motivate the relevant persons in the administration to collaborate in the Scan. Given the fact that we are dealing with decision makers with a heavy work-load this is not astonishing. However, the effort to assemble the relevant persons from energy, mobility, urban development, procurement, environment around one table to do the scan is a valuable part of mainstreaming energy efficient procurement into the administration and should not be considered an “extra” effort, or waste of time. The Scan itself seems to have served its function of sensitizing the decision making staff for the many areas of activity where energy efficiency is an issue and of defining the framework conditions in the different administrations. The five cities share many important points and show some significant variations in the different fields of interest.

Energy Efficiency

The two Spanish cities of San Sebastian and Murcia have already developed with the support of the Eco-Institute Barcelona abundant policies oriented towards energy efficiency. The Eco-Institute adapted the Energy Efficiency Scan to the Performance Indicators of the Basque GPP program. Both cities have elaborated energy plans with particular attention to energy efficiency and quantitative goals; further they both have Energy Agencies. San Sebastian has also activated participation processes with various stakeholders and citizens on issues that involve energy efficiency. Murcia inserted explicitly pro-EE and energy efficient procurement in its Local Strategy against Climate Change, approved in 2007 by the city council. Energy efficient procurement since then has been above all a subject in the context of the Covenant of Mayors and the Sustainable Energy Action Plan (SEAP). This was also the context in which citizen participation was organized. Murcia named as the main obstacle for extending energy efficient procurement to other stakeholders economic considerations. Here the perspective of the “Total Cost of Ownership” (TCO) promoted by pro-EE can be useful to not limit the considerations only to the immediate costs of purchasing goods or services. TCO helps public and private buyers to determine direct and indirect costs of a product or system. It is a management accounting concept that can be used in full cost accounting.

The Portuguese cities of Casçais and Torres Vedras, supported by LNEG have shown a high level of activity in the field of energy policies in general and energy efficiency in particular in the context of their Agenda 21 processes, creating synergies with other European projects and forming collaborations with other local administrations. In their work with stakeholders the method is to take as a point of departure the energy efficient actions the participants have already implemented in their own companies. Both cities report difficulties to involve stakeholders. The work on pro-EE will be rendered fruitful above all in the context of the processes for the SEAP which should also help to mobilise stakeholders in a more encompassing and long-term perspective of moving towards the 20, 20, 20 goals promoted by the European Commission. Cascais has and Torres Vedras is in the process of adhering to the Covenant of Mayors.

The fifth pilot city active in this work package, the city of Amaroussion in Greece, working closely with CRES, has developed an extensive Activity Plan. There seems to be a strong political will for action in collaboration with local stakeholders. The city succeeded in involving construction companies, banks and NGOs in its effort to reach out into the local community with the argument of energy efficient procurement.

Energy

In the general field of energy, looking at the whole range of supply and demand and not only efficiency, the five pilot cities offer a variegated picture. The Spanish cities can rely on existing energy plans and here again San Sebastian distinguishes itself for the extensive work on citizens' participation. Also in Murcia there have been extensive sensitization campaigns and the city has embarked on an ambitious project of energy efficiency in its building stock and on monitoring energy consumption. The Portuguese cities of Torres Vedras and Casçais are collaborating closely, and, as was mentioned before, with other local networks and have realized many concrete measures be it in their own buildings as in the municipal territory. Amaroussion has prepared the grounds for extensive activities for sustainable energy that should be carried out shortly. All the cities are working hard to involve the private sector as far as small and medium industry is concerned be it as partners for specific measures be it as a target group for specific awareness raising campaigns in the field of energy efficiency.

Transport

The Spanish cities are very active in the field of transport and sustainable mobility well aware of the great importance of this sector for the general question of energy efficiency and the perspectives of sustainable development of their territories. Murcia has already activated many of the steps necessary to steer the mobility sector versus a higher level of sustainability, what is missing are strong initiatives in reference to the municipal staff itself. Casçais and Torres Vedras have started a process of reorganization of their transport system with the objective to render the mobility by bike and on foot more attractive and safe, but they too have not yet activated any program with their municipal staff. Amaroussion has planned a number of actions in the field of mobility but has not yet taken concrete measures, in some fields, like the transport of goods they do not see any possibility to intervene because it is not in their competence.

In the difficult field of transport an important point of departure is the municipal administration itself. This means to convert the municipal vehicle park to clean and energy-efficient vehicles, a policy all five pilot cities are following, but also rendering the use of sustainable forms of mobility attractive for the staff in their transfers from home to work (incentives for using public transport, restrictive policies for parking space) and render it more aware of their use of motorized individual transport (eco driving). See: European Local Transportation Service - <http://www.eltis.org/>

Procurement

Procurement, which in the context of pro-EE obviously assumes particular importance, is a field of action that regards in a first step the internal activities of the administration. In this particular respect the situation of the two Spanish cities seems comparable in the sense that they both have only recently started to operate, with an important input by the Eco-Institute Barcelona, in this field with the aim to implement the actions that have been decided. The Portuguese cities find themselves in a comparable situation with a precise planning and also in this case with a strong collaboration with local and national networks and the help of LNEG. Amaroussion has already taken a number of steps in the field of sustainable procurement and has far-reaching plans for the future. They write in their activity plan: "Please note that, in the Municipality of Amaroussion various departments / authorities are concerned regarding energy such as the Technical and Financial Service, the Outdoor Services Management, the Welfare Enterprise of Transportation, the Organization for the Environment, Planning and Quality of Life, the NGO "Athmonon", the European and National Funding Office, the Communication Office, the Welfare Enterprise of Education and Technology, and finally the Municipal Development Company of Amaroussion."

2. Embedding energy efficient procurement into the Energy Planning policy of the administration

As was said in the introduction, GPP and energy efficiency are within city administrations two “marginal” subjects. For energy efficient procurement to become a fixed part of daily routine it has to be embedded into overarching activities of the public body in the field of sustainable energy and has to be linked with other activities and projects. To introduce it as an isolated issue diminishes drastically the impact of actions. This means, as was illustrated above, (a) to create with the help of instruments like the Energy Efficiency Scan an awareness that next to all departments and institutional activities have an impact on the consumption of energy and the emission of greenhouse gases of the local government and (b) to create synergies with other ongoing projects and activities, notably the Covenant of Mayors, to update the Energy Plan of the city in this sense, to make it an explicit part of the EMAS or ISO 14.000 process, etc.

Municipal Energy Plan

Many cities in Europe have elaborated in the last years and decade a municipal energy plan and most of these in the meantime have undergone a series of updates. City networks like Climate Alliance, Energy Cities and ICLEI give support in the elaboration of municipal energy plans. Pro-EE considers the inclusion of energy efficient public procurement, which in the past unfortunately often received little or no attention, a key element of any municipal energy plan to be drafted or updated.

Covenant of Mayors

With the Covenant of Mayors the European Commission established a direct collaboration with local and territorial public entities for reducing CO₂ emissions by 20% or more within 2020. Joining the Covenant, the cities take the commitment to elaborate within twelve months a Sustainable Energy Action Plan (SEAP), a key document that shows how the local administration intends to proceed in reducing emissions in its territory. The SEAP must contain specific measures and quantify the reductions obtained with each of them (see: www.eumayors.eu).

In the context of the many fields of actions and competences local governments have in their energy policies the European Commission correctly puts a large emphasis on what the administration can do “in its own house”. Even though the energy consumption of the local administration constitutes only 2 – 5% of the total,

the reduction of CO2 emissions done in the public sector – demonstrating the many possible fields of actions - has a high symbolic value.

In particular in the context of pro-EE it is important to note that the commission recommends strongly in the elaboration of the SEAP to make specific indications in the field “Public procurement of products and services” (the administration as consumer).

The Covenant of Mayors is hence an important framework for giving energy efficient GPP a systematic context with quantitative goals and a monitoring system.

EMAS and ISO 1400

To be certified EMAS or ISO 14000 means for a local government to make serious and progressive commitments for environmental protection of its territory.

For this purpose the cities and towns have to analyze their own activities (direct) and those in the territory (indirect) showing how the administration intends to deal with

- obedience to environmental legislation and in the field of security
- use of energy resources
- environmental impacts

Here too, the second point, use of energy resources, includes obviously energy efficiency and energy efficient GPP. As part of the goals of the local governments energy efficient GPP adds an important element and gives credibility to the goals of a sustainable development of the territory. In fact, Amaroússion has made a commitment of the administration in the framework of its existing environmental policy and environmental management system (ISO 14001:2007) to the development of a sustainable procurement policy, a context in which pro-EE finds its natural collocation.

Conclusion

Pro-EE recommends highly to develop a Local Energy Efficiency Action Plan (LEAP) with particular attention to energy efficient GPP in the context of the general energy policy of the administration be that in the context of the Municipal Energy Plan, more specifically the Sustainable Energy Action Plan (SEAP) requested by the Covenant of Mayors or the certification EMAS or ISO 14000 or other suitable campaigns or actions.

3. Monitoring Green Public Procurement policy

Even though, as was said before, the consumption of the local government accounts for only 2 – 5% of the total consumption of the territory, it is important to reduce it in a consistent way not the least through energy efficient procurement, in order to give a good example to the other stakeholders, to show the feasibility of the measures and last but not least to reduce the energy costs of the administration in times of scarce financial resources. In a period of constrained budgets of local governments the waste of money for heating and electric energy is also economically and not only environmentally irresponsible. Here one must say that the vast majority of public administrations have very vague ideas about their energy consumption. Energy efficient GPP must therefore depart from a collection of data on energy consumption and follow it up with a constant monitoring of these data.

To institutionalize the collection of the data of energy consumption is an important step towards an energy efficient procurement policy of the administration and a central element of energy policies in general. Some of the pilot cities in pro-EE, like for example Cascais, have very sophisticated systems for monitoring certain types of energy consumption. In this case there is a remote-controlled system for monitoring the consumption of public lighting. San Sebastian has a comprehensive system of data collection be it for the administration as for the private households at large. "The consumption of gas and electricity of the municipality in different sectors is analyzed every year: data from 2005 on residential, industrial and services consumptions is available."

But more in general and having in view the bigger part of cities and towns in the pro-EE countries, one can say that the knowledge and data of energy consumption in the buildings and infrastructure of municipal administrations are extremely fragmentary.

The scarcity of data for a comprehensive analysis (data on annual consumption of electric energy and heat, volume and area heated) is unfortunately a common situation when trying to quantify the energy consumption of public administrations. This, however, should not discourage from working with the data at hand but above all to make provisions for improving the situation for the future.

For monitoring the energy data it is good practice to institute a data base that contains all the necessary information for setting into motion an energy efficiency program for the municipality. This requires clear and simple ways of transmitting the data to the person responsible (energy manager) and to update them in fixed intervals in order to be able to follow the consumptions year by year. This presupposes a coordination between the various departments because the data typically arrive on different desks in the administration.

As a first practical step the staff members who receive energy related documents like electricity bills should be provided with a database containing columns for the relevant information:

- the building or the infrastructure concerned
- the period
- the energy consumed
- the prize

The administration should also develop a data base with all buildings, indicating for every one of them

- the area and volume heated
- the number of users specifying their status (employees, students, etc.)

The data thus at the disposal of the administration contribute to a correct maintenance of the infrastructures and appliances, which assumes an increasing importance in view of their growing complexity be it for their correct functioning be it for energy and cost efficiency.

4. Sensitization and training of all decision makers in the administration and continuous political support

Energy efficient GPP – from a shared vision to a common practice

Pro-EE was able to verify that in the participating cities the public servants showed a high level of information on Green Public Procurement and also on energy efficiency in GPP particularly in fields like office equipment and public lighting. The situation changed drastically when it came to what they succeed to apply in their daily work. “We are pretty much behind”, “practically we pay next to no attention to these criteria” where frequent statements.

The obstacles resulting from the field research that have to be removed for increasing energy efficient public procurement are two and they are closely connected: apart from the daily consumables (paper, toner, etc.) which are purchased centrally, the bigger items (vehicles, computers, furniture) in most administrations are acquired by each department separately. This means that it is not enough to inform and sensitize the staff in public procurement but virtually all leading and decision-making personnel as to ecological purchasing and energy efficiency. Secondly: training and sensitization have to be complemented repeatedly with a strong political position-taking within the administration. It is not a question of passing once a general declaration in the council in favour of GPP, what is needed is a periodic and explicit stance in favour of ecological purchasing in order to strengthen the decision makers within the administration acting in this sense and rendering the purchase of “prestigious” un-ecological goods and services - glossy paper, big vehicles, flashy lightning - less acceptable. The question is not so much what has to be done and not even so much how to do it but how to put those who want to act in a position to be able to act.