

9

Block 2: Management of Energy Plans

Module 2.3. Industry involvement



Katerina Maneva Mitrovikj, Pavel Ruzicka, ENVIROS, Czech Republic

MODULE DESCRIPTION



The module shows the involvement of the industry through different energy efficiency measures and activities



CONTENT



- The EU's objectives and priorities for "Clean Energy for All Europeans"
- Industry and energy planning
- Current practice of industry involvement in project partners countries



THE EU'S OBJECTIVES AND PRIORITIES FOR "CLEAN ENERGY FOR ALL EUROPEANS"



The focus of the European Energy Union is to facilitate the EU clean energy transition and meet the climate and energy targets for the year 2020. Therefore, a package of policy measures and activities is provided by the European Commission following the three main topics:

- putting energy efficiency first
- achieving global leadership in renewable energies
- providing a fair deal for consumers



INDUSTRY AND ENERGY PLANNING



The European Member States are required to achieve their national targets through the development, management and implementation of the Energy Action Plans.

The development and the performance of the Energy Plans is followed by analysis of data to specify the objectives in each sector:

- Industry,
- Transport,
- Buildings (Households),
- Agriculture.

These include participation of all stakeholders, starting from the stakeholders operating with the sectoral energy strategies, responsible to arrange the policy measures and activities, to the end-stakeholders (SMEs, large enterprises industry and technology community).



INDUSTRY IN ENERGY PLANNING



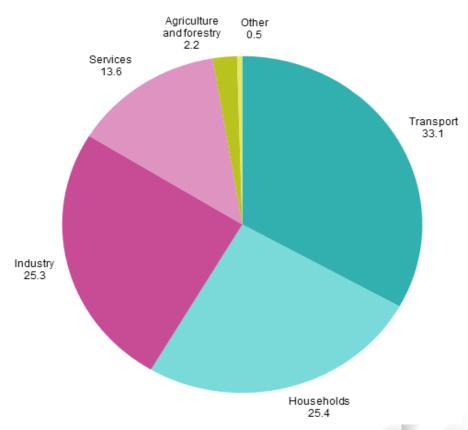
The industry sector is the third largest sector that accounts over 25 % of the total energy consumption in the EU 28, 2015

Great potential in energy saving and reduction of primary energy consumption and GHG emissions



SUPPORT and INCENTIVES are needful for industry sector to invest in energy efficiency and low carbon technology

Final Energy Consumption in EU 28 (2015)



Source: Eurostat, http://ec.europa.eu/eurostat/statistics-explained/index.php/Consumption_of_energy





Partner: Technology Promotion Burgenland Ltd. (TOB), Austria



How is industry addressed in Energy Plans? (e.g. obligations, supporting measures, etc.)

Members of chamber of industry are invited to use the funds for the energy measures according the elaborated guidelines.

How is industry involved into the Energy Plans development? What possibilities do they have to influence conditions and settings of Energy Plans?

While elaborating the regional energy plan all stakeholders were invited to contribute to the topics and the contents of the energy plan for Burgenland. One of the stakeholder was a representative of the regional chamber of commerce for Burgenland. In that sense the regional industry was involved in the process of the EP via the chamber of Commerce.

How is industry involved during implementation of Energy Plans?

Industry is involved by making their energy efficiency measures for setting their Energy production plants by using the funds for specific investments.





Partner: IRENA, Istrian Regional ENergy Agency, Croatia



How private sector/industry is addressed in Energy Plans? (e.g. obligations, supporting measures, etc.)

On the regional and local level the authorities have problem regarding the energy consumption in the industrial sector. Therefore, no specific objectives were set for the industry but the authorities rather focused on the variables they can control, namely the private (only apartment buildings) and public buildings and the companies which are partly or entirely owned by the regional or local authorities.

From this, it is obvious that many, if not the majority, of the energy consumers are not included in the Energy Plans and therefore, the planned measures would provide only a modest percentage of energy savings.

The industry sector is practically left out of the regional and local Energy Plans. However, the authorities recognize the importance of the SMEs so there are budget lines in each authority's budget to support the SMEs. This is however reflected only in their respective yearly budget.





On the national level the Energy Development Strategy and the National Action Plans have dedicated their attention to the industry sector. There is a budget for industry support. Furthermore, the ESI funds (managed by Ministries and The Environmental Protection and Energy Efficiency Fund) are available to industry.

How is private sector/industry (energy producers and consumers) involved into the Energy Plans development? What possibilities do they have to influence development of **Energy Plans?**

Private sector/industry are either part of Croatian Economy Chamber or Croatian Chamber of Trade and Crafts. Through representation of these institutions and other associations, like Croatian Employers Association, the private sector is influencing the policymakers.

How is private sector/industry involved during implementation phase of the Energy Plans?

It is involved through the priority axis of the operational programmes (see the next slides).







Priority axis 4: Supporting the shift towards a low-carbon economy in all sectors (Total ERDF funding: 625,659,781.00 EUR)

- 4b Promoting energy efficiency and renewable energy use in enterprises
 - 4b1 Increasing energy efficiency and use of RES in manufacturing industries
 - 4b2 Increasing energy efficiency and use of RES in private service sector (tourism and trade)
- 4c Supporting energy efficiency, smart energy management and renewable energy use in public infrastructure, including in public buildings, and in the housing sector
 - 4c1 Reduction of energy consumption of the public sector buildings
 - 4c2 Reduction of energy consumption of the residential buildings (multi apartment buildings and family houses)
 - 4c3 Improvement of the efficiency of the district heating system
 - 4c4 Improvement of the efficiency of the public lighting system
- 4d Developing and implementing smart distribution systems that operate at low and medium voltage levels
 - 4d1 Pilot iintroduction of smart grids







Priority axis 6: Environmental Protection and Sustainability of Resources (Total ERDF funding: 338,020,392.00 EUR, CF funding: 1,649,340,216.00 EUR)

- 6c1 Increasing employment and tourist expenditure through enhancing cultural heritage
- 6c2 Increasing attractiveness, educational capacity and sustainable management of natural heritage sites
- 6i Investing in the waste sector to meet the requirements of the Union's environmental acquis and to address needs, identified by the Member States, for investment that goes beyond those requirements
- 6i1 Decreased amount of waste being landfilled

Priority axis 7: Connectivity and Mobility (Total ERDF funding: 1,070,830,307.00 EUR, CF funding: 910,205,755.00 EUR)

7ii - Developing and improving environmentally-friendly (including low-noise) and lowcarbon transport systems, including inland waterways and maritime transport, ports, multimodal links and airport infrastructure, in order to promote sustainable regional and local mobility





Partners:

Network for Energy & Environmental Technology (NEUeV), Germany Fraunhofer Center for International Management and Knowledge Economy (FhG-MOEZ), Germany

How is industry addressed in Energy Plans? (e.g. obligations, supporting measures, etc.)

The Economic Development Office of Leipzig has developed an SME Support Program. Partly aimed at existing companies, the City of Leipzig's SME Support Program is also intended to provide stimulus for business start-ups and expansions. Funding is provided for promising projects in those enterprises lacking sufficient financial resources for their implementation.

How is industry involved into the Energy Plans development and implementation? What possibilities do they have to influence conditions and settings of Energy Plans?

Within the Clusterteam "E-Mobility" and there frequently meetings are relevant actors were involved in the policy development and implementation process. Further there is the "e-Allainz" Leipzig. The "e-Allianz" Leipzig was founded in June 2015 with the aim of bundling common interests to promote electro-mobility in Leipzig. The founders include the BMW AG Leipzig plant, Porsche Leipzig GmbH, Tesla Motors Leipzig, the Leipzig public transport company and the Leipzig municipal utilities.





Partner: South Transdanubian Regional Innovation Agency Nonprofit Ltd. (STRIA), Hungary



How is industry addressed in Energy Plans? (e.g. obligations, supporting measures, etc.)

Optionally. Governmental bodies, so as to provide for the wider spillover of energy efficiency and use of renewable energy based solutions take measures to address SMEs and companies. The same statement could be made in terms of lower territorial level strategies/action plans.

How is industry involved into the Energy Plans development? What possibilities do they have to influence conditions and settings of Energy Plans?

Their needs are taken into account through public consultations or by the communication of their interest protection organizations (be them public or private). These reflect also the most frequent way of influencing conditions by their side.

How is industry involved during implementation of Energy Plans?

There is not yet practical examples available in Hungary.





Partner: Chamber of Commerce of Venice Rovigo, CCIAA Delta-Lagunare, Italy

How is industry addressed in Energy Plans? (e.g. obligations, supporting measures, etc.)



The PERFER (Regional Energy Plan - Renewable Sources, Energy Saving and Energy Efficiency) addresses the industry sector by pointing out the analysis of electric energy consumption, the levels of potential energy conservation and suggestions for energy conservation in the sector. The Plan only highlights these points, but does not provide the targets.

How is industry involved into the Energy Plans development? What possibilities do they have to influence conditions and settings of Energy Plans?

Local potential is strongly intertwined with national strategies. Regarding Veneto Region, any intervention in the industry sector should be oriented to the achievement of three main objectives: businesses' reduction of energy consumption, reduced dependency from energy supply and spreading of an energy efficiency-based culture.

(additional information in part 8 of PERFER)

How is industry involved during implementation of Energy Plans?

The PERFER includes a list of practical interventions (referring to specific machineries usually employed in the industrial sector) industries should implement to reduce energy consumption and to improve machinery performance, so to reach energy efficiency. (additional information in Annex C of PERFER)







Partner: Emilia - Romagna Region (RER), Italy

How is industry addressed in Energy Plans? (e.g. obligations, supporting measures, etc.)

The Regional Energy Plan has a specific section dedicated to the Industry sector with a target of increasing the energy efficiency of Industries of about 4% per year, through:

- a) supporting the shift from fossil sources of energy to electricity, especially in selfproduction from renewable sources;
- supporting to recover and to re-use the thermal losses of industrial production and to co-generation;
- supporting the spreading of energy control and management systems (energy audits, ISO management system, etc.);
- set-up of Financial instrument to optimize the resources rather than the profit of the investments;
- boosting best- practices development concerning the energy saving together with the development of RES also through the adoption of strategies of industrial symbiosis. All the measures/actions reported in the REP are financially supported.







How is industry involved into the Energy Plans development? What possibilities do they have to influence conditions and settings of Energy Plans?

Consultation process.

How is industry involved during implementation of Energy Plans?

Monitoring committee involving main stakeholders including worker's union.





Partner: Regional Development Agency ARLEG SA in Legnica (RDA ARLEG), Poland

How is industry addressed in Energy Plans? (e.g. obligations, supporting measures, etc.)



The strategic documents at regional level indicate actions addressed to industry.

Development Strategy of Lower Silesian Voivodeship 2020

There are eight objectives identified in the Strategy, out of which two are related to SMEs and energy efficiency, including Objective 3. Increase of competitiveness of companies particularly SME and Objective 4. Environment protection, efficient use of resource and adaptation to climate changes and improvement of the safety level.

Regional Innovation Strategy for Lower Silesian Voivodeship for years 2011-2020

Among four objectives there is a Strategic objective 2. "Increased chance for the success of innovative business projects", which is focused on the increase of availability of financing of the innovations though the development and dissemination of financial instruments and products.

Provision of effective support for the enterprises in the form of capital, knowledge and infrastructure within the scope of Lower Silesian Innovation System.

Support of research-development activity within the enterprises.





Energy Development Strategy on the Lower Silesia (2011)



- 1. One of its thesis is to reduce the consumption of primary energy by 20% in the industry through energy-efficient processes in Lower Silesia region.
- The activities addressed to the Business Investors group have been defined. A particularly important task for the investors is to undertake activities aimed at creating conditions for the development of industry in Lower Silesia which would manufacture machinery and equipment for innovative power engineering for domestic and export purposes. This will be done through: training of human resources in the scope of construction and construction of energy equipment; supporting organizational and financial transfer of knowledge and best practice in the field of construction and production technologies of machinery and equipment for innovative power engineering; Involving potential users of these equipment and machines in research and testing of new and improved technological solutions; Launching hybrid training courses, e.g. in mechanical, energy and information technology; programming of research funding for innovative technologies for the production of energy machinery and equipment and for the manufacturers of such equipment; supporting the creation of a cluster of manufacturers of machinery and equipment for innovative power industry in Lower Silesia.





How is industry involved into the Energy Plans development? What possibilities do they have to influence conditions and settings of Energy Plans?



The involvement of industry is ensured by:

- presenting comments and proposals during the so-called public consultation of prepared documents,
- business representatives are part of the steering committees for the drafting of the document concerned.
- participation in seminars, discussion panels and expert panels. Energy companies are responsible for development of energy infrastructure plans as producers of energy and are obliged to prepare for their area of operation development plans for meeting the demand for energy carriers. Municipalities, in turn, are obliged to consult their energy plans with energy producers.
- How is industry involved during implementation of Energy Plans?

Participation of energy producers and/or consumers with a particular focus on activities in the public sector, they are of great importance as investors for municipalities and counties (districts). Energy producers and consumers (including industry) become for example members of energy cluster, the aim of which are activities aimed at energy efficiency, activities related to sustainable development of RES etc. resulting from the implementation of the objectives of the municipality's energy plans.





Partner: Lubelskie Voivodeship (LV), Poland



How is industry addressed in Energy Plans? (e.g. obligations, supporting measures, etc.)

Operational programs are being developed at the regional level. Each of them has appropriate priority axes along with provided support measures for a given sector.

How is industry involved into the Energy Plans development? What possibilities do they have to influence conditions and settings of Energy Plans?

The private sector participates in social consultations. Some of these suggestions are taken into account by the authorities / operators when creating energy plans.

How is industry involved during implementation of Energy Plans?

This is done through organizations that participate in meetings, workshops, etc. (various associations, business clubs, etc.).







Source of information	Link / PDF / Video document
/	/







CROATIA

Source of information	Link / PDF / Video document
/	/







Source of information	Link / PDF / Video document







GERMANY

Source of information	Link / PDF / Video document
/	/







Source of information	Link / PDF / Video document
/	/







Source of information	Link / PDF / Video document
/	/

Emilia Romagna

Source of information	Link / PDF / Video document
National Plan Industry 4.0 (it)	http://www.sviluppoeconomico.gov.it/index.php/it/industria40
Mandatory energy audits for large companies	http://www.efficienzaenergetica.enea.it/per-le-imprese/diagnosi-energetiche
Regional Table of Entrepreneurship	http://www.unciemiliaromagna.net/rappres entanza/presentazione_tavolo_imprenditoria .pdf
Contribution for SME energy audits	http://energia.regione.emilia- romagna.it/bandi/contributi-per-diagnosi- energetiche







Source of information	Link / PDF / Video document
/	/

Lubelskie

Source of information	Link / PDF / Video document
/	/



SOURCE DOCUMENTS



https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union

https://ec.europa.eu/eurostat/statistics-explained/index.php/Consumption_of_energy





Thank you for your attention

