

# DSM Spotlight

The Newsletter of the International Energy Agency Demand-Side Management Programme July 2002



## IX

### Municipalities and Liberalization – What are the Issues?

Activities in IEA DSM Task IX, *The Role of Municipalities and Energy Efficiency in a Liberalized System*, has raised a number of interesting questions on ways in which municipalities can impact energy efficiency issues in a liberalized market. Answers to some of these questions will be published in two reports in October 2002. These reports examine the role of local authorities and how liberalization has changed the context of local authority action in the field of energy efficiency.

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#### **Municipalities As Clients**

Municipalities have become one among many clients under liberalization, and in the U.K. and Sweden this role is being played to its fullest. To be able to influence the market, a client needs good bargaining power, and one way to obtain this power is through

the joint purchasing of energy. This has become common practice in both the U.K. and Sweden, and although the models used are rather different, the impact is the same.

In the U.K., joint purchasing is done through consortia of local authorities. In Sweden a company has been subcontracted by a large number of Swedish local authorities to issue tenders on their behalf.

Following these models, the Dutch local authority of Almere has tendered its energy supply and three other municipalities have formed a consortium for that purpose. One advantage of the consortium process is that it allows members to combine forces and to look at ways to improve the energy efficiency of their energy stock. Unfortunately, there is little evidence that this extension to include energy efficiency is occurring in local authority energy-purchasing consortia (although there are examples among other public sector consortia in the U.K.). There are, however, moves in the U.K. to promote renewables, for instance by sponsoring joint investment in renewable capacity.

#### **Municipalities As Energy Suppliers and Distributors**

Other municipalities also are considering their options as energy suppliers and distributors. With the progress of liberalization, there is a trend for municipalities to distance themselves from the utility function. Even in Denmark, where legal instruments were introduced to discourage the sale of municipal shares in energy companies, municipal supply companies have been restructuring into larger shareholding entities to meet the challenge of competition. Furthermore, local authorities in the Netherlands, Germany and Sweden have been reporting the sale of shares in municipal companies to the private sector to meet the challenge of liberalization. As a matter of fact, in the Netherlands there is almost no municipal shareholding left.

#### **COUNTRIES PARTICIPATING IN THE IEA DSM PROGRAMME**

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## Italy Initiates Energy Efficient Trading Certificate Programme

The promotion of energy efficiency in end-use sectors has never been a high priority in Italy, until now. In the past, policies have focused on the supply side of the energy market and have promoted a shift from carbon intensive fuels to renewable energy. Recent studies, however, have shown that there are significant benefits to gain from improving the efficiency of energy use.

Driven by increased concern over the environment and security of the energy supply, two Legislative Decrees were issued in April 2001 that set mandatory national energy savings targets for electricity and gas distribution in the years 2002-2006 (see Table 1). Based on these targets, an overall saving target of 2.9 Mtoe will need to be achieved by 2006. To help reach these targets, a "policy tool kit" has been created. This tool kit combines

Kingdom are the only countries at this time that have taken on this energy efficiency challenge. Based on the concepts of emissions trading and Renewable Energy Certificates (green certificates), the Italian scheme will award certificates to gas and electricity distributors and energy service companies for specific demand-side projects.

The implementation of this program is the responsibility of the Regulatory Authority for Electricity and Gas (AEEG). The basic structure of the program is that after consultation with interested parties AEEG will issue Guidelines for the Design, Implementation and Evaluation of Projects for the enforcement and non-compliance of the distributors' assigned targets as well as for cost-recovery mechanisms. Based on these guidelines, distributors and energy service companies (ESCOs) will carry out projects and evaluate the savings realized. Verification of the actual savings achieved by each project will be made by AEEG through careful monitoring of the reporting documentation. To support the verification process, AEEG will randomly inspect customer sites and conduct on-site audits of additional project-related documentation duly recorded by distributors and ESCOs. Then AEEG will certify savings achieved by each project and issue the certificates to electricity and gas distributors or ESCOs. The issued certificates will correspond to the certified volume of primary energy saved and their value will be expressed in tons of oil equivalent energy saved. Distributors and ESCOs can then trade the certificates through bilateral contracts or in the EEC market, yet to be set up.

**Table 1.**  
**Mandatory national energy saving targets (2002-2006)**

Year	Target (Mtoe)	
	Electricity distribution sector	Natural gas distribution sector
2002	0.10	0.10
2003	0.50	0.40
2004	0.90	0.70
2005	1.20	1.00
2006	1.60	1.30

market-based instruments (e.g., certificate trading) with command and control measures (e.g., mandatory quantitative targets), and tariff regulation (e.g., cost recovery mechanisms through electricity and gas rates).

At this time, the Italian program is to include only distributors who serve a minimum of 100,000 customers. For gas, this represents 22 distributors with over 9.6 million of the total 16 million customers. And for electricity, this represents 8 distributors and 98% of the total customers. For ESCOs, AEEG is proposing to use third party types of contracts. Currently the number of established ESCOs is very limited.

Understanding that this is a complex policy to implement, the AEEG is attempting to tackle the technical issues that have arisen. To ensure that input is received from all interested parties, the AEEG has just issued a



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In a move to shift from traditional policy instruments, such as standards and fiscal incentives, to more market-based instruments, Italy has developed an Energy Efficient Certificates (EEC) program. Italy and the United

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By contrast, the debacle of electricity liberalization in California has resulted in an unsuccessful attempt by the city of San Francisco to re-municipalize their energy service. This changing of ownership has had quite an influence on the attitude of local utilities to provide public service functions, such as promoting energy efficiency. And, this is a key question in the European Union where a Directive is currently being discussed which is designed to promote the provision of energy services by suppliers. However, when suppliers are involved, energy services must have a business reason if they are to be promoted, for example, developing goodwill, providing profitable services, etc.

### **Role of Energy Planning**

The other functions of local authorities include energy planning and awareness raising. There seems to be a trend to promote the local role in energy planning, just at a time when the withdrawal of municipalities from utility functions makes planning more difficult to apply. Such responsibilities are being imposed in France and Poland for example. Whether this will continue remains to be seen. One possible lever is the concession, the contract by which a local authority grants a utility the exclusive right to build and operate a distribution network within a given area. Experience in the Netherlands and Germany has shown that this can be used to improve energy efficiency and encourage sustainable energy practices, but generally it is simply seen as an extra source of revenue for the local authority.

### **Role of Energy Efficiency**

More and more local authorities are being pushed to promote energy efficiency. In the past, there was little support in the way of resources, but slowly central governments are getting the message and are increasing support to local authorities for this function (for example, a recent Swedish policy doubles resources for energy efficiency at the local level and the U.K. has been steadily increasing funding for local initiatives via such sources as the "Energy Efficiency Commitment"). Local authorities also appear to be having an even more important coordinating role. However, a clear message coming out is that one of the key effects of liberalization is the transfer of the responsibility for public interest activities to the public sector. Each national administration will therefore need to think how it will raise funds to meet this need, formerly carried out, for better or worse, by the utilities and then how they will be applied in the marketplace.

All in all, however, it is clear that over the decades, energy efficiency policies have generally been short-lived and uncertain. We are still awaiting long-term programmes that do not disappear when the next fall in fuel prices occurs. The driver is now the environment and since our environmental problems are not going to disappear quickly, the challenge is to prepare a sustained policy programme for the long-term.

### **Next Phase of DSM Task IX**

The experts of DSM Task IX met in Odense, Denmark in June 2002 to discuss the next phase of the Task's work – the preparation of best practice case studies. It is clear that, apart from using the market for competitive purchase of energy, local authorities rarely respond directly to the liberalized market when planning policies since the majority of functions operate in both a monopoly and a liberalized market. Instead local authorities tend to adapt existing practices to the new liberalized marketplace and perhaps give greater emphasis to roles designed to counteract the weaknesses of a liberalized system. Therefore, the case studies are more likely to be studies of practices that are important or adaptable to, but which is not necessarily exclusive to, a liberalized system.

"We have now agreed upon a common framework and will be getting down to preparing draft studies," commented Martin Cahn, Operating Agent of DSM Task IX. "Each participant has been given the task of finding case studies in his own country and in several others, so the job has been shared out equally."

In addition to the DSM Task IX experts meeting, the Energie-Cités annual seminar was held in Odense on 13-14 June 2002. At this meeting, the issue of the municipal reaction to liberalization was discussed and a supplement with 10 brief case studies covering the issue of liberalization was included in the Energie-Cités' bulletin. This supplement and the proceedings of the seminar can be obtained directly from Energie-Cités, [info@energie-cites.org](mailto:info@energie-cites.org).

To stay abreast of the Task's activities you can visit the IEA DSM website, [dsm.iea.org](http://dsm.iea.org), or the Energie-Cités website; [www.energie-cites.org](http://www.energie-cites.org).

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proposal document for circulation. The key issues included are to:

- Ensure that EEC represents actual savings (i.e., savings realized over and above the spontaneous market trends)
- Set up the EEC market (e.g., who has to and who can buy certificates, who can sell, types of certificates, information content and degree of fungibility, etc.)
- Design effective monitoring and non-compliance schemes
- Share the benefits and costs among the different players (users, energy retailers and suppliers, component and service providers, etc.), including the definition of rules and procedure for the partial recovery of costs related to energy saving projects through electricity and gas rates.

Italy is on its way to establishing a full-fledged certificate trading market. And as Marcella Pavan of AEEG notes, "the policy framework put in place by the Government is rather ambitious in both its scope and the administration of the policy tool-kit. Undoubtedly, the introduction of a certificate trading mechanism has the advantage of making the promotion of end-use energy efficiency consistent with a liberalized market framework. On the other hand, the effectiveness of such a mechanism in delivering the expected results (i.e., pre-defined quantitative targets combined with overall cost minimization) crucially depends on a number of factors, such as the actual technical-economic potential for savings, the number of actors involved in the market, the degree of complexity of the rules governing the mechanism, etc."

As for the success of the scheme, Ms. Pavan remarks, "In order to exploit the potential advantages and to limit the potential disadvantages inherent in the policy approach designed by the Government it will be crucial to guarantee a gradual phase-in of the whole system, to ensure credibility and transparency, to define rules and guidelines which combine simplicity and thoroughness, and to introduce instruments that allow market actors a certain degree of flexibility in meeting their goals."

To track the activities of the Italian scheme, a dedicated website will be available when the whole mechanism is operating. At this time, the consultation document issued in April 2002 is available in Italian at [www.autorita.energia.it](http://www.autorita.energia.it). Also, several articles on the scheme in English and Italian will soon be added on this website. ●

UPDATE

## International Market Study

The market research study conducted under IEA DSM Task VII, *Market Transformation*, has proven that a cross-country analysis of public attitudes regarding energy efficiency is possible. This research continues to provide valuable information to use when talking to market actors about "selling" energy efficiency as a positive attribute of their products.

The basis of this research was an energy efficient behavior survey conducted in Denmark, Finland, the Netherlands, Norway, Sweden and the U.K. This pioneering international survey analyzed the attitudes, habits and use of energy efficient products in correlation to specific socio-cultural clusters. (For an article on the survey, see the October 2001 issue of the DSM Spotlight on the DSM website).

DSM Task VII is serving as a conduit between consumers and product manufacturers and marketers. The Task participants foresee this research stimulating new methods of targeted marketing by providing energy efficiency product manufacturers with arguments and raw data for the production and marketing of the next wave of energy efficient products. ●

*The DSM Spotlight is published four times a year to keep readers abreast of recent results of the IEA Demand-Side Management Programme and of related DSM issues. The viewpoints or policies expressed in this newsletter do not necessarily reflect those of the International Energy Agency, the IEA Demand-Side Management Programme member countries, or the participating researchers.*

*For more information on the Programme, its work and contact addresses, please visit our website at <http://dsm.iea.org>*

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