



DSM *spotlight*

October 2001

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

An International Approach to Transforming the EE Market

There are many energy efficient technologies available in the marketplace, but so far the sale of them has been disappointingly limited. To determine why this is the case and how to increase the market share of today's energy saving products

and practices, experts from seven countries are participating in the IEA DSM Task VII, Market Transformation.

IEA DSM PROGRAMME MISSION

To promote energy efficiency and DSM for global sustainable development and for business opportunities.

The desire to meet national Kyoto targets and to reduce greenhouse gas emission through greater energy efficiency is the driving force behind this work. And, the Task is pursuing exciting new

areas including product branding and marketing energy efficiency as well as creating radical new approaches to the way that marketplaces typically transform. The Task work is divided in to three main areas of work, 1) Policies and Programs: the development of a coordinated international approach to market transformation, 2) Marketing: the development of market-based actions to deliver market transformation, and 3) Promotion: the use of procurement, requirements, specifications and other tools in a targeted way to deliver market transformation.

To begin to understand consumers' attitudes towards and purchasing habits of energy efficient products, the Task conducted a survey of six

European countries (Denmark, Finland, Netherlands, Norway, Sweden and United Kingdom). As the Operating Agent for Task VII, Verney Ryan of BRE in the United Kingdom, notes, "...to the best of my knowledge, no such international investigation has ever been undertaken with an emphasis on analyzing attitudes, habits, and use of energy efficient products and how these correlate to an individual's specific socio-cultural cluster."

The goal of the survey was to gather consumer information, which could be used as a common platform for developing more effective market strategies for energy efficiency and energy efficient products. The survey included questions on consumers' preference for exclusive brands; their knowledge of energy saving efforts; and what they do to save energy.

Highlights of the survey include:

■ When asked what someone can do to use energy more efficiently, 41% responded turn out the lights in rooms you are not using. This was followed by 17% who stated use energy saving light bulbs and 16% who stated lower the temperature in the house. The overall results show that the most popular activities are simple, daily things that can be done. However, the results also show that people's knowledge on how to save energy is rather limited.

■ When asked what you yourself have done to

COUNTRIES PARTICIPATING IN THE IEA DSM PROGRAMME

Australia

Austria

Belgium

Canada

Denmark

European Commission

Finland

France

Greece

Italy

Japan

Korea

Netherlands

Norway

Spain

Sweden

United Kingdom

United States

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use energy more efficiently, it is not surprising that the responses were similar to the question above, 37% responded turn out the lights in rooms not using and 17% said use energy saving light bulbs. The only difference found was that 7% responded install triple/double glazing. Because few people stated activities that are more definitive energy saving actions than turning out lights, the conclusion that can be drawn is that few people consciously take energy saving actions.

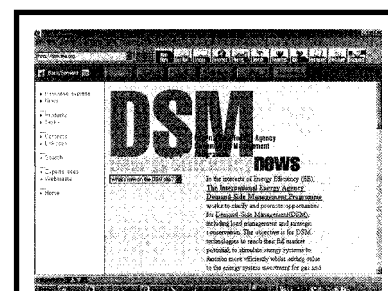
- Although only 17% of the respondents suggested using energy saving light bulbs as an energy saving measure, 61% reported that they were using energy saving light bulbs in their house. And, 39% responded that they didn't know or have none. These responses show that many people who use energy saving bulbs do so without necessarily thinking of it as an energy saving action. The results also showed that energy saving bulbs are used more often by people aged 40-49, highly educated people, people living in detached or semi-detached houses, and those living in households of 4 or more people. This indicates a clear series of market niches available to tap.
- In order to assess the value of an energy efficiency strategy, respondents were asked several questions. Before answering these questions, the respondents were told about the potential energy gains of labeled products. The first was to determine their willingness to pay for products labeled with special energy efficient symbols. Surprisingly, a substantial number of people, 67%, are willing to pay more for products and equipment labeled with special energy efficient symbols. For the first time in this survey, the differences between countries were noticeable. For example, 51% of the Danes are more willing to pay more than 10% for labeled products while 23% are not willing to pay anything at all. In Finland and Sweden, it is just the opposite; only 33% are willing to pay at least 10% more for labeled products.
- The market potential for energy efficient products depends on consumer perceptions of such products. As a means to find out if there are any significant barriers for these products, some basic perceptions of energy efficient labeled products were measured. Respondents were asked about the cost, design/look and quality of these products. The responses were high for quality, 82% responded that the quality was at least the same as other electrical equipment. And, 75% responded that the design/look was comparable. On the costs, 38% responded that the products do not cost more.

- The final question addressed energy prices. The respondents were asked if energy prices were to double, would you make a big effort, some effort or no effort to save energy. Half the respondents claimed that they would make a big effort to save energy and 32% stated that they would make some effort.

When asked about the value of this survey, Mr. Ryan stated, "The results have conclusively proved that a cross country analysis of public attitudes on energy efficiency is possible. The results also provide invaluable information which is needed when talking about 'selling' energy efficiency as a concept with multinational market actors." These findings will be used to stimulate new methods of targeted marketing amongst energy efficiency product manufacturers and to develop a dialogue with the companies and market actors interested in promoting the sales of their energy efficient products and services.

With the marketing data in hand, the Task participants are now planning Synergy Workshops. The aim of these workshops is to generate new promotional ideas for energy efficiency and seek solutions to increase the desire for energy efficient products and services. Mr. Ryan stated "... it would be wonderful if these workshops gave us the key to stimulate a demand for the 'brand' of energy efficiency that could be as strong as the ever-growing demand for the brand of 'organic' food." Workshops are planned for November 2001 in Finland, Korea, the Netherlands, Norway, Sweden and the United Kingdom. The results of these workshops will be documented and presented during a one-day symposium to be held in early 2002 in the United Kingdom. This symposium will showcase best practices and lessons learned in market transformation and will provide an opportunity for targeting a way forward for future market transformation activities – an answer to the challenging questions facing the energy efficiency community in today's marketplace.

This Task is producing innovative new thinking and methods in international market transformation. The unique collaboration between six countries is providing a rich resource of experiences and lessons



<http://dsm.iea.org>

Visit the IEA DSM web site for more information on Programme activities, publications and contact names.

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The Role of EE in National GHG Response Measures

At the May 2001 IEA DSM Executive Committee meeting, a special session was held on "The Role of Electrical Energy Efficiency as part of National Greenhouse Gas Response Measures." The overall objective of this session was for Executive Committee members to inform one another of the role that electrical energy efficiency plays in their country to reduce greenhouse gas emissions and how the DSM Programme could contribute to their national goals. Energy efficiency, which reduces demand through technology, is not only relevant to the IEA DSM Programme because it is a means to reduce energy demand, but also to national Kyoto goals as emissions are reduced when energy consumption is reduced.

The session provided a rich overview of the national activities in 12 countries—Australia, Austria, Denmark, Finland, France, Italy, Japan, Netherlands, Norway, Spain, Sweden, and United Kingdom. National activities ranged from energy efficiency standards for commercial/residential buildings and product labeling programs to electricity/gas taxes and performance contracting. Despite the range in the national approaches taken to improve electrical energy efficiency and to reduce greenhouse gas (GHG) emissions, the participating countries agreed that the DSM Programme has an important role to play to support national actions as well as international initiatives.

For example, the Australian representative noted that the DSM Programme is contributing to Australia's GHG objectives through its work on demand-side bidding, performance contracting, and market transformation as well as on empowering local governments. The Japanese representative remarked that the DSM Programme's new work on the role of energy service companies to promote energy efficiency is already providing valuable information and resources. And, the representative from Spain commented that although demand-side bidding is an option in Spain, there is very little experience using this tool, and therefore, the country is participating in the Programme's demand-side bidding Task to learn from others' experiences.

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learned. It is also providing the opportunity to develop a common language and medium of exchange, which is vital if the participants are to successfully communicate to global players in the marketplace and to multinational organizations. Mr. Ryan comments that the results of the Task are proving to be a useful sales tool for energy efficient

products and that manufacturers and retailers are becoming exceedingly interested in the Task work.

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At the conclusion of this special session, the members compiled and prioritized a list of potential new areas of Programme work. This list includes:

- Utility/Energy Distributor Energy Efficiency Programs – programs that are or could be offered by utilities or energy distribution companies.
- Studies – for example, on the role of high performance buildings/zero energy buildings, impact of DSM/EE on GHG emissions, cost/benefits of EE measures and actions, and what and how market-based initiatives work.
- Barrier Removal – identification of and ways to remove barriers to energy efficiency.
- EE Standards – the types and their impact on GHG emission reduction.
- Best Practices – documentation and promotion of best EE and DSM practices.
- Energy Savings Certificates – how to structure, use and evaluate the effectiveness of certificates.
- Labels –role of EE labeling in reducing GHG emissions.
- Bundled Services –ways to bundle EE services, including how to bundle EE with green power.
- Targets and Benchmarks – how to set, use and track energy consumption targets.
- Role of Climate Change Taxes/Incentives – how to initiate and structure them, and how they work.
- Lessons Learned – lessons from successful and unsuccessful EE and DSM actions.
- Emissions Trading – what it is and how to do it successfully.
- Information – includes education programs and public opinion of EE and renewables.

workshops, symposium and complete survey report, "Energy Efficiency Study 2001: Report From A Multinational Study Of Knowledge and Attitudes Towards Efficient Use of Energy in Private Households in 6 European Countries," (available soon) visit the Task page on the IEA DSM web site.

New

Access Reports on the Internet

The DSM Programme has numerous reports and articles now available on its web site. These reports document work being conducted under current Tasks as well as work from completed Tasks. The following is a summary of a few of the available reports. To download these and other reports, go to www.dsm.iea.org and click on "Library."

Task II: Communications Technologies for Demand-Side Management

Final Report on Assessment of Research, Development and Demonstration Priorities for DSM and Value Added Services. This report highlights the functions and services considered to be the most beneficial to customers and utilities, and identifies research and development activities necessary to assist the growth of DSM, energy efficiency and other value added services in the customer marketplace.

Final Report on International Standards Activity for Customer/Utility Communications, Demand-Side Management and Related Functions. Based on an assessment made of the 10 countries participating in this work, a portfolio of standards is presented and related to communication structures using each communication method being considered. A strategy also is proposed to enable the work on evaluating consumer and utility requirements and communication media to best benefit work on international standards.

Evaluation of Communications to Meet

Customer/Utility Requirements for DSM and Related Functions. This report covers the collection and processing of data on DSM and related functional needs, together with customer/utility communication technologies to meet the needs of the 10 countries participating in this work.

Task V: Investigation of Techniques for Implementation of Demand-Side Management Technology in the Marketplace

Marketing Analysis of DSM Programmes. This second edition includes the initial analysis of 32 DSM programmes plus eight other programmes carried out by the Task Participants. The analysis is designed to extract all possible information concerning marketing strategies and developments used in the programmes and that determined their success or failure.

Reports Provided by Participants on Programmes Developed in Annex V. Several Task Participants provided reports on programmes that they developed during the Task, but were not reported on elsewhere. The programmes are from VTT (Finland), NVE (Norway) and NUTEK (Sweden).

Action Plans and Evaluation Areas of Programmes Developed in Annex V. This report describes the two tools that were developed and used in the Task. The Action Plan allows to follow-up the project, detecting risks and collecting knowledge to be used in future projects. The Evaluation Areas is a framework that describes the items in the programmes

that have to be analyzed during and after their implementation to find out why their results were obtained. The report includes examples of the use of these tools.

Techniques for Implementation of Demand Side Management Technology in the Marketplace - Final Report. This report summarizes the Task's work and presents its results and conclusions. The report includes complete descriptions of the methodology and evaluation tools, Task projects, and the lessons learned and conclusions which are grouped by Utilities, Governments and Institutions, Customers, Consumption Habits, Purchasing Process, DSM as a Service, and TOU Tariff as a Service.

Task VI: Mechanisms for Promoting DSM and Energy Efficiency in Changing Electricity Businesses

Existing Mechanisms for Promoting DSM and Energy Efficiency in Selected Countries. The report provides descriptions of the existing composition and structure of electricity industries and of the existing mechanisms being used in the 12 countries participating in this work to promote the implementation of DSM and EE by electricity businesses.

Public Policy Implications of Mechanisms for Promoting Energy Efficiency and Load Management in Changing Electricity Businesses. This report analyzes how the effectiveness of existing mechanisms to promote the implementation of EE and load management is influenced by different structural models for the electricity industry.

Developing Mechanisms for Promoting DSM and Energy Efficiency in Changing Electricity Businesses. This report describes how twenty-five selected mechanisms were developed, examines their public policy implications and likely effectiveness, and provides detailed descriptions of them.

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 web site at <http://dsm.iea.org>

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