

The contribution of the Energy Efficiency Centre to the energy efficiency policy in Lithuania

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1. ENERGY EFFICIENCY CENTRE

The Energy Efficiency Centre was created as a division of the SC Energy Agency of Lithuania in 1995 by the Ministry of Energy and started functioning in 1996. The Centre has a staff of five engineers.

The Energy Efficiency Centre:

- Provides information and advice on energy saving possibilities in Lithuania;
- Promotes energy efficiency throughout the energy cycle;
- Undertakes energy audits in the buildings sector and industry.

The Energy Efficiency Centre is a platform for national and international activities in the field of energy efficiency. The Energy Efficiency Centre is working with energy efficiency connected with both existing and new building and installations including technology and operation.

The main target groups are:

- Households;
- Public authorities, municipalities (Institutions, schools, hospitals, kindergartens...);
- Industry.

2. AWARENESS CAMPAIGN

In 1998 the EEC implemented the first awareness campaign in Lithuania. All events were accompanied by great media interest:

- 10 television interviews;
- 8 radio interviews;
- 6 articles in various newspaper and magazines;
- Three hours TV “special” on the activities of the Centre.

After that the public profile of the EEC has been raised immensely in 1998-1999:

- 400 telephone enquiries (increase of about 75%);
- 100 written enquiries (increase of about 75%);
- 1000 visitors during Open days (increase of about 70%).

They are now seen as a reliable provider of information and advice. After this Campaign there has been a clear shift of people along the “awareness chain” from “unaware” to “aware” and to “interested”. People are aware of a much greater variety of energy saving techniques. During the Awareness Campaign within the residential sector three key issues have been identified for attention following a Strengths, Weaknesses, Opportunities and Threats analysis:

1. **Continuity.** Any marketing campaign needs to be long term. If it stops, individuals quickly forget not only the messages, but also the campaign. If cultural change is to be achieved, the campaign will need to continue.
2. **Development of messages.** Individuals quickly become bored if the same message is delivered in the same way too many times. A marketing campaign will need to develop over time. The message will need to evolve as individuals move down the Awareness Chain.
3. **Development of targets and channels.** Individual targets and delivery mechanisms need to change in order to maintain the progress of individuals down the awareness Chain.

3. RESEARCH STUDIES

Two market research studies were undertaken during the campaign: the first in February 1998 was used to identify the key target groups, messages and media. The second survey was carried out in February 1999 and was used to measure the change in attitudes towards energy saving and a change in the knowledge about energy saving. The results have been encouraging. Whilst we can not claim that significant energy savings have been caused directly by the Campaign, there has been a significant positive shift in people's:

- Ideas about where to get information;
- Knowledge of different ways to save energy;
- Recognition of the logo of Energy Efficiency Centre and its association with energy saving;
- Perception of the Energy efficiency Centre as a provider of information.

4. ENERGY AUDITS

In 1999 the Energy Efficiency Centre together with Danish experts have carried out energy audits in 20 Lithuanian companies. The companies were selected from the following the industrial target sectors: Textiles and clothing; Wood industry (wood processing and furniture); Food; Chemicals and pharmaceuticals; Electronics, instruments; Construction materials.

The main impressions from the 20 simple walk through energy audits in industry is that the infrastructure for most of the enterprises is very typical for enterprises that have been static since they were built. That is, the production and distribution of all auxiliary services is done in a centralised manner. Typically, there is no energy management at the enterprises or the knowledge of how to start it. There is no mapping over energy consuming equipment and the documentation in the form of plans and data of the equipment are typically missing or not updated. Many enterprises are connected to district heating systems, which supply steam and heat, but in consequence of decreased production – and thus the need for heat and steam- or conversion to natural gas, the heat losses from poorly insulated pipe systems now account for greater part of the total consumption. That is mean that every kWh consumed at the enterprise becomes more and more expensive. We have seen examples of enterprises which may “raise” the temperature on the hot water by help of steam during the summer. Some enterprises have not even made any attempts to change or reduce the production, e.g. to move the necessary production equipment to one workshop and maybe let out the rest of the buildings. We have seen one example of the enterprise, which only utilise 1-3% of the total production capacity, another only 20%.

On the basis of these audits and statistical information, the energy consumption and saving potential for the Lithuanian industry has been estimated. The main figures are as follows:

Electricity consumption (GWh)	Electrical saving potential (GWh)	Heat consumption (GWh)	Heat saving potential (GWh)
2850	20260 or 13,5% (Pay back period less than 5 years)	384	3700 or 21,3% (Pay back period less than 5 years)

5. POLICY

The main document that outlines energy efficiency policy is the National Energy Efficiency Programme, which was approved by Decree No.940 of August 5, 1996. It replaced the plan adopted in 1992. The 1996 programme covers the period 1996-2000. Last year the programme was revised once again and presented to the Parliament of Lithuania for approval.

The National Energy Efficiency Programme 2000 includes a number of activities in agreement with the National Energy Strategy and Energy Law connected to the Energy Efficiency Centre's working areas:

- To carry out energy audits in industry, to evaluate received results of existing situation and to make a prognosis for nearest future;
- To prepare recommendations for implementation of quality management system in industry;
- To create the information base of comparative consumption of energy to unit of production in industry;
- To prepare and issue the necessary printed material about effective measures taken in the field of energy conservation and saving in industry;
- To organise seminars and conferences on the effective usage of energy in industry;
- To organise training courses for energy managers and auditors in industry;
- To organise awareness campaigns for the general public on energy efficiency in households.

Some activities the Energy Efficiency Centre can implement without any problems but there are some where we have difficulties:

- Lack of legal documents for procedures of carrying out energy audits;
- Underdeveloped market for energy audits in Lithuania because of this, uncertain financing perspectives;
- Lack of technical documentation of buildings;
- No regulations for the training of energy auditors and energy managers;
- No financing for information and training activities on energy conservation;
- Lack of political awareness about energy efficiency.

Another difficulties are that the Energy Efficiency Centre has limited staff numbers, which are not able to specialise in all sectors. Also, there are no possibilities to develop the staff of the Energy Efficiency Centre, themselves.

6. CONCLUSION

The National Energy Efficiency Programme 2000 has very grand aims but there are few resources and people to carry it out. The Energy Efficiency Centre is one of the implementing bodies, which have gained important international experience.

7. REFERENCES

D.Goult, Lithuania: Energy Conservation Awareness Campaign. AEA Technology plc, Harwell, 1999.

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