

European Energy Network Report (July 2020-February 2021)

Facts and News – Croatia

Energy Efficiency

The Act for Amending the Energy Efficiency Act, in accordance with the Directive of the European Parliament on Energy Efficiency (2018/2002), amending Directive 2012/27/EU on energy efficiency, is to be rectified by the Croatian Parliament. Main amendments in the Act concern:

- the introduction of new energy efficiency goals until 2030, determining the methods to achieve those goals by combining the Energy Efficiency Obligation Schemes and alternative measures,
- the obligation to plan and report in accordance with the Directive 2018/1999 while acknowledging the energy efficiency principles,
- the obligation to consider energy poverty mitigation while shaping energy efficiency measures,
- the right to clear and transparent information on the calculation and consumption of electricity, natural gas, heat and water.

The Croatian Ministry of Physical Planning, Construction and State Assets has adopted in December 2020 a Long-term Strategy on the Renovation of the National Buildings Fund until 2050, in order to support the renovation of the national fund of residential and non-residential buildings, public and private, and the transformation of the existing buildings fund in a highly energy efficient and decarbonised buildings fund until 2050.

On the basis of 2020 Act Amendments for the Energy Renovation of Family Houses, the National Environmental Protection and Energy Efficiency Fund has issued a new tender on the energy renovation of family houses called "On the House", up to 60 per cent of grant financing. The tenders are focused on a) all citizens, in particular those living in family houses of lower energy class or b) vulnerable groups hit by energy poverty. This is therefore the first time where the reduction of energy poverty has been included as a target of a specific public funding programme.

A new tender has been published at the end of 2020 (deadline: February 2021) for co-financing the increase in energy efficiency and use of renewable energy in manufacturing industry, financed by the European Fund for Regional Development in the amount of 266 million Croatian kuna, or approx. 35.47 million Euro. The ESI funds have also published a tender on the energy renovation of public and multi-residential buildings.



Renewable Energy

The Croatian Energy Market Operator (HROTE), responsible for promoting the electricity production from renewable energy sources, has published a public tender in 2020 on the allocation of market premium and guaranteed purchase price from renewable energy. Seventy-one project developers have had successful bids, seven for market premium and sixty-four for the guaranteed purchase price.

The solar power plant Vis with a power capacity of 3.5 MW, owned and operated by the Croatian Electric Utility Group (HEP), located on the island of Vis, is the first solar plant in the Republic of Croatia that has provisionally accessed the electricity market without previously being a part of the feed-in tariff system, as per July 2020.



Figure 1 Solar power plant Vis, island of Vis, Croatia



Transport

Defined within the National Energy and Climate Action Plan from 2021 to 2030, the 14% share of renewable fuels is now integrated in the proposed Act on Biofuels and Renewable Energy for Transport which is currently in ratification process by the Croatian Parliament. The Ordinance on the Use of Biofuels is currently under development, while at the end of 2021, the National Policy Framework for the Development of Infrastructure for Alternative Fuels should be revised.

The National Environmental Protection and Energy Efficiency Fund is implementing the subvention programme for alternate, more energy efficient vehicles, and a public tender has been organized on the construction of electric and hydrogen filling stations.

Facts and news – EIHP

Energy Institute Hrvoje Požar (EIHP) is currently actively working on 12 projects financed through Horizon 2020 and Interreg programmes. The projects highlighted here are:

REPLACE

The EU Horizon 2020 project REPLACE aims to support the European 2030 and 2050 energy, climate, environmental, economic and societal targets by boosting the phase-out of inefficient and old heating and cooling (HC) systems for renewable systems in the HC sector. Specifically, the project targets consumers, investors/owners as well as intermediaries (installers, chimney sweepers and consultants) and helps them to make well-informed decisions. The project has almost reached the end of its 1st interim period, and so far several activities have been executed, including:

- mandatory meetings with members of Local Working Groups in all regions
- publication of several reports such as D2.1-D2.4., D3.1. and D4.1.
- newsletter dissemination
- by the end of February few more reports are expected to be published on web site (<http://replace-project.eu/>), including the interactive REPLACE Heating Matrices.

EMOBICITY

EMOBICITY (<https://www.interregeurope.eu/emobility/>) aims to strengthen the capacities of all key stakeholders on e-mobility, especially regarding policy making, through workshops, study visits and peer reviews, as well as to raise public awareness by open campaigns and other communication activities. The following enhancements and innovations are examined during the project, to be included in policy instruments:

- Legislative amendments to overcome current obstacles for e-mobility integration
- Improvement of Charging/Taxation Models - Energy price for charging
- Specialized Regional policies for the development of e-mobility
- Promotion of e-mobility in low integration fields
- Integration of incentives in policy instruments to stimulate e-mobility by private users
- Inner city logistics and autonomous driving
- Integration of RES in the energy mix for EV charging

The project is currently in the fourth semester of implementation and in the coming period it is expected to draft action plans to influence national policy instruments.



CELEBio*

The main objective of CELEBio (Central European Leaders of Bioeconomy Network - <https://celebio.eu/>) was to contribute to strengthening bioeconomy-related activities through the elaboration of evidence-based action lists for each of the targeted countries, as well as through the dissemination of information on the opportunities offered by BBI (Bio-based Industries Joint Undertaking). To this end, the CELEBio project team will support the setting-up of a network of BBI info points (BBI Ambassadors). The main goals were:

- Assessment of biomass potential and mapping in Croatia (SWOT analysis)
- Mapping of bioeconomy stakeholders
- Development of National Action Plan for bioeconomy in Croatia

The project was successfully concluded in November 2020.

DANUP-2-GAS

The DanuP-2-Gas main objective is to support diversification of energy sources as well as generation and storage strategies for renewables in the Danube Region by advancing renewable natural gas in regional energy planning. DanuP-2-Gas seeks to elaborate a transnational strategy that includes idle organic residue, river transportation of energy intermediates, a Power to Gas (PtG) approach to reduce strain on the electrical power grid by storage of unused renewable electrical power in the gas grid. Main assignments are:

- Development of biomass and infrastructure analysis in Croatia for creation of Transnational Renewable Energy Atlas
- Pre-feasibility study on transnational infrastructure and biomass assessment
- Cooperation with policy institutions to implement new legislation regarding methanation and hydrogen production

LEAP4SME

Co-ordinated by ENEA, LEAP4SME (<https://leap4sme.eu/> - Linking Energy Audit Policies to enhance and support SMEs towards energy efficiency) aims to support Member States in establishing or improving effective policies for small and medium-sized enterprises (SMEs) to undergo energy audits and implement cost-effective, recommended energy-saving measures through identifying the barriers for unlocking energy efficiency measures, mobilising private stakeholders, and proposing effective solutions to realise both energy and non-energy benefits. The project was launched in September 2020 is currently in the finishing stages of mapping and analysing barriers for energy audits and energy efficiency programmes for SMEs.



BIOEASTsUP

The BIOEASTsUP (<https://bioeast.eu/bioeastsup/>) is a project anchored on BIOEAST bioeconomy in the field of agriculture, aquaculture, and forestry in the Central and Eastern European Countries (CEE) by 2030. In the past decade, Circularity and Sustainability remains at the heart the EU. At the BIOEASTsUP, the consortium brings together different government stakeholders within the 11 CEE countries accenting their respective national governments agendas, the agri-food sector, and support for the national bioeconomic strategies. The project is currently in the middle phase of its development.

PROSPECT2030

The project PROmoting regional Sustainable Policies on Energy and CLimate change mitigation TOwards 2030 (PROSPECT2030 - <https://www.interreg-central.eu/Content.Node/PROSPECT2030.html>) tackles the challenges related to the transition towards a low-carbon economy and the adaptation of climate change mitigation policies that Central European Regions are facing. The main objective of the project is to boost the capacity of involved Regions in mobilising investments addressed to reach 2030 energy objectives at the territorial level in a more efficient way.

The project partners are currently finalising the energy action plans of involved Regions based on the innovative pathway by interconnecting energy planning with economic, financial and technical aspects. Such holistic view toward 2030 for a set of 2-3 key low carbon technologies, identified in each region is supported by the stakeholder consultations. The mutual learning activities where project partners are sharing their know-how regarding energy planning and many other interesting low-carbon topics is about to be finalised. Next task is related to twelve institutions that replied to the call for replications of the PROSPECT2030 methods and recommendations. Project partners will organise workshops for the 8 project regions on the following topics: energy planning and energy transition, energy efficiency in buildings, financing energy efficiency, sustainable transport, renewable energy systems, energy grids and infrastructures and stakeholder engagement and the role of consumers. The first plenary session will take place by the end of February 2021.

RESPONSe

The project aims at empowering local policymakers to enable climate-smart governance approaches and promote sustainable living in Adriatic marine and coastal areas. RESPONSe will provide the tools to foster effective policy-making on climate adaptation at local level and support strategic decision-making on how best to address the effects of climate change on the coastal areas of the Adriatic basin. Building on the development of tailored climate services tackling vulnerabilities of the Adriatic region, RESPONSe will promote the engagement of local policy-makers and help mainstreaming adaptation planning into policy frameworks. The



project is currently finalizing the methodology for Risk and Vulnerability Analysis, along with an RVA for the first pilot project.

ODYSSEE-MURE

This long-lasting project is currently in the phase of writing annual reports and the upgrade of MURE database.

ENSMOV

ENSMOV (ensmov.eu) is supporting public authorities and key stakeholders in 14 Member States represented by its consortium (Austria, Belgium, Bulgaria, Croatia, France, Germany, Greece, Hungary, Italy, Lithuania, Netherlands, Poland, Romania and the UK) – and beyond, addressing all 28 MS and accession countries to monitor, revise, improve and complement the design and implementation of their national energy efficiency policies by developing resources on practical and strategic issues arising from the Article 7 EED. The project is currently submitting its first reporting period and is entering its second phase of analysis of effectiveness of energy efficiency MRV systems and Energy Efficiency Obligation Measures.

LABEL2020

The project (<https://www.label2020.eu/>) focusing on new energy labels for household appliances targets:

- consumers and professional buyers by means of effective information campaigns, services and tools.
- retailers in the correct, efficient and effective implementation of the new label at the point of sale and in online sales channels.
- manufacturers in the provision of correct labelling and product information
- policy makers, multipliers and other stakeholders in the use and promotion of the new label within national programs, initiatives and schemes.

Currently, all the partners are working on media campaign for consumers and retailer education on new energy labels for household appliances. The main challenge is to update the information on energy label rescale where products have different (lower) energy efficiency classes than in the past – the products are not less energy efficient, but the scale has changed. Also, retailers have to change all the old labels in short period.

TIMEPAC

TIMEPAC is a recently green-lit H2020 project, which will contribute to improving existing energy certification processes, moving from a single, static certification to more holistic and dynamic approaches that consider: a) the data generated in the overall energy performance



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certification process, from generation to storage, to analysis and exploitation, and throughout all the building lifecycle, from design, to construction and operation b) buildings as part of a built environment, connected to energy distribution and transport networks and c) buildings as dynamic entities, continuously changing over time. TIMEPAC will demonstrate the feasibility of combining EPC databases with other data sources to make certification more effective and reliable. The new methods and tools to enhance current certification practices will be developed in five Transversal Deployment Scenarios, and validated in four demonstration scenarios across six European countries: Austria, Croatia, Cyprus, Italy, Slovenia and Spain. The outcomes will be used as training materials to further educate professionals involved in certification processes throughout Europe. An online platform will provide access to training materials and courses delivered in a variety of contexts (onsite and online, blended). A TIMEPAC Academy will further develop and exploit the innovative EPC enhancement methods and tools and the training materials developed in the project.

EUB SuperHub

The EUB SuperHub is a recently green-lit H2020 project will support the evolvement of the certification process in the EU by development of a scalable methodology to view, assess and monitor the buildings through their lifecycle (LCA, LCC). The EuB SuperHub one-stop shop will store, geo reference, display and organise the local public databases of EPC (Energy Performance Certificates), local sustainability and SRI (Smart Readiness Indicators) ratings into a common digital E-passport. The passports will be connected to a virtual matchmaking market place, creating the conditions for demand driven market for energy, sustainable and smart building. The project will start in June 2021 and will gather 10 partners from all EU regions.