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ORIGINAL ARTICLE

Role of European Green Deal as a transformation mechanism of the state policies for the European integration of Ukraine

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The authors note that the EU sets an intermediate goal: to reduce greenhouse gas emissions by 50-55% compared to the 1990 level. The European Green Deal (EGD) covers all sectors of the economy, particularly transport, energy, agriculture, construction, and industries such as steel, cement, information and communication technologies, textiles, and chemicals. The authors underlined the pandemic and response to COVID-19 in 2020 made adjustments only to the pace of implementation of the EGD. The authors clarify that the aim of the EU and, accordingly, Ukrainian transport policy is to promote more ecological vehicles. The European Green Course (EGC) covers several areas of sector reform of transport policy: changing mobility flows; shifting to cleaner modes of transport; increased requirements for standards in the transport sector; development of transport infrastructure; promotion of smart management in the transport sector digitalization.

Keywords: European green deal, Transport sector, European integration, transport policy, European green course.

Introduction

The European Green Course (EGC) is the European Commission's program of action, centered on an ambitious plan to move to a climate-neutral Europe until 2050. This is the EU's response to the global problems of climate change, pollution, loss of biodiversity, and the request of European citizens to include climate challenges in the EU political agenda. The course is enshrined in the Communiqué "European Green Course" on December 11, 2019, and is based, on the one hand, on existing policies and legislation in the areas of the EGC, on the other hand, new strategies, plans, legislation should be developed for its implementation, mainly in 2020-2021. The main areas of EGC are climate, energy, transport, industrial policy, zero pollution, trade, biodiversity, agriculture, waste. The pandemic and response to COVID-19 in 2020 made adjustments to the implementation of the EGC. Moreover, the European Commission has repeatedly underlined that economic recovery should be aimed at a more resilient, green, and digital Europe, solutions beneficial not only for the economy but also for the environment. Through Green Course diplomacy, which is an essential element of the global dimension of the EGC, the EU also influences the formation of new priorities within the EPs. The Eastern Partnership is a joint program initiative aimed at deepening and strengthening EU relations with six eastern neighbors: Armenia, Azerbaijan, Belarus, Georgia, Moldova, and Ukraine.

Civil society has always been the engine of progressive change in Eastern Partnership countries, including environmental and climate issues. At this stage, non-governmental organizations have a unique opportunity. The EP period in the format of achieving 20 key tasks for the period until 2020 has finished. It is expected that the new phase of the partnership will better reflect environmental and climate priorities and will be closely linked to the implementation of the EGC objectives for EP. New long-term goals of EP were consolidated at the Summit of EP in March 2021. The EP States Parties have different levels of cooperation with the European Union, different depth of integration, and approximation of national legislation to EU policies and legislation. Nevertheless, the EGC influences Georgia, Moldova, and Ukraine in the context of the implementation of association Deals and all six EP countries regarding changing terms of trade, formulating and achieving climate goals. In most EP countries, there is still no response at the government level to the challenges and opportunities of the EGC for regional cooperation and bilateral relations, which means they need to analyze the EGC, its possible impact in countries.

Methods

The subject of the research is the impact of the European Green Deal on environmental policy and transport policy. Such a research subject requires an analysis of several phenomena in their relationship: the European Green Course, the Eastern Partnership, regional and bilateral cooperation between the EU and EP countries, the environmental and transport policies of these countries.

Therefore, for this research, the authors raised the following questions: what are the main factors and mechanism of the impact of the EGC; which environmental and transport policy areas of EP countries will be significantly affected by the EGC; what are the differences between EP countries and how can they influence the role of the EGC in their environmental policies; what emphasis can the EU place in cooperation with different EP countries to achieve the objectives of the EGC.

Based on the possibilities of the current research, the primary method was the so-called "desk analysis," that is, an expert and analytical analysis of existing sources of information regarding those phenomena that make up the subject of the research.

All sources used for this research are publicly available. Such sources included official documents, analyses, and the results of previous studies on issues of interest. Desk analysis was carried out using the method of expert assessments. To verify the results, several consultations were held with experts from the EP countries.

Results and Discussion

The European Commission's European Green Deal aims to make the EU climate neutral by 2050. This program package covers many different sectors, including energy, construction, biodiversity, and transport.

Representatives of the International Renewable Energy Agency, the European Commission, the State Agency for Energy Efficiency and Energy Conservation of Ukraine, the energy regulator E-Control (Austria), and the research institute EURAC Research (Italy) expressed their views and positions on the consequences and challenges posed by the European Green Deal to Ukraine and EU member states, as well as on the economic benefits of renewable energy (Pye et al., 2008; Hodne, 2020).

Twinning project "Development of renewable energy sources in Ukraine" was implemented by the Austrian energy regulator E-Control, the Austrian Energy Agency, the Austrian Environmental Agency, the former Austrian Ministry of Sustainable Development and Tourism, and the Italian institute EURAC Research in collaboration with SAEE. The project lasted 1.5 years and had a budget of 1 million euros.

It includes stimulating green growth across the Bloc, creating a clean "circular" economy, drastically reducing greenhouse gas emissions, and "pushing" other countries to take more decisive action on climate change.

The European Green Deal covers all sectors of the economy, particularly transport, energy, agriculture, construction, and industries such as steel, cement, information and communication technologies, textiles, and chemicals.

The EU sets an intermediate goal: to reduce greenhouse gas emissions by 50-55% of the 1990 level. By the summer of 2020, the Commission had to submit an action plan (Shanahan et al., 2019; Miccinilli, 2020).

Under the Green Deal, the European Commission also planned to propose the world's first carbon border tariffs to fine carbon-intensive imports and protect European enterprises that must pay for EU carbon emissions. The Commission explains: "While many international partners do not share the same goals as the EU, there is a risk of "carbon leakage, "either because production is transferred from the EU to other countries with less ambition to reduce emissions, or because more carbon-intensive imports replace products from the EU. If this risk materializes, there will be no reduction in global emissions, and this will undermine the efforts of the EU and its industry to achieve the global climate goals of the Paris Deal" (Miccinilli, 2020; Siddi, 2020).

However, such a measure may be difficult to implement or ineffective for the following reasons:

1) It is difficult to calculate the "carbon content" of products produced abroad;

2) The Introduction of additional fees will lead to an increase in prices for imported products, which will be unpopular with voters and potentially lead to an increase in inflation;

3) Import tariffs tend to lead to trade wars that destabilize the world economy.

The European Electricity Association 'Eurelectric' supported the Green Deal, stressing that the industry is ready to supply the economy with exclusively carbon-neutral electricity by 2050 "and make a key contribution to the decarbonization of transport, buildings, and industry through electrification. The European Green Deal is still a project. It must be approved by the European Parliament and Member States (Council of Europe).

If the future decision of the Parliament is unlikely to raise questions, then passing the Council of Europe will be more difficult. The European Environment Agency warns that the EU will not be easy to achieve even the current 2030 emission reduction targets, and there is no guarantee that all member states are interested in even more radical actions. The coalition of mostly Western European countries generally supports the Commission's plans. However, coal-dependent economies such as Poland and the Czech Republic have repeatedly resisted calls for more ambitious emission reduction targets, fearing it would hurt their economies. The UK actively supports more ambitious goals but could formally leave the Bloc within a few weeks (Bloomfield, 2016; Hodne, 2020).

The main direction of world energy development became apparent many years ago. This is the decarbonization and development of renewable energy, which will lead to the gradual displacement of hydrocarbons. In this regard, the new Green Deal only further confirms what we have been talking about for many years, recalls that the green economy is not a temporary fashion. It indicates that the energy transition can go fast, faster than expected, and many researchers predict. The rate at which hydrocarbon consumption may decline has been estimated in numerous studies. If plans are implemented to reduce greenhouse gas emissions to climate neutral, the use of oil and gas for energy purposes in the EU can be reduced to extremely low or almost zero value by 2050. At the same time, it should be noted that researchers, as a rule, attribute the bulk of the reductions to the 40s of our century (Dimas, 2007; Miccinilli, 2020).

As for any new "specific" risks arising from this Deal, we can see only the proposed introduction of "carbon" customs tariffs. The likelihood of their introduction into practice is still difficult to assess, but it was evident that the possibility of using such tools will be more actively probed.

On the other hand, the energy transition expands the markets of other commodities, metals, and the relevant sectors of the Ukrainian economy can take advantage of new opportunities. However, the volume of potential new revenues will not offset the decline in revenues from hydrocarbon exports.

The effective response to the challenges of European (and global) decarbonization is the systematic development of non-resource sectors of the economy, the expansion of the domestic market, the development of the transport industry. Including in the "new energy" and its engineering, a more active "expansive" policy should be pursued.

The benefits of the European Green Deal for the Ukrainian state transport policy will be the following:

- A so-called fair transition mechanism (worth 100 billion euros) designed to help countries still heavily dependent on fossil fuels and carbon-intensive processes switch to renewable energy;
- Proposals to reduce greenhouse gas emissions to 50% of 1990 levels or even lower by 2030 – instead of the current target of 40%;
- Adoption of a law that will spell out the EU's achievement of "climate neutrality" by 2050;
- Waste Promotion Plan and Farm-to-Fork Strategy aimed at improving the sustainability of food production and distribution.

At first, it was announced the allocation of 3.2 billion euros from the state budgets of seven EU member states (Germany, France, Italy, Poland, Belgium, Sweden. and Finland) for the first such private-state project, the leading members of which are the 17 largest industrial and automotive companies in Europe (including BASF SE, BMW AG, and Fortum Oyj). EU approval (and allocation of budget amounts similar in scale) for the second, Franco-German, project, jointly coordinated by PSA-Opel and the famous French battery manufacturer SAFT (since 2016 it has been part of the Total group), according to European Commission Deputy Chairman Maros Shefchovich, should be received no later than the end of December 2019 (Dimas, 2007; Miccinilli, 2020).

At the same time, there is "the window of competitive opportunities for the European battery industry.

According to conservative estimates of the European Commission itself, presented in The European Green Deal project, additional investments of at least 260 billion euros per year will be required to achieve the climate and energy targets set for 2030 (the equivalent of 1.5% of the EU's total GDP in 2018).

Moreover, from 2030 to 2050, the average annual total investment of EU countries in environmental modernization of energy systems and transport infrastructure can more than double; some media call 575 billion euros.

However, the preliminary road map of the European Commission has so far outlined only the most common mechanisms and tools designed to ensure the financial filling of many planned "green" subprojects and programs (Rosenbloom, Markard, Geels & Fuenfschilling, 2019; Hodne, 2020).

So, it mentions the possible allocation of about 100 billion euros from the pan-European budget to create a special Just Transition Fund - a fund to support countries and regions "most sensitive" to environmental transformation (including Poland and some other Central and Eastern European countries already mentioned). It is told about the active search of new sources of income (for example, due to new taxes on the plastic waste which is not giving in to utilization), about significant growth in "green" project financing from the European Investment Bank (the share of "climate-oriented" projects in its budget should grow from the current 25 to 50% up to 2025). It is also noted that the private sector should become the most critical catalyst for the overall process (that is, an equal co-investor in environmental transformation). By March 2020, the European Commission submitted the first European Law on climate change (Climate Law or Climate Pact), in which the general purpose of ensuring "climatic neutrality" of Europe by 2050 is legislatively enshrined. Furthermore, by the summer of 2020, Brussels expects to approve a plan to increase the EU's greenhouse gas emission reduction targets by at least 50% by 2030 ("possibly even 55%") compared to the 1990 baseline (according to the European Commission estimates, from 1990 to 2018, EU countries managed to achieve a 23% reduction in emissions) (Toleikyte et al., 2016; Miccinilli, 2020).

One of the primary measures of the European Green Deal will be the movement of 75% of freight traffic in the EU from road to rail, which will help to reduce greenhouse gas emissions by 90% by 2050. The rail segment in Europe already has many advantages. For example, railways cover their variable costs very well and have a higher electrification degree than other developed countries. Four out of five trains in Europe are powered by renewable energy.

However, the movement of goods towards rail transport will require significant investment in infrastructure, as European rail systems are now more people-oriented than freight. When comparing European and American railways, the differences are striking: in the American railway industry, structural changes have occurred in recent years, which have led to an increase in the length of trains and an increase in the load on the axis.

The length of the average freight train in the United States is about 2,000 meters, and the length of longer ones is more than 6,000 meters. In Europe, the length of trains is limited to 750 meters. This is primarily due to the difference in the purpose of trains: the European railway system is aimed at transporting people, not goods. Longer trains are undesirable since it will be more difficult for trains to slow down quickly, which must be considered in trains carrying people (Pye et al., 2008; Hodne, 2020).

The European Green Deal could be the starting point for Europe's transition from road to rail freight, but it is essential to look at the industry's challenges. EU reforms should be accompanied by strategic investments in the sector, which, if implemented, can lead to a significant reduction in emissions from the transport sector. The changes will affect the EU and Ukraine and plan to take an active part in developing and implementing the new Green Deal.

Together with business representatives, the Cabinet of Ministers of Ukraine, the public, and experts have developed preliminary proposals for creating a joint road map with the EU on Ukraine's participation in the European Green Deal. This will strengthen cooperation with the EU within the existing framework and begin work with new green and climate finance mechanisms for Ukraine (Shanahan et al., 2019; Miccinilli, 2020). The priority areas for Ukraine under the European Green Deal include, among other things:
- improving the energy efficiency of the economy, the development of renewable and hydrogen energy;
- fair transformation of the coal industry;
- development of a national system of trading in greenhouse gas emissions;
- development of sustainable agriculture;
- digitalization of the economy;
- greening of transport;
- scientific cooperation.

At the same time, new regulations resulting from new European policies should not create obstacles to the integration of Ukrainian producers into the EU industrial chains; trade should develop following general obligations under the Association Deal and the World Trade Organization.

Ukraine should also participate in consultations on carbon and technical regulation to not create barriers to trade for Ukrainian businesses.

Moreover, since achieving the ambitious objectives of the European Green Deal on a climate-neutral European continent involves minimizing the use of fossil fuels, which requires the joint efforts of different countries, financing should also take place on a reciprocal basis.

In this regard, Ukraine intends to sign a memorandum on a new energy partnership, providing for developing hydrogen technologies in Ukraine.

Ukraine is ready to offer Germany the specific pilot projects to produce green hydrogen with a capacity of 100 MW for subsequent export.

Conclusions

Detailed objectives and plans for cooperation on EGC issues are currently being developed and are the subject of negotiations between the European Commission and the Governments of EU countries. Much will depend on the ambition and perseverance of the latter. Therefore, it is to revitalize the interested expert society, hold national discussions and formulate country priorities, and mobilize responsible officials and diplomats for appropriate communication with the EU. Civil society in the region, for its part, should require a precise formulation of commitments, as well as the establishment of a mechanism for effective monitoring of the implementation of the green goals of the EP, involving the participation of civil society. The creation of a new EP framework in the context of the EGC requires the involvement of all stakeholders; therefore, the recommendations made based on the conclusions of this analytical document concern both the States parties to the EGC, the European side, civil society, and business.

The current activity of Ukraine concerning the EGC (discussion of its participation in the EGC in the format of a high dialogue between Ukraine and the EU, the creation of an appropriate interdepartmental group led by the Prime Minister, the development of a position document) reflects Ukraine's desire to build unique relations with the EU actively, and not be a subject of regional EU policy, responding to the vision proposed by the European Commission for the development of cooperation. Of course, the prospects of attracting large-scale financing to modernize the country's economy and increase its competitiveness are a primary incentive for the Ukrainian leadership.

However, in the EGC, Ukraine also sees an opportunity to change its perception in Brussels from a state that is trying to catch up with EU countries in the development and with difficulties implements the norms of European law, while remaining one step, or even more, behind, on a reliable and equal partner who shoulder to shoulder and in real-time fights with common challenges with the EU. In this sense, successful participation in the EGC can be a springboard for Ukraine (and Georgia and possibly Moldova) to review relations with the EU and obtain the long-awaited prospect of membership.

So, the aim of the EU and, accordingly, Ukrainian transport policy is to promote more ecological vehicles. The main goal of transforming mobility is to reduce greenhouse gas emissions from transport by 90%. The EGC envisages several areas of sector reform. In particular, it is assumed:

- Changing mobility flows;
- Shifting to cleaner modes of transport;
- Revision of pricing policies (including subsidies and benefits), taking into account the environmental impact of transport;
- Increased requirements for standards in the transport sector;
- Development of transport infrastructure, taking into account the subsequent increase in the use of cleaner modes of transport;
- Promotion of smart management in the transport sector and its digitalization.

To increase transport by sustainable modes, 75% of domestic transport carried out by cars is provided for transfer to railway and inland water transport. A set of measures to implement the provisions of the EGC on cleaner, affordable, healthy transport and smart mobility will be defined by the Sustainable and Smart Mobility Strategy, which was scheduled for adoption in 2020.

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