



National Peer-Learning Workshop

Lithuania

Agenda

Workshop “Implementation of energy efficiency goals and its practical evaluation in Lithuania”

Date: 11th April 2019

Location: Lithuanian Energy Agency, Gedimino av. 38, LT-01104, Vilnius

9:30-10:00	Registration	
10:00-10:10	Welcome	Romualdas Skema Lithuanian Energy Institute
10:10-10:40	Evaluation into Practice to Achieve Targets for Energy Efficiency (EPATEE)	Romualdas Skema Lithuanian Energy Institute
10:40-11:10	Improving Energy Efficiency in Implementation of Directive 2012/27/EU in Lithuania	Mindaugas Stonkus Ministry of Energy of the Republic of Lithuania
11:10-11:40	Coffee break	
11:40-12:10	Monitoring of Energy Efficiency, Energy Savings Calculation and Verification	Tadas Norvydas Lithuanian Energy Agency
12:10-13:00	Wrap-up of workshop	Romualdas Skema Lithuanian Energy Institute
13:00	Lunch	



Seminaras

ENERGETINIO EFEKTYVUMO TIKSLŲ ĮGYVENDINIMAS IR JO PRAKTINIS VERTINIMAS LIETUVOJE

Programa

2019-04-11

Lietuvos energetikos agentūra, Gedimino pr. 38, LT-01104, Vilnius

9:30-10:00	Registracija	
10:00-10:10	Įžanginis žodis	Romualdas Škėma, Lietuvos energetikos institutas
10:10-10:40	Energetinio efektyvumo tikslų įgyvendinimo praktinis vertinimas (EPATEE)	Romualdas Škėma, Lietuvos energetikos institutas
10:40-11:10	Energijos vartojimo efektyvumo didinimas įgyvendinant 2012/27/ES direktyvą Lietuvoje	Mindaugas Stonkus, LR Energetikos ministerija
11:10-11:40	Kavos pertraukėlė	
11:40-12:10	Energijos efektyvaus vartojimo stebėseną bei sutaupytos energijos skaičiavimas ir tikrinimas	Tadas Norvydas, VšĮ Lietuvos energetikos agentūra
12:10-13:00	Diskusijos, diskusijų apibendrinimas	Romualdas Škėma, Lietuvos energetikos institutas
13:00	Pietūs	

Proceedings

10:00-10:10 | Welcome | Romualdas Skema, Lithuanian Energy Institute

Romualdas Skema welcomed all participants of the peer-learning workshop. **The aims of the workshop were to present and to discuss the main issues related to energy efficiency policy implementation and its evaluation practice in Lithuania and other countries, apply and discuss outcomes of the EPATEE project (especially the results of WP3 and WP4) and building the capacity of national policymakers and experts/evaluators.**

R. Skema invited all participants for active participation and discussions on the topics of interest.

10:10-10:40 | Evaluation into Practice to Achieve Targets for Energy Efficiency (EPATEE project) | Romualdas Skema, Lithuanian Energy Institute

Romualdas Skema presented EPATEE project. The main project idea is to assess and compare needs, expectations and existing energy efficiency policy evaluation practices. The main project objectives are to create the favourable conditions for improving the number and effective use of ex-post impact evaluation of energy efficiency policies.

Results of the interviews with the main stakeholders in Lithuania and data provided in the case studies were presented. The case study “Renovation Programme with EU funding from Lithuania” was presented in more detail. The aim of this programme is to implement energy efficiency measures in Lithuanian multi-apartment blocks during 2005-2020. The case study focuses of the efficiency of this programme.

R. Skema paid special attention to results from WP3 and WP4. The aim of WP3 and WP4 is to review current evaluation practices of energy efficiency policies, to provide practical tools to support stakeholders, experts/evaluators and to facilitate the uptake of good evaluation practices. At present time, the EPATEE Knowledge Base gathers about 180 references (evaluation reports, studies, papers, guidebooks, etc.) about evaluation of energy efficiency policies. Also the online toolbox for good energy efficiency policy evaluation practices was being prepared at the time of the workshop.

R. Skema gave a first insight to the not yet publically available version to the Lithuanian stakeholders. It was suggested to test the Online Toolbox after the workshop and to promote it among other policy makers and experts/evaluators.

10:40-11:10 | Improving Energy Efficiency in Implementation of Directive 2012/27 /EU in Lithuania | Mr. Mindaugas Stonkus, Ministry of Energy of the Republic of Lithuania (Head of Heat and Energy Efficiency Department)

The Ministry of Energy is responsible for the implementation of Energy Efficiency policies in Lithuania.

M. Stonkus presented the main strategical national documents for the implementation of energy efficiency policies in Lithuania:

- Energy Law (2002.05.16 No. IX-884)
- Energy Efficiency Law (2016.11.03 No. XII-2702)
- National Energy Independence Strategy (2018.06.21, No. XIII-1288)
- National Energy Efficiency Action Plan, 2017

The new Lithuanian National Energy Independence Strategy was adopted in 2018 June. The National Energy Independence Strategy (hereinafter referred to as the Strategy) establishes the vision of the Lithuanian energy sector, its implementation principles, strategic directions, objectives and tasks.

Energy efficiency improvement is one of the most important objectives in Lithuania. Energy efficiency is usually evaluated by the primary and final energy intensity, which indicates how much energy costs or went into the production of a specific amount of goods and services in the country (the ratio of the country's energy consumption to its GDP). In 2010-2015, the energy intensity of the country's economy consistently decreased (primary energy – 32%, final energy – 31%), and in 2015 was the smallest among the three Baltic States at 205 kgoe/1000 EUR (in Latvia – 207 kgoe/1000 EUR, Estonia – 358 kgoe/1000 EUR). Lithuania is still behind (by about 70%) the EU average (120 kgoe/1000 EUR).

The greatest potential for energy efficiency improvements based on the economic feasibility of efficiency measures is in the industrial, building and transport sectors. In the industrial sector, energy costs in total production cost remains high and is on average 20% higher than the EU average; therefore, more efficient and modern technologies and also energy management measures are needed to reduce energy costs and increase the competitiveness of enterprises. Multi-apartment residential buildings consume the most amount of heat energy in Lithuania, i.e. 54 % of final heat energy consumption. It is in this area, which accounts for 60% of all buildings by area, the largest potential for saving energy is observed.

In 2010 - 2016, final energy consumption in the transport sector increased by 26.5 % while the sector itself consumes about 38% of the total final energy. It is therefore necessary to increase energy efficiency in this sector and to implement energy efficiency measures related to it. The main objective of the Strategy in improving energy efficiency is to ensure that the intensity of primary and final energy by 2030 is 1.5 times lower than in 2018, and by 2050 it is about 2.4 times lower than in 2018.

In pursuit of the energy efficiency improvement objective, the aim will be to:

- Ensure the implementation of the Directive 2012/27/EU and other Directive's requirements for energy efficiency improvement in Lithuania by 2020 (i. e. total energy savings of 11.67 TWh) and the financing of compliance with these requirements
- By 2030, ensure that primary and final energy intensity is 1.5 times lower in 2030 than in 2018
- By 2050, ensure that primary and final energy intensity is about 2.4 times lower than in 2018

The National Energy Efficiency Action Plans (with the last version adopted in 2017) presents the energy resources and energy efficiency improvement programmes implemented in the country and other measures approved or to be approved for the implementation of the most important requirements of Directive 2012/27/EU, provides data on energy efficiency indicators and their change trends in the country's economic activity sectors and final energy consumption sectors, and an overview of measures implemented state-wide.

The following options are usually part of policy evaluation that is performed in Lithuania:

- Monitoring of the global energy savings and of the resources spent within the policy measure
- Economic assessment of the performance of the policy measure

Typically the following evaluation is implemented for the energy efficiency policies in Lithuania:

- Ex-ante evaluation is performed mainly as some technical evaluation for a specific measures (the last Ex – ante report was prepared in 2018)
- Ex-post evaluation is only performed partly and with a time-shift of two years

Considering effectiveness of policy evaluation in Lithuania:

- Evaluation is in place at least for the most important policies, but it is not sufficiently developed to produce improvements in the analysed measures

In conclusions M. Stonkus pointed out that the results of the EPATEE project will be very useful for Lithuania, especially good practice examples, schemes which are implemented in other countries and legal implementation of existing schemes and practices of their implementation.

11:40-12:10 | Monitoring of Energy Efficiency, Energy Savings Calculation and Verification | Tadas Norvydas, Lithuanian Energy Agency

Tadas Norvydas is Head of Sustainable Energy Development Division of the Lithuanian Energy Agency. This division is responsible for monitoring/verification of implemented energy saving measures and calculation of energy saving on national level. T. Norvydas also actively participated in EPATEE European peer-learning workshops and other project activities.

T. Norvydas presented the strategy, methods and rules for monitoring/verification and energy savings calculation in Lithuania.

The monitoring process involves persons receiving financial support from subsidy programmes, the public authorities or bodies administrating programmes implemented by the public authorities and the Ministry of Energy of the Republic of Lithuania.

The main document - Monitoring Rules (“Rules for monitoring efficient consumption of energy resources and energy”, approved by resolution No 332 of the Government of the Republic on 30 March 2016).

The Monitoring Rules set out the monitoring requirements for buildings, technological processes, installations or transport units covered by energy efficiency improvement measures and receiving financial support from energy efficiency improvement programmes implemented by the public authorities.

Upon completing the implementation of energy efficiency measures, persons receiving financial support from programmes can register the entity’s ambient and proper indicators during the same calendar year and for one calendar year afterwards and then transmit the data collected to the administrator of the respective programme.

Apart from each entity’s proper and ambient indicators, the monitoring of energy resources and energy consumption covers the following: the type and number of measures implemented, energy properties and the amount of investment in specific measures. Relevant programme administrators evaluate individual programme indicators, review the monitoring exercise and make the forecast and file the programme monitoring report on efficient consumption of energy resources and energy for the previous calendar year to the Ministry of Energy.

The national final energy savings are establishing by applying the “bottom-up” approach taking into consideration energy savings of each measure.

Calculation Rules – “Rules for calculating national energy savings”, approved by Order No. 1-320 of the Minister for Energy of the Republic of Lithuania of 05 December 2016.

The Calculation Rules set out the calculation rules for energy resources and energy savings by implementing measures on the national level, energy efficiency indicators used for these calculations and the procedure for calculating them. The provisions of the calculation rules for national energy

savings apply when calculating national energy savings and drawing up energy efficiency action plans in accordance with the requirements of Article 14 of Directive 2006/32/EC.

The “bottom-up” method is used to establish energy savings for each individual measure implemented. Energy savings of individual measures can be evaluated using measurement-based data:

- Directly metering the energy consumption at the entity where the measure is implemented (a specific technological installation, process, a building’s heating system, lighting equipment, etc.)
- Data of energy bills for a specific period submitted by energy companies before and after implementing the measure
- Energy sales data of energy companies collected before and after implementing the measure
- Equipment and devices sales data
- Data of applied research and surveys

The calculations are using data collected by Statistics of Lithuania and other national data.

The presented methodologies were developed using material prepared by the European Commission: Recommendations on Measurement and Verification Methods in the Framework of the Directive 2006/32/EC on Energy End-Use Efficiency and Energy Services.

12:10-13:00 | Wrap-up of workshop | Romualdas Skema, LEI

Romualdas Skema started the discussions on the workshop topics.

Participants of the workshop agree that evaluation of energy efficiency policy is very important for policymakers and implementers. The new Energy Efficiency Law was approved at 03 November 2016. According to the Law, the Ministry of Energy is responsible for the overall implementation of the energy efficiency policy in Lithuania.

Until present time, ex-post energy efficiency evaluation is only performed partly and with a time-shift of two years.

The main barriers to policy evaluation in Lithuania are as follows:

- Lack of reliable data on energy savings
- Partly lack of reliable data on investment costs that benefit from incentives
- Lack of reliable data on side effects such as employment, market development, qualification of operators, etc.
- Insufficient economic resources available for policy evaluation
- Policy evaluation is extended only on some policies in small scale
- Policy evaluation techniques and procedures are not sufficiently developed
- Lack of standardized evaluation procedures
- Lack of widespread effectiveness indicators
- Lack of communication/cooperation among institutional bodies

All workshop participants agree that EPATEE project and its results are very interesting, especially the results of WP3 and WP4. The good practices produced by WP3, the smart online toolbox from WP4,

the case studies and energy saving calculations methods used in other countries will help to develop evaluation practices of energy efficiency in Lithuania.

Romualdas Skema ended the workshop by thanking all speakers and participants for their input.

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