

Policy paper

EUROPEAN GREEN DEAL: OPPORTUNITIES AND THREATS TO UKRAINE

August 2020

The policy paper explores the goal, main objectives, and key components of the European Green Deal as an agenda of the European Commission to transit to climate neutral Europe by 2050. The document analyzes each component of the European Green Deal (climate change, energy, transport, industrial strategy, agriculture, zero pollution, biodiversity, finance, trade) in terms of opportunities and threats to Ukraine. The policy paper includes recommendations for stakeholders in Ukraine and the EU as regards the European Green Deal and Ukraine.

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The policy paper was prepared within the implementation of the project "European Green Deal: Opportunities and Threats to Ukraine" by the Resource and Analysis Center "Society and Environment" in cooperation with the Institute for Economic Research and Policy Consulting, and DiXi Group.

The policy paper was prepared with the financial support of the International Renaissance Foundation as part of the grant project "European Green Deal: Opportunities and Threats to Ukraine." The translation into English was provided with support of the EU funded project EU4USociety. The contents of this publication are the sole responsibility of the authors and do not necessarily reflect the views of the European Union and the International Renaissance Foundation.

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INTERNATIONAL
RENAISSANCE
FOUNDATION



Resource and Analysis Center
"SOCIETY AND ENVIRONMENT"



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SUMMARY

The goal of the policy paper “European Green Deal: Opportunities and Threats to Ukraine” is the analysis of key objectives and key components of EGD (climate change, energy, transport, industrial strategy, agriculture, zero pollution, biodiversity, finance, trade) in terms of opportunities and threats to Ukraine.

The policy paper was prepared with the financial support from the International Renaissance Foundation as part of the project “European Green Deal: Opportunities and Threats to Ukraine.” The study was carried out by the experts from the Resource and Analysis Center “Society and Environment” (Andriy Andrusevych, Nataliya Andrusevych, Zoriana Kozak), the Institute for Economic Research and Policy Consulting (Vitaliy Kravchuk, Veronika Movchan), DiXi Group (Anastasiya Synytsia), Information Center “Green Dossier” (Kateryna Shor), Oleksii Khabatiuk (independent expert).

The European Green Deal is an EU action plan focusing on an ambitious goal to move to climate-neutral Europe by 2050. The Government of Ukraine declared its intention to join the EGD. The government’s aspirations are important in terms of the need to build public policy in Ukraine that would consider today’s environmental and climate challenges. At the same time, the entire range of EGD consequences for Ukraine shall be taken into account, in terms of opportunities and threats it generates for us.

MAIN CONCLUSIONS of the paper are based on the study of all structural elements of the EGD, in terms of how these issues are addressed in the EU, with account for the state of play in this area in Ukraine, and the analysis of possible opportunities and threats:

CONCLUSION 1: Climate change is a top priority for the EU. For Ukraine, it implies the need to clearly articulate the climate policy, such as the ambitious climate goals within the commitments under the Paris Agreement, the relevant energy strategy, and integration of climate change into all sectoral policies. Opportunities stemming from the EGD are hidden in the low current energy efficiency and high carbon intensity of Ukraine’s economy caused by high depreciation of fixed assets, and by the big share of fossil fuels in the energy balance. Provided an efficient international and/or bilateral mechanism is established, in particular under the EGD, it would allow to raise large volumes of ‘green’ funding. It is evident that the new non-tariff barriers to trade are going to be ‘climate’-related, while the climate-friendly areas are going to have the barriers reduced (such as in RES).

CONCLUSION 2: The EGD implementation creates for Ukraine several strategic opportunities for growth. Adopting the industrial visa-free regime will facilitate the integration of Ukrainian businesses into the EU new industrial processes. Expected restrictions related to the ‘environmental-friendly’ goods and services placed in the EU market may create new niches for Ukrainian producers by phasing out import to the EU from other countries. In agriculture, it may be about the enhancement of organic production, in energy industry it is about the cooperation on hydrogen energy, in finance – it is about the active access to the EU market of public procurements, and access to the EU financial and technical support instruments.

In nature protection – it is about the integration of nature reserves in Ukraine into the NATURA 2000 network, through the creation of special financial instruments.

CONCLUSION 3: A separate group of new opportunities for Ukraine is geopolitical. Since the key EGD objective is a climate-neutral Europe, Ukraine's engagement in the process of achieving it is a necessary precondition. A climate-neutral Europe creates a conceptual and values basis for cooperation in foreign policy, such as within the Eastern Partnership format, deepening the EU association process, the Paris Agreement, environmental conventions, the Energy Community, Ukraine-EU Memorandum of Understanding on a Strategic Energy Partnership.

CONCLUSION 4: 'Homework' is a key to opportunities and a threat mitigation tool. Efficient use of opportunities is closely linked to the current state and the readiness of Ukraine to accept transformations in a certain area. Efficient domestic reform in the areas related to EU integration and climate change is the precondition to seize the opportunities and reduce the probability or impact of threats posed by the EGD to Ukraine. A necessary priority is the efficient approximation of Ukrainian legislation to the EU acquis in all areas set under the Association Agreement.

CONCLUSION 5: The EGD poses certain threats to Ukraine. Enhanced quality requirements for certain types of products and technologies is likely to pose additional challenges for the 'industrial visa-free regime,' since the EU plans create for Ukraine a difficult 'moving target' in this area. The strengthening of the secondary raw materials market in the EU will lead to reduction in exports of secondary raw materials to Ukraine. It would affect the processing facilities currently dependent on the imports of such materials. EU aspirations to reduce the transportation of cargoes by motor vehicles intended to reduce emissions may impact the issuance of permits for Ukrainian trucking companies. High priority for nature protection in the EU may imply, in practice, a close attention of the EU and its financial institutions to Ukraine's compliance with the relevant commitments, such as in implementing investment projects in the energy sector.

CONCLUSION 6: A key threat is the restricted access of Ukrainian goods to EU markets, and new non-tariff barriers to trade. It is primarily about the energy intensive and resource intensive goods that account for a large share in the structure of Ukrainian exports, such as metallurgy, agriculture, food industry, energy sector, heavy chemicals, machine building, steel, construction products, etc. Moreover, such mechanisms might impact the transport infrastructure, such as gas pipelines. The intention to introduce the carbon border adjustment mechanism, currently under development by the European Commission to prevent the birth of 'carbon offshores' in the neighbouring countries, may largely aggravate the electricity export from Ukraine to the EU, since Ukraine has a large share of thermal power plants in the overall electricity generation. High requirements to food products and to compliance with the environmental standards during their production may be an obstacle to further exports of Ukrainian agricultural products to the EU market.

CONCLUSION 7: New opportunities through deeper digitalization. Many opportunities come from the digital advancement in the EU: from simplified transactions and customs procedures to enhanced anti-smuggling efforts, further development of IT sector, and access to public procurements in the EU.

CONCLUSION 8: A separate group of threats from the EGD implementation includes environmental consequences in Ukraine.

Development of the electric vehicles market in the EU, and the subsequent flooding of Ukrainian market with the used electric cars from Europe will have a positive effect on reduction of pollution in cities. On the other hand, using the 'unclean' energy to charge the battery powered cars and the problem of recycling the batteries may cause new environmental challenges in Ukraine. The development of inland waterway transport will require addressing a series of environmental issues related to the construction of new water routes or to the operation of the previously constructed routes.

The paper includes **RECOMMENDATIONS** for key stakeholders, such as:

(1) **FOR THE GOVERNMENT OF UKRAINE**, that shall formulate the government's priorities, with account for opportunities and threats from the EGD; to invite European counterparts to a dialogue on the development of a Road Map for Ukraine under the EGD; to support further EU integration of Ukraine in EGD areas prioritized for Ukraine; to develop a climate policy of Ukraine; to support integration of Ukrainian producers into the EU industrial production chains, such as to provide for the signing of ACCA in the shortest possible time; to use and promote new opportunities for financing and involvement of green investment; to continue the digitalization; to inform businesses on the role of 'carbon footprint' in future exports to the EU.

(2) **FOR THE VERKHOVNA RADA OF UKRAINE**, which first of all should ensure the process of full implementation of requirements of the European law related to the EGD, such as through strengthening the control mechanisms for compliance of draft laws with the requirements of the EU law, and integration of climate change aspects at all stages of lawmaking.

(3) **FOR BUSINESS**, that should take into account the EGD objectives in the process of their strategic planning, and use the EGD financial instruments; to search for integration opportunities into new industrial production processes in the EU market; to take into account that access to EU markets in the future will largely depend on compliance of goods and services with the EU climate and environmental requirements.

(4) **FOR CIVIL SOCIETY**, that should focus on promoting better awareness-raising for all stakeholders on opportunities and threats of the EGD, and continue the process of monitoring the implementation of European integration reforms in Ukraine.

(5) **FOR THE EUROPEAN SIDE**, that should consider Ukraine as a necessary partner in EGD implementation, develop together with the Government of Ukraine a roadmap for Ukraine following the example of the Roadmap for the Balkan countries provided by the EGD; to foster Ukraine's integration into new 'green' production processes in the EU, by launching an industrial dialogue; to strengthen control over sustainability of goods and services imported to the EU from Ukraine, such as timber, agricultural products, etc.; to support investment from the EU intended for production of 'green' goods, and decarbonization of economy; to continue to provide assistance to Ukraine in approximating the legislation on environment protection and climate, agriculture, energy, and transport; to shape flagship initiatives for Ukraine's integration into the EU nature protection area, such as to start a dialogue on elimination of barriers to the implementation of birds and habitat directives, and Ukraine's integration into the NATURA 2000 network.

LIST OF ABBREVIATIONS

AA – EU-Ukraine Association Agreement

ACCA – Agreements on Conformity Assessment and Acceptance of Industrial Goods

AIC – agro-industrial complex

BAT – best available techniques / technologies

CMU – Cabinet of Ministers of Ukraine

DCFTA – Deep and Comprehensive Free Trade Area

EGD – European Green Deal

GDP – Gross Domestic Product

GHG – Greenhouse gases

GMO – Genetically Modified Organisms

Minecoenergy – Ministry for Energy and Environment Protection of Ukraine

NDC – nationally-determined contribution

RES – Renewable Energy Sources

TEN-T – Trans-European Transport Network

TRACECA – Transport Corridor Europe-Caucasus-Asia

VAT – Value Added Tax

VRU – Verkhovna Rada of Ukraine

WHO – World Health Organization

WTO – World Trade Organization

INTRODUCTION

In December, 2019, the European Commission approved the European Green Deal (EGD). European Green Deal is a series of actions defining the EU policy for the coming years in such areas as climate, energy, biodiversity, industrial policy, trade, etc. Key objective of the deal is the Europe's sustainable green transition to the climate neutral continent by 2050.

EGD is still under development, since it is a dynamic tool. Strategies, plans, the legal framework to implement the EGD will be drafted and approved mostly during 2020-2021. Currently, the pace of implementing EGD has been slightly blurred due to the priority of response action to COVID-19. However, the European Commission reiterated that the recovery shall aim at a more sustainable, green, and digital Europe, and solutions that are useful both for economy and for the environment. It means the firmness of the 'green' course and following the timeline of implementing important EGD components. The approach found support also from many EU Member States, Germany and France among them.

Ukraine's government declared its intention to join the EGD. The government's aspirations are important in terms of the need to formulate a policy in Ukraine in different areas that would account for current environmental and climate challenges. At the same time, we shall take into account the entire range of EGD consequences for Ukraine in the context of opportunities and threats stemming therefrom. Drawing key conclusions and recommendations on the EGD impact is important on this stage when Ukraine has not yet

finalized its intentions, whereas the EGD is also under development and content consolidation.

The goal of the policy paper is to analyze the EGD in terms of opportunities and threats to Ukraine in the EGD key areas (climate change, energy sector, circular economy, transport, agricultural policy, biodiversity, pollution, finance, and trade), as well as to issue recommendations to key stakeholders in Ukraine and the EU on seizing opportunities and avoiding threats.

The document contains the characteristics of all nine components of EGD. It includes the analysis of the relevant components in the EU, the overview of the state of play in relevant sectors in Ukraine, and the analysis of opportunities and threats to Ukraine.

We hope the conclusions and recommendations of the policy paper will be useful in the process of preparing to the meeting of the Association Council due in the end of 2020.

The policy paper has been drafted as part of the "European Green Deal: Opportunities and Threats to Ukraine" project implemented by the Resource and Analysis Center "Society and Environment", funded by the International Renaissance Foundation, jointly with the Institute for Economic Research and Policy Consulting, and the DiXi Group.

METHODOLOGY

The policy paper has been drafted on the basis of the research carried out by experts.

The object for research were the structural elements of the European Green Deal: (1) climate change; (2) energy; (3) industrial strategy for circular economy; (4) sustainable and smart mobility; (5) biodiversity preservation; (6) zero pollution; (7) green agricultural policy; (8) finance; (9) EU as a global actor.

The subject for research is the Communication from the Commission “European Green Deal”¹ and the Road Map thereto², and other public sources, including EGD enforcement acts, draft acts, statements, etc.

Each element of the European Green Deal was analyzed according to the following algorithm:

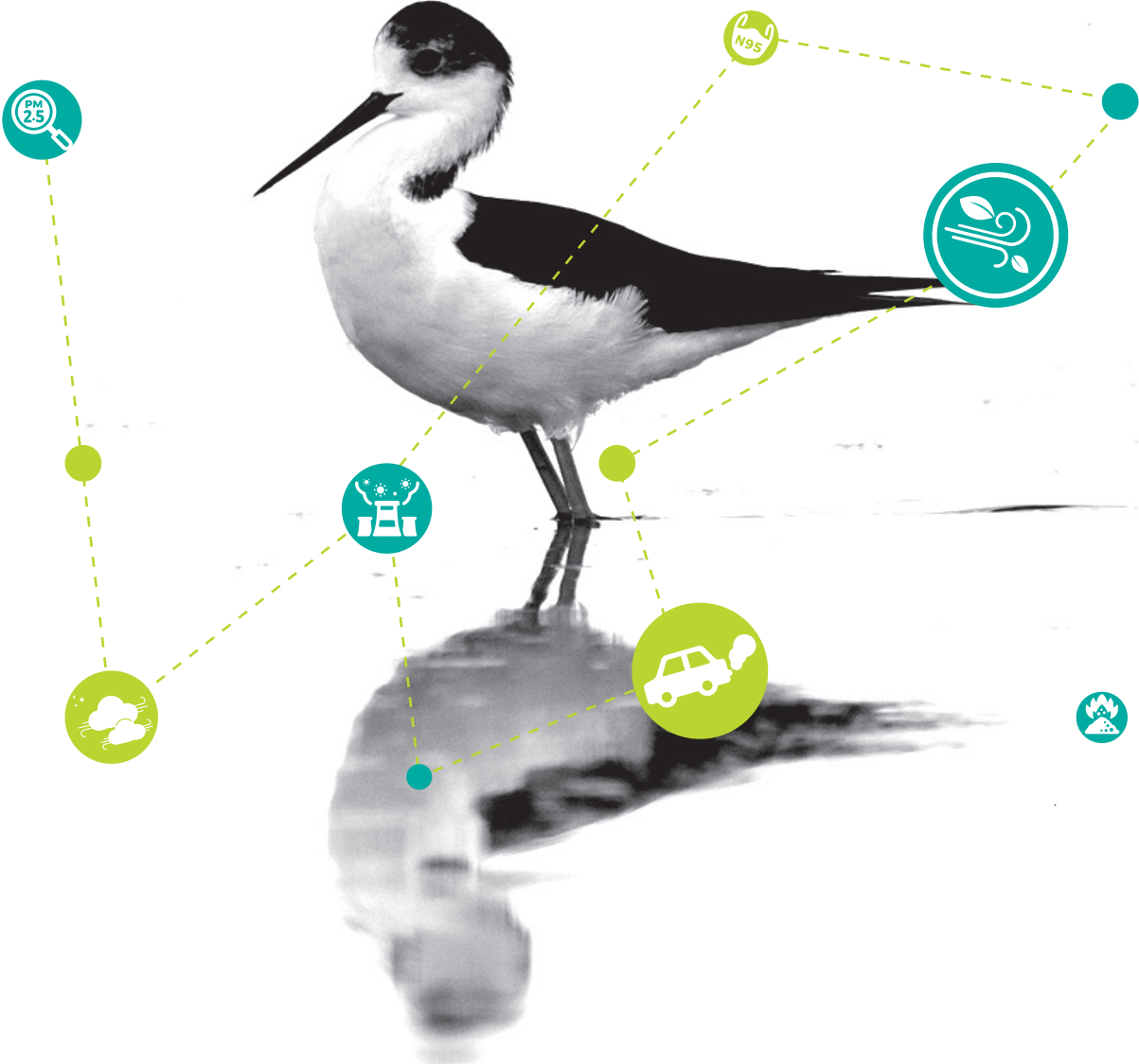
- Brief summary of the structural element;
- Brief summary of the state of affairs in Ukraine on that matter, including the factual data, strategic documents and plans, and a potential link to other processes (Association Agreement, Energy Community, IMF, etc.);
- Opportunities for Ukraine from EGD implementation (what opportunities open up, what trends could be useful, what the favourable /unfavourable factors there are in Ukraine to take the opportunities);

- Threats for Ukraine from EGD implementation (potential threats for Ukraine, whether we can impact the threats, how to mitigate or avoid the threats).

In addition to the overview of EGD and the EGD structural elements, the policy paper includes general conclusions and recommendations for stakeholders, generalized and formulated on the basis of exploring all EGD elements.

Chapter I.

EUROPEAN GREEN DEAL – THE EU DYNAMIC ACTION PLAN





«THE EUROPEAN GREEN DEAL IS
OUR NEW GROWTH STRATEGY
– FOR A GROWTH **THAT GIVES BACK MORE THAN IT
TAKES AWAY.**»

/URSULA VON DER LEYEN/





European Green Deal is the action plan of the Commission focusing on the ambitious goal to transit to the climate neutral Europe by 2050. In terms of politics, it is a response to global challenges of climate change, pollution, and, loss of biodiversity, and consequently, positioning the EU as a global leader.

Along with other key institutions, the European Commission develops a general strategy and a policy vision for the EU. Every 5 years, at the onset of work of the new composition of the Commission, the President of the European Commission also identifies key priorities for the term of office. The Commission converts the priorities into specific actions on the basis of an annual program setting action plan for the coming 12 months. The EGD is one of the six priority areas of the Commission agenda under the office of Ursula von der Leyen that serves as a basis for activities for 2019-2024.

The title selected by the Commission for their ambitious program directly refers to the well-known New Deal of the US President Franklin D. Roosevelt (a comprehensive agenda to overcome the time of deep recession in the USA in the 1930s). That is why the European Green Deal is not an agreement, it is a 'course' suggested by the newly appointed Commission as a title for their strategy and agenda by 2024. The European Green Deal is not an 'agreement,' either in form or content. It is a strategy and an action plan for the supreme executive authority in the EU. The closest Ukrainian analogue could be the government's work program.

Including climate ambitions into the EU agenda is a response to a request from the EU citizens. Recently, they have been expressing their position on climate not through protests alone but through electing the respective political actors, including also in elections to the European Parliament. It also had its imprint

on the formation of the composition of the new Commission. In fact, among the six groups of commissioners, one group will be dealing with the EGD. The demand from citizens is also shown in the opinion poll undertaken in 2019 by the Eurobarometer. According to the findings, over 93% of respondents believe climate change a major concern, 49% think the European Union shall take charge of the action to fight climate change.³ According to Ursula von der Leyen, a message from European voters, and from youth who have not been voting yet, is loud and clear: they want real action for climate change, and they want Europe to lead on this course.⁴

On December, 11, 2019, a Communication from the Commission was adopted on the "European Green Deal"⁵. The Communication also includes a Road Map that lists key actions in the areas covered by the EGD, and the timeline for their implementation. The European Parliament generally supported the program through its resolution of January, 15, 2020⁶.



Therefore, the Communication and the Road Map are key documents to define the substance and actions for the EU on the way to a climate neutral Europe. However, the EGD is still under development, and it is a dynamic tool. Strategies, plans, legal framework to implement the EGD will continue to be drafted and approved mostly throughout 2020-2021.

Content-wise, the Communication from the Commission is a "preliminary road map of key policies and activities required to reach the European Green Deal." The EGD is a key part of the Strategy of the Commission to implement the UN Agenda 2030 and the Sustainable Development Goals.

European Green Deal is not only about the energy or environment. It establishes priorities in virtually all areas of EU activities.

Specific policies and activities provided by the EGD include the following:

- Adopting a series of strategies (smart sector integration, industrial strategy, action plan on circular economy, reform in building sector, development strategies for offshore wind, strategy on chemicals, strategy on biodiversity, forest management strategy);
- Adoption of “Climate Law” and new versions of Regulations and Directives in energy taxation, transport, agriculture, and waste management;
- Financial tools, such as a mechanism of the so called ‘just transition.’

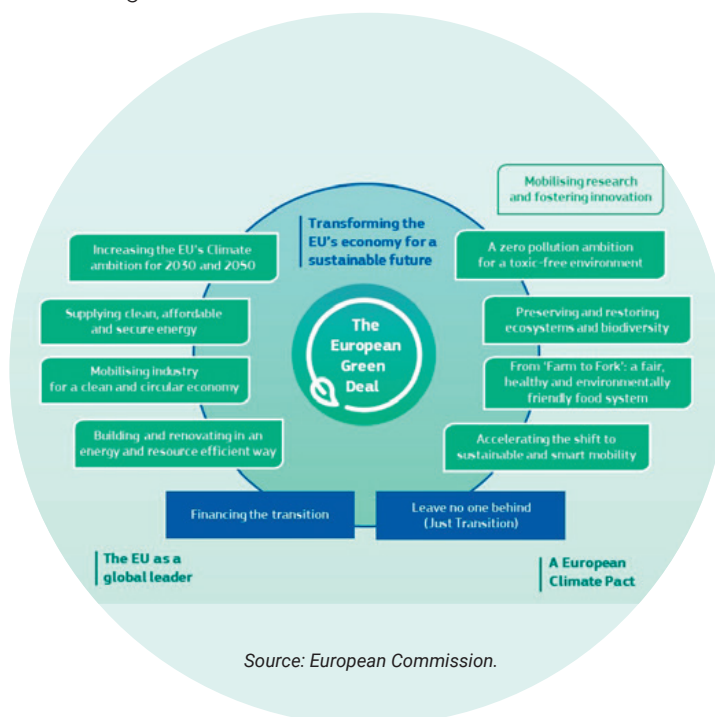
The policies and activities will be implemented in the following nine areas:

- (1) Climate
- (2) Energy
- (3) Industrial strategy for circular economy
- (4) Sustainable and smart mobility
- (5) Green agricultural policy
- (6) Biodiversity preservation
- (7) Zero pollution
- (8) Financial tools
- (9) EU as a global leader

One of the central idea in the EGD is global leadership of the EU. As Ursula von der Leyen stated in the presentation of her priorities, EGD is like a ‘man-on-Moon’ project for Europe (a direct reference to the US 1960s Moon program). In the opinion of the European Commission, the transition to a climate-neutral Europe requires efficient action from EU neighbours. That is why the EGD provides for the development of the ‘green deal diplomacy in order

to convince and support other partners. It will include the development of environmental, energy, and climate partnerships with the neighbouring states.

In order to achieve the EGD objectives, large investment is required. The Commission estimated that in order to reach the climate and energy objectives by 2030, EUR 260 bln of additional investment is needed.⁷ That is why, parallel to the suggestion of goals and actions within the EGD, the Commission plans to develop financial plans and tools to achieve the ambitious objectives of the EGD. In the first place, it is The Sustainable Europe Investment Plan, and the just transition mechanism and the Just Transition Fund available in the framework of the Plan. The Just Transition Fund and mechanism will focus on regions and sectors affected by the green transition since they depend on fossil fuel or carbon related processes. Moreover, it is planned that at least 30% will be allocated by the Invest EU Fund to combat climate change, while all EU programs will have the 25% of funds to reach climate goals.



Chapter II.

STRUCTURAL ELEMENTS OF THE EUROPEAN GREEN DEAL





«WE CAN MAKE OUR SOCIETY AND OUR PLANET HEALTHIER BY INVESTING IN RENEWABLE ENERGY, BY DRIVING CLEAN CARS, BY RENOVATING OUR HOUSES AND MAKING THEM ENERGY EFFICIENT. BY BUYING SUSTAINABLE FOOD , REUSING MATERIALS RATHER THAN THROWING THEM AWAY OR PRODUCING LOW CARBON STEEL.»

/URSULA VON DER LEYEN/



2.1. CLIMATE CHANGE

MAIN EGD OBJECTIVES: CLIMATE CHANGE

- reaching the climate neutral Europe by 2050
- reduction of greenhouse emissions from 40% to 50-55% in 2030 (compared with 1990)
- integration of climate objectives into all sectors of economy and social life

WHAT IS IMPORTANT FOR UKRAINE?

- EGD will require actions from Ukraine on reducing greenhouse gas emissions
- Reaching EGD climate objectives will require from the EU to protect their markets and producers, such as the carbon border adjustment mechanism

(a) Overview

The Commission suggested a clear measurable objective for a long-term integrated climate policy for the EU in their vision⁸ before the EGD was presented⁹. **In addition to identifying an objective to achieve a climate neutral economy in the EU by 2050, the vision also defined the ways to achieve it.** Vision objectives are based on the goal of the Paris Agreement¹⁰ and comply with the Sustainable Development Goals.

Specific long-term climate goals are not new in the EGD; they continue the tradition of goal-setting in the EU climate policy. Over the recent 10 years or more, the Commission established the climate goals^{11,12}, even though not so ambitious and far-reaching but such that required the development and implementation of policies in the highly emitting sectors of economy. **EGD and the vision are distinct not only in their ambi-**

tious goals, but also in the deep integration of virtually all sectors of economy and life, unlike the previous goals that focused on sectors that have been and still are the largest greenhouse gas (GHG) emitters, but are mostly related with energy emissions.

In its vision, the EGD offered to the society, to investors, and to all business operators the well-timed and anticipated signal to plan the transformations. Additionally, it suggests to stipulate the climate goals on the level of the law. **As of today, the Commission drafted a proposal on the Regulation for the “European Climate Law.”¹³ It proposes to consolidate the goals and ways to achieve the climate neutrality for the EU by 2025 on the level of the EU acquis**, and to identify general provisions to help progress in adaptation to climate change, such as: (1) the Commission shall be granted with powers to determine and review a pathway for the EU to approach the climate neutrality, starting from 2030 till 2050; the time-

* The climate neutral economy in the EGD is the status of economy when the net GHG emissions, defined as the sum total of all GHG emissions and their absorption by all natural and anthropogenic absorbers listed in Annex V to the Regulation (EU) 2018/1999 on the territory of the EU, equals zero or there is a net GHS absorption.

line shall be set, key principles and areas to guide it; (2) it obliges the Member States to develop and implement climate change adaptation strategies that include the introduction of risk management in this field; (3) it shall empower the Commission to evaluate and monitor progress in achieving final and interim EGD objectives in general, conformity of activities undertaken by Member States with the objectives, and entitles the Commission to issue relevant recommendations to Member States to implement the corrective action.

At the same time, **the EGD requires to revise the current EU climate goals 2030** that shall be interim goals for the EGD, such as to intensify the reduction of GHG emission from 40%¹⁴ to 50-55% (as compared to 1990), **and the relevant policies and tools needed to achieve them.** In order to draft the proposals to adjust the goals by 2030, the Commission conducts public consultations during March-June, 2020,¹⁵ and plans to present them in the third quarter of 2020, along with the extended plan to raise the ambitious level of climate goals 2030. The review will cover both the goals, and the policies and tools to implement them, at least the Directives on the emission trading system (2003/87/EC), energy efficiency (2012/27/EU), renewable energy sources (2018/2001/EU), Regulation on land use, land use change and forestry (2018/841), and on distribution of efforts (2018/842), and the Regulation on CO₂ emission performance standards for passenger cars and light commercial vehicles. Specifically, the Commission continues to consider the scheme for emission trading that covers over 11,000 installations in energy intensive sectors (responsible for about 45% of all GHG emissions in the EU), as a key tool for climate policy, and does not exclude the possibility to expand it to new sectors, such

as road vehicles and maritime transport, buildings, and small industrial installations, household waste incineration facilities and other sectors. In addition, in the framework of the emission trading system, the Commission is considering the possibility for the following: (1) increasing the rate for linear reduction of the number of emission permits; (2) reduction of initial number of emission permits in phase four (by 2030); (3) introduction of the bottom line for prices on emission permits; (4) reduction or cancellation of free of charge emission permits, etc.

In the framework of the EGD, **the Commission plans to review the Directive on taxation of energy products and electricity** (2003/96/EU) that secured about 4.7 % of all tax revenues in the 28 EU member-states in 2017. Jointly with the emission trading system, it is considered as a second component of European pricing tools for carbon¹⁶ (through the mechanism of implicit price for carbon). It is obvious that in the revision process, the Commission will rely on the evaluation of the Directive¹⁷ and will take into account the failing experience of negotiations during the 2011-2015 that resulted in the withdrawal¹⁸ of the Commission proposals¹⁹. In the evaluation of the current mechanisms of the directive, the Commission states the following: (1) mechanism for national rates for energy tax erodes the competition in the market of engine fuels and leads to 'fuel tourism' between Member States, among other factors, which reduces efficiency of energy taxation and increases GHG emissions; (2) mechanism for minimum rates of energy tax for natural gas and electricity without the mechanism for their indexation does not provide for sufficient incentives to reduce fuel consumption; (3) the mechanism for national rates for energy tax for natural gas and

electricity is fragmenting internal energy market in the EU; (4) the Directive and the emission trading system have partially different objectives, which leads to inconsistency and overlapping of the tools with one another (for example, in the electric energy sector); (5) energy taxation sends erroneous price signals to consumers, in the context of climate action, since the rates are established with a view to fuel scope or energy content, and does not account for carbon content. Public consultations on reviewing the Directive are due in the second quarter of 2020²⁰, whereas the Commission plans to propose the changes to the Directive in June, 2021.

Implementation of the policies and their tools listed above will lead to the increased financial burden on consumers, and on producers in the EU. Increase in the cost for goods and services produced within the EU aggravates a conflict on the internal EU market in the context of competition with imports from countries that have not imposed similar measures in climate action, as well as in the external markets in the same countries. That is why **the Commission proposes²¹ introducing the measures for carbon protec-**

(b) Situation in Ukraine

As a Party to the Kyoto Protocol and the Paris Agreement, Ukraine has undertaken certain commitments, such as to take action to reduce the GHG emission and to adapt to climate change.

In the first nationally-determined contribution²³ (NDC) submitted in 2016, Ukraine independently²⁴ identified its goal for GHG emission restrictions, such as in 2030 it shall not exceed 60% compared with the 1990 levels. The level of GHG reduction is not ambitious, in the context of Paris Agreement, since it provides for the increase of national GHG

tionism²² of EU producers through the carbon border adjustment mechanism. The Commission justified the need for such measures not only by the intention to protect the EU producers' interests, but also by the need to minimize the risks for growing GHG global emissions due to the so-called 'carbon leakage' effect. It allows to avoid the increase in global GHG emission due to replacement by goods and services produced within the jurisdictions where the mandatory cost internalization measures have been imposed for the GHG production emissions to their production cost by the goods from the jurisdictions where the measures have not been introduced. Public consultations on the mechanism for carbon border adjustment will be taking place in the third quarter of 2020, while the Commission plans to propose the respective legislative initiatives in the second quarter of 2021.

emissions by 75% by 2030 as compared to 2017²⁵. In 2018, Ukraine declared²⁶ about its NDC review in order to significantly raise its ambition; and it is intended to be approved in spring, 2020^{27,28}.

The main current framework on public policy and administration on climate action is the Main Foundations (Strategy) of National Environmental Policy of Ukraine 2030²⁹, a Concept for public policy implementation on climate action 2030,³⁰ and the relevant action plan³¹ thereto.

Provisions of the Strategy for National Environmental Policy on Climate Action are rather general, declarative, and refer to Ukraine's need to conform with the undertaken international commitments under the Paris Agreement, and are de facto based on the objective for GHG emission reduction by 2030 set in the NDC*.

The concept for climate policy does not set any independent quantitative objectives in part of reducing /restricting GHG emissions**, but rather sets a goal to "improve public policy on climate action" and identifies the implementation routes: (1) institutional capacity building; (2) climate change mitigation through emission reduction and increase of GHG absorption; (3) adaptation to climate change. Specifically, in the area of emission reduction and GHG absorption increase, it is provided for the following: (1) extending an action plan to raise energy efficiency; (2) increasing a share of energy produced from the renewable energy sources (RES) within the overall structure of energy consumption; (3) increase of volumes of GHG absorption through implementing measures in land use sector, change in land use and forestry; (4) creating an emission trading system***; (5) improving approaches to taxation of GHG emissions, such as by the dedicated use of revenues;

.....

* Strategy 2030 only sets an interim objective on the way to 2030, such as not to exceed 76% of GHG emissions by 2020 as compared with 1990 levels; which will definitely be reached with no need to implement any additional policies or measures, or to have any national policy in this field.

** Concept 2030 sets the need to secure the achievement of NDC commitments in 2030, which shall not exceed the 60% from the basic levels of 1990. At the same time, according to even most pessimistic forecasts, under BAU conditions, GHG emissions will not exceed the levels. Other anticipated quantitative outcomes of the Concept 2030 in energy efficiency and RES, de facto replicate the respective national action plans approved earlier for the delivery on commitments as part of the Energy Community.

*** Creation of the emission trading system by implementing certain provisions of the Directive 2003/87/EC is part of Ukraine's obligations under the AA (Art. 365 and Annex XXXI to the Agreement). Implementation timeline: provisions of the Directive 2003/87/EC shall be implemented within 2 years upon the AA effective date, i.e. by September, 1, 2019.

(6) approval of the Strategy for Low Carbon Development of Ukraine 2030. As of April, 2020, climate change specific policies and measures under the Concept that had to be developed or approved in 2018, according to the Plan, failed to be implemented, either.

At the same time, a Low Carbon Development Strategy for Ukraine 2050³² was developed and submitted³³ to the Secretariat for the UN Framework Convention on Climate Change for comply with Ukraine's commitments under par. 19 of Art. 4 of the Paris Agreement. It shall be noted that the Strategy had not been approved by any CMU act, as it was provided by the Concept. Thus, it is not part of the national framework, and the information thereon is provided for reference only. The Low Carbon Development Strategy identifies the following three key tasks: (1) transition to the energy system that would use low carbon energy sources, development of clean electrical and thermal energy sources, enhancing energy efficiency and energy saving in all sectors of economy and at housing and home infrastructure facilities, incentives for the use of fuels alternative to petroleum products and motor fuels, such as for cargo and passenger transportation due to more ecological types of vehicles; (2) increase in volumes of carbon absorption and retention through using best practices for farming and forestry adapted to climate change; (3) reduction of GHG emissions, such as methane and nitrogen oxide, related mostly to fossil fuels production, farming and waste. The Strategy stipulates that Ukraine shall invest efforts to reach the GHG emission levels in 2050 in the amount of 31–34% to the 1990 levels.

De facto, **the only current policy tool that is directly related with the GHG emissions is a fiscal tool – a tax introduced in 2011 on CO₂ emissions**

by stationary sources³⁴, which rate has largely increased since 2019.³⁵ It is almost 25 times higher, and now amounts to UAH 10.00 per ton of CO₂. It shall be noted that despite the fact that the tax rate has largely increased, it remains low, while the tax has a fiscal function rather than incentive. The rate and the procedures for tax administration were scheduled for revision under the Concept, among other things, but today, there are only certain working achievements that have not yet been officially discussed.

Other tools, such as the 'green' tariff to intensify the RES use for electricity generation, allocating dedicated public funding to implement energy efficient measures are not specific for climate change goals exclusive, or for GHG reduction, in particular. That is why they are discussed in the chapter on "Energy".

In the early 2020, the Minecoenergy presented a draft Concept for 'green' energy transition for Ukraine 2050³⁶. **A key distinctive feature of the draft as compared to the previous conceptual and strategic national documents is that it establishes a specific measurable long-term objective such as to reach the status of climate neutrality for Ukraine's economy by 2070.** The

Concept covers other areas, in addition to energy, even though it does focus on the energy sector (in the classification of sectors by the UN Intergovernmental Panel for Climate Change), and also the area of waste management, and partially farming and forestry*. However, it hardly touches upon any aspects of adaptation to climate change, which makes it different from the EGD. The Concept identifies the following policies and tools to reach the goal: (1) direct public subsidy and fiscal incentives for priority areas of decarbonization of economy, such as energy efficiency and RES; (2) minimizing public subsidies for fossil fuels; (3) taxation for externalities for fossil fuels; (4) introduction of the emission trading system.

* Farming aspects are covered by the Concept 2050 in a selective manner, and are reduced to energy issues in agriculture. Therewith, forestry and waste management are considered on a broader non-energy specific context.

(c) Opportunities

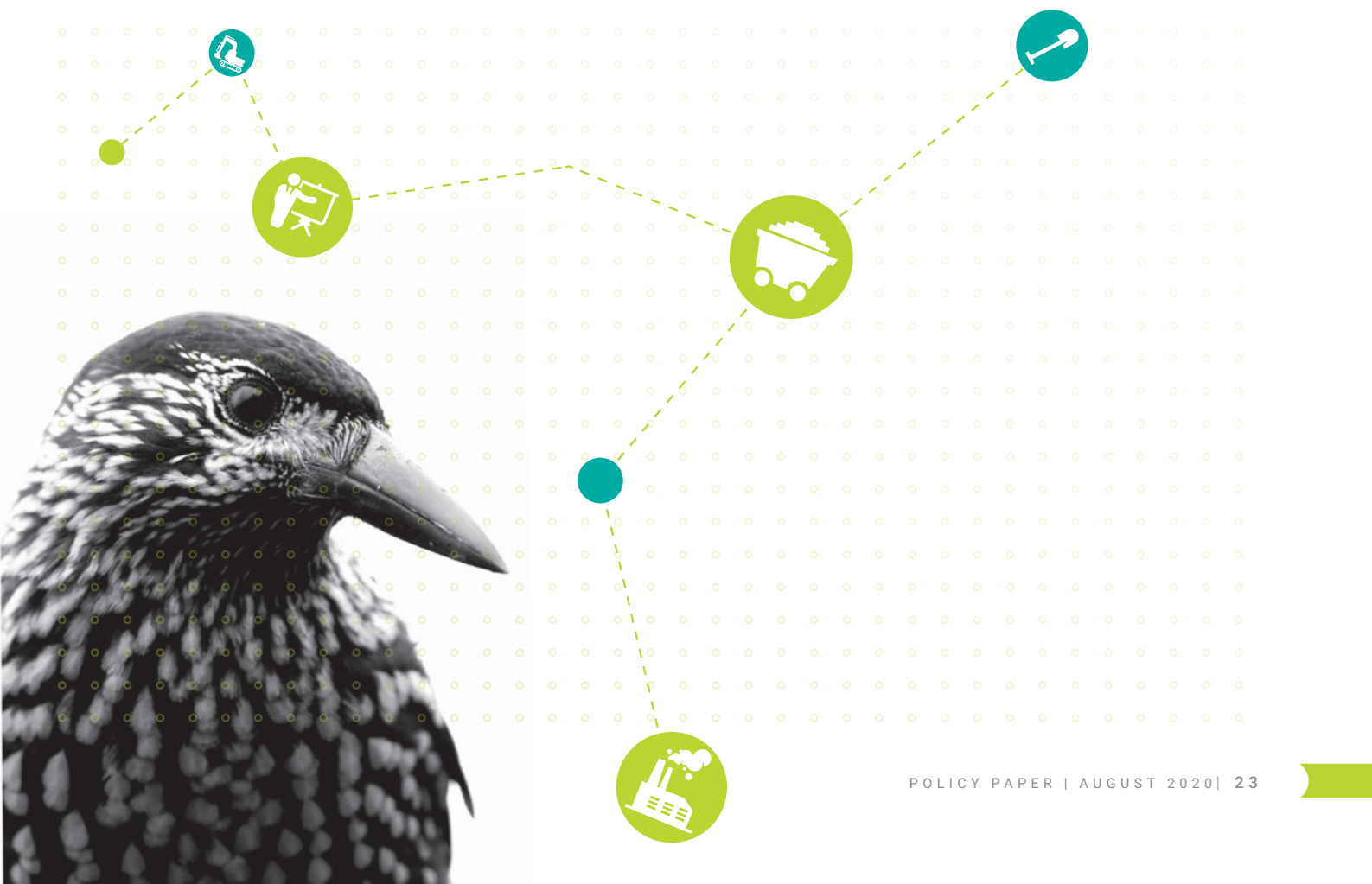
Most systemic shifts of the recent years in climate action, and also in energy, occurred in Ukraine under the impact or rather under the pressure from externalities and international commitments. That is why the EGD, through its own mechanisms and tools, and through other agreements that include climate specific commitments, such as the Association Agreement, will demand action from Ukraine.

Ukraine's opportunities are also inherent in its current low energy efficiency and high carbon intensity of economy, caused both by high wear and tear of the capital assets, and by a large share of fossil fuels in the energy balance. It offers a huge potential for the low-cost decrease per unit of GHG emission reduction. Provided that an effective international and/or bilateral mechanism is established, such as under the EGD, it will help attract large volumes of the 'green' finance.

(d) Threats

Current climate goals of Ukraine are not adequate either to the goal of Paris Agreement, or to EGD objectives. Development and implementation of climate policy requires a deep intersectoral /interagency cooperation, and availability of developed government's basic functions, such as protection and security of property, justice, domestic security, and availability of markets, in particular financial and energy markets. Fragmentary nature and inconsistency of national climate policy in Ukraine, failure on its commitments under the Association Agreement on climate action, aggravated by the extremely low institutional capacity and a disbalanced public administration system, undermine Ukraine's ability to develop and implement an efficient and effective climate policy. In this context, there has appeared and keeps aggravating a gap between the EU climate policy (that has developed and largely progressed over the last 20 to 25 years) and the status of continuous uncertainty in Ukraine.

Achievement of the EGD ambitious goals will require from the EU to introduce the protection of their own markets and producers, such as through the carbon border adjustment mechanism. It may reduce competitiveness of Ukrainian goods in EU market, particularly as regards energy and resource intensive goods that take a large share in the structure of Ukrainian exports. These are products of metallurgy, agriculture, food industry, energy, high tonnage chemicals, machine building, etc. Moreover, transportation infrastructure may fall under constraint of such mechanisms, such as pipelines. In fact, logistical carbon emission will be accounted therefor, thus affecting its competitiveness.



2.2 ENERGY

MAIN EGD OBJECTIVES: ENERGY

- Key objective – further decarbonization of the energy system
- RES as a basis for electricity sector (rejection of coal, transition to decarbonized gas, unlocking the potential of offshore wind energy)

WHAT IS IMPORTANT FOR UKRAINE?

- further integration and regional cooperation are the priorities of the EGD energy component
- new RES trends may become a starting point to intensify the cooperation between Ukraine and the EU
- carbon border adjustment mechanism may largely aggravate the export of electricity from Ukraine to the EU

(a) Overview

A key target of the EGD in energy is further decarbonization of the energy system which is currently responsible for the 75% of GHG emissions in the EU³⁷. To reach climate neutrality by 2050, EGD sets the following **targets for energy industry**:

- 1) RES as a basis for electrical energy industry (rejection of coal, transition to decarbonized gas, unlocking the potential of offshore wind energy);
- 2) energy efficiency, particularly in buildings sector;
- 3) just energy transition (engaging consumers as beneficiaries and combating energy poverty);
- 4) development of infrastructure through integration and digital transformation (political, infrastructural and technological solutions that enable a fully integrated EU energy market).

EU Member States shall provide for the fulfilment of the joint climate and energy targets of the EU through their **national plans on energy and cli-**

mate 2030. It is a tool of the Energy Union policy currently adapted to the EGD.³⁸ Proposals on national energy and climate plans must have been submitted for consideration of the Commission by the end of 2019. However, some countries failed to meet the deadline, such as France and Germany.³⁹ The approval procedure for the plans by the Commission and their regular revision ensure sufficient national contributions for the sake of energy transition, and help increase climate ambitions.

Within the 'content-filling' of the EGD energy component, in 2020, the Commission intends to present the following documents: assessment of the finalized national energy and climate plans (June, 2020); assessment and revision of the Regulation on trans-European energy infrastructure⁴⁰; Strategy for smart sector integration, and the development of offshore wind energy; an initiative for buildings sector 'Renovation Wave';⁴¹ recommendations to assist EU Member States in addressing the issue of energy poverty.⁴²

Special focus in the EGD is laid on the energy efficiency of private and public buildings (account for 40% in the overall structure of energy consumption in the EU⁴³). Through the modernization programs, they plan to at least double the annual rates of buildings renovation (the rate currently accounts for 0.4-1.2%).⁴⁴ For that purpose, the Commission will review the Regulation on construction products⁴⁵, start the assessment of long-term strategies for housing stock renovation in the EU Member States*, foster the elimination of regulatory obstructions for investment into energy efficiency, and stimulate financing of such projects through the InvestEU program.

On July 8, 2020, the European Commission adopted two strategies in the field of energy, namely EU Strategy for Energy System Integration⁴⁶ and Hydrogen Strategy for a Climate Neutral Europe⁴⁷.

.....
* As part of requirements within the Directive (EU) 2018/844 of the European Parliament and of the Council of 30 May 2018 amending Directive 2010/31/EU on the energy performance of buildings and Directive 2012/27/EU on energy efficiency.

EU Strategy for Energy System Integration sets out a vision on how to accelerate the transition towards a more integrated energy system, one that supports a climate neutral economy at the least cost across sectors. This Strategy proposes concrete policy and legislative measures at EU level to gradually shape a new integrated energy system, while respecting the differing starting points of Member States. It contributes to the work of the Commission on a comprehensive plan to increase the EU 2030 climate target to at least 50% and towards 55% in a responsible way and identifies follow-up proposals that will be prepared as part of the legislative reviews of June 2021, announced in the European Green Deal.

The EU Hydrogen Strategy will give a boost to clean hydrogen production in Europe. Hydrogen can be used as a feedstock, a fuel or an energy carrier and storage, and has many possible applications which would reduce greenhouse gas emissions across industry, transport, power and buildings sectors.

(b) Situation in Ukraine

Similar to the EU pattern, success of decarbonization in Ukraine will largely depend on the progress in the energy sector, since it accounts for 68% of greenhouse gas emissions.⁴⁸

Even though Ukraine shows an active development of RES, which is a key component of the energy transition, there is still a big difference between Ukraine and the EU in the RES share in the structure of electricity generation. To compare, over 2019, in Ukraine and the EU, RES based generation accounted for 3.6% and 23.8%, respectively, without hydro power plants and hydro storage power plants; and 8.7% and 34.6%, respectively, with hydro power.⁴⁹⁵⁰ The trend is also relevant for the climate ambitions. For example,

according to the most optimistic scenario of the Strategy for Low Carbon Development of Ukraine 2050, greenhouse gas emissions in 2050 will account for 31% to the 1990 levels (appr., equals the current levels)⁵¹, while the EU intends to reach a full climate neutrality by that time.

Raising energy efficiency is a shared challenge for Ukraine and the EU, since energy consumption in housing and non-housing buildings in Ukraine also accounts for about 40% of all consumed energy resources.⁵² The problem is aggravated by the fact that the amount of energy consumed per 1 m², is severalfold higher than the respective rate in EU countries with similar climate conditions.⁵³ Ukraine lacks tools to provide for a large progress in energy

efficiency: the 'warm credits' program has been traditionally underfinanced, while the Energy Efficiency Fund only launched its operations in the late 2019.

At the same time, Ukraine has progressed on the way to liberalize energy markets (launch of retail and wholesale markets of electricity, launch of a more competitive model to support RES – auctions instead of the 'green' tariff, transition of gas market to the mode of a daily balancing, separation and certification of an independent operator for the gas transportation system), integration into the European energy system (work on the integration to ENT-SO-E and ENT-SOG networks), improving a model for consumer protection (monetization of subsidies and preferences has been implemented).



The updated Annex XXVII to the EU-Ukraine Association Agreement is the legislative guideline to approximate and integrate Ukrainian energy system to the EU

(ratified by the VRU in June, 2019)⁵⁴.

Key strategic documents in energy and climate either require an update (Ukraine's Energy Strategy

2035, Concept for the Implementation of Public Policy on Climate Change 2030), or are under development or approval on national or international levels (the updated Strategy for Low Carbon Development of Ukraine 2050, Strategy for Ukraine's Adaptation to Climate Change 2030, the Second Nationally Determined Contribution for Ukraine to the Paris Agreement, national action plans on energy efficiency and renewable energy for 2021-2030, Concept for 'Green' Energy Transition of Ukraine 2050, and the National Energy and Climate Plan 2030).

Presented in January, 2020, the draft Concept of Ukraine's 'Green' Energy Transition 2050 is a document that is structurally and content-wise closest to the EGD, in terms of its dynamics, intersectoral approach and ambitions (target – climate neutrality for economy by 2070). The concept implementation plan for the coming ten years shall be an integrated National Energy and Climate Plan 2030. The political, analytical, and technical aspects of the plan are being developed in the framework of the Recommendation 2018/01/MC-EnC approved by the Council of Ministers of the Energy Community to prepare for the drafting of the National plan on energy and climate change action.⁵⁵

(c) Opportunities

EGD is a dynamic and multicomponent strategy that does not revoke the previous political decisions but supplements and integrates them. That is why, in order to be able to make use of the EGD opportunities, **it is critical for Ukraine to continue the reform of the energy sector within the undertaken commitments.** In the first place, it goes about the implementation of AA provisions, such as an updated Annex XXVII, which provides for the EU prior approval of draft laws in energy field, and intends to bring the Ukrainian energy framework in conformity with the EU provisions. In addition, the Memorandum on Strategic Energy Partnership Ukraine-EU shall be mentioned. It is a more flexible interaction tool (unlike the AA, wherein the commitments have been clearly stipulated, and which requires a complicated procedure for changes, in the event when the EU acquis is updated, or new legal acts are approved).

Further integration and regional cooperation are on the priority list under the EGD energy component. In the combination with the potential revision of the European Neighbourhood Policy (including also the Eastern Partnership policy), in the context of the new reality of the EGD, it may create a favourable ground for acceleration of integration.

Timing with the EU Member States in the drafting of the National Energy and Climate Plan 2030, under the auspices of the Energy Community, and relying on the EGD as a guideline allows to immediately join the EU efforts in the context of single energy and climate policy. Particularly, synchronization with the EU policies may speed up the development of energy efficiency.

To provide for the EGD success, the EU needs to prevent the 'carbon leakage' effect. That is why we could expect access to the tools of technical and financial support from the EU (through the just transition mechanism, direct investment, funds and programs). The assistance may go for the infrastructure development, such as the construction and improvement of interconnectors, as well as addressing of structural issues, such as the development of balancing and storage facilities, which allow the energy system to operate stably in the context of the growing RES share.

A more rapid and ambitious energy transition in the EU may catalyze the speedy changes in the Ukrainian energy sector. In particular, coal mines could be closed down, the outdated coal power stations decommissioned, and the coal mining regions would have to be transformed. Since the EGD investment plan does not provide for the financing of nuclear energy development, in the future the EGD may provide an impetus for Ukraine to review its plans for nuclear energy development, such as the policy on life time extension of nuclear power plants.

Since a key focus is placed on the RES development as a basis for decarbonization of the energy system, new trends in RES may be a starting point to intensify the cooperation between Ukraine and the EU. In the first instance, it is about the **cooperation in the area of hydrogen energy**. It is within the EU scope of interests, and has a high potential in Ukraine (especially, in terms of the need to replace the natural gas transit and to provide for the full load of the Ukrainian gas transportation system). This factor, as well as the fact that the role of gas supply from the Russian Federation to the EU Member States is going to gradually decrease, should the course to replace fossil fuels and to increase a share of RES continue – all of it may foster Ukraine's energy security.

It shall be noted that Ukraine may find the opportunities not only in the EGD itself, but also in the **'homework'** that Ukraine has not delivered yet. It is hard to talk about any further joint vector if the homework is not done. It implies the liberalization of energy markets, introduction of an efficient regulation for natural monopolies (RAB-regulation and efficiency-oriented regulation), elimination of energy subsidies (both cross-, and direct).

(d) Threats

Despite Ukraine's EU integration efforts, **there is still a huge technological gap between the European and Ukrainian energy systems.** Change of political approaches in the EU imposes an additional burden on Ukraine, since it failed to have delivered on its previous commitments in legal harmonization and regulation.

Regardless of the fact that the updated Annex XXVII to the AA was ratified by the VRU back in June, 2019, Ukraine only managed to agree with the EU Guidelines on the application of the Annex (in part of conducting consultations with the European Commission) as late as January, 2020⁵⁶, while the VRU dedicated committee announced the start of agreeing on the energy draft laws with the EU under a new procedure as late as in March, 2020.⁵⁷

Potential threats for Ukraine can be also found in the EGD itself. Specifically, the **carbon border adjustment mechanism** currently developed by the Commission in order to prevent the transformation of the neighbouring countries into the 'carbon offshores'⁵⁸, may largely aggravate the electricity export from Ukraine to the EU. Since Ukraine holds a large share of carbon generation within an overall structure of electricity production (about 37.4% in 2019)⁵⁹, while the stock of generating facilities is mostly outdated (according to the National Plan for Emission Reduction,⁶⁰ 135 out of the 223 large combustion facilities available in Ukraine cannot be brought into conformity with the EU standards, and shall be decommissioned by December, 31, 2033), the factual integration of electricity markets is going to be complicated.

Moreover, because of the unbalanced development of the energy system, low flexibility and lack of maneuvering facilities, Ukraine will find it difficult to increase the capacity of RES with no harm to the balancing reliability of the single energy system and security of supplies. Since the EGD provides for the transition to renewable energy as a key decarbonization tool, Ukraine's lagging in this area may only become more aggravated. Therefore, the Ukrainian single energy system cannot be fully integrated into the European energy system and assume the EGD practices without resolving a number of structural issues: a large share of outdated generation facilities, low flexibility (lack of highly-maneuverable facilities, such as the quick start gas generator stations, accumulator batteries), unbalanced RES development.

One of the key threats is in the **social and economic consequences from the closure of carbon-intensive companies** (mines, thermal power stations and the related facilities), which is a required, however painful step within the energy transition. The consequences may be alleviated through a comprehensive approach to the issue, such as using a model of just transformation of coal regions.

Reduction of natural gas consumption in the EU or its replacement with the 'green hydrogen,' among other things (within an obvious positive trend in the decarbonization context) may leave Ukraine without transit revenues. The risk may be mitigated due to the development of own hydrogen energy economy, preventive adaptation to changes in the global market of natural gas, and integration of the Ukrainian gas market to the EU market. In addition, even when the EU takes a slow pace in rejecting natural gas, Ukraine will be still losing on the transit revenues because of the Gazprom policy (by-pass pipe lines, reduction in transit volumes). That is why the optimization of the operational modes of the gas transportation system needs to be prioritized.

2.3 INDUSTRIAL STRATEGY FOR CIRCULAR ECONOMY

KEY EGD OBJECTIVES: INDUSTRIAL STRATEGY FOR CIRCULAR ECONOMY	WHAT IS IMPORTANT FOR UKRAINE?
<ul style="list-style-type: none"> ● Key objective – to foster the transition of industry to the sustainable model of inclusive growth ● Industrial strategy priorities: support of the EU global competitiveness, achieving climate neutrality in Europe in 2050, and shaping the EU’s digital future ● creating an integral policy for sustainable goods and services 	<ul style="list-style-type: none"> ● new restrictions related to environmental sustainability for goods and services to be placed in the EU market ● the priority areas will include electronics, information communication technologies, furniture, steel, cement, and chemicals ● additional challenges for the ‘industrial visa-free’ mode ● new conditions for industrial cooperation between Ukraine and the EU

(a) Overview

A key task in the area of industrial strategy and circular economy is “to support industry transition to a sustainable model of inclusive growth.”⁶¹

The priority tasks include decarbonization of the energy-intensive sectors (steel, chemicals, and cement), providing reliable information on the ‘green’ goods to avoid the so-called ‘greenwashing’ (abuse of the ‘green’ labelling), legal reform on waste management (including batteries), development of the digital sector (including the reduction of its impact on climate). To enforce the EGD, in March, 2020, New Industrial Strategy⁶², Circular Economy Action Plan,⁶³ and the Strategy on Shaping Europe’s Digital Future⁶⁴ were approved.

A new industrial strategy has the following three priorities (drivers): to support global competitiveness of the EU industry, to achieve climate neu-

trality for Europe in 2050, and to shape EU’s digital future. That is why it is closely related to other EGD elements, and was approved in the package with other related policies: An SME Strategy for a Sustainable and Digital Europe⁶⁵, Analysis⁶⁶ and Action Plan⁶⁷ to eliminate barriers in the single market. Among other things, these policies shall reinforce the EU’s single market.

An important element of the New Industrial Policy is protection of the EU internal market from unfair competition from the outside, due to government subsidies in foreign states, low requirements (including also ‘climate-related’ requirements) to the production of goods and services, enhancing customs control, introduction of a position of the Chief Trade Enforcement Officer. Measures targeting the reduction of industry impact on climate (such as

supporting an initiative for zero CO₂ emission in steel production), also include the abatement of 'carbon leakage.' It implies the introduction a carbon border adjustment mechanism in 2021. The New Industrial Policy is also aiming to reinforce the EU autonomy and reduce its dependence on any externals. EU plans to further support industrial 'eco-systems' and associations: the launch of the European Clean Hydrogen Alliance is expected.

Circular Economy Action Plan is aimed at the creation of a holistic policy for sustainable goods and services, mainly to prevent waste generation in the process of their production. In addition, the EU is trying to create an efficient secondary raw materials market.

Within the action plan implementation, the EU will:

- review a Directive on ecodesign: expanding the scope (priority areas will include electronics, information and communication technologies, furniture, steel, cement, and chemicals), including new requirements (such as about the lifetime for goods, content of recycled materials, etc.);

(b) Situation in Ukraine

In general, there is a large role of industry in making Ukraine's GDP, as compared to the low share in the EU Member States.⁶⁹ In implementing its economic policy, Ukraine follows the requirements established by international agreements (AA, Protocol of Accession of Ukraine to the World Trade Organization, Extended Fund Facility (EFF), stand-by assistance (SBA) from the International Monetary Fund, etc.), thus it is urged to shape its industrial policy in highly controversial settings.⁷⁰

State of play in the industrial sector in Ukraine can be characterized with the following key features:

- strengthen control over 'sustainability' of all goods on the EU market. An Industrial Emissions Directive will be reviewed (such as BATs and a new system for EU technologies verification will be implemented).
- Much focus will be put to certain value chains (electronics, batteries, plastics, packaging, textiles, construction materials).
- Promote circular economy within the neighbourhood policy, focusing on priority areas (value chains).

On September 3, 2020, the European Commission presented an Action Plan on Critical Raw Materials⁶⁸, the 2020 List of Critical Raw Materials and a foresight study on critical raw materials for strategic technologies and sectors from the 2030 and 2050 perspectives. The Action Plan looks at the current and future challenges and proposes actions to reduce Europe's dependency on third countries, diversifying supply from both primary and secondary sources and improving resource efficiency and circularity while promoting responsible sourcing worldwide.

- rapid non-compensated de-industrialization of economy since 1991;*
- deficit of the qualified workforce;
- critical dependence on raw materials exports;
- prevalence of low added value industries;
- high level of industrial goods imports;
- an intense geographical concentration of industrial exports;

* A share of industry in the GDP has dropped from 45.8% in 1991 to 21.2% in quarter I-III in 2017. Source: a draft Strategy for the development of Ukraine's industrial complex 2025.

- an intense regional concentration of industry;^{*}
- low resource efficiency of industry and high load on environment.

Program and strategic documents in the field of industrial policy have been sectoral in the recent years (are not based on a horizontal principle), while the draft Strategy for the Development of Ukraine's Industrial Complex 2025 is mostly oriented on promotion of Ukrainian industrial goods to foreign markets, launching new products and technologies, training the staff, and innovative development of industrial companies.⁷¹

Recently, an important part of the industrial policy has been to promote **'industrial visa-free'** mode with the EU, to eliminate technical barriers to trade with the EU.^{**} The

^{*} The 5 regions (Dnipropetrovsk, Donetsk, Zaporizhzhia, Kharkiv oblasts., Kyiv city) account for over 50% of the gross added value of processing industries. Source: a draft Strategy for the development of Ukraine's industrial complex 2025.

^{**} By signing the Agreement on Conformity Assessment and

ACCA may potentially cover up to one fifth of Ukrainian exports to the EU, mostly machine building products. Currently, the priority sectors (most promising) are low-voltage equipment, electromagnetic compatibility, and machinery.⁷²

State of play in the 'circular economy' in Ukraine may be assessed as very low or absent. In terms of the fact that the priority for circular economy is on waste management, including also the prevention of waste generation, circular economy is currently only contemplated.^{***} An important part belongs to the market of secondary raw materials, where the volume of necessitated import of secondary raw materials for the functioning of operating recycling companies accounts for 400,000 tons per year.⁷³

Acceptance of Industrial Products (ACAA). Signing the ACAA is provided by Article 57 of the EU-Ukraine Association Agreement.

^{***} Relevant program documents in this field are the National Strategy (2017) and the National Action Plan (2019) for Waste Management, Strategy of Ukraine's National Environmental Policy 2030 (2019).

(c) Opportunities

A possible window of opportunities for Ukraine, in the context of the EU New Industrial Policy, is the **integration of Ukrainian production facilities into the new industrial processes of the EU**. In other words, they shall become an element in the chain of new industrial processes. It may imply not only the supply of raw materials or localization of industrial processes at the cost of the 'cheap' labour, but also the integration into the high-tech sectors with high added value of the processes. It can all be made possible, provided the industrial policy is implemented in Ukraine, which is currently unavailable. It is clear that a precondition thereto is political integration, as well as conducive regulatory and investment climate in Ukraine.

Expected limitations **related to the sustainability of goods and services** to be placed in the EU market may pose new niches for Ukrainian producers due to the EU import phase-out from other countries. It is obvious that in order to make use of the niches, Ukrainian producers will have to provide for the due quality of goods and services (such as in creating new production facilities), while the government shall provide for their maximum support (such as informational and analytical support).

Many opportunities stem from the development of **digital area** in the EU: from simplified payment settlements to customs procedures, and improved control over smuggled goods (both ways), further development of IT sector, and access to the EU public procurement. In order to seize the opportunities, Ukraine shall pursue the implementation of digitalization initiatives in all areas of economy, and close cooperation in order to coordinate digital processes with the EU.

In the field of circular economy, there are certain obvious opportunities that open up in the framework of the EU special priority to promote these matters in the framework of **neighbourhood policy**. The Commission's new proposal on priorities of Eastern Partnership directly indicates that the EU will support and promote aspects of circular economy in the neighbour states with a focus on energy-intensive sectors (plastics, textiles, and construction products).⁷⁴ In order to make the most efficient use of the opportunities, Ukraine shall take a proactive role in the formation of priorities and budgets for the relevant thematic and geographical programs under the European Neighbourhood Policy⁷⁵.

The EU intention is to utterly refuse from the export of wastes and introduce a powerful European market of secondary raw materials. Consequently, it may facilitate the emerging of such market in Ukraine, which in its turn, will create **conditions for the segregated waste collection, waste sorting and waste processing** in Ukraine.

(d) Threats

The New Industrial Policy of the EU may jeopardize the **access to Ukrainian goods and services to the EU market** through the creation of a series of new technical barriers related to the increased requirements to their environmental sustainability. In the first place, it concerns the production of steel, chemicals, construction products, and cement. At the same time, the requirements for environmental sustainability are related to the energy intensity of such production, and the associated impact on climate change. There is also a closely related intention to introduce a carbon border adjustment mechanism at the EU customs border.

The New Industrial Policy of the EU may **aggravate the cooperation** and engagement of Ukrainian producers into the EU manufacturing facilities, since the EU aims to enhance the autonomy of their production by decreasing the dependence on foreign suppliers.

Enhanced requirements to quality for certain types of products will possibly pose extra **challenges for the 'industrial visa-free regime'**, since in this field there will be some active changes which implies a 'moving target' for Ukraine. Consequently, manufacturers shall be prepared to implement more rigid technical requirements to their products, according to how the EU is trying to do in their industrial policy.

Government support to manufacturers in Ukraine may largely aggravate the access to their products to the EU market, since the EU wishes to overcome the external unfair competition related to the government subsidies in foreign countries. Therefore, such manufacturing facilities will require either some internal demand, or other foreign markets.

EU policy in circular economy will lead to stricter requirements of the Directive 2009/125/EC on **ecodesign** (in scope and substance). It will negatively affect the opportunities to export the goods by Ukrainian producers in the areas of electronics, furniture, steel, cement, and chemicals. In order to have access to the EU market, business operators will have to modernize their manufacturing facilities.

Enhancing control over 'sustainability' of all goods getting to the EU market may also restrict the opportunities for Ukrainian producers falling under the Industrial Emissions Directive (including machine building, chemicals, thermal power, dairy production, etc.). Special risk zone will cover producers of plastics, packaging, textiles, and construction products.

Strengthening of the **secondary raw materials market** in the EU will definitely lead to decreased exports of recyclables to Ukraine. It will affect processing companies currently dependent on the imports of such secondary raw materials.

The EU intends to integrate new environmental requirements to goods and services into all **trade agreements**, and add demands within the framework and in line with WTO demands.

Upon the whole, due to the EU new industrial policy and implementation of circular economy principles, access to its markets for Ukrainian manufacturers will be largely aggravated through stricter requirements to environmental sustainability of products (energy intensity, greenhouse gas emissions, control of waste generation and waste management, requirements to ecodesign, etc.).



2.4 SUSTAINABLE MOBILITY

MAIN EGD OBJECTIVES: SUSTAINABLE MOBILITY	WHAT IS IMPORTANT FOR UKRAINE?
<ul style="list-style-type: none"> ● key objective – reduction of greenhouse gas emissions in the sector by 90% ● increasing the share of sustainable types of transport, such as railway and inland water transport ● stricter standards for pollutant emissions for motor vehicles with combustion engines ● development of infrastructure for electric cars 	<ul style="list-style-type: none"> ● impact on the development of electric cars market in Ukraine, especially used cars ● new conditions for motor carriers operating in the EU markets ● potential for the development of railway and inland water transport in Ukraine

(a) Overview

Key task in the field of transport to reach an objective on climate neutral Europe by 2050 is to reduce greenhouse gas emissions by 90%.

It will be secured due to: (1) transferring a large share of cargo transportation from motor vehicles to railway and inland water transport (75% of cargoes); (2) smart traffic management; (3) raising environmental requirements of fuel for all types of transport, such as through termination of subsidies for fossil fuels and reviewing preferences in taxation for maritime and jet fuel, application of the European emission trading system in transport; (4) production increase and use of alternative fuels for vehicles, including the development of infrastructure for cars with low and zero emission levels; (5) development of public transport for cities; (6) reduction of pollution through stricter standards for fuel, reduction of pollution in ports, and better air quality near the airports.

The following measures are planned to fulfil the tasks:

- From 2021, to run initiatives for better railway and inland water transport management. To support the **promotion of railway transport** and to increase its usage for passenger and cargo transportation, the year 2021 shall be declared the European Year of Rail.⁷⁶
- In 2020, it is planned to adopt the **Sustainable and Smart Mobility Strategy**. The Strategy will cover the following 4 areas of action: increased use of clean transport and alternative fuels for motor vehicles, maritime and aviation transport; increase in the share of sustainable types of transport, such as rail and inland water transport; incentives for consumers for correct choices of low emission transport; investment into solutions with low and zero emissions.⁷⁷
- Since 2020, the financing for the **development of charging stations as part of infrastructure for alternative fuels**, and the assessment of legislative opportunities to speed up the production and supply of alternative fuels. It is planned to have 1 mln charging stations in

2025, for 13 mln. low emission cars (currently, there are 140,000 charging stations for 975,000 cars). In particular, in 2021, it is planned to review the **Directive 2014/94/EU on the deployment of alternative fuels infrastructure** and the **Regulation 1315/2013 for the development of trans-European transport network**.

- In 2021, the review of proposals to the **Directive 92/106/EEC on the establishment of common rules for certain types of combined transport of goods between Member States**. Main objective is to make the directive an efficient tool for support to multimodal transport of goods involving rail and water transport, including the coastal shipping.

- In 2021, to submit proposals for more rigid standards for pollutant emissions for **vehicles with combustion engines**.
- Assistance in the development of **smart systems** for traffic management and a solution **'Mobility as a Service'** through financial tools, such as Connected Europe Facility.
- to work on emission reduction from the air carriage through approval of the Commission's proposal to the **"Single European Sky"** initiative.
- Possibility for the Commission to submit a new proposal to supplement the **Directive 1999/62/EU on the charging of heavy goods vehicles for the use of certain infrastructures** in the context of pricing efficiency for the road use in the EU.

(b) Situation in Ukraine

Ukraine has a task to make the transport sector greener in a number of its strategic documents, such as in the National Transport Strategy of Ukraine 2030, a draft Concept for 'Green' Energy Transition of Ukraine 2050, a Strategy for Low Carbon Development of Ukraine 2050. **Transport Strategy**, among other things, includes such targets as reduction of greenhouse gas emissions volumes into air from mobile sources to the 60% of the 1990 levels, reaching the 75% share of electric vehicles in domestic connections in 2030, increasing the level of applying alternative fuels and electricity in transport sector to 50% by 2030.⁷⁸

However, the declared targets on greener transport and emission reduction remain on the level of strategies: **the developed action plan 2019-2021 to implement the Transport Strategy has not been approved**.

An important move to improve transport infrastructure, to develop transport sector, to introduce new technologies and environmentally

friendly transport, to raise security levels, and to provide quality transportation services is **to implement a transport component of the Association Agreement**. Nevertheless, as of today, the most important draft laws on transport have not been approved, even though they are developed, and some of them have been registered in the parliament. Specifically, it concerns the draft laws on railway transport, on inland water transport, on operating safety wheeled vehicles, on multimodal transportation, on joining the Agreement on the development of multimodal transport TRACECA. Since 2014, there has been the lowest implementation levels of European integration commitments in the transport area (as little as 21%).⁷⁹

Ukraine's transport system has a **low level of development of transportation and logistics technologies and facilities for multimodal carriage**. Multimodal and intermodal cargo transportation accounts for as little as 0.5% of transport market in Ukraine.⁸⁰ Ukraine's transport system borders with TEN-T, but currently it still has a low level of

interoperability and the overall technological lag from TEN-T.

Transport sector is one of the largest sources of pollution and greenhouse gas emissions. 90-95% of pollutant emissions into the air in cities and in crowded places is accounted for motor vehicles. In 2018, the sulfurous oxide emissions into the air accounted for 17623.3 tons, and it is the growing trend.⁸¹

Motor transport itself is used the most for cargo and passenger transportation in Ukraine. In 2018, cargo motor transport carriage was 3.7 times higher than the rail transportation, and 326 times higher than inland river transport. Motor transport (buses) carried 196,852.1 thousand passengers, i.e. 12-fold than by railway.⁸²

Ukraine supports the purchase and use of **electric cars**, due to introducing preferential conditions (VAT and excise tax exemption when brought to Ukraine before December, 31, 2022). According to Ukravtoprom, in 2019, Ukrainians purchased and registered 7,012 electric cars, while their number in Ukraine has grown by almost 33%.⁸³ However, the infrastructure for servicing electric cars is developing at a very slow pace.

(c) Opportunities

Including sustainable and smart mobility aspects into the European Green Deal may provide an impetus to speed up the European integration reform in the field of transport in implementation of the EU-Ukraine Association Agreement. It is particularly relevant for the reform and development of railway transportation, and also for multimodal carriage.

Should Ukraine synchronize a series of its instruments and practices in transport field, such as in smart technologies, the general digitalization policy of Ukrainian government will have a positive effect on this matter. In this context, cooperation between Ukraine and the EU may acquire more relevance on gaining experience in using smart technologies in settlements, such as in cities.

Rejection of a wide use of motor transport for cargo and passenger transportation in the EU will offer an opportunity for Ukraine to develop new railway connections, ports, rail or maritime transport hubs.

(d) Threats

Development of the electric cars market in the EU and the subsequent flooding of Ukraine's market with the used electric cars from Europe will have a positive effect on pollution reduction in cities. On the other hand, though, the use of dirty electricity to charge electric cars and the problem of recycling of car batteries may cause new environmental problems in Ukraine.

EU's aspirations to reduce motor cargo transportation in order to reduce emissions may impact the issuance of permits for Ukrainian trucking companies, which is rather problematic already today.

Development of inland water transport in Ukraine will require tackling a series of environmental issues related to the construction of new water routes (E-40, specifically, conducting the strategic environmental assessment and environmental impact assessment) or the operation of the previously created routes (channel Danube-Black Sea, specifically, resolving problems with Romania).



2.5 GREEN AGRICULTURE

MAIN EGD OBJECTIVES: GREEN AGRICULTURE	WHAT IS IMPORTANT FOR UKRAINE?
<ul style="list-style-type: none"> ● main task – ensure food security ● sustainable primary production ● sustainable consumption and healthy food ● reduction of food waste 	<ul style="list-style-type: none"> ● strengthening environmental requirements to agricultural products to be placed in the EU market ● Ukraine has a large capacity to expand the organic production

(a) Overview

Main task in agriculture (includes farming, fishery, and aquaculture) is to provide for food security. It is estimated that by 2050 the population in the world will reach 10 bln. They will need to be provided with access to safe and nutritious food. To address this issue and reach the sustainable development goals, The European Commission adopted its new Farm to Fork Strategy⁸⁴ for a fair, healthy and environmentally friendly food system on May 20, 2020. The Farm to Fork Strategy has proposed EU actions and commitments to transform food systems into global standards for competitive sustainability, the protection of human and planetary health, as well as the livelihoods of all actors in the food value chain.

The strategy has set targets to transform the EU's food system, including:

- 50 percent reduction of the use and risk of pesticides
- 20 percent reduction of the use of fertilisers
- 50 percent reduction in sales of antimicrobials used for farmed animals and aquaculture

- 25 percent of agricultural land used for organic farming.

The 'farm to fork' provides for a number of activities to achieve the following objectives:

- **Transition to sustainable production, mitigation of climate change, and biodiversity preservation**

Inter alia, it is about the significant decrease in the use of **chemically synthesized pesticides and fertilizers, decrease in antibiotics usage.** According to the estimates of the Intergovernmental Panel for Climate Change, greenhouse gas emissions from agricultural activities in the EU alone account for 11%. In the world, about 21-37% of all greenhouse gas emissions come from activities related to food production⁸⁵. Moreover, sectors related to agriculture and food production contribute to large soil and water pollution.

Activities of agricultural sector shall be oriented to the **use of sustainable practices, such as organic production, precision farming, compliance with the animal welfare standards,** etc.

Thereat, it goes about the ban on imports of food products to the EU market, if they do not comply with environmental standards.

- **Support to sustainable consumption and transition to healthy diet**

Sustainable food system shall:

- have a neutral or positive environmental impact,
- be adaptable to climate change and also contribute to climate change mitigation,
- provide for food security,
- create an environment with free access to healthy eating for EU citizens.

Within the strategy implementation, it is planned to develop the coordinated policy and legal framework in the EU on **sustainable food system**, to inspire research, innovations and financial

mechanisms in this field. Special focus shall go to events oriented towards awareness raising of consumers, such as through electronic means, on sustainable consumption, the choice of food products in favour of healthy and nutritional food products, or such that have smaller environmental footprint.

The 'fork to farm' strategy will also include proposals to improve the status of farmers in supply chain.

- **Reducing food waste**

Another way to reduce environmental impact is to **reduce the number of food waste**, since up to 20% of all food produced in the EU goes wasted. Thereat, about 36 mln. of EU citizens cannot afford high quality nutrition; over a half of adult population suffer from obesity, which contributes to the spread of related diseases and additional costs for health care.

(b) Situation in Ukraine

Ukraine's agro-industrial complex is one of the key sectors of economy, and has made about 10% of Ukraine's GDP over 2018-2019 marketing year. Over the same period, the AIC products exports accounted for almost 40% of the total exports.⁸⁶ Agricultural lands take up 41.4 mln. hectares, of which 79% are the arable lands. Thereat, Ukraine has one of the highest rates of arable land share - 54% of the country's territory,⁸⁷ but a very low efficiency of land use and AIC productivity. Every year, a share of eroded lands is growing, specifically due to tillage.

The previous Strategy for National Environmental Policy of Ukraine 2020⁸⁸ declared the decrease of arable lands by putting out of use or through

conservation of degraded, low-yielding and technogenic-contaminated agricultural lands, etc. The current strategy for environmental policy, the same as many other documents⁸⁹, identify, among other priorities, the rational use of agricultural lands and reduction of man-caused impact of agrarian sector on environment, supporting the development of organic farming, securing rational use of natural resources, etc. At the same time, they do not contain any clear indications as to the implementation of the activities.

In the framework of **AA implementation, Ukraine** had to improve the law, specifically to contribute to transition to sustainable farming practices. The approved legal framework includes a Law

of Ukraine “On the Underlying Principles and Requirements to Organic Production, Turnover, and Labelling of Organic Products” dated July, 10, 2018, No 2496-VIII; the Law of Ukraine “On Government Control Over Compliance with the Food Product Law, Feeds, Animal Origin By-Products, Animal Health and Welfare” dated May, 18, 2017, No 2042-VIII; and the Law of Ukraine “On Safety and Hygiene of Feeds” dated May, 18, 2017, No 2042-VIII.

The Law on Organic Production has not been implemented yet, since the process is underway for approval of the by-laws. It shall regulate the rules and procedures for organic farming. Even though organic production has been developing in Ukraine since the early 2000s, its share in the overall area of agricultural lands, as of 31.12.2018, accounts for as little as 0.7%⁹⁰.

Another important law “On Information to Consumers on Food Products” was approved on December, 6, 2018, No 2639-VIII. The law sets the requirements to producers on providing complete and truthful information on food products, specifically to state the information on content of allergic agents, food additives, and other parameters. The enforcement of the law has already started.

Another important factor for the sustainable development of farming is the approval of the Law of Ukraine “On Environmental Impact Assessment” dated May, 23, 2017, No 2059-VIII to abate possible environmental impact from the agroindustrial activities.

The climate change adaptation aspects remain unregulated, even though in the end of 2019 a Strategy for Control and Adaptation to Climate Change in Agriculture, Forestry, Hunting Sector, and Fishery of Ukraine 2030 was drafted⁹¹. In ad-

dition, Ukraine is lagging behind in the implementation of the entire block of issues related to the agricultural sector’s impact on the environment and on food products, such as: regulation of contamination of underground waters and surface waters with nitrates from the agricultural sources, approval of the code of best practices in agriculture, establishing control over GMO, bringing into conformity the measures on using fertilizers and pesticides.

According to recent data, the aggregate greenhouse gas emissions in the agricultural sector in 2018 have grown by 7.7%, compared to the previous year. It can be explained by the increasing area under tillage, and the growing volumes of the applied mineral and organic fertilizers⁹².

A separate block of issues is related to the establishment of bringing into conformity to quality requirements for food products, such as honey, eggs, and poultry, crude fruit and juices, etc. Some of the food products are very important for exports, while most legal and regulatory acts have been drafted and preliminary approved by the sectoral Ministry.

(c) Opportunities

Conformity with the established European quality standards and reduction of environmental impact are the top priority for the EU in agrarian production. That is why, for further growth of exports, it is important to bring into conformity the quality standards for food products, and to provide for their compliance by producers, and approve the code of best practices in agriculture.

Ukraine has a huge capacity to expand organic production and to use the minimum soil disturbance technologies on a broader scale. Organic production combines high quality standards and best environmental practices. It helps preserve natural resources and biodiversity, as well as renovation of degraded territories. According to the studies undertaken within the "Assessment of Ukraine's Technological Needs" project, the organic production may cover up to 4 mln. hectares. Currently, the area under organic production accounts to as little as 309,000 hectares.

The capacity of introducing the minimum soil disturbance technologies, according to the same study, may reach up to 10 mln. hectares. The minimum soil disturbance helps preserve its structure, prevents humus loss and erosion, and helps reduce greenhouse gas emissions.

The disadvantage to the technologies may be the drop in crop yields. In organic production, a transition period shall also be taken into account, which may last from a year on. On the other hand, the price of products grown according to the organic production standards, is higher than the conventional products.

In the world, as of 31.12.2018, there were 71.5 mln. hectares of lands covered by organic production, while the market volume was USD 105 bln⁹³. Main market places for organic production are found in the USA, EU, and China. For Ukraine, the EU is an important trade partner, both for the conventional, and for organic products. However, the increase in organic production has a huge potential for expansion of markets to sell Ukrainian products.

(d) Threats

High requirements to food products and conformity with the environmental standards in their production may be an obstruction for further exports of Ukrainian products to the EU market. Currently, it is one of the key markets, which loss may affect the country's economy. While the issue of quality requirements for food products is being handled increasingly, the environmental standards in agroproduction are not available in Ukraine today.

We can already feel the challenges in the exports of corn and rape plant, the leading global positions for Ukraine. Ukraine holds the 4th and the 2nd places, respectively, in the global exports of these plants in natural units⁹⁴. According to the EU Directive on energy from renewable sources,⁹⁵ Ukraine shall report on greenhouse gas emissions in production of agricultural products. In 2017, the pilot estimates for greenhouse gas emissions carried out on the basis of the real data of farming enterprises growing corn and

raps plant in Ukraine showed the exceedance of permissible levels of greenhouse gas emissions in growing both plants⁹⁶. Since 2018, the estimations shall be performed on a regular basis. In addition, in June, 2021, a new EU Directive is becoming effective, which will add more requirements to GHG emissions reduction⁹⁷.

With approval of the European Green Deal and the 'farm to fork' strategy, we may expect the strengthening of measures for compliance with the environmental law and the restrictions for imports to the EU.



2.6 BIODIVERSITY PRESERVATION

MAIN EGD OBJECTIVES: BIODIVERSITY	WHAT IS IMPORTANT FOR UKRAINE?
<ul style="list-style-type: none"> ○ EU is trying to ensure the comprehensive and unified position in the negotiations at the Conference of the Parties to the Convention on Biological Diversity on the new global strategy on biodiversity protection ○ 'zero tolerance' to illegal, non-transparent, and unregulated fishery 	<ul style="list-style-type: none"> ○ strengthened control within the Forestry Strategy over all products imported to the EU market ○ protection of biodiversity is one of the key objectives for cooperation recently proposed by the EU in the framework of Eastern Partnership

(a) Overview

The problem of protecting biological diversity is quoted as soon as in the first paragraph of the Communication from the European Commission on the European Green Deal. **The EGD is only a part of the 'puzzle' of the EU policy in this field: no less important and mutually reinforcing is the Environment Action Programme and the European Strategy 2030 (sustainable development goals).** Of special importance is the Environment Action Programme. In 2020, the Commission shall propose a new 8th action programme 2021-2030 (the current 7th programme ends in December, 2020).

The European Commission adopted the **EU Biodiversity Strategy⁹⁸ for 2030 and Action Plan** as a comprehensive and long-term plan for nature protection. The main elements of the Strategy are the following: (1) Establishing a larger EU-wide network of protected areas on land and at sea, building upon existing Natura 2000 areas; (2) EU Nature Restoration Plan; (3) Measures to tackle the global biodiversity challenge. The important objective is to provide the holistic and single po-

sition of the EU during negotiations at the Conference of the Parties to the Convention on Biological Diversity (preliminary – China, autumn, 2020). At the Conference of the Parties, it is expected to approve a new global strategy on preservation of biological diversity.

The EU Biodiversity Strategy has very measurable goals and activities to protect the biodiversity in the EU itself. In particular, it is planned to assess the need to reinforce the EU law in this area, to expand the NATURA 2000 (a network of protected areas in the EU). On the basis of the strategy, the EU Forestry Strategy will be developed. It is expected that the **new Forestry Strategy of the EU** will include afforestation among its key objectives. In addition, the EU plans to strengthen control within the Forestry Strategy over all goods imported to the EU market that might affect forest preservation.

Under this priority, the EU plans to strengthen the protection of seas and oceans, such as the Commission announced a 'zero tolerance' policy for illegal, non-transparent, and unregulated fishery.

Biodiversity protection is one of the key objectives of the cooperation recently suggested by the EU in the framework of Eastern Partnership⁹⁹. In par-

(b) Situation in Ukraine

Ukraine covers under 6% of Europe's area, but owns about 35% of its biological diversity. Ukraine's biosphere accounts for over 70,000 species of flora and fauna, such as over 27,000 of flora species, and over 45,000 of fauna species. In the recent years, there has been an increase in the number of plant and animal species enlisted into the Red Book of Ukraine.¹⁰⁰ The total area of forests, according to different sources, accounts for 14.5% to 16% of Ukraine's territory. They include primary forests and old-aged forests of the Carpathians (according to the scientific data, over 900 km²). Other natural ecosystems account for 6 to 9% of the country's territory. The share of arable lands in Ukraine is one of the highest in the world: as of January, 1, 2019, 68.5% of Ukraine's territory is accounted for agricultural lands¹⁰¹; the arable lands cover 54% of Ukraine's territory. **Overall, Ukraine's biodiversity is understudied**¹⁰².

To protect the biodiversity, the protected areas have been allocated, with different status. As of 01.01.2018, the nature reserve lands of Ukraine include 8,296 territories and protection sites with the total area of 4.318 mln. hectares within Ukraine's territory (the actual acreage is 3.985 mln. hectares) and 402,500.0 hectares within the Black Sea water area.¹⁰³

The main threat to biological diversity comes from human activity and destruction of natural habitats for flora and fauna. There is a disastrous

reduction of wetlands, steppe ecosystems, and natural forests. The causes are in land ploughing, deforestation with further change of designated use, soil reclamation or increasing soil water content, industrial, residential and vacation cottage construction, etc.

reduction of wetlands, steppe ecosystems, and natural forests. The causes are in land ploughing, deforestation with further change of designated use, soil reclamation or increasing soil water content, industrial, residential and vacation cottage construction, etc.

A key strategic document in this area is the Main Foundations (Strategy) for National Environmental Policy of Ukraine 2030.¹⁰⁴ The objectives identified by the strategy under the Goal 2 "Ensuring Sustainable Development of Natural Resources Potential of Ukraine" include: to reduce losses of biological and landscape diversity, to preserve and resume the abundance of species of natural flora and fauna, such as migrating animal species, their habitats, to combat the illegal trade in wild species, to increase and expand territories of nature reserves.

Nature protection is an area for approximation of Ukraine's environmental law under the AA. Under this objective, Ukraine has the commitment to approximate its legislation to the two nature directives: the birds and the habitats directives. If they are fully implemented, Ukrainian sites shall assume a status in the NATURA 2000 network. Ideally, it would be a full membership in the network. However, due to the fact that Ukraine is not the EU member state, there are certain restrictions on the implementation of the directives. Some experts and EU representatives suggest that Ukraine take another

approach: to create the sites within the Bern Convention, and to include them into the Emerald Network. Currently, the territories (sites) of

the Emerald Network in Ukraine do not have any special protection status (there has been 'created' over 270 of them).¹⁰⁵

(c) Opportunities

Nature protection is an extremely **important aspect for the EU**, since it is a priority for EU citizens. In particular, recently a fitness check for the birds and the habitats EU directives has been completed, which implies a long-term perspective of their application in the EU. That is why their implementation in Ukraine under the AA will maintain its relevance for the EU.¹⁰⁶ At the same time, the implementation of the birds and the habitats directives requires substantial funding.¹⁰⁷

Nature protection as a priority of the EU foreign policy will open a number of opportunities for the cooperation with the EU, and for Ukraine's acceptance of international assistance in this area, such as within the Eastern Partnership. In order to use this assistance, there shall be some clearly set priorities in this area, to show progress in the fulfilment of its commitments under the AA.

The EGD implementation is running parallel to the update of Annexes to the AA in the field of environment protection and climate. It creates a **unique window of political opportunities** for the Government of Ukraine to initiate a dialogue with the EU on elimination of the current, and actually, rather formal, obstacles, and provide for the opportunity for Ukraine to implement the Birds Directive and the Habitats Directive of the EU, to create a format of an additional cluster to the NATURA 2000 network, under the provisional name of NATURA 2000+¹⁰⁸, and most importantly, to attract the EU financing for these purposes (the NATURA 2000 network would not exist without the EU funding).

Strengthening of control from the EU over the movement of **wood** will have a positive effect on Ukraine's action in combatting the market of illegal wood, such as its exports to the EU.

(d) Threats

The high priority of nature protection in the EU, such as in the EGD framework, among other things, may practically imply the EU's and its financial institutions' careful attention to Ukraine's compliance with the respective commitments, particularly, in implementing investment projects in energy sector. Notably, special focus shall be laid on the protection of migratory species under the Birds Directive 2009/147/EC, which is part of Ukraine's commitments within the Energy Community.

Upon the whole, biodiversity protection under the EGD does not pose any special threats for Ukraine, but rather opens new opportunities.

2.7 ZERO POLLUTION

MAIN EGD OBJECTIVES: ZERO POLLUTION

- key objective is a toxic free environment in the EU
- enhanced monitoring (including the digitalization), reporting, abatement and liquidation of pollution
- additional requirements to the quality of air, water, and soils

WHAT IS IMPORTANT FOR UKRAINE?

- including new climate, energy, and circular economy requirements for the best available techniques, and chemicals production
- this EGD element is included into the future priorities of Eastern Partnership

(a) Overview

A key ambitious task for the EU on zero pollution is a toxic free environment. The EGD identifies vectors that require more careful attention and reform to reach the objective:

- **zero pollution** – a focus on measures to improve monitoring (including digitalization and its new features for distance monitoring for pollution), reporting, prevention and liquidation of pollution, and will concern the air, water, soil, and consumer goods. These measures are of the integrating nature. That is why the EU and the Member States will need a systemic revision of all policies and legal framework;
- **clean water** – the need to reduce water pollution with the surplus of biogenic substances, to combat water pollution due to flooding, urban sewage waters, new and especially hazardous pollution sources (such as contamination with microplastics, chemicals, including pharmaceuticals), overcoming a combined impact from various pollutants;
- **clean air** – reviewing the standards for air quality in the EU, and their conformity with the WHO

recommendations, and offering assistance to local authorities in provision for cleaner air, through strengthening provisions on monitoring, modelling and plans for air quality,*

- **industry** – EU activities to abate industrial emissions will concern the following two areas: reviewing measures on pollution from large industrial facilities and improving measures to prevent industrial accidents. On industrial emissions, a sectoral scope of the law will be reviewed, to bring into full conformity with the climate and energy policy and circular economy policy;
- **chemicals** – simplification and strengthening of the EU legal framework, notably, the improvement of rules for assessment of chemicals placed on the EU market, strengthening the role of institutions and research facilities in the EU in promoting the 'one substance-one assessment' process, transparency in prioritizing actions on chemicals management, rapid adjustment of the law to the scientific findings

* In planning and approving measures, the Commission will be taking into account the findings of the 2019 Fitness Check.

on risks coming from the substances that compromise the endocrine system, hazardous chemicals in goods, including imports, highly persistent chemical substances and a combined impact of various chemicals.

The Commission planned for 2020-2021 to approve several documents to provide for zero pollution*:

- **Chemicals for Sustainability Strategy** (summer, 2020),
- **Action Plan on Zero Pollution to Waters, Air, and Soils** (2021),

.....

* 7th Environment Action Programme (DECISION No 1386/2013/EU) authorized the European Commission to develop the EU Strategy on Toxic Free Environment by 2018. To implement the commitment, a special study was conducted (Final report. 2017), second Assessment of REACH within the framework of REFIT (COM(2018) 116 final), Fitness Check of the most relevant EU chemicals legislation (except for REACH) (COM(2019) 264 final). However, the strategy was never approved.

(b) Situation in Ukraine

Air pollution is one of the most pressing environmental problems in Ukraine. In fact, two thirds of the country's population live in the territories where the quality of air does not comply with the health standards. Besides, the issue with water and soil contamination also calls for action.¹⁰⁹

The issues with inefficiency of the environment monitoring system, the need to take into account the EU standards will keep their relevance for Ukraine. In the recent years, there has been certain progress in this area. Specifically, new **procedures for water monitoring**¹¹⁰ and **air monitoring**¹¹¹ were approved. However, their practical implementation provokes a series of justified concerns.¹¹² The issue of efficiency of the environment monitoring is closely related to the reform of the **state oversight and control system** that

- **Revision of Pollution Abatement Measures for Large Industrial Installations** (2021).

Presently, the Commission is developing drafts for the above documents, and running consultations with stakeholders on their content.

The achievement of a zero pollution ambition is closely related to the implementation of other EGD focus areas. For example, in 2021, it is planned to run a series of activities to provide for zero pollution in a new Action Plan on Circular Economy (2020). Notably, it will include development of methodologies to minimize the content of chemical substances in secondary materials, to introduce amendments to annexes to the EU Regulation on Chemical Substances and their Safe Use (REACH), reviewing the directives on sewage water treatment and on industrial emissions.

has been changing recently¹¹³ and is on the stage of approving legislative acts¹¹⁴.

Industrial production sector is still one of the main sources for environment pollution. In 2018, emissions of pollutants into the atmospheric air from the fixed pollution sources accounted for 17.7% from the extracting industry, 35.2% from the processing industry, and 39.4% from the activities related to supplies of electricity, gas, steam, and conditioned artificial air.¹¹⁵

Approximation of Ukraine's law on the action to abate pollution from large industrial installations has insofar reached the approval of **programme documents**¹¹⁶. A draft law was registered in the parliament **on abatement, reduction, and control of industrial pollution**, but it was further

withdrawn.¹¹⁷ Assistance to Ukraine in legal approximation and practical implementation of the Directive 2010/75/EU on industrial emissions is provided under technical assistance projects. There are also certain complexities on the **National Plan for Reduction of Emissions from Large Combustion Plants**, which practical implementation has been protracted, also for financial reasons.¹¹⁸

There is still a high risk on the territory of Ukraine for **accidents** of natural and anthropogenic origin. One reason for the occurrence of emergency situations is climate change.¹¹⁹ A combined resolution of issues of **accidents and climate change** will help prevent a negative impact on environment.¹²⁰ Ukraine has the law regulating rules of conduct in accidents, but it fails to fully account for the EU standards. There are certain difficulties in the implementation of requirements of the Seveso Directive III.* Attempts to adopt the **legislative changes** failed, the draft laws registered in the VRU have been withdrawn.¹²¹

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* According to Annex XXX of the AA, Ukraine shall approximate its legislation to the Directive No 96/82/EU on the control of major-accident hazards involving dangerous substances (Seveso II). However, it was repealed, and today there is an effective Directive 2012/18/EU of the European Parliament and of the Council dated July, 4, 2012, on the control of major-accident hazards involving dangerous substances (Seveso III). Paragraph 1764 of the Action Plan to Implement the Association Agreement provides for tasks and measures to implement The Seveso III Directive.

The Concept for Raising the Level of Chemical Safety (2008)¹²² provides for the improvement of Ukraine's law on chemical safety and chemical substances management through its approximation to the EU standards. The AA (Art. 361 (h)) emphasizes the cooperation of Ukraine and the EU in the sector of chemical substances. However, Annex XXX does not include any EU Regulations on chemical substances management (their registration, assessment, labelling, etc.) that Ukraine shall approximate its national legislation thereto. Notably, the Regulation (EC) 1907/2006 and Regulation (EC) 1272/2008¹²³ were not included.

At the same time, Ukraine **planned** to implement the above EU Regulations, by adopting **national technical regulations**¹²⁴. On November, 20, 2019, the government **Action Plan to Implement the Association Agreement** was supplemented with the clause 1779². It also sets a task to bring the national legislation in conformity with the EU Regulations 1907/2006 and 1272/2008. Currently, the legislation has not yet been approved, even though the work to develop it had been done with-in technical assistance projects¹²⁵.

(c) Opportunities

The EGD emphasizes the fact that environmental and climate issues require urgent action from the EU and the partner states. **Combining the two instruments, the EGD and Eastern Partnership, opens new opportunities for Ukraine to continue the cooperation in promoting environmental and climate goals.**

Within Eastern Partnership, further vectors for cooperation have been identified for Ukraine and the EU. They include:¹²⁶

- **focusing on full implementation of the AA** and the Agreement on the Deep and Comprehensive Free Trade Area, and other trade agreements, in order to provide the maximum benefits,
- continuation of cooperation with the EU Civil Protection Mechanism on **improved prevention**, preparedness and response **to natural and anthropogenic disasters**,
- continuing to **invest into environment protection management** and raised **awareness**, including also through the engagement with civil society.

Expanding the scope of large industrial installations will incentivize the increase in the number of companies that would be implementing best available techniques. At the same time, the implementation will require considerable financial costs. That is why it is relevant to develop the **financial mechanism to support the implementation of EU standards** on industrial emissions. Positive functioning of the mechanism could be transposed to other areas of implementing EU environmental standards that require considerable financial investment, for a large part.

The negative foreign trade balance of Ukraine in a segment of chemicals is virtually not changing. At the same time, there is a steady and lasting increase in import deliveries of chemicals.¹²⁷ Therefore, the implementation of the EGD updated mechanisms on chemicals management will help **increase environmental conformity of chemical products and further exports by Ukraine** to the EU Member States, and help **protect the environment, people health, and domestic market** from hazardous chemicals.

(d) Threats

The assumed changes to be implemented under the EGD will impact Ukraine due to the need to fulfil its commitments under the AA, to finally move from the planning stage to the adoption of the respective national law and to practical implementation of environmental standards. Basic challenges and threats are still in **implementation limits** and in the **lack of financial mechanisms** to support and encourage the implementation of environmental standards.

For example, the challenges in the implementation of European standards in Ukraine are still about the industrial emissions, such as in the development, adoption, and application of the **best available techniques (BAT)**. On the EU level, the technologies shall be approved by the Commission, rather than by

the individual Member States. The approach is an objective reason for Ukraine's limited competence in approving the BAT, that is why it requires a dedicated mechanism for the application of the BAT reference documents developed and approved by the Commission.

Including climate, energy and circular economy requirements to the best available techniques, chemicals production, non-compliance with the EU environmental standards, the same as further delays in Ukraine with their implementation, will impact the **restriction of import of goods** from Ukraine, as such that have been produced not in compliance with the environmental standards. The EU may apply to such goods certain burden or restrictive financial measures (for example, to apply a carbon border adjustment mechanism).



2.8 FINANCE

KEY EGD OBJECTIVES: FINANCE	WHAT IS IMPORTANT FOR UKRAINE?
<ul style="list-style-type: none"> ● Development of sustainable finance ● Expanding the reporting on the ESG risks ● Accounting for the ESG risks in the regulation of financial services ● Introducing a taxonomy for sustainable economic activities 	<ul style="list-style-type: none"> ● Changes in the rules for regulation of financial services will be implemented in Ukraine in the future (rather long-term) ● In the event of EGD success, the access to external financing will be simplified for sustainable companies and may be complicated for other companies

(a) Overview

EGD action in financial sphere will primarily continue the efforts of the previous Commission composition in sustainable finance¹²⁸. Under the EGD, in 2020, the Commission planned to issue a new strategy for sustainable finance, and update the Non-Financial Reporting Directive*. First consultations on the sustainable finance strategy were scheduled for the first quarter of this year, but failed to take place. Consultations are still underway on the Non-Financial Reporting Directive update in order to extend the risk reporting related to climate change and environment.¹²⁹

EU also continued the work within the Action Plan on sustainable finance adopted in 2018.¹³⁰ In 2021, the Regulation No 2019/2088 on sustainability-related disclosures in the financial services¹³¹ will come into effect. The EU regulators of financial services (EBA and ESMA) approved their action plans to pursue sustainable finance.¹³²

Activities of regulators will concern the following three areas:

- Transparency: disclosure of ESG-risks (environmental, social, and governance risks) undertaken by financial institutions, disclosure of the risks in products on offer, correct description of achieved objectives on 'green' financial products;
- Corporate management: due account for ESG-risks in decision-making by financial institutions;
- Accounting for ESG risks in oversight: updating the approaches to oversight over financial institutions.

The process is completing to approve the Regulation on Support to Sustainable Investment, also known as Taxonomy Regulation. The taxonomy in question is the sustainable economy taxonomy. The Regulation provides for the development of technical standards to help identify whether the economic operations are sustainable in terms of environmental impact.

Therefore, six main environmental protection objectives have been identified: mitigation of climate

* Also, the EGD investment plan, mostly concerning state support to financing the EGD action, was published.

change, adaptation to climate change, sustainable use and protection of water and marine resources, transition to circular economy, abatement and control of emissions of pollutants, protection and restoration of biodiversity and ecosystems.

Sustainable economic activities shall comply with the minimum social requirements, contribute to the achievement of at least one of the six objectives, and not have a serious negative impact on

other objectives. 'Green' financial products shall be conducive to sustainable economic operations, in line with the approved technical standards. Companies shall have to disclose non-financial reporting and include therein the data on sales of goods and services related to sustainable economic operations, and about the share of capital and operational costs on sustainable economic activities. It should incentivize investments into sustainable economy.

(b) Situation in Ukraine

Currently, Ukraine is implementing basic standards for international financial reporting and regulation of financial institutions. The government does not yet have any plan on transition to sustainable finance. The dedicated annex to the AA (Appendix XVII-2) does not provide for the implementation of the EU acquis provisions on sustainable finance. Similarly, the provisions are not included in the Strategy for the Development of Financial Sector 2025¹³³ recently approved by financial market regulators and the Ministry of Finance, except for the plans for implementation of 'green' bonds for the infrastructure development.

The Law on Accounting and Financial Reporting¹³⁴ provides for big companies a management report, in addition to financial reporting. It includes, among other things, the non-financial information 'describing the status and prospects for the company development, and discloses key risks and uncertainties in the company's operations' (mid-scale companies submit the management report, but it may not include any non-financial information). There have been no mandatory rules approved for the content of the management report, or the non-financial information in particular, even though the Ministry of Finance was author-

ized therefor, in cooperation with the National Statistics Service.

In its Guidelines on management report¹³⁵, the Ministry of Finance recommends that companies disclose information on environmental aspects of operations, while companies with over 500 employees are recommended to disclose non-financial indicators of their operations, such as on environmental impact. The recommendations generally conform with the EU requirements on disclosure of non-financial information.

I. Access to International Financial Markets

EU action to transit to sustainable finance is intended to re-direct the investment flows to sustainable economy. If successful, financing the development of sustainable economy is going to become more accessible and cheaper. Thus, the investments into other sectors are going to become more expensive.

The changes will go beyond the EU borders. For Ukrainian companies engaging the finance in global capital markets, environmental impact may be a crucial factor for the cost of external finance. It will create opportunities for the development of sustainable economy in Ukraine, and incentivize big business to implement best practices in environment protection.

II. Banks and Insurance Companies

The AA provides for the prospect to form a single market of financial services with the EU. If Ukraine decides to seize this opportunity, it would imply full introduction of the EU rules on banks and insurance companies. With the development of financial sector, banks and insurance companies are going to face increasingly more ESG risks, and their full account in the work will be relevant not only for compliance with regulatory requirements, but also for reduction of losses.

III. Internal Capital Market

Similar to banks and insurance companies, the formation of a single market of financial services with the EU will provide for the introduction of capital markets regulation under the EU rules. Since the internal capital market in Ukraine is on a rudimentary stage, possible advantages from changing the rules of game are still small. As in banking area, the compliance with the rules of sustainable finance is going to be a comparatively small component in the implementation of EU regulations in Ukraine.

IV. Non-Financial Reporting

At the moment, requirements to disclose non-financial information for companies are similar to the EU rules. Both in Ukraine, and in the EU, the requirements apply to businesses that present public interest*, and have over 500 employees. In the EU, these are about 6,000 companies¹³⁶, whereas in Ukraine, they are about 600 companies. Guidelines from the Ministry of Finance on non-financial information to be included in the management reports are similar in substance to the EU acquis.¹³⁷

The EU plans to review the requirements to non-financial reporting. Changes might standardize the non-financial reporting, introduce the requirements to confirm the non-financial data, to expand the data on environmental impact, to add a requirement on non-financial reporting to a broader group of companies. Upon approval of the Regulation on the taxonomy of sustainable economy, non-financial reporting will

* According to the EU rules, the businesses include banks, insurance companies, and companies with shares included into stock exchange listings. National legislation of the EU Member States may provide for additional categories of businesses of societal relevance. In Ukraine, in addition to categories identified by the EU, big companies are recognized as such that present societal relevance.

have to include the data on the share of sustainable business operations and the share of investment into sustainable economic activities.

The changes might be introduced in Ukraine, as part of commitments under the AA.

Currently, it is hard to assess the impact of the planned changes but increased transparency of operations of big businesses may improve the ESG risks management, and encourage them to increase the share of sustainable economic activities.

(d) Threats

I. Access to International Financial Markets

Technical standards defining the 'green' activities of a company, may appear to be too rigid in not so well-developed economies.* It may slow down the development of sustainable economy in Ukraine.

II. Banks and Insurance Companies

Full implementation of the EU rules for banks and insurance companies in Ukraine will make them to largely change their operations, and work in conditions of a higher regulatory burden. However, the implementation of provisions on sustainable finance is going to be one, but not the most complicated task to be faced by financial institutions.

III. Internal Capital Market

As mentioned above, the formation of a single market of financial services with the EU will imply the introduction of capital markets regulation under the EU rules. Due to low development of the internal capital market, the assumed losses from the change of rules of the game are still rather small. The same as for banks, following the rules on sustainable finance will be a rather small component of introducing the EU regulations in Ukraine.

IV. Non-Financial Reporting

As has been stated above, under the AA, Ukraine will likely have the changes to the requirements for non-financial reporting. In particular, big businesses will have to disclose more information on their ESG risks management, and on the contribution of their sustainable economic activities to sales and investment of the company.

At this stage, it is hard to assess the impact of the planned changes, but the probable threats from their implementation in Ukraine are not expected to be big. They only concern several hundred largest companies in Ukraine that have already been obliged to file their financial statements and management reports.

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* In other words, if the costs related to the introduction of standards largely exceed additional costs to attract the finance in many sectors of economy.

2.9 EU AS A GLOBAL LEADER

MAIN EGD OBJECTIVES: EU AS A GLOBAL LEADER	WHAT IS IMPORTANT FOR UKRAINE?
<ul style="list-style-type: none"> ● the EU positions itself as a global leader ready to promote and maintain an ambitious global agenda on environment action, climate change, and energy policy ● Instruments of EU global leadership include 'Green Deal Diplomacy,' trade policy and finance under the development assistance policy 	<ul style="list-style-type: none"> ● Strengthening a climate component in trade policy ● The use of the technical regulations system to promote the EU climate goals ● Risk of emerging new barriers to international trade ● Opportunities to attract investment into 'green' areas

(a) Overview

The foreign economy and foreign policy dimensions are integral components of the EGD, since the global scale of environmental challenges requires the response coming jointly from all countries in the world.

In the Communication on the EGD, the EU presents itself as a global leader ready to promote and support the ambitious global agenda in environment protection, in climate action, and in energy policy. **The Instruments suggested by the EU for global leadership include the 'Green Deal Diplomacy', trade policy, and financing under the development assistance policy.**

The EU diplomatic efforts will go for the work with other countries, as part of current multilateral agreements and platforms, such as Paris Agreement, G20, Eastern Partnership, and bilateral platforms, such as EU-China Summits. At the same time, the EU will be searching for innovative forms for cooperation and propose new initiatives with account for the needs and

challenges of individual countries or regions. For instance, the Communication mentions the launch of "NaturAfrica" initiative to preserve Africa's biodiversity.

The EU sees an important element of global leadership in the creation of economic incentives for climate action. The EU will pursue the development of an international carbon market. In addition, changes will be taking place in the EU trade policy, to include the following:

- **Strengthening of commitments on sustainable development in the EU trade agreements.** It implies the strengthening of commitments, and better monitoring and support to their implementation. All recent trade agreements of the EU already include the commitments of the parties to ratify and implement the Paris Agreement. It is expected that the commitment will be an integral part of all the new trade agreements;

- **Incentivization of trade with ‘environmental’ goods and services, and the investment** into their production. According to the Eurostat, these are goods and services designed or rendered in order to protect the environment and manage the resources;¹³⁸
- **Support to climate-friendly public procurement,**¹³⁹ i.e. the purchase of goods, services, and works with lower environmental impact, provided the functional features are kept;
- **Ensuring the fair international trade in the raw materials needed for the ‘green’ transition and investments** into production of such raw materials. It includes, among other things, combating illegal logging;
- **Reduction of non-tariff barriers in RES trade** and strengthening of regulatory cooperation in this area;
- **The use of technical regulations as an instrument for promotion of environmental requirements.** Notably, the Communication provides for the use of technical regulations and standards, in particular on food safety, as a control instrument over placing to the EU market only those goods that meet the EU environmental requirements. In addition, the Communication

also declared the goal to encourage partner states to approve similar technical regulations and standards, which shall facilitate trade and improve environment protection. Another area of the EU action on standardization is active engagement in the development of international standards, in line with the ambitious environmental goals of the EU;

- **Implementation of the carbon border adjustment mechanism,** or, the ‘carbon duty,’ as it is more commonly called. It is expected that the mechanism will allow for full account for carbon footprint in the price of imported goods. The mechanism is planned to operate in conformity with the WTO rules.

Financial support of global changes – it is the third component of a global leadership of the EU. The Communication mentions the opportunities of financing on the part of the EU and its Member States, as well as about the mobilization of private funds. Specifically, two clear initiatives have been outlined: to allocate to the climate related issues the 25% of funds from the Neighbourhood, Development, and International Cooperation Instrument, and to build an International Platform on Sustainable Finance.

(b) Situation in Ukraine

Unlike the EU, Ukraine does not present itself as a global leader in environment protection. Instead, Ukraine positions itself as a country ready to actively cooperate with the EU in climate action and abatement of environmental issues, and in actual fact, join the EU initiatives.

The area of environment protection takes an important place in the AA. The issues of trade and

sustainable development are part of the deep and comprehensive free trade area (DCFTA) with the EU, while some broader issues of environment protection, such as Ukraine’s commitments on harmonization of the legislation in this area, are included into Chapter V of the Agreement, on economic and sectoral cooperation. Therefore, the AA is in line with the EGD logic, to a certain extent, and the new generation of trade agreements with

the EU, with the increased focus on sustainable development.

Another important element in the cooperation of Ukraine with the EU in climate-oriented trade policy is the gradual harmonization of its technical regulation with the European system. The ultimate goal of the process is signing with the EU the Agreement on Conformity Assessment and Acceptance of Industrial Goods (ACAA). It will allow to lift the non-tariff barriers to trade in products covered by the Agreement. However, it also implies that Ukraine will automatically adapt and continue adapting its regulatory acts related with the technical regulation system to the relevant European standards. Therefore, if the EU includes into the regulations and standards some more rigid environmental requirements, Ukraine will follow. It can already be illustrated by adoption of several technical regulations related to the requirements to energy labelling and ecodesign.

Moreover, Ukraine harmonizes with the European standards even those technical regulations that are not covered by any commitments to be harmonized under the Association Agreement. Specifically, currently the technical regulation is under development focusing on safety and protection of chemical products, based on the EU Regulation on chemicals and their safe use (REACH),¹⁴⁰ despite the lack of the binding provision on harmonization in the Association Agreement.

In the field of sanitary and phytosanitary measures, the situation is similar. The country is reforming the system of food safety and feed safety in line with the commitments under the Association Agreement, and on the basis of European standards. It implies the transposition into the country's regulatory and business practices of the environmental requirements applied in the EU.

Public procurement is one of the most successful reforms today, in the framework of DCFTA with the EU. The fact that procurement in Ukraine is currently administered almost exclusively online makes them more climate-friendly than the previous procurement procedures. Moreover, the law on public procurement provides that technical specifications for the procured object may include the indicators of environmental impact assessment and climate and resource efficiency, which also allows for making the procurement more 'green'.

At the same time, the issue of carbon footprint generated in the production process is very painful in Ukraine. In Ukraine, there are many outdated, thus energy inefficient and environmentally unfriendly fixed assets, while the used coal for electricity generation makes all products in the country a hostage to the carbon footprint.

(c) Opportunities

It has already become obvious that the efforts targeting environment protection and climate change action lead to new non-tariff barriers in international trade. Ukraine finds it important to provide for as close links with the EU as possible, in order not to have the trade barriers obstruct Ukrainian trade but protect our producers alongside with the protection coming from the barriers for European producers. What opportunities does Ukraine have therefor?

Ukraine has already started harmonizing its legislation on technical regulations and sanitary and phytosanitary measures, in line with the EU acquis. However, for a full-fledged use of the opportunities enshrined in the AA and the EGD, Ukraine needs to reach signing of the ACAA in the area of technical regulations and recognition of equivalence in food safety and feed safety. It will help the EU treat Ukrainian products as its 'own' in the single European market.

Another opportunity is the active entry to the EU market of public procurement, which gradual opening is provided by the DCFTA. However, in order to compete in this market in climate-friendly procurement, it is important to comply with environmental requirements set for such goods and services. That is why the question when and to which extent the Ukrainian producers could make use of this opportunity remains open.

Another interesting opportunity is to attract investment into 'green' areas. However, there is a persistent challenge of the country's investment attractiveness in general, specifically, its low ranking in protecting private property rights and intellectual property.

(d) Threats

Major threat for Ukraine is to see the growth of trade barriers to export to the EU, which accounted for 41% of Ukraine's external trade in 2019.

In the field of non-tariff barriers related to product safety (the system of technical regulations and sanitary and phytosanitary measures), the major challenge for businesses is to adapt as fast as possible to new technical regulations that have been harmonized with the EU standards and are also binding in placing products to Ukraine's domestic market. Businesses shall also be prepared to further adapt thereto in the course of further changes of the EU standards. On the other hand, for the government, a key challenge is to sign the ACAA for industrial goods, and to provide for the recognition of equivalence for goods covered by the standards of sanitary and phytosanitary measures. Unless the challenges are addressed there will be a persistent threat of growing non-tariff barriers in trade with the EU.

Moreover, the increase of non-tariff barriers may jeopardize the part of products not covered by the ACAA even conceivably, since the harmonization of technical regulations in this field has not been stipulated by

the Association Agreement. It concerns chemical products and cosmetics, among other things, that will be in the focus of attention in terms of environmental sustainability.

However, the biggest threat, as of today, is the introduction of a carbon border adjustment mechanism, which may affect all Ukrainian producers. It is not improbable that all Ukrainian products have the 'carbon footprint', also due to the use of electricity generated at the thermal power plants. On the other hand, compliance with the environmental requirements involving the large combustion facilities remains on a very low level, including also because of high financial cost for the installation of the necessary equipment.



CONCLUSIONS AND RECOMMENDATIONS





**«THE EUROPEAN GREEN DEAL
AGENDA WILL BE A PRIORITY FOR OUR GOVERNMENT,
AS IT IS FOR THE EUROPEAN COMMISSION. WE ARE
STARTING THE HISTORICAL DEAL, AND WE NEED TO TAKE IT
THOROUGHLY AND SERIOUSLY.»**

/DMYTRO KULEBA/

CONCLUSIONS

European Green Deal is the EU road map for transition to a climate neutral Europe by 2050. Ukraine still lacks a comprehensive analysis of the EGD impact on the formation and implementation of the climate, environmental, transport, agricultural, and energy policy of Ukraine, in the short-term and long-term perspectives. On the basis of the general analysis of the EGD components, we reached the following conclusions.

EGD is an external factor for Ukraine (both in form and content). Upon the whole, the EGD is the EU plan to build a new climate-friendly social economic model of development. As an external factor, it shall be viewed in terms of opportunities and threats it poses for Ukraine. The opportunities and threats stem from the EU sectoral plans within the framework of the EGD, as well as from cross-cutting issues. A key over-arching topic is climate change where the EU established ambitious, specific and measurable goals.

Climate change is a top priority for the EU. For Ukraine, it implies the need to clearly integrate climate change into the plans for social and economic development. The least it implies is to formulate ambitious climate goals under the Paris Agreement (the second nationally-determined contribution), the relevant energy strategy, taking into account the climate change into all sectoral plans. The climate change related issues are a cause for most threats coming from the EGD for Ukraine. On the other hand, the current state of play in climate change also opens most opportunities. In particular, such opportunities are in the low energy efficiency and high carbon intensity of Ukraine's economy caused by high depreciation of fixed assets, and by the big share of fossil fuels in the energy balance. It creates a significant potential for low cost (per unit) decrease of greenhouse gas emissions. Provided an efficient international and/or bilateral mechanism is established, in particular under the EGD, it would allow to raise large volumes of 'green' funding. It is evident that the new non-tariff barriers to trade are going to be 'climate-related,' while the climate friendly areas are going to have the barriers reduced (such as in RES).

The EGD implementation creates for Ukraine several strategic opportunities for growth. The opportunities are mostly related to rather high degree of Ukraine's integration into the European space in certain sectors. Sector-wise, they are energy sector, finance, agriculture, and industry. For example, the prospects for signing the industrial visa-free will foster the integration of Ukrainian production facilities into new industrial processes of the EU. Expected restrictions related to the sustainability of goods and services placed in the EU market may create new niches for Ukrainian producers by phasing-out imports to the EU from other countries. In agriculture, it may be about the enhancement of organic production, in energy industry it is about the cooperation on hydrogen energy, in finance – it is about the active access to the EU market of public procurements, and access to the EU financial and technical support instruments. In

the nature protection, it is about the integration of the protected areas in Ukraine into the NATURA 2000 network, through the creation of special financial instruments.

A separate group of new opportunities for Ukraine is geopolitical. Since the key EGD objective is a climate-neutral Europe, Ukraine's engagement into the process of achieving it is a necessary precondition. Hence, this creates new conducive conditions for Ukraine's integration into the EU in energy, circular economy, transport, environment protection. A climate-neutral Europe creates a conceptual and values basis for cooperation in foreign policy, such as within the Eastern Partnership format, deepening the EU association process. Rather than stemming from Ukraine's geographical position, the opportunities are related with the close international legal and foreign relations, such as the Paris Agreement, environmental conventions, commitments under the Energy Community, Ukraine-EU Memorandum of Understanding on a Strategic Energy Partnership, and the relevant thematic blocks from the EU-Ukraine Association Agreement.

'Homework' is a key to opportunities and a threat mitigation tool. Efficient use of opportunities is closely linked to the current state and the readiness of Ukraine to accept transformations in a certain area. Efficient domestic reform in the areas related to EU integration and climate change is the precondition to seize the opportunities and reduce the probability or impact of threats posed by the EGD to Ukraine. In particular, in energy sector it is about the liberalization of energy markets (primarily natural gas and electricity), introduction of an efficient regulation for natural monopolies (RAB-regulation and efficiency-oriented regulation), elimination of energy subsidies, implementation of the updated energy Annex to the Association Agreement, synchronization in the development of the national plan in energy and climate, cooperation in hydrogen energy. In industrial policy, it is about the performance of the 'homework' to sign the Agreement on Conformity Assessment and Acceptance of Industrial Goods, full implementation of requirements to the integrated environmental permit. A necessary priority is the efficient approximation of Ukrainian legislation to the EU acquis in all areas set under the Association Agreement.

EGD poses a number of serious threats to Ukraine. The nature of the threats is two-fold: on the one hand, they come from more rigid EU requirements to environmental sustainability of goods and services, and the model of social economic development as a whole. On the other hand, they are caused by the unsatisfactory state of play in the relevant areas in Ukraine (primarily, it is the sustainability in energy, industry, agriculture, and transport). Enhanced quality requirements for certain types of products and technologies would possibly pose additional challenges for the 'industrial visa-free regime,' since the EU plans create for Ukraine a difficult to achieve 'moving target' in this area. The strengthening of the secondary raw materials market in the EU will lead to reduction in exports of secondary raw materials to Ukraine. It would affect the processing facilities currently dependent on the imports of such materials. EU aspirations to

reduce the transportation of cargoes by motor vehicles intended to reduce emissions may impact the issuance of permits for Ukrainian trucking companies. High priority for nature protection in the EU, also under the EGD, may in practice imply a close attention of the EU and its financial institutions to Ukraine's compliance with the relevant commitments, such as in implementing investment projects in the energy sector. Specifically, special focus shall be laid on the protection of migratory species, under the Birds Directive 2009/147/EC, which is part of Ukraine's commitments under the Energy Community.

A key threat is in the restricted access of Ukrainian goods to EU markets, and new non-tariff barriers to trade. It is primarily about the energy intensive and resource intensive goods that account for a large share in the structure of Ukrainian exports, such as metallurgy, agriculture, food industry, energy sector, large-tonnage chemical industry, machine building, steel, construction products, etc. Moreover, the mechanisms might impact the transportation infrastructure, such as gas pipelines. The intention to introduce the carbon border adjustment mechanism, currently under development at the European Commission to prevent the birth of 'carbon offshores' in the neighbouring countries, may largely aggravate the electricity export from Ukraine to the EU, since Ukraine has a high share of thermal power plants in the electricity generation. High requirements to food products and to compliance with the environmental standards during their production may be an obstruction to further exports of Ukrainian agricultural products to the EU market.

New opportunities through deeper digitalization. Many opportunities come from the digital advancement in the EU: from simplified settlements of payments and customs procedures to enhanced anti-smuggling efforts, further progress of IT, and access to public procurements in the EU. Should Ukraine synchronize a series of its instruments and practices in transport, such as in smart technologies, the general digitalization policy of Ukrainian government will have a positive effect on the deepening of integration into the EU, in this and other areas. In this context, cooperation between Ukraine and the EU may acquire more relevance on gaining experience in using smart technologies in settlements, such as in cities.

A separate group of threats from the EGD implementation includes environmental consequences in Ukraine. Development of the electric vehicles market in the EU, and the subsequent flooding of Ukrainian market with the used electric cars from Europe will have a positive effect on reduction of pollution in cities. On the other hand, using the 'unclean' energy to charge the battery powered cars and the problem of recycling the batteries may cause new environmental challenges in Ukraine. The development of inland water transport will require addressing a series of environmental issues related to the construction of new water routes (E-40, specifically, conducting the strategic environmental assessment and environmental impact assessment) or the operation of the previously created routes (channel Danube-Black Sea, specifically, resolving problems with Romania).

RECOMMENDATIONS

For Ukraine's Government:

- (1) to formulate the government's priorities, reflecting opportunities and threats from the EGD, and to create the mechanisms to work on them (such as through decisions of the Association Council, supplementing Annexes to the Agreement, as part of the Energy Community).
- (2) to invite European counterparts to start a dialogue on the development of a Road Map for Ukraine under the EGD.
- (3) to support further European integration of Ukraine in EGD areas prioritized for Ukraine, which will create synergy with the implementation of the Association Agreement, and provide for synchronization with the relevant EU policies. Therefore, a key priority on this stage shall be the fulfilment of the 'homework' under the Association Agreement, the Energy Community, and the Paris Agreement.
- (4) to formulate a climate policy of Ukraine, which absence will pose risks for Ukraine's export capacity and industrial cooperation with the EU through more rigid requirements to environmental compatibility of production and end products to be placed on the EU market, and intentions to create a carbon border adjustment mechanism by the EU.
- (5) to support integration of Ukrainian producers into the EU industrial production chains, such as to provide for the signing of ACCA as soon as possible, and further continuous harmonization of Ukraine's technical regulations with the EU acquis, such as on ecodesign and energy labeling, as well as other categories of goods important for the EGD.
- (6) to take an active part in formation of new priorities and budgets in the EU cooperation programs, to use and promote new opportunities for funding and engagement of green investment in energy efficiency, decarbonization, circular economy, and nature protection.
- (7) to continue the digitalization of all fields of social and economic life, such as in the areas that foster further development of trade and economic relations with the EU.
- (8) to develop and conduct an awareness campaign, engaging civil society organizations, targeting businesses and explain the role of 'carbon footprint' in the future exports to the EU, opportunities and threats in the context of EGD.

For Verkhovna Rada of Ukraine:

- (1) to ensure the process of full implementation of requirements of the European legislation related to the EGD. In particular, it concerns the areas of industrial emissions, waste management, transport, agriculture, and energy.
- (2) to strengthen the control mechanisms for compliance of draft laws with the requirements of the EU legislation, specifically, through conducting and taking into account the European expert conformity assessments, similar to a mechanism of the Annex XXVII to the Association Agreement.
- (3) to develop a mechanism to take into account the climate change aspects at all stages of lawmaking, since the climate change action is a central element of the EGD, and will impact the mutually beneficial economic and political links of Ukraine and the EU, in short-term and long-term. The mechanism may include climate change impact assessment as a necessary element of conclusions of committees, of conclusions of the Chief Office for Research and Evaluation at the VRU, and explanatory notes to draft laws.

For Business:

- (1) To take into account the EGD objectives in the process of their strategic planning, especially in prioritized areas (value chains) of the EGD: electronics, ICT, furniture, steel, chemicals, batteries, plastics, packaging, textiles, construction materials, secondary raw materials, transport, and agriculture.
- (2) To search for opportunities to integrate into new industrial processes and phasing out producers from other countries from the EU market, through raising environmental sustainability of production processes and end products.
- (3) To account for the fact that access to the EU markets in the future will largely depend on the compliance of goods and services with the EU climate and environmental requirements.
- (4) To use the EGD financial instruments for investment into the innovative solutions and technologies, green goods and services, such as to improve the use of RES, and construction of balancing facilities.

For Civil Society:

- (1) To raise environmental awareness of citizens, especially on climate change.
- (2) To build on environmental considerations in the formation and implementation of all sectoral policies in Ukraine.
- (3) Civil society platforms (such as the Ukrainian side of the EU -Ukraine Civil Society Platform) shall run due monitoring over implementation of EU integration reforms, with a special focus on the dynamics of European policy and law in the respective areas.
- (4) To contribute to better awareness-raising for all stakeholders on opportunities and threats coming from the EGD.

For European counterparts (EU Delegation to Ukraine, European Commission, European Parliament, a.o.):

- (1) to consider Ukraine as an indispensable partner in EGD implementation, taking into account its key objective – achieving the climate-neutral Europe by 2050.
- (2) to develop a road map for Ukraine, jointly with the Ukraine's government, following the example of Roadmap for Balkan states provided by the EGD.
- (3) to foster Ukraine's integration into new 'green' production processes in the EU, by launching an industrial dialogue; to engage into the processes of drafting and updating technical regulations; to support investment into green innovations and infrastructure.
- (4) to strengthen control over sustainability of goods and services imported to the EU from Ukraine, such as timber, agricultural products, etc.
- (5) to support investment from the EU intended for production of 'green' goods, and decarbonization of economy, and to ensure that the EU macroeconomic assistance contributes to Ukraine's sustainable development.
- (6) to continue to provide assistance to Ukraine in approximating the legislation on environment protection and climate, agriculture, energy, and transport .
- (7) to develop flagship initiatives on Ukraine's integration into the EU nature protection area, such as to start a dialogue on elimination of barriers to implementation of birds and habitat directives, and Ukraine's integration into the NATURA 2000 network.

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