

Case Study // Round Table SDG 7: Improving the Efficiency of the Energy System

Raising awareness for energy consumption through a marketing campaign “Energy Mathematics”
The former Yugoslav Republic of Macedonia
Level: national

Summary

The “Energy Mathematics” campaign is part of the national Platform for Energy Efficiency, a long-term cooperation among the privately owned electricity distribution company EVN Macedonia, the Ministry of Economy, and the Energy Agency of the Republic of Macedonia. The platform has functioned since 2012.

The “Energy Mathematics” campaign, which began in July 2014 and is on-going, was designed to show customers how small changes in their daily habits and relatively minor investments can significantly reduce energy consumption.

Situation

The campaign was conceived as a response to growing energy consumption in the country and, more specifically, the rising energy intensity of the housing sector. At that time, there was no actual understanding on the cost-effective measures to save energy in a typical household, nor did the citizens have available information to be further educated in the energy saving measures that were available, like energy audits, insulating materials, energy management systems, etc. In addition, it has been observed that the usage of biomass for individual households in the more dense urban areas also had an effect on the air pollution in those cities, thus improvement of the energy consumption/efficiency had an additional effect of improving the air quality in the country.

Strategy

The government decided that the best way to reverse the adverse energy intensity trend was to launch a promotional campaign and to engage the general public in understanding how they use energy on a daily basis. This approach was chosen because it was considered to be optimal in terms of affordability, outreach, and impact.

The Platform for Energy Efficiency comprises a wide range of educational activities aimed at various categories of customers:

- A targeted television series of eight episodes explained in layman’s terms different ways of saving energy in households;
- Illustrative billboards have been erected in key locations;
- Explanatory informational materials have been included in consumers’ energy bills;
- Targeted activities for students, businesses and media provide educational tools for current and future professionals, thus further increasing the impact of the campaign.

Results and impact

As a consequence of the “Energy Mathematics” campaign and the broader Platform for Energy Efficiency, estimated 1.6 million citizens and 18 thousand small businesses have been able to learn about principles of energy efficiency at home and in everyday life. They also have been able to appreciate how energy auditors work in the field.

- In the first year (2014 - 2015) of the “Energy Mathematics” campaign, gross national electricity consumption per capita decreased by 2.3% (from 4,129 kWh per capita to 4,031 kWh per capita);
- Final electricity consumption in households per capita decreased by 1% (from 1,438 kWh per capita to 1,473 kWh per capita);
- Overall energy intensity decreased by 6.3% (from 471.3 kgoe per EUR 1,000 of GDP to 441.5 kgoe per EUR 1,000 of GDP). Of that amount, 2.4% were directly attributed to the campaign “Energy Mathematics”;
- Saved energy is estimated at 202.8 GWh;
- Estimated greenhouse gas emissions reduction is estimated at 393 kt CO₂. Energy Agency attributes 50% of these savings and reductions to the campaign.

In 2016, the expert jury of the International Public Relations Association (IPRA) has awarded the most prestigious Golden Award to the “Energy Mathematics” campaign that EVN Macedonia, the Ministry of Economy and the Energy Agency of the Republic of Macedonia have been implementing as a part of the Platform for Energy Efficiency.

Challenges and lessons learned

The Energy Mathematics campaign and the Platform for Energy Efficiency responded to specific behavioural issues and investment barriers to improving energy efficiency generally and specifically in buildings. The government undertook a detailed statistical analysis of the challenge of energy efficiency, and realized that the greatest impediments were lack of understanding by the general public and by professionals of the potential for improvements.

Main challenges were:

- Answering the question: “How to transfer the message for energy efficiency to the common household?”
- Removing the already established opinion that energy efficiency is expensive and it interferes with daily life comforts,
- Who will finance the campaign? Who bears the social responsibility?
- Setting the target that we wish to achieve.

The main lesson learned: Explaining the technical issues using common and easily understandable language is a challenge, but it brings benefits long after the marketing campaign ends. Education is the first and cheapest energy efficiency measure.

Potential for replication

This type of campaigns could be replicated in every country. It has to be customized to local conditions to address the typical mentality of the people living in the country, as well as to transfer local experience for energy efficiency with approachable language.

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