

LATVIAN RENEWABLE ENERGY POLICY IN THE CONTEXT OF EU INITIATIVES

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Abstract. Energy security and reduction of dependence on energy imports is a key issue on the EU's agenda in the context of today's global challenges. The resource potential of renewable energy expands the capabilities of EU member states to increase energy sustainability and attract additional investments to implement the green transformation of national economies. The EU has adopted a number of initiatives under Directive EU 2018/2001, REPowerEU, which are synchronized with "The European Green Deal". They are aimed at boosting the development of renewable energy. These EU initiatives and the need to increase energy security and sustainability make the development of renewable energy relevant for Latvia. *The subject of the study* is the content and features of Latvia's energy policy. *The purpose* of the scientific research is to study the key trends in the development of Latvia's renewable energy policy in the context of EU initiatives. *Research methodology:* systematic approach, methods of analysis and generalization. One of the key areas of the government's energy policy is the development of renewable energy. This is stated in the National Energy and Climate Plan 2021–2030 and the Sustainable Development Strategy until 2030. Key tasks include synchronising the efforts of the state, business, the public and stakeholders in developing energy security by increasing the use of energy from renewable sources, attracting investment in the energy sector to promote a green economic transformation, energy efficiency and creating a culture of responsible resource consumption. Latvia has identified key areas for the development of renewable energy in line with the content of its energy policy and relevant EU initiatives. Considerable attention is being paid to optimising the regulatory framework. The Green Channel online platform has been created to coordinate the efforts of the government and stakeholders in developing key sectors of the national economy, including renewable energy. The resource of cross-border cooperation is actively used in the implementation of projects for the construction of wind farms for the production of electricity and the necessary infrastructure for its supply to domestic and foreign consumers. The research phases of the Latvian-Estonian offshore wind project ELWIND and the construction of the Kurzeme wind farm with the assistance of the Swedish company Eolus and the German company PNE have been launched. Domestic stakeholders are interested in building solar parks and related infrastructure. Considerable attention is being paid to the digitalisation of the energy sector in order to optimise the management of the energy market and consumer services. *Results of the study:* the priority direction of Latvia's energy policy is the development of renewable energy in the context of increasing the level of energy security of the state and correlation with relevant EU initiatives; the national government promotes the optimisation of the content of the regulatory framework in the field of renewable energy, expands opportunities for cross-border cooperation and involves stakeholders' initiative in project implementation; measures are taken to digitalise the energy sector and create a culture of responsible energy consumption.

Key words: renewable energy, energy security, energy policy, energy market, cross-border cooperation, stakeholders.

JEL Classification: Q28, Q42, Q48, Q54

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1. Introduction

Today's global challenges are intensifying the processes of cooperation to find additional ways to ensure the sustainability of economic development and the security of modern states. The potential of renewable energy resources is seen by the international community as one of the key mechanisms for promoting the development of a green economy, increasing energy security and reducing negative impacts on the environment. In addition, Russia's aggression against Ukraine has raised the issue of energy security for both individual European countries and the EU as a whole.

Renewable energy, green economy and cross-border cooperation are important components of the Baltic Sea Region's energy security strategy under the EU's REPowerEU plan. It aims to increase energy resilience, diversify energy sources and expand opportunities for renewable energy production. The EU is also actively working to achieve its ambitious goals of reducing greenhouse gas emissions and ensuring that 55% of its energy comes from renewable sources by 2030.

In the context of European energy and climate initiatives, Latvia is committed to reducing its dependence on fossil fuels and gradually increasing the use of renewable energy in various sectors of society. The development of the renewable energy sector creates new challenges for the state in terms of updating the regulatory framework, building energy infrastructure, digitalisation of energy and related sectors, raising the level of environmental culture and responsibility of citizens, etc. It can be stated that Latvia has practical experience in responding to these challenges in the field of renewable energy. The purpose of the study is to examine key trends in the development of Latvia's renewable energy policy in the context of EU initiatives. The complexity of the study is to determine the role of renewable energy in Latvia's energy policy in the current political reality. The systematic approach of the study will help to specify the main trends in the development of renewable energy in Latvia in the context of EU energy and climate initiatives. The method of analysis will help to clarify the content of energy policy and the subjectivity of the state in

the development of renewable energy. The use of the generalisation method will make it possible to specify the final results of the study.

2. Basic principles of Latvia's energy policy

The goals of Latvia's energy policy are set out in the National Energy and Climate Plan for 2021–2030 (Latvian Government, 2020). It envisages synchronising the efforts of the state, business, the public and stakeholders in developing a green competitive economy, increasing energy security and strengthening the state's resilience to modern challenges.

According to Latvian officials, the developed energy policy directions will help to stabilise prices on the domestic energy market by increasing the share of national energy production, including from renewable sources, which will help to eliminate energy dependence on Russian energy resources. The investments attracted by the implementation of energy projects will contribute to the sustainable development of the Latvian economy. One of the key objectives of the plan is to increase the use of renewable energy resources in areas such as electricity generation, heating and cooling, and transport. In this context, several key energy policy targets have been formulated that can contribute to increasing the share of renewable energy in final consumption in general (see Table 1).

The data in Table 1 show that Latvia is striving to meet its commitments under the EU energy initiatives to increase the share of renewable energy in final consumption to at least 40%. Given the existing high level of renewable energy production and use in heating and cooling, no further significant growth is planned. At the same time, an indicative target of >60% by 2030 has been set. At the same time, there is an urgent need to increase the share of renewable energy in the functioning of transport, to be achieved through the use of biofuels and biogas.

The Sustainable Development Strategy up to 2030 also pays considerable attention to the prospects for increasing the final consumption of renewable energy, which will contribute to energy security, improve the country's import-export balance and stimulate regional development. Promising areas for renewable energy development include wind and

Table 1

Latvia's national renewable energy targets

| National goals | 2020 | 2022 | 2025 | 2027 | 2030 |
|--|------|------|------|-------|-------|
| Share of renewable energy (RE) in final consumption, % | 40 | 41,8 | 44,3 | 46.5 | 50 |
| Share of RE in energy production, % | 59.8 | - | - | - | >60 |
| Share of RE in heating and cooling, % | 53.4 | 55.2 | 56.8 | 56.69 | 57.59 |
| Share of RE in the functioning of transport, % | 10 | - | - | - | 7 |
| Share of biofuels and biogas in final energy consumption by transport, % | - | 0.2 | 1.0 | - | 3.5 |

Source: (Latvian Government, 2020)

solar power generation and biofuel production (Latvian Parliament, 2010). Renewable energy is seen as a key mechanism for improving energy efficiency and competitiveness of the national economy in the context of EU climate and energy initiatives.

The key aspects of renewable energy development identified by the Latvian Government and Parliament correlate with EU initiatives such as EU Directive 2018/2001 and REPowerEU. The EU Directive 2018/2001 defines the basic principles of renewable energy development as a key objective of the EU energy policy aimed at reducing CO₂ emissions and fulfilling commitments under the Paris Climate Agreement. It is emphasised that the ultimate goal of forming a renewable energy system is to stabilise prices for consumers, as well as to minimise the negative impact on the environment in the context of the transition to a low-carbon economy by 2050 (European Commission, 2018). The EU encourages cross-border cooperation between Member States to develop and implement innovative projects aimed at building the infrastructure and storage facilities necessary for the efficient use of renewable energy.

The invasion of Ukraine by Russian troops and massive attacks on the Ukrainian energy system prompted the EU to adopt the REPowerEU plan (European Commission, 2022), which aims to increase energy resilience, diversify energy sources and expand renewable energy production. This will reduce the EU's need to import Russian energy resources, encourage the gradual transition of industry and transport to energy consumption from renewable sources, and help reduce CO₂ emissions. By 2027, the EU plans to attract €210 billion of investment to achieve its goals. This initiative is synchronised with the EU's ambitious "European Green Deal" plan.

Therefore, according to the existing national regulatory documents, renewable energy is a component of Latvia's energy security. The development of renewable energy is linked to the EU's energy and climate initiatives. The key areas of energy policy are to achieve the set targets for increasing the share of renewable energy in final consumption by maintaining positive dynamics in electricity production, use in heating and cooling, and expanding the possibilities for its use in transport.

3. Key Trends in the Development of Renewable Energy in Latvia

Renewable energy is a priority area for the implementation of Latvia's energy policy. In this context, amendments have been made to the Electricity Market Law to promote the development of renewable energy (Latvian Parliament, 2022).

It regulates the system of settlements between traders and consumers of renewable energy, defines the procedure for the formation of energy communities, their functions in the distribution and sharing of energy, and the exchange of digital data.

The Ministry of Economy and the Investment and Development Agency of Latvia have launched the Green Channel initiative, which aims to expand opportunities for stakeholder participation in the development of key areas of the national economy. In particular, this refers to Smart Energy and Mobility, a key aspect of which is investing in the development of renewable energy (LIAA, 2021). Investment projects should contribute to the intensification of entrepreneurial initiatives, the search for creative ideas and solutions in the field of renewable energy, and an increase in the number of jobs. This will have a positive impact on increasing the competitiveness of the Latvian economy in the face of today's global challenges.

Considerable attention is paid to finding new areas of cross-border cooperation in the implementation of projects aimed at increasing the role of renewable energy in the Baltic Sea region as a whole. As part of the cooperation between Latvia and Estonia, the governmental cross-border offshore wind project ELWIND has been launched in the Baltic Sea (Elwind, 2020). The objective is to build two offshore wind farms to generate renewable electricity, which will contribute to the development of ports in both countries and the transition to the use of renewable energy in public transport (Khorishko, Horlo, Malovana, 2023). This will intensify the fulfilment of Latvia's commitments under the European Green Deal to reduce CO₂ emissions. This project is part of cross-border cooperation in the field of renewable energy, which makes it possible to apply to the European Commission for funding under the Connecting Europe Facility.

Sweden's leading renewable energy company Eolus and Germany's PNE have launched a joint project to build the Kurzeme wind farm off the west coast of Latvia (EOLUS/PNE, 2023). At this stage, studies are underway to estimate the cost of the project, assess the potential environmental impact and explore the prospects for long-term collaboration between the initiatives of various stakeholders in the field of clean energy production. The plant is expected to be operational in 2030 and will generate 4.5 TWh of renewable electricity per year.

The prospects for the construction of wind power plants in the Baltic region are boosting the initiative of internal stakeholders to implement renewable energy projects. The management of the northern port of Ventspils is initiating a long-term development strategy aimed at building the necessary infrastructure within the port area, as well

as a service centre for offshore wind farms already operating in the region or to be built in the future. The port is currently actively seeking investors. Given its geographical location and climatic conditions, the port area is promising for the implementation of projects to build solar parks for electricity generation and infrastructure for its export to consumers. In this context, a number of agreements have been signed for the construction of these parks in the port's industrial zone (LIAA, 2023).

At the same time, according to T. Naburgs, head of the Latvian Wind Energy Association, the effectiveness of the country's wind energy development depends on further action by government officials to take an integrated approach to the development of the wind energy sector (Eng.LSM.lv, Zalamane, 2021). This means improving the relevant regulatory framework, developing mechanisms for resolving problematic issues of interaction between stakeholders and local municipalities at all stages of infrastructure construction.

Investor interest in the construction of solar power generation parks is growing. The investment company Merito Partners (Merito) has expressed a desire to invest €50 million in the construction of 10 solar power plants in different regions of Latvia. This will enable the production of around 70,000 MWh of electricity per year, enough to meet the needs of more than 35,000 households. To implement the initiative, the Merito Sustainable Energy FUND I was established, which has accumulated approximately €20 million. Consultations with national and regional stakeholders are underway to attract additional investment (LIAA, 2023).

Digitalisation processes expand the possibilities of modern states to optimise the functioning of the energy sector in the context of creating a single energy data space. The Latvian Environmental Investment Fund is an active participant in the European Commission's Enershare project, funded with €8 million (LEIF, 2022). Its ultimate goal is the digitalisation of the energy and related sectors, with the aim of providing stakeholders with access to a significant range of energy data, algorithms for interacting on its use, and making the process of forming the cost of energy services manageable. Particular attention will be paid to optimising the provision of energy services, taking into account the amount of energy from renewable sources, sharing data on its surplus and redistributing it to meet the needs of vulnerable groups.

An important area in promoting the development of renewable energy is the involvement of public initiative, the promotion of a high level of environmental culture and responsibility among Latvian citizens. In this context, the Latvian Environmental Investment Fund and the Physical Energy Institute, with the

support of government officials, are involved in the implementation of the EU Horizon2020 project "Community Energy for the uptake of renewables in the electricity sector. Linking long-term visions with short-term actions" (COME RES, 2020; LEIF, 2020). The total budget of the project is around €3 million.

Its aim is to create a platform for interaction and communication between different public groups on the development trends and prospects of renewable energy in the context of ensuring sustainable development of the country as a whole. The main tasks include developing practical recommendations for the government to optimise the functioning of the renewable energy sector, taking into account the experiences of municipalities and communities, analysing the experiences of foreign partners, and intensifying the involvement of COME RES members in the implementation of effective business models or practices for the production and consumption of energy from renewable sources. The project will also include cultural and educational events, round tables and discussions aimed at raising public awareness of the benefits and prospects of renewable energy development in the context of energy security and sustainable development in Latvia.

The development of renewable energy is therefore one of the most important areas of the country's energy policy. This is evidenced by the synchronised efforts of key authorities to introduce relevant changes in national legislation, launch public initiatives, establish cooperation with stakeholders and cross-border cooperation in the implementation of renewable energy projects in the context of EU initiatives.

4. Conclusions

The development of renewable energy in Latvia is a key area of the national energy policy aimed at reducing dependence on energy imports and increasing the final consumption of renewable energy in various sectors of society. The implementation of renewable energy projects will facilitate the introduction of green technologies and attract significant investments in the development of the national economy.

The key aspects of Latvia's renewable energy policy are: improving the regulatory framework and developing mechanisms to resolve problematic issues of stakeholder interaction in the energy market; developing cross-border cooperation and expanding opportunities to use the resource potential of renewable energy to ensure energy security in the Baltic Sea region as a whole; further digitalisation of the energy sector to optimise energy data management processes; creation of online platforms to synchronise the efforts of stakeholders and the government in the implementation of renewable energy projects; involvement of public initiatives to raise the level of environmental culture and responsibility of citizens in general.

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Received on: 12th of March, 2023

Accepted on: 22th of April, 2023

Published on: 23th of May, 2023