

## ENERGY EFFICIENCY IN LITHUANIA

LITHUANIAN ENERGY AGENCY
Energy efficiency competence centre
Agnietė Melninkaitienė





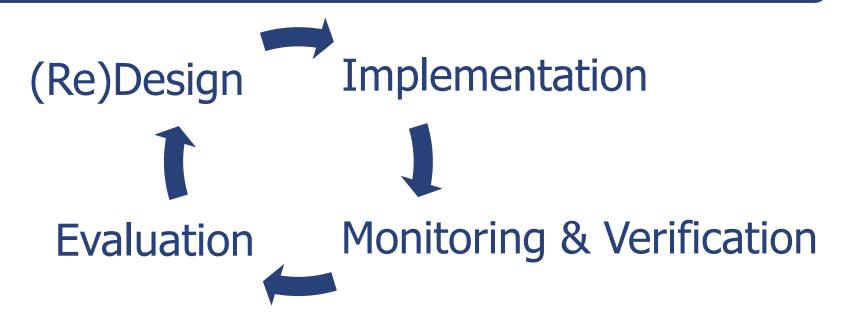
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## ENSMOV, ABOUT ENSMOV Plus



- > Support for the implementation of Article 7 > 8 EED
- > Target groups: public authorities & agencies, stakeholders (energy companies, ESCos, ...)
- > Scope: whole policy cycle



#### 14 partners from 12 countries

8 public authorities, agencies or institutes

















#### 2 national associations of stakeholders





#### 4 research labs or think tanks





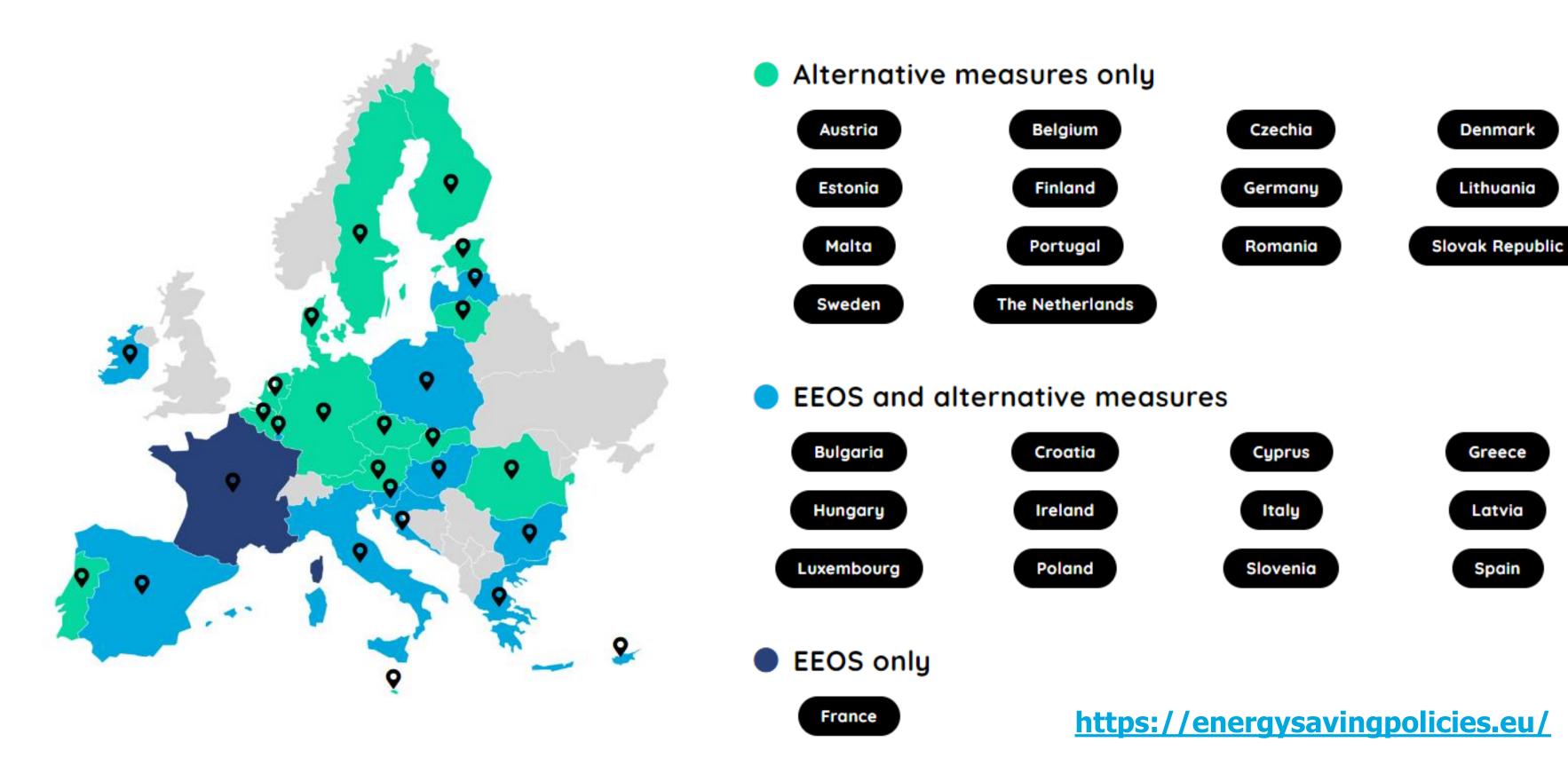






## ENSMOV<sub>PLUS</sub> OBJECTIVES & OUTPUTS







## ABOUT LITHUANIAN ENERGY AGENCY





Analysis and data monitoring



Offshore wind project in the Baltic Sea



**Energy innovation** 



Energy efficiency



Strategic oil reserve management



**Energy security** 



Administration of energy projects



Promotion of Renewables



## ENSMOV, ENERGY EFFICIENCY COMPETENCE CENTRE



Supervision and quality assurance of energy audits

- Attestation of energy auditors
- Administration and quality assessment of auditors' reporting
- Improving the quality of energy consumption audits
- Creation of auxiliary tools for audits preparation

**EE** policy measures monitoring

- National progress report (EE Directive)
- Monitoring and verification of:
  - energy savings agreements
  - measures for end users education and counseling
  - measures for services of public interest

Methodical support for project implementers

- Providing methodological assistance for public buildings' renovation, only in the scope of energy efficiency:
  - Preparation of standard documents for public procurement
  - Preparation of proposals for the integration of efficiency and sustainability measures
  - Monitoring and ex-post analysis of implemented projects
  - Dissemination of good practice

Analysis and research activities

- Compilation of the list of public buildings (central government buildings)
- Data collection, systematization and analysis
- Preparation of analytical works
- Cooperation with international organizations (IEA, EnR)

proposals for the improvement of the legal framework

Preparation of

Projects

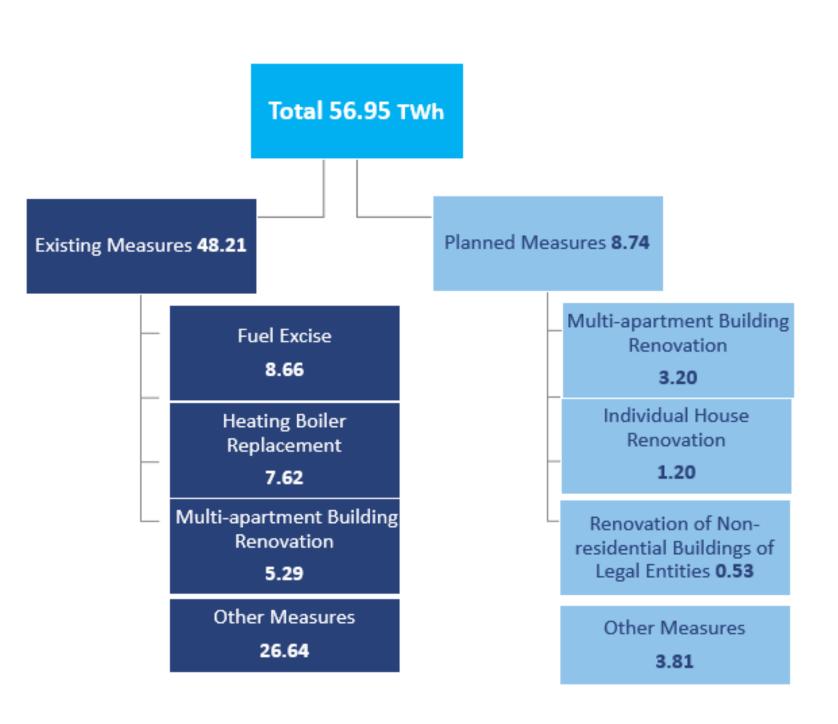
- Participation in international projects financed by LIFE IP, Norwegian financial instruments, EU Technical Assistance **Facility**
- Project initiation (Preparation and submission of project applications)

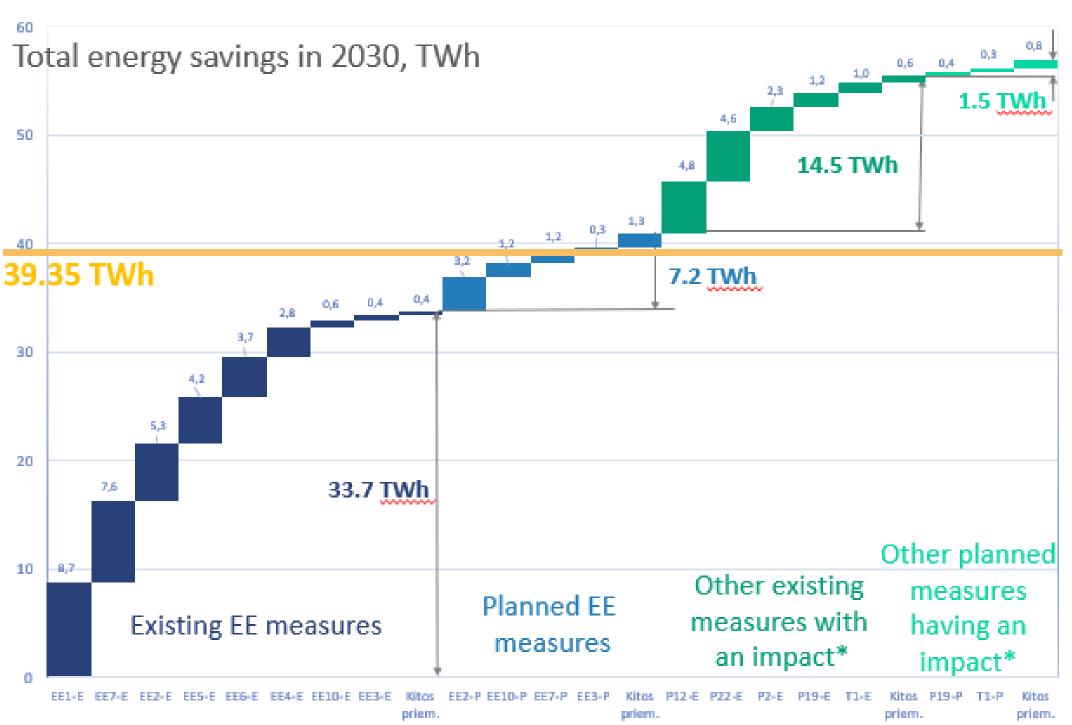


## ENSMOV, ENERGY EFFICIENCY (EE) SECTOR



The target for the total energy saved by 2030 – 39.35 TWh.





Measures in the transport and industrial sectors that impact energy efficiency

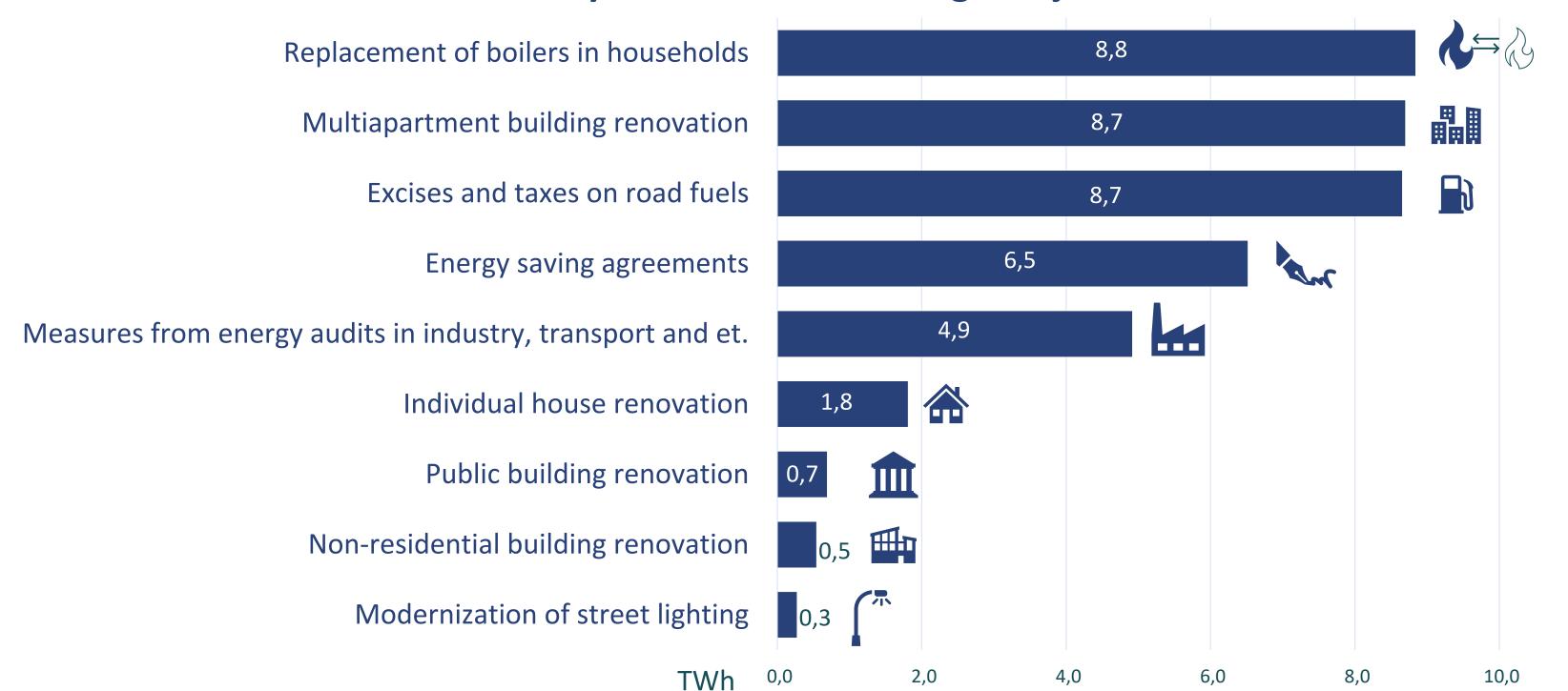


## ENSMOV<sub>PLUS</sub> ENERGY EFFICIENCY POLICY MEASURES



Year	Energy Saving Target, TWh	Energy Saving Achieved, TWh
2021 – 2030	39.35	7.58

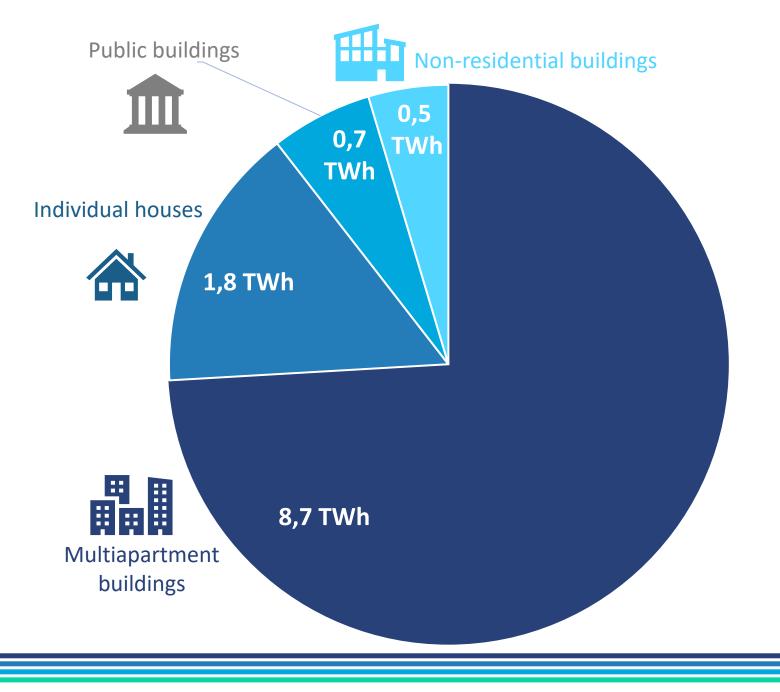
#### **Policy Measures and Savings Projections**







#### **Projected Energy Savings in 2021 – 2030** by Building Renovation: 11,7 TWh





#### Multi-apartment building renovation

Annual target: Renovate >1 000 buildings.



#### **Individual house renovation**

Annual target: Renovate >3 000 individual houses.



#### **Public building renovation**

Annual target: Renovate about **80 000 m<sup>2</sup>** of public buildings area.



#### Non-residential building renovation

Annual target: Renovate about 100 000 m<sup>2</sup> of buildings area.

#### **Good practice:**

- During renovation, the building envelope is insulated, engineering systems are automated or replaced, other efficiency and renewable energy measures (solar panels, heat pumps) are installed. As a result, expenses for energy decrease, CO2 emissions are reduced, and comfort is increased.
- Renovation rates in Lithuania have increased due to the financial support of the structural funds of the European Union.
- Lower-income households were encouraged to agree with Multiapartment building renovation by connecting the renovations to heating bill support.



## DESCRIPTION OF ENERGY SAVINGS AGREEMENTS



#### **Energy Efficiency Obligations**

MANDATORY – State owned energy Transmission and Distribution operators (Litgrid, ESO, Ambergrid)

VOLUNTARY – Other energy suppliers, state and municipal enterprises

INPUT of member: technical and financial contribution in energy efficiency measures

Agreements signed 33

HARD measures to improve energy efficiency

#### **Education and Consulting Agreements**

MANDATORY – All energy suppliers (electricity, heat, gas)

INPUT of member: educational and consulting activities to implement energy efficiency measures



Agreements signed 59

**SOFT** measures to improve energy efficiency

All

Verify ≥ 20 % of measures

Implementation costs
Calculation methods
Energy savings achieved

Evaluation of calculations

Verification of documents

■ Analysis and reporting to Ministry of Energy of the Republic of Lithuania All

Verify ≥ 20 % of measures

Types of measures
Number of affected consumers (by groups)

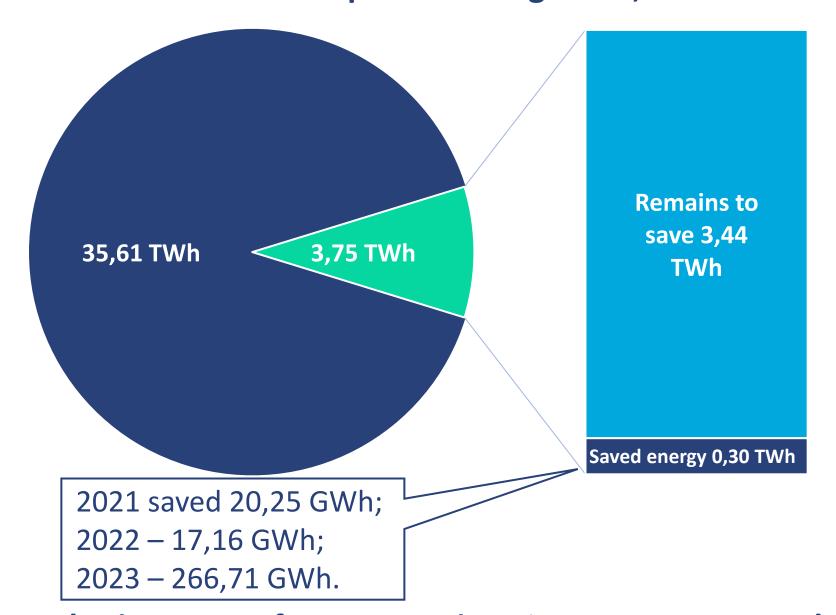
Resulting energy savings



## ENSMOV, IN IMPLEMENTATION OF EEO IS SAVED 8 % AND CO OF ECA IS SAVED 27 % FROM ITS TARGETS

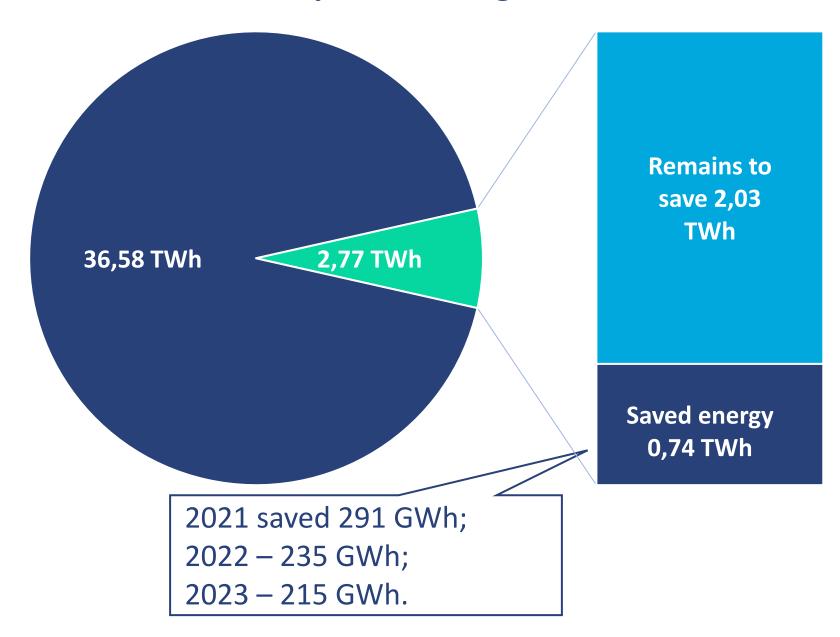


#### 2021–2030 EEO input in EE target is 3,75 TWh



- The increase of energy savings in 2023 was caused by a higher number of enterprises implementing savings agreements (increased 7 times, from 4 to 29 companies).
- Several enterprises exceeded their targets by 2 times (or more).

#### 2021–2030 ECA input in EE target is 2,77 TWh



Energy savings in 2022 and 2023 are similar, as the number of energy suppliers is almost unchanged.



### ENSMOV PLUS PROMOTING ENERGY EFFICIENCY: EMPLOYEE TRAINING & MEDIA ENGAGEMENT



#### **Energy Saving Training for Company Employees**

- Helps staff understand how to use energy efficiently at work.
- Covers practical, visual, and engaging content.

#### **Key topics include:**

- Understanding energy use and reducing waste;
- Energy pricing, fluctuations, and bill breakdown;
- Ways to improve efficiency and reduce costs.

Visit: <a href="https://www.ena.lt/renginiai/">https://www.ena.lt/renginiai/</a> for latest event information

#### Media Engagement & Public Communication

- Goal: Raise public awareness and ensure broad information access.
- **Topics**: energy sector trends, current news and issues, energy efficiency, and more.





### 1st national Meeting: ENSMOV<sub>PLUS</sub> AGREEMENTS WITH COMPANIES AND ENERGY **SUPPLIERS**



- **Interest group:** Ministry of Energy of the Republic of Lithuania - Energy Efficiency Policy Group.
- The purpose of the meeting: LEA has introduced the demand for support of companies having signed new energy-saving agreements.
- The meeting was private and focused on energy-saving agreements (ESS), common challenges, and calculation issues.







### 2nd national Meeting:

ENSMOV<sub>PLUS</sub>

AGREEMENTS WITH COMPANIES AND ENERGY

**SUPPLIERS** 



- Interest group: Ministry of Energy of the Republic of Lithuania - Energy Efficiency Policy Group and Companies having signed new energy-saving agreements.
- The purpose of the meeting: LEA has introduced the procedure of reporting energy savings in detail.
- LEA analyzed company reports and proposed solutions to improve energy calculations, simplify reporting, and justify implemented measures.







#### **3rd national Meeting:** ENSMOV<sub>PLUS</sub> LITHUANIAN HEAT SUPPLIERS JOIN THE ENERGY SAVINGS AGREEMENTS SCHEME



- Interest group: Heat Suppliers preparing to join the agreement scheme.
- The purpose of the meeting: LEA has introduced the procedure of implementing energy savings agreements and selecting energy-saving measures.
- Practical examples were shared to help companies plan their energy efficiency strategies. LEA has developed templates and guidelines for annual reporting and online tools for calculating energy savings.







#### 4rd national Meeting: ENSMOV<sub>PLUS</sub> 4rd national Meeting: IMPLEMENTATION OF EDUCATION AND COUNSELLING MEASURES: PRACTICAL ADVICE AND DISSEMINATION OF GOOD PRACTICES



- Interest group: Lithuanian energy suppliers having signed agreements with the Ministry of Energy.
- The purpose of the meeting: LEA has introduced implementation of education and counselling measures: practical advice and dissemination of good practices
- The meeting was held online format
- LEA experts presented the implementation process, provided guidance on best practices, and shared insights into achieving effective results.





# ENSMOV ENERGY SAVING GUIDELINES: SIMPLE STEPS TO LOWER ENERGY USE





**Objective:** Save energy and reduce costs by optimizing consumption.



**Recommendations categorized** by implementation time, saving potential, investment, and effort:

#### **Key Areas:**







#### **Guidelines for different sectors:**



Households



**Public sector** 



**Service sector** 



**Industrial sector** 



Implementation timeframe (quick, low-effort actions for immediate savings or longer-term improvements for greater impact 6–12 months);



Energy-saving potential (estimated percentage of energy savings from lowest to highest);



**Investment requirements** (from no investment needed to actions requiring significant investment);



Effort level (from low-effort actions to those requiring substantial effort).



## LITHUANIAN ENERGY AGENCY PROVIDES SUBSIDIES FOR:



## ESTABLISHMENT OF PRIVATE CHARGING POINTS FOR ELECTRIC VEHICLES:



BUDGET - 21.25 million EUR

TARGET – 18 910 charging points in households, near multiapartment residential buildings, on poles of lighting networks and in workplaces; IMPLEMENTATION PERIOD: 2022–2026;

APPLICANTS – private and legal persons;

SUPPORTED ACTIVITY: installation of charging points: private persons – up to 22 kW, legal persons – up to 44 kW.

#### **CONSTRUCTION OF SOLAR POWER PLANTS:**

BUDGET – 76.21 million EUR

TARGET – 170.38 MW of additional electricity generation capacity;

IMPLEMENTATION PERIOD: 2023–2026;

APPLICANTS: companies, farmers, renewable energy communities and

citizens' energy communities;

SUPPORTED ACTIVITY: installation of solar power plants up to 500 kW.

#### **TOTAL: 248.65 million EUR**

## REPLACING INEFFICIENT BIOFUEL OR FOSSIL FUEL BOILERS BY MORE EFFICIENT HEAT GENERATION TECHNOLOGIES USING RES:

BUDGET - 120.2 million EUR

TARGET – 20 504 dwellings with more efficient heat generation

technologies, 166.3 MW heat generation from RES;

IMPLEMENTATION PERIOD: 2023–2030;

APPLICANTS: households;

SUPPORTED ACTIVITY: installation of heat pumps or 5th

class biofuel boilers.



## INSTALLATION OF ELECTRICITY STORAGE CAPACITY POWERED BY RES:

BUDGET – 30.99 million EUR

TARGET – 109.3 MWh storage capacity;

IMPLEMENTATION PERIOD: 2023–2026;

APPLICANTS: companies, farmers, renewable energy communities and

citizens' energy communities;

SUPPORTED ACTIVITY: installation of storage facilities

up to 500 kWh.







## Thank you!



#### **Contact:**



**ENSMOV Plus** 



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https://ieecp.org/projects/ensmov-plus/



Our Platform: <a href="https://energysavingpolicies.eu/">https://energysavingpolicies.eu/</a>



Lietuvos Energetikos Agentūra / Lithuanian Energy Agency

https://www.linkedin.com/company/ltena/



http://www.ena.lt



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