

# Bringing energy efficiency to the liberalised markets

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## Abstract

Restructuring and liberalisation on the supply side of the electricity and gas markets has been accelerated by two EU Directives. However, demand-side energy efficiency has not yet received the attention in this process that it deserves. Experience in countries such as Denmark, the UK, Belgium, and Italy shows: Policy can create a supportive framework, allowing energy companies and other market actors to play their role in assisting their customers with the more efficient use of electricity and gas, also in liberalised markets.

The European Commission is therefore preparing an Initiative and a proposal for a Directive presently entitled 'on Demand Management and Energy Services', which also the European Parliament requested as a complement to the EU internal electricity and gas market Directives.

In this context, the European Commission has given financial support to a group of EU institutions, co-ordinated by the Wuppertal Institute, for the project 'Bringing Energy Services to the Liberalised Markets (BEST)'. This project disseminates information and organises a stakeholder dialogue on good practice in supportive policy, and in energy efficiency programmes and services themselves. Major ac-

tions to achieve this are workshops in six EU countries, and a European Conference.

The paper will present and analyse this unique approach of systematically integrating scientific analysis by the project group and different stakeholders already during the political-administrative process, i.e. the political debates over the introduction and contents of a new Directive. The usefulness and setbacks of this innovative approach for enhancing the chances of adoption and rapid and coherent implementation will be assessed.

## Overview

As this paper presents the process and preliminary results of a project that is closely related to a specific policy initiative, the paper starts with presenting the rationale for launching the EU Initiative on Energy Services and the proposal for a Directive on the subject. The next chapter lists possible elements of such an EU Directive. Why is there a need for such a preparatory project as the one subject to this paper's analysis? There are open questions and possible opposition, which are dealt with in the third chapter.

Having set the scene, it is time to describe the project itself and what makes it useful for policymakers. Then the results to date must be presented and finally analysed, to draw first conclusions.

## Why is there a need for an EU Initiative and Directive on Energy Services?

Restructuring and liberalisation on the supply side of the electricity and gas markets only addresses half of the market

for least-cost energy services. The other half is **demand-side energy efficiency**, which has not yet received enough support from EU and national policy.

A **professional intermediary** between the providers and the buyers or users of energy-efficient end-use equipment and buildings is needed to overcome the many barriers to end-use energy efficiency, and to reduce the transaction costs for energy efficiency measures. **Energy companies** should be involved or play a prominent role in implementing energy efficiency, since they can integrate supply-side and demand-side energy efficiency in providing least-cost energy services. Energy companies, but also other actors, can thus be the professional intermediary needed on end-use technology markets.

Although there are some economic incentives inherent in the market system for energy companies to engage in end-use energy efficiency – such as avoiding or postponing investment in generation, transmission or distribution capacity, profitable energy efficiency services that are directly paid by the customers who benefit, customer retention, corporate image, and profitable fuel-switching, these incentives are **too weak** for consistently increasing such activities to levels motivated by the potential for energy efficiency and the broader energy and climate policy objectives.

A market for **energy efficiency services**, mainly targeted at larger customers, begins to develop in a number of Member States, or is adjusting to the new market environment in other countries. However, this could and should be accelerated by supportive policy, e.g., stimulating demand for such services.

In those Member States, which have combined the implementation of the EU Internal Markets for electricity and gas with a supportive policy framework, **energy efficiency programmes** by energy companies, which are *not* directly paid by the customers who benefit, are continuing or even expanding in volume and scope. In Member States without such a policy, such activities have gradually reduced with the introduction of retail competition, and are carried on only by a smaller number of more innovative companies.

A supportive national policy framework should **stimulate both energy efficiency services and programmes** of energy companies and other market actors. In particular, energy policy needs to **create mechanisms** enabling energy companies to finance energy efficiency programmes in a way not harming their competitive position in the liberalised electricity and gas markets. This will give to the companies a fair share of the net economic gain to society they are creating with the programmes. It will also support the development of energy efficiency services directly paid by those who directly benefit.

Such supportive policy has been most effective (cf. Paper 1,227 by Irrek et al. 2003) where **a combination** has been created of:

- An agreed or mandated, quantified target for energy savings,
- A channel or an allowance for raising funding and for avoiding net economic losses in a way not discriminating between companies, and

- A standardised and mandatory scheme for cost-benefit evaluation of the energy efficiency activities.

If the good practice examples in energy efficiency programmes and services that exist in some form in most EU Member States (Wuppertal Institute et al. 2002, Wuppertal Institute et al. 2003, see also Paper 1,227) were extended to the whole EU and continuously developed, they could **reduce EU electricity and gas consumption by 10% compared to the forecast** (which is expected to grow by almost 20%) within the next ten years. This would be equivalent to a net economic gain of around 10 billion Euro per year. It would also achieve two thirds of the additional CO<sub>2</sub> reduction required for the EU to meet its Kyoto target. And it would reduce EU dependence on imports of energy resources considerably.

Therefore, an **EU Initiative including a Directive is needed to ensure the union-wide implementation of comprehensive and successful energy efficiency services and programmes**. This will complement other EU action and legislation on energy efficiency and ensure that the EU can harvest the full net benefits for the economy, environment, security of supply, and employment from energy efficiency. The Energy Efficiency Action Plan (European Commission 2000) has given Energy Services priority, and the Communication on the implementation of the first phase of the European Climate Change Programme (European Commission 2001) announced the proposal of a Directive on Energy Demand Management. The European Parliament has repeatedly called for such a Directive as well.

Such an EU Initiative and Directive is conforming to the **principle**: ‘Harmonisation in targets, but subsidiarity in methods’. It should have three interlinked **objectives**, to be achieved by the Member States:

- First, that all Member States should create a supportive policy framework, which enables energy companies and other market actors to successfully implement energy efficiency programmes, and to finance the programme costs in a way not harming their competitive position in the energy markets. The Member States should be free to choose how to achieve this, e.g., using the most appropriate policy mechanisms (e.g., those analysed in Wuppertal Institute et al. 2000, cf. also Paper 1,227).
- Second, that all Member States should promote further the supply of and demand for energy efficiency services.
- The first two objectives serve the ultimate third objective: to create lasting **energy savings of ca. 10%** over the next decade and additional savings thereafter, compared to the baseline trend of energy demand.

Figure 1 shows how such a Directive will indirectly stimulate energy efficiency, by enabling activities of professional intermediaries such as energy companies or energy service companies (ESCOs) to support their customers and other market actors in overcoming the barriers to increased energy efficiency.

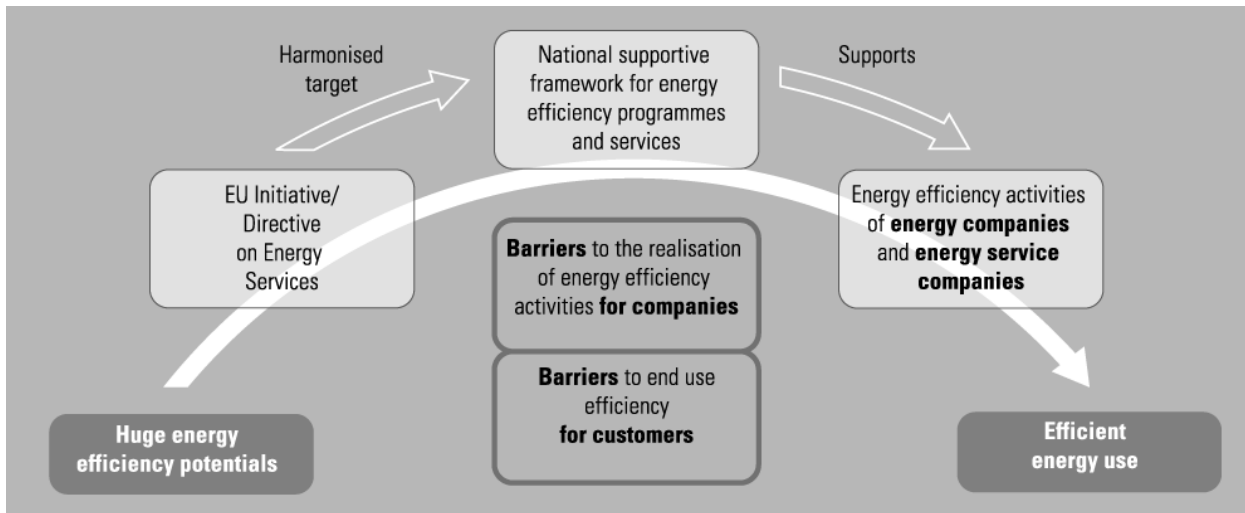


Figure 1. How an EU Initiative and Directive on Energy Services will support energy efficiency.

### Possible Elements of an EU Directive on Energy Efficiency Programmes and Services

As mentioned in the previous chapter and shown in Figure 1, such an EU Directive would be directed towards the Member States with some common elements and requirements, but the Member States would be given freedom in the concrete implementation adapted to their national market and institutional features.

**Common elements to be realised in each Member State** in order to achieve a common, harmonised framework consistent with the needs of a common market without major distortions, as opposed to the implementation elements to be decided at national level (see below):

- A harmonised quantified **energy saving target** for the Member State, to be obtained primarily through energy efficiency programmes implemented for at least 5 to 10 years. The proposal for the target is 1% per year of the electricity and gas consumption in the previous year.
- For achieving the target, a **supportive policy framework** enabling energy companies and other market actors to successfully implement energy efficiency programmes and services must be created.
- The **funding** at least for the direct costs of energy efficiency programmes must be secured, paid either directly through energy prices for at least 5 to 10 years, or through taxes, if governments can prove they will keep the funding necessary to achieve the energy saving targets for at least 5 years.
- Standard common (or converging over a certain time) **methods for bottom-up evaluation** of savings are used, and an **independent** body or bodies responsible for the evaluation exist.
- States should be required to ensure that in the monopoly segments (transmission, distribution, and retail supply to captive customers) the evolution of revenues is closely correlated to the evolution of costs and to avoid that companies are allowed extra-profits when increasing sales.

**Other fundamental implementation elements** – who is responsible for the administration, who for the implementation, ways for funding – **would be decided at national level according to the subsidiarity principle** and coherent with national market and institutional features. A **number of alternative scenarios** are possible, for example:

#### Scenario 1

*Administration:* Distribution or transmission network, or retail supply company, with an obligation for achieving a certain saving target and for managing the necessary funding (administration function) under the oversight of a supervisory body.

*Implementation:* Distribution or transmission network, or retail supply company, which can implement the energy saving programmes and services directly or through ESCOs and other partners.

*Funding:* Cost recovery from energy prices or network charge, and payments for energy efficiency services.

#### Scenario 2

*Administration:* Independent body (Energy Efficiency Trust) or government.

*Implementation:* Distribution or transmission network, or retail supply company, but also involving ESCOs, energy agencies, local governments and other actors.

*Funding:* Funds for the Energy Efficiency Trust from energy prices or network charge or taxes.

#### It should be noted that:

- Different schemes can be applied in different Member States and, within a state, to different customer groups (e.g. industry on one side and services and households on the other).
- Member States may also decide to achieve a part of their target through energy efficiency services, provided they have in place a reliable methodology and a body responsible for the evaluation of the energy savings.

- Regional and Local Governments and energy agencies can be involved in the design and implementation of the energy efficiency activities in all the scenarios.
- ESCOs are always involved. In scenario 2, they might be the main actors if a state decides for low involvement of energy companies (provided that points 1 to 5 of the common elements are fulfilled).
- Installation contractors, planners, retail trade, and other market actors will also be involved in the implementation, and will benefit from increased investment in energy-efficient technologies and buildings in any case.

#### Possible additional element:

A market for Energy Saving Certificates trading (and/or direct bilateral trading) can be established. Potential double-selling on the CO<sub>2</sub> emissions allowance and/or reductions credits markets must be properly addressed.

### Open questions and possible opposition

While the principle considerations for the common elements and the national implementation are quite simple, there are a number of open questions as to the details of both. Furthermore, while there will be many winners from increased energy efficiency investment and from a favourable policy framework for energy services, there will also be stakeholders who are afraid of being losers.

#### OPEN QUESTIONS

Here, we only list the most important questions that have been raised to date, e.g., at the workshops and conferences organised by the project 'BEST' as well as a stakeholder meeting organised by the European Commission on 8 May 2002. Considerations for possible answers can be found in the reports from the project 'BEST' (Wuppertal Institute et al. 2002, 2003a, 2003b).

- What is the relation between this Initiative/Directive and other EU Directives in energy efficiency? Why do we need this Initiative/Directive in addition to them?
- What is the relation between the energy savings targets proposed for this Initiative/Directive and the EU's general target of 1% per year reduction of energy intensity compared to the baseline?  
How would the savings be measured, and achievement of the target monitored?
- Should it be energy or CO<sub>2</sub> targets?
- Which energies to address? E.g., only electricity and gas to stress the completion of the newly liberalised markets? Or all fuels for stationary end uses, i.e., including heating oil, coal, district heat? Or even including transport fuels?
- Which actors should be involved for implementation? Is there a danger of market distortions in the installer or ESCO markets?
- Which types of energy companies should be involved?
- Which customer groups should be involved?

- What is the relation to CO<sub>2</sub> emissions trading?

#### POSSIBLE OPPOSITION

Again, a full description of possible opposition is not possible here. Stakeholders who possibly might be afraid of losing position or profits from such a policy initiative might include:

- Energy companies who are further away from the end-use customer, e.g., pure generators, who may be afraid of a loss in sales; on the other hand, energy efficiency will drive down the costs of CO<sub>2</sub> emission allowances,
- Energy companies in general who may fear that new regulation will be imposed upon them, although this initiative has the intention to support them in customer-oriented activities,
- Energy end-users who are not aware that finally their costs for genuine energy services such as heated rooms, cooled or cooked food will be reduced, but who are only looking at the moderate price increases needed to finance the investment in energy efficiency that will reduce their bills,
- Installation contractors of end-use equipment who may be afraid that the energy companies will 'crowd them out' of their business, while usually energy companies and ESCOs and/or their customers who benefit from the energy efficiency assistance will subcontract installation contractors for the implementation of technical energy efficiency measures and thus increase their business,
- Member States, in which national, regional, or local governments have already created a considerable level of energy efficiency schemes, and which are not sure in how far the energy savings these schemes create can be counted towards potential energy savings targets under such a Directive.

This short and far from complete list of possible opposition already shows two things. First, many of the open questions listed above are connected to stakeholder positions and fears; and second, there will be a tremendous need for both information on the objectives, elements, function, and effects of an Initiative and Directive on Demand Management and Energy Services, and for discussion to find a compromise solution that is as fair to all stakeholders as possible while maintaining effectiveness in attaining its objectives listed above.

### The project 'BEST'

#### PARTNERS

The project 'Bringing Energy Services to the Liberalised Markets (BEST)' is co-ordinated by the Wuppertal Institute for Climate Environment Energy. The partners sharing co-ordination at national level are:

- Association for the Conservation of Energy, UK
- ADEME, the French national energy and environment agency
- ADENE, the Portuguese national energy agency

- ASEW, the working group for energy and water conservation of German municipal utilities
- The Energy Saving Trust, UK
- Lund University, Sweden
- Politecnico di Milano, Italy
- University of Antwerp-STEM, Belgium

Furthermore, there are supporting partners, which assist the dissemination and dialogue mainly at national level:

- BFE-FPE, Belgian electricity company association
- FIGAZ, Belgian gas company association
- The Electricity Association, UK
- OFGEM, the electricity and gas regulator for Great Britain
- STEM, the Swedish national energy administration

Finally, Energy piano assists the group with information from and contacts as well as basic dissemination in Denmark, while ARMINES supports ADEME in completing its work.

#### OBJECTIVES

Given the open questions and possible opposition to an EU Initiative and Directive on Demand Management and Energy Services, the aims of the project are:

1. To foster a policy dialogue through publications, national workshops and a European Conference. The aim is to discuss and to further develop mutual understanding and possibly a consensus on the planned EU Initiative on energy services and on national policy initiatives to create a supportive framework for the electricity and gas supply industry to implement energy efficiency activities.
2. To disseminate information about good practice:
3. In policy to create a supportive framework for energy efficiency services and programmes in liberalised electricity and gas markets, and
4. In energy efficiency services and programmes themselves.

For dissemination and dialogue, the main target groups for this project are policymakers in governments and parliaments, the electricity and gas supply industries, regulators, other stakeholders like trade unions, consumer organisations, environmental organisations, the energy efficiency industry, and the relevant media.

#### ACTIONS

The project has stimulated dissemination and dialogue through the following actions:

##### National Workshops

A workshop was held in Belgium, France, Germany, Italy, Portugal and Sweden in January 2003. The workshops served to discuss both the national experiences and possibilities for improving the policy framework, and the expectations from the country towards the planned EU Initiative

and possible Directive. The results of the workshops were thus an important input for the European Conference.

##### The European Conference 'Bringing Energy Efficiency to the Liberalised Markets'

The European Conference on Policy to Stimulate Energy Efficiency Programmes and Services in Liberalised Electricity and Gas Markets was held in Brussels on 27 and 28 March, 2003. It brought together experiences and expectations from the Member States and particularly served to discuss open questions with regards to the planned EU Initiative and possible Directive on Demand Management and Energy Services.

##### Publications

- A short report in English, French, German, Italian and Dutch (Wuppertal Institute 2002),
- A background report with more details than in the brochure (Wuppertal Institute 2003a),
- The proceedings of the European Conference,
- A final document summarising the results of the policy dialogue, and featuring the points of agreement but also still existing disagreement between the different stakeholders (Wuppertal Institute 2003b),
- Furthermore, the project has put up a website [www.wupperinst.org/energy-efficiency](http://www.wupperinst.org/energy-efficiency) (English), [www.wupperinst.org/energieeffizienz](http://www.wupperinst.org/energieeffizienz) (German), where all information regarding the workshops and conference is available, and the project's publications plus further relevant reports can be downloaded.

##### EXPECTED RESULTS

The expected direct result is a better understanding of the possibilities by all stakeholders, proposals for improvement, and possibly a consensus on the planned EU Initiative and the possible proposal for a Directive on energy services and the related national policy initiatives to create a supportive framework for energy efficiency activities by energy companies and others. This will be an important step towards a harmonisation of the internal energy markets and a much increased implementation of high quality energy efficiency services and programmes in Europe.

##### What makes the approach of 'BEST' useful for policymakers?

The European Commission has given co-funding to the project 'BEST' because of its unique approach of systematically integrating science and different stakeholders already during the political-administrative process, i.e. the political debates over the introduction and contents of a new Directive. This is hoped to enhance the chances of adoption and rapid and coherent implementation of the Directive through the following effects:

- Dissemination of information on the objectives, contents, and likely effects of the Initiative and Directive will help to increase awareness among policymakers and stakeholders and is expected to reduce opposition that

may be based on lack of knowledge or wrong perceptions of what is intended. The scientific analysis of such issues, which is the basis for the information material prepared by the project, can improve the credibility of the information among the audience.

- Debate of open questions such as those mentioned above will further contribute to this effect. It is hoped that the debate will enable the Commission to find compromise solutions, which will minimise opposition and maximise consensus and approval of the end result. The project allows these solutions to be based on a scientific analysis of the positions, proposals, and arguments raised by the stakeholders. This is an open process: the end result may deviate considerably from the original proposal, but will have been tested for applicability by practitioners and science.
- Early dissemination and debate of the possibilities and chances for national implementation is expected to accelerate implementation once the Initiative is launched, and a possible Directive comes into force. Through improved consensus also on the national level, this is likely to lead to a more comprehensive and coherent implementation.

Overall, this approach of communicating and debating a new policy initiative is considered very promising.

## Project results to date

### QUANTITATIVE RESULTS – SOME STATISTICS

The national workshops held in January have had in total ca. 400 participants and created considerable public interest also through publication of programmes, press releases, results. Table 1 displays the dates, venues, and numbers of participants of the workshops.

Very important is the high level of participants at the workshops. E.g., at the Portuguese workshop, it has been considered a very good debate by the participants. Participation was only on invitation. ADENE managed to have three general directors from national ministries (energy, consumer issues – the first time ever in energy issues, and environment), three former secretaries of state, the president of the energy industry regulator ERSE and of the transmission system operator, and the coordinator of the national Climate Change Programme, who came although it was the day before the presentation of the national plan for climate change mitigation.

The other workshops also attracted high-level participants from national governments and parliaments, the electricity and gas supply industries, regulators, other stakeholders like trade unions, consumer organisations, environmental organisations, the energy efficiency industry, and the relevant media. In Germany for example, two Members of the Federal Parliament, and the head of the German Energy Agency participated in a panel discussion.

Interest in the European Conference has been equally high. Organisations such as Eurelectric, the Union of the Electricity Industry; Eurogas, the European Union of the Natural Gas Industry; CEDEC, the European Federation of Local Public Energy Distribution Companies; e5-European Business Council for a Sustainable Energy Future; Climate Action Network Europe; the World-Wide Fund for Nature; and FEDARENE, the European Federation of Regional Energy and Environment Agencies have supported it. Furthermore, Stadtwerke Hannover AG, a municipal utility, and EuroACE, the European Alliance of Companies for Energy Efficiency in Buildings, have sponsored the Conference. Speakers included Eryl McNally and Claude Turmes MEP; Günther Hanreich, Director, DG TREN; Jorge Vasconcelos, President of the Portuguese energy regulation authority; Eoin Lees, former head of the Energy Saving Trust; and many others. Around 150 participants represented the same stakeholder groups as for the national workshops.

The information materials prepared were distributed in high numbers. This includes 1 000 copies of the short report in English and 1 500 in German, and 200 copies each of the Conference proceedings including the background document.

### SUBSTANTIVE RESULTS

It should first be noted that neither at the time of the national workshops nor at the Conference, the European Commission had published a proposal for the EU Initiative and Directive on Demand Management and Energy Services. However, a presentation of cornerstones of the proposal under preparation was given at the Conference, confirming and detailing the principles outlined in the project's publications.

A remarkable outcome of the Conference is that nobody argued in principle against creating an EU Directive on Demand Management and Energy Services at the Conference. Equally, at the national workshops a large majority of the participants was positive. The principle of 'Harmonisation in targets, subsidiarity in methods' was generally welcomed.

**Table 1. Information on the national workshops.**

Country	Date	Venue	Number of participants
Belgium	20 January	ELIA (transmission system operator), Brussels	40
France	23 January	ARMINES, Paris	102
Germany	23 January	Representation of North Rhine-Westphalia, Berlin	86
Italy	29 January	Politecnico di Milano, Milan	101
Portugal	13 January	Centro Cultural de Belém, Lisbon	36
Sweden	14 January	Elforsk (Energy industry research institute), Stockholm	37

Furthermore, energy companies were generally seen as important actors (among others) for energy efficiency.

More specifically, the debate at the national workshops and the European Conference therefore focused on three subjects:

- How should quantitative targets be defined in an EU Directive on Demand Management and Energy Services?
- What should the Directive state on funding and cost recovery of energy efficiency programmes, price regulation, and energy prices?
- How should the energy savings from energy efficiency services and programmes be monitored and evaluated in order to measure compliance with the Directive?

A list of questions had been prepared both for the national workshops and the European Conference, to focus the debate on these most important issues.

### Targets

*Should a Directive on Energy Services set harmonised quantitative energy savings targets to the Member States to be achieved through energy efficiency programmes and services stimulated by the national policy frameworks?*

This idea was generally accepted. However, there was some debate on how far the targets should be harmonised. E.g., do structural and climatic differences or previous energy saving successes motivate differentiation? Probably not, experts argued that there is always a 20% economic potential for improvement, due to technical progress. So it will not be a burden but a benefit to each Member State to save 1% per year in addition.

*Should such targets to the Member States be indicative or mandatory?*

No agreement was reached on this question. Mandatory targets would be more stringent for attaining the energy efficiency goals, and are favoured by many EU stakeholders. On the other hand, it is probably easier to achieve acceptance in Council for indicative targets. Furthermore, Eurelectric and Eurogas were both in favour of indicative targets.

*Which energies should be included?*

- (1) Electricity and gas only?
- (2) Electricity, gas, heating oil, coal, district heat?
- (3) All energy sources, including transportation fuels?

No agreement was reached on this point either. Some participants argued that it would be desirable to include all energy sources/uses. However, many pointed out that for practical purposes, the transportation sector would better be handled in a separate directive; many were afraid that including transport could delay the process of adoption of the planned Directive. A tendency in the debate was that it should not be electricity and gas only, but rather all fuels for stationary energy end uses.

*Should it be energy or CO<sub>2</sub> targets?*

There is a clear tendency towards energy targets, but one stakeholder group (Eurelectric) favours CO<sub>2</sub> targets. Arguments in favour of energy targets build on the fact that energy efficiency has further benefits, such as improved

competitiveness and reduced energy bills, increased employment, and improved security of supply. Another argument is that energy targets would be easy to compare between Member States, while CO<sub>2</sub> targets not, and the latter would provide little motivation for action in Member States with low CO<sub>2</sub> emission coefficients.

*Should the target include all customer groups or not? Which?*

On this question, there is almost an agreement to include all customer groups, with one notable exception, Eurelectric. Eurelectric is referring to the planned CO<sub>2</sub> emission trading for large energy-intensive customers and arguing that the planned EU Directive on Demand Management and Energy Services should only be a complement to the emissions trading scheme. However, as one participant noted, the *electricity* consumption of the large energy-intensive customers is not included in the planned EU emissions trading scheme.

Furthermore, some participants expressed the view that all the customer groups, from which funds are collected, should have the possibility to receive energy efficiency programmes/services, in particular small and low-income customers. The programme expenses should be corresponding to the share of the funds that have been collected to each customer group.

*Should an indicative list of possible energy policy mechanisms for national implementation be annexed?*

The answer clearly is yes: Although the implementation of the favourable national energy policy framework would largely be left to subsidiarity, such an indicative list would provide useful guidance.

Some participants also asked for list of energy efficiency services and programmes for inspiration. Such a list would make it as clear as possible, what is the subject of this Directive, and what are the activities by energy companies, market actors, and governments that can be counted towards achieving the Member States' targets.

### Programme Funding and Energy Prices

The more specific question to be answered with regards to the funding and pricing issues was the following:

*Would you agree that an EU Directive on Energy Services should require the Member States, where price regulation of the remaining monopoly functions of electricity and gas markets (i.e., transmission and distribution networks, supply to non-eligible customers) exists:*

- to allow regulated energy companies, and network companies in general, to recover the costs, and an appropriate share of the net benefits to society, of energy efficiency programmes in a way not harming their competitive position;*
- to remove artificial incentives for regulated energy companies to increase sales/transport of units of energy, by aligning the development of revenues over time more closely to the development of the relevant cost drivers in the practice of price regulation?*

There seems to be a general agreement on these proposals. Generally accepted principles were:

- If a target is imposed or agreed with an entity to perform energy efficiency activities, this entity (be an energy company or an independent body), should be allowed to

recover the costs incurred, including them in energy prices, or in tariffs of the regulated part of the business, or in general taxation.

- Eliminating “artificial incentives to increase sales” from tariff mechanisms (for regulated sectors) is important. No actor should receive incentives to work “against” energy efficiency. Good experiences with regulations schemes achieving this target have been made, e.g., in the UK, Italy, Denmark, and Norway.
- Eliminating other price distortions (like higher VAT on energy-efficient devices than on energy) seems to be a common concern, although it might be difficult for this Directive to directly require specific actions on taxes (like raising funds through taxation). A suggestion might be that the principle of eliminating perverse incentives from tariff regulation might be applied also to taxation.
- The Directive should state the main objectives, and eventually suggest methods to achieve them, but leave enough room for Member States to adapt the main objectives to their specific situation.
- A certain number of comments have been made on the fact that there are already different models *successfully* implemented (ways of collecting the funds, entity chosen for the administration), hence it would not be wise to keep some of these models out of the scheme.
- A suggestion was that the directive might state the possibility to let energy suppliers offer long term contracts to final customers, if Energy Efficiency contents are proved, since customer would receive longer term benefits. In this case final customers would be able to choose normal contracts with short notice period, or Energy efficiency contracts with longer notice period.
- Various suggestions were made on the definition of cost recovery.
- Some comments argued for the necessity of something more than just cost recovery, suggesting the necessity to use of shared savings arrangements.
- How should cost reduction to the company (for example avoided costs for the upgrading of the networks) be taken into account?

### Reporting, Monitoring and Evaluation

The overall question regarding reporting, monitoring and evaluation is:

*How should the energy savings from energy efficiency services and programmes be monitored and evaluated in order to measure compliance with an EU Directive on Demand Management and Energy Services?*

The overall conclusion is that bottom-up evaluation of the different energy efficiency programmes and services within a Member State will be important in any case. Certainly, the methods will depend on how the energy efficiency targets to the Member States will be set (i.e., in terms of energy intensity improvements in % or energy savings in GWh). The planned EU Directive should be as precise as possible in this, and probably a working group of Member

States and the Commission should elaborate the methods in preparation of the implementation.

### Analysis and conclusions

The success of the project can be monitored at first level by the number of information materials distributed, number of articles published and readers reached, number of participants in the workshops and the conference. As Table 1 and the previous chapter presented, these quantitative indicators point towards a good success of the project and its approach, at least in terms of information dissemination.

At second level, the degree of consensus, which can be reached due to the dissemination and policy dialogue, on which policy actions should be appropriate at EU and national level, is an important indicator for the success of the project. In the best case, the European Commission just needs to appropriately consider the recommendations from the final document on a specific issue during the creation of their planned policy Initiative and Directive for support to the energy industry and to ESCOs for developing energy efficiency services and programmes. In the case of continued disagreement on an issue, the Commission will have to carry out further investigations on how these problems can be resolved.

Looking at the results of the discussions presented in the previous chapter, it appears that the project has brought to the surface that a broad consensus or at least acceptance seems to exist for the basic ideas behind creating a Directive on energy efficiency programmes and services. I.e., the idea to create such a Directive, and the basic principles as outlined above, were not contested. Setting targets to the Member States, giving them the task to create a favourable framework for energy companies and others to implement energy efficiency programmes and services, including ways to secure the necessary funding, and reporting back to the European Commission on the degree to which targets have been achieved and energy has been saved, all seem in principle acceptable to the stakeholders in the EU. Having shown this acceptance, and maybe having contributed to it, can be considered a further success of the project.

On the other hand, there are still a number of open questions and points of disagreement, mainly in the details. Having clarified these is certainly a merit of the project, but it also means further work for the European Commission and possible the project team to resolve these issues. For example, there has been some confusion among discussants as to the way how the targets can be – in terms of energy intensity (%) or energy savings (GWh/year), and how they will be monitored – top down through energy intensities or bottom up for each energy efficiency programme and service? Furthermore, which kinds of energy efficiency programmes and services will be ‘eligible’ for counting towards achieving a Member State’s target was also not very clear to many participants. These are issues, were the Commission will need to clarify things in the forthcoming proposal.

There were also still a number of points of disagreement. Perhaps the two most important of these are the question if energy savings targets to the Member States should be mandatory or indicative, and whether the Directive should include demand management and energy services on



transport fuels. The Conference also brought ideas from the audience on how these problems might be dealt with. E.g., the Directive could start with harmonised indicative targets, but give the Member States the task to develop and present 'allocation plans' for the implementation, follow-up and evaluation of concrete policy instruments as well as energy efficiency services and programmes for the different technologies and customer groups, and quantifying how these together would reach the target. These plans could build on the work done for the allocation plans in the framework of the EU Emissions Trading Directive, and would be a further refinement of the latter.

As a possible way to deal with the transport fuels issue it was proposed to launch an Umbrella Initiative on Energy Services both in stationary and transport energy uses, but with two separate Directives, targeting stationary and transport fuels separately, under this umbrella. This would demonstrate that the European Commission is also taking action on energy efficiency in transport and please, e.g., the European Parliament. It would at the same time avoid that political resistance on one of the subjects delays adoption of a Directive targeting the other. The question is, however, if the Commission would have the staff power to prepare and launch two Directive proposals at the same time.

A further conclusion can be drawn on the general usefulness of projects like 'BEST', which are closely interlinked with an ongoing policymaking process. This conclusion relates to the delay in the launch of the Initiative and Directive proposal. This was originally announced by the Commission for the autumn of 2002. Hence, the workshops, Conference, publications would all have been able to disseminate the actual proposal for the Initiative and Directive. This would have been a more concrete basis for the debate. As it was now, there was room for speculation, e.g., on how the energy efficiency targets will be set. It would probably also have improved the effectiveness of information dissemination, because awareness of the subject would also have been higher. Even more participants to the workshops and downloads of reports might have been possible.

In fact, the Commission had to postpone the launch of the Initiative to the second quarter of 2003. So, in January 2003 only a Powerpoint presentation from the Commission services with considerations for the Initiative and Directive was available for the Swedish workshop. At the time of the Conference, the degree of detail in the Commission's presentations had increased, but there still were open questions, and no written draft proposal was available.

Obviously, such delays in the policy initiative, to which the project is closely related, are a risk for the effectiveness of this type of project. It is however also chance, because awareness can be raised even before the launch of the initiative, and the feedback from the policy and stakeholder dialogue can help to improve already the first draft of such a policy proposal. The European Commission therefore considered the outcomes of the debate as documented in the report on the Conference and the national workshops (Wuppertal Institute et al. 2003b) very helpful for finalising the draft Directive. Still, a number of points of disagreement or open questions still had to be resolved, as pointed out above.

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