

Analysis of Ukraine's Post-War Recovery Plan Blueprint and Ecoaction's Recommendations

Ecoaction supports the cornerstone goals of Ukraine's Recovery Plan Blueprint¹ (hereinafter — the Plan), which was presented on July 4–5, 2022. The Plan relies on sustainability, recovery, modernization, and European integration. Importantly, recovery assumes the preservation of the focus on decarbonization and integration of climate goals into all sectors of the economy and social life.

The growth of GDP and the economy in general, mentioned in the Plan, will play a significant role in the recovery process; however, for Ukraine's sustainable development, it is also important to consider environmental and social aspects. Only in this case will it be possible to ensure high-quality and sustainable recovery for generations.

Despite the right guides, the Plan looks rather scattered and seems to provide separate, often competing, projects, rather than a holistic vision of the country's development. Thus, it suggests both advanced and necessary solutions — transition to clean carbon-free technologies in metallurgy, replacement of fossil gas with renewable energy sources in heating, and plans to integrate decarbonization into all economic sectors — and dangerous ones that are inconsistent with each other. In the course of further work on the Plan, it is highly important to exclude:

- Construction of new nuclear power plants, this is incompatible with the plans of transition to renewable energy sources and involves an unjustified risk of accidents;
- Weakening of environmental control instead of reforms. Effectiveness of compliance with environmental legislation should be increased and state monitoring of environment should be introduced;
- Deregulation and simplification of access to subsoils and expansion of the mineral and raw materials base of Ukraine;
- Increasing the volume of livestock production without the use of technologies to reduce emissions and recycle waste from sector. It is necessary to prioritize the development of scattered, small and medium-sized farms (as opposed to concentrated industrial livestock plants).

Importantly, substantial financial support from international partners is expected for recovery. However, Ukraine risks spending these funds inefficiently for various reasons, in particular due to the inability to develop or implement quality projects and lack of effective financial mechanisms. Creating transparent mechanisms and public access to monitoring of these funds' use can help reduce this risk.²

Below we provide detailed recommendations for the finalization of the Plan in various sectors — development and recovery of the economy, new agrarian policy, energy security, and environmental security.

¹ Ukraine's Recovery Plan Blueprint https://www.urc2022.com/urc2022-recovery-plan

² Green Reconstruction of Ukraine: Position of Civil Society https://en.ecoaction.org.ua/green-reconstruction-ukraine.html



Analysis of the Recovery Plan in the "Development and Recovery of the Economy" Sector

Recommendations regarding the key reforms planned for implementation:

Restructuring of the economy through an accelerated development of the processing industry (investment attraction, export expansion, and import substitution)

This goal is important for the recovery of the economy and creation of new jobs. However, it is also important to apply the best available technologies (hereinafter — BAT) and management methods in the processing industry. Implementation of BAT and management methods is one of the EU requirements and should be primarily considered when planning and developing the industry.

It is important to speed up the adoption and implementation of the draft law No. 6004-2 "On ensuring the constitutional rights of citizens to an environment safe for life and health" and to get synchronized with the Ministry of Environmental Protection and Natural Resources to coordinate all issues.

Flourishing of small and medium-sized businesses due to deregulation

We support this initiative and believe that small and medium-sized businesses should be the basis for economic growth. Their development can be accompanied by state support programs, simplification of the tax burden, etc. It is important that business deregulation comply with the best European environmental rules for economic activities and be accompanied by effective prevention of violations and control. This issue is crucial in the context of business relocation and compliance with established environmental requirements (use of land and water resources, emissions into the atmosphere, etc.). Also, due to the increase in the number of IDPs in certain regions, environmental load is increasing, and this should be taken into account.

It is important to reform state environmental control and adopt the draft law No. 3091 "On state environmental control." This reform will help change environmental control approaches from punitive methods to the prevention of environmental damage.

Analysis of the Recovery Plan in the "New Agrarian Policy" Sector

In the Plan, strategic goals for the agricultural sector for the next 10 years include economic transformation of the agro-industrial complex and development of agricultural infrastructure.

Ecoaction <u>supports</u> advanced and positive measures for sustainable agriculture recovery, which have been developed:

✓ Promoting the agri-food sector transition to green growth

The agricultural sector faces the effects of climate change the most due to droughts, lack of moisture, redistribution of precipitation, and temperature fluctuations. Adaptation to climate change and mitigation of its effects is therefore essential in the recovery process. In addition, it is important to reduce the amount of



greenhouse gases produced by agriculture. It is necessary to implement new climate-friendly technologies^{3,4} and focus on preserving biodiversity through nature-oriented solutions.

Development of processing capacities; stimulation and development of processing

One of the tasks described in the Plan is the processing of crop and livestock waste (by-products of animal origin). We support this initiative and believe that agricultural enterprises should rely on circular economy principles in this regard. However, it is no less important to reduce the amount of waste and recycle locally.

✓ Return and restoration of agricultural lands

A significant area of the land may be unsuitable for economic activity during the war; therefore, it is important to inventory the lands and start their sustainable restoration. We recommend land conservation and nature-oriented solutions as the major restoration method.

✓ Development of cooperation and organic production

The Plan suggests developing cooperation and organic production. Ecoaction supports the diversification of small and medium-sized agricultural enterprises and farms⁵; this approach is also in line with the European Green Deal (hereinafter — the Green Deal).

Despite the presence of advanced solutions, government officials have included rather <u>negative initiatives</u> that make the agricultural sector one of the causes of the climate crisis rather than a source of green growth. Nonetheless, some issues are not sufficiently considered within the Plan.

Development of livestock and redirection of grain and oil raw materials into the livestock industry

One of the priorities of the Recovery Plan is to increase livestock production. Further intensive development of the industry will have negative consequences since intensive livestock is dangerous for environment. According to the Green Deal, approximately 68% of agricultural land in Europe is used for livestock (forage and fodder crops). Hence, further intensive development of livestock may lead to an increase in greenhouse gas emissions. Besides, the development of this industry generates a huge amount pollution from waste the environment. In addition, livestock sector requires a large amount of water in the course of production; animal products have one of the largest water footprints in the food industry. Therefore, in the conditions of insufficient supply of water resources and further predicted changes in the quantity and quality of water resources in Ukraine (in particular due to climate change), livestock growth is inappropriate and creates additional risks.

³ Technology Needs Assessment Report Mitigation. Ukraine https://tech-action.unepdtu.org/wp-content/uploads/sites/2/2019/08/tna-01-mitigation-ua-final-190731.pdf

⁴ Technology Needs Assessment Report Adaptation. Ukraine https://tech-action.unepdtu.org/wp-content/uploads/sites/2/2019/09/final-ukraine-tna-adaptation-report.pdf

⁵ Principles of the Green Post-war Reconstruction of Ukraine https://en.ecoaction.org.ua/green-post-war-reconstruction-ukraine.html



<u>Recommendation</u>: development of small-scale livestock with high standards of animal welfare; use of technologies and practices to reduce greenhouse gas emissions as well as reduce and recycle agricultural and food waste. Herewith, production and processing should develop according to the circular economy principles.⁶

× Lack of support for small and medium farmers

In the Plan, we did not see a specific focus on supporting small and medium-sized farmers. Small and medium-sized farms are the same small and medium-sized businesses that should be the basis for the post-war recovery. Small farmers (especially family ones) make up 98% of all agricultural producers in the world and cultivate more than 53% of agricultural land. Moreover, such farms produce about 60% of the gross agricultural product of Ukraine.

<u>Recommendation</u>: development and implementation of greater, systemic governmental support for small and medium-sized farms. Such support is important with regard to not only new gardens and berry gardens, but also vegetables and grains. Apart from support for the development of production, support for raw materials processing is needed (creation of value-added chains) as well as access to markets in Ukraine. To achieve this, it is important to foster cooperation of small and medium-sized producers at the state and regional levels.

In addition to crop production, small and medium-sized businesses in livestock require more attention and support in the development of processing of their products and safe utilization and processing of waste and by-products of livestock. In particular, this regards assistance in access to technologies, funds, and knowledge.

Development of land reclamation and irrigation instead of rational use of water

The Plan views development of reclamation as one of the important measures of adaptation to climate change. However, in the Plan, government officials pay little attention to the reduction of water levels in rivers, which will be observed in the coming years due to climate change.

<u>Recommendation</u>: with regard to reclamation development, it is necessary to make a strong focus on energy-efficient measures and rational use of water. In addition, the Ministry of Agrarian Policy and Food and other responsible ministries must ensure the application of the best technologies for the use of water for irrigation, in particular the use of treated wastewater. It is important to include in the Plan such measures as dismantling of hydromelioration systems, which are currently of no economic use but lead to the drainage of wetlands or affect the hydrological regime of rivers.

Development of the "Smart Green Deal": gradual alignment of requirements to Ukrainian agricultural producers with the requirements of the EU Green Deal, taking into account the Ukrainian national context

The "Smart Green Deal" development creates risks of non-compliance with respective course of the green transition. The Green Deal is an already agreed compromise of the European Union member states. Attempts

⁶ UN/DESA Policy Brief: Circular agriculture for sustainable rural development

https://www.un.org/development/desa/dpad/publication/un-desa-policy-brief-105-circular-agriculture-for-sustainable-rural-

 $[\]frac{development/\#: \sim : text = Circular\% 20 agriculture\% 20 focuses\% 20 on\% 20 using, the\% 20 ecological\% 20 footprint\% 20 of\% 20 agriculture.}$

⁷ Ecoaction, WWF-Ukraine, and the Ukrainian Nature Conservation Group: Joint Position on Irrigation in Ukraine https://en.ecoaction.org.ua/wp-content/uploads/2022/01/eng-zroshennia-pd-ukrainy.pdf



to obtain different attitude to Ukraine will slow down the negotiations on EU accession and reduce the effectiveness of the Deal as such.

<u>Recommendation:</u> The strategy should relate to greenhouse gases reduction and adaptation to climate change, as well as the prospects of the future EU membership. Ukraine has potential for a green transition in the agricultural sector, and therefore it is important to set ambitious goals and objectives for the latter is sustainable development.

Development of a strategy and action plan for the development of rural areas

The development of rural areas is inextricably linked with the development of agricultural sector. Hence, economic transformation of the agricultural sector should take place in a complex/parallel manner with the development of rural areas. Rural areas should become not only a production base, but also a comfortable place of residence for millions of Ukrainians, including displaced persons.

<u>Recommendation:</u> Rural development issues should not be ignored in the planning and implementation of the Recovery Plan. Synchronization and interaction of responsible ministries, in particular the Ministry for Communities and Territories Development and the Ministry of Environmental Protection and Natural Resources, is important for the creation of both a comprehensive strategy for rural areas development and a specific action plan that could be realistically implemented in the difficult conditions of post-war recovery. It also seems necessary to involve the Ministry of Social Policy to support displaced persons for whom rural areas have become a refuge.

Analysis of Recovery Plans in the "Energy Security" Sector

One of the principles of the Recovery Plan is "Build Back Better". The plan explicitly states the possibility of implementing key EU principles for the transition to the green economy. However, **the section on energy provides no comprehensive, truly green and sustainable vision of the energy transition**. The proposals look more like a large "shopping list" involving all stakeholders — new oil and gas projects are accompanied by RES development (with a special focus on bioenergy), construction of new nuclear units and hydropower capacities, hydrogen from renewable energy, and full integration into the EU energy system.

In fact, loud statements about the transition to the low-carbon economy are not supported by respective plans; instead, they consist of a number of false solutions.

Energy efficiency in the buildings sector

The planned large-scale measures to increase energy efficiency of buildings and the proposed plans to localize the production of materials and equipment for such measures should be particularly noted. However, it is doubtful that the plan for thermal modernization of 20,000 buildings is possible to implement by the end of 2022 due to the lack of a state program to support energy efficiency or another funding mechanism for measures of such scale. Creating mechanisms for the implementation of thermal modernization plans should be a priority.

Some measures suggested in the Plan could be implemented at the earliest rather than delayed. For example, it is advisable to make the European NZEB requirements— Nearly Zero-Energy Buildings — obligatory during the new construction of all types of buildings in the short run (without waiting for the currently planned 2028).



For the implementation in 2022, the Plan suggests important low-cost measures to reduce specific energy consumption (regulation of gas boilers in households, insulation of heat pipes in houses, etc.) and regulatory measures (increasing the minimum requirements for energy efficiency of buildings, defining NZEB criteria, etc.). In order to meet the challenges of the next heating season and begin to improve the national standards for a more sustainable recovery, all of the above measures should be implemented immediately. In addition, training of builders, designers, and other specialists who will rebuild Ukraine according to the new standards should begin in advance.

Nuclear energy

Plans to increase nuclear energy capacity disregard the real state of the industry in the world. Companies from partner countries have actually lost experience in building new reactors (like Westinghouse) or have not yet built a single commercial reactor (startups with SMRs). The declared priority for nuclear energy makes Ukraine even less attractive for renewable energy investors, who already have a negative experience in the country.

The construction of those few reactors that have begun to be built in the world in recent decades shows that the construction cost and time are growing unpredictably (the completion period is at least 8–12 years). Any new construction of a nuclear power plant (NPP) in the country would be an experiment due to which time and money would be lost, delaying the implementation of quick, real, and most economically viable solutions.

The risk of major accidents, the issue of handling spent nuclear fuel and radioactive waste, competition for water resources, unacceptable thermal pollution (as well as the inability to operate) in the conditions of extreme heat waves make NPPs ecologically unacceptable.

The occupation of the Zaporizhzhia and Chornobyl NPPs demonstrates extreme security risks in wartime conditions — both due to the risk of an accident with significant environmental pollution and due to the control over a significant part of generating capacities concentrated at NPP sites.

Renewable energy sources should be a priority

In general, in the next 10 years moderate development of RES is expected — adding 5–10 GW. However, it is precisely a sharp increase in electricity production from RES that is needed for a rapid transformation of the country to be able to phase out fossil fuels and become energy independent. Creating new mechanisms for guaranteeing investments in the sector is an important prerequisite.

Herewith, there is no recognition of the advantages of local decentralized RES generation in communities and no support at the state level. There are currently no plans to support energy cooperatives and other collective forms of implementing RES projects. However, they could become a guarantee of Ukraine's energy security and independence.

Huge renewable energy capacities (30 GW) are supposed to be built only for the production of hydrogen for export to the EU countries. Herewith, the domestic market and consumers should be the primary priority while focus on the foreign market and external players should be secondary.

Phasing out fossil fuels in heating

Ecoaction welcomes the declared course for the gradual substitution of fossil gas with renewable energy sources in heating. However, this could be accelerated by prioritizing the updating of the central heating system itself as the fastest and cheapest way to truly decarbonize the sector. As due to the Russian aggression Ukraine's energy system suffered great losses, it is important to set the right priorities in the course of recovery.



The Recovery Plans should rely more on the goals stated in the European Union plans, in particular REPowerEU. These plans include the acceleration of the ban on the use of gas boilers, rapid increase in the use of heat pumps, etc.

• Unjustified expectations from hydrogen

The use of hydrogen is expected in those processes that cannot be easily electrified and cannot directly use renewable electricity, or for balancing when renewable electricity is unavailable. Hydrogen may play a role in such sectors as the production of green building materials (steel, cement), long-distance shipping, aviation, etc.

In the first place, domestic hydrogen market should be developed, and only after that hydrogen export could be considered. It is much more expedient to use these RES capacities not for the production of hydrogen for export, but for the generation of electricity in Ukraine, in particular to replace the capacities of thermal power plants and nuclear power plants that should be decommissioned. In this case, decarbonization and energy transition would be achieved much faster.

It would be much more appropriate to export green energy to the EU using a high-voltage network. Any investment in hydrogen production capacities must be made on a purely commercial basis without state financial support.

• Phasing out coal in energy sector and just transition of coal regions

Positively, the Plan separately mentions economic diversification, improvement of monofunctional towns' infrastructure (including coal mining towns), and development of respective state just transition program by the end of 2022. This is a crucial issue within the declared and reconfirmed plans to phase out coal in electricity generation and heating.

Analysis of the Recovery Plan in the "Environmental Security" Sector

Ecoaction supports the vision of reconstruction destroyed infrastructure and restructuring the economy based on clean, low-carbon, and energy-efficient technologies, integration into European industrial alliances, as well as participation in new production chains. Implementation of international agreements, in particular the EU-Ukraine Association Agreement, the Paris Agreement and others, will assist the implementation of the developed vision.

It is important to **prevent environmental degradation** compared to the pre-war period in Ukraine since water, air, and soil pollution was significant even before the war. The situation has aggravated due to the Russian aggression; hence, compliance with the approved legislation, its updating, and, in some cases, increasing requirements are mandatory. It is also **important to establish a high-quality monitoring system** of the state of surface water, air, and soil. This will also help in gathering evidence of damages to the environment caused by the Russian aggression and will allow defending Ukraine's rights in international institutions.

Climate policy: mitigation and adaptation to climate change

Currently, there is a gap in Ukrainian legislation between the national and local climate policies. Climate change adaptation should become one of the priorities in the course of restoration of cities. Every year, the average temperature rises, the distribution of precipitation changes, it is leading to floods, and abnormal heat makes



life in Ukrainian cities unbearable. It is crucial to include a vision of climate change adaptation during developing recovery plans at the regional and local levels.

We support further implementation of the international climate policy and upgrading of the system of monitoring, reporting, and verification. Adoption of national decarbonization plans will help to strengthen Ukraine's economy. Herewith, according to the Paris Agreement, Ukraine should revise its Nationally Determined Contribution until 2025 and set a more ambitious emissions reduction target. As of now, the previously set target is exceeded; therefore, we should set a goal that will guarantee real reduction. To increase climate ambitions, it is important to start broad discussions concerning the new target starting from 2024, engaging regional and local stakeholders, as well as the public, and ensure process transparency.

Environmental safety and effective waste management

Upon the outbreak of the full-fledged Russian invasion, a large amount of military waste remains in areas of active fighting and on occupied territories, and this amount increases day by day. Currently, it is impossible to speak about military waste disposal in war zones, but to avoid further contamination in the future, it is important to have a plan for swift waste collection and disposal once the war is over and full access to Ukrainian territories is possible. It is already possible to collect and dispose of waste on deoccupied territories, but these efforts should be systemic. Hence, the development of the military waste collection and disposal plan should start in 2022.

Waste management has always been a great challenge, which remained unsolved for decades. The presented Plan for the new capacities of waste processing plants, 62 mechanic-biological treatment plants, and 27 waste disposal facilities with power generation are not a solution to reduce the impact from sector to the environment. To achieve this, new organic waste composting sites, recycling stations, and bioenergy production are necessary. However, primarily, waste prevention and recycling should be guaranteed.

· Sustainable use of natural resources in terms of increased demand and limited offer

Protection and rational use of water resources

The Plan pays special attention to the quality and accessibility of water resources. We have repeatedly drowned attention to the issue of water contamination with nitrates from agriculture. During the war, the problem has been exacerbated by military actions and cultivation of new lands due to the global food security risks.

Before the full-scale invasion, Ukraine faced a problem of adherence to environmental requirements in agriculture within coastal protective zones, water conservation areas, and hillsides. Recovery Plans include prevention measures for such violations. We support this initiative and believe that environmental awareness should be raised among farmers, household plot owners, etc. However, it is important to also provide for effective monitoring and control over the fulfillment of environmental requirements.

We support the initiative on further implementation of the Water Framework Directive, particularly in developing the River Basin Management Plans. These Plans are crucial for water resources improvement, especially in the post-war period.

Protection and rational use of land resources

We support the initiative regarding land recovery, particularly in implementing conservation, restoration, and improvement measures for lands affected by the Russian aggression, especially considering the amount of



mined and contaminated land. However, planning and implementation of these measures should be performed together with the Ministry of Agrarian Policy and Food of Ukraine.

It is important to establish water resources monitoring system, as well as a monitoring and control system for the proper use of agrochemicals and pesticides.

Conservation of natural ecosystems and biological diversity, restoration and development of protected area network

As mentioned in the Plan, r, about 20% of the area of all protected areas of Ukraine are threatened, 17 Ramsar sites of a total area of 627,3 thousand hectares, approximately 160 territories of the Emerald network of an area of 2,5 million hectares and 4 biosphere reserves faced the risk of extinction. This threatens the strategic goals of preserving biodiversity, reduces greenhouse gas absorption, and intensifies desertification. Besides, even before the war, the natural reserve fund was underfunded and lacked management plans for most of the protected areas, which leads to inefficient nature protection and violations on natural reserve fund lands.

The developed Plan suggests funding the creation of 15 wildlife crossings and 10 European-type parks.

<u>Recommendations:</u> Improvement of existing natural areas in the south and east of Ukraine should be funded since these parks are generally underfunded. Priority in funding should be given to the development of area management plans and resolving land issues — demarcation, security, etc.

Herewith, for the construction of wildlife crossings, a network of protected areas and relevant construction standards should be developed in the first place. So far, Ukraine has not adopted the Emerald Network legislation, and necessary building standards are missing. It is important to adopt law 4461 on the Emerald Network sites to legislate the Emerald Network and comply with European integration obligations. This is essential amidst the Russian aggression and considering the necessity of post-war recovery. Great part of Emerald Network sites has been damaged due to military actions and require clear management plans that would facilitate these territories' recovery. Secondly, post-war recovery will require significant resources and high economic growth. To avoid causing harm to the environment and the next generations, we need to introduce strict criteria for the business and industry sector defining where activities are allowed or prohibited.

• Effective public administration in the field of environmental protection and use of natural resources

Ecoaction does not approve of the reduction of terms, simplification of procedures, or cancellation of Environmental impact assessment and Strategic environmental assessment in the post-war recovery period. As mentioned in the Plan, this can become an obstacle to reaching European public administration standards in environmental protection and lead to extra pollution. The procedure must be launched at the earliest to prevent environmental degradation due to the recovery process.

The proposal on deregulation and **simplifying access to the subsoils** as well as expanding Ukraine's mineral-resource base **should be rejected**. Resource extraction should be conducted after a thorough environmental impact assessment since subsoil extraction has one of the most damaging environmental impacts leading to ecosystem degradation.

State atmospheric air monitoring

Modernization and creation of new observation points and modernization of laboratories of the state environmental monitoring system is a crucial and necessary step. An up-to-date and reliable air quality



monitoring system, in particular, will enable Ukrainians to be aware of the quality of the air they breathe in real-time. To expand the air quality monitoring network, each zone (region) and agglomeration (a city with a population of over 250,000 residents) should approve state monitoring programs regarding atmospheric air. According to the Resolution of the Cabinet of Ministers of Ukraine No. 827/14.08.2019 (hereinafter — the Resolution), the deadline for submitting to the Ministry of Environmental Protection and Natural Resources of Ukraine for approval is July 1, 2021. As of now, six zones and agglomerations (or 10 — including zones and agglomerations still facing military actions) have not submitted their programs to the Ministry.

Considering this, regional state administrations and city councils should take all possible measures to catch up with the backlog and approve state monitoring programs in the field of atmospheric air as soon as possible.

Moreover, this program's funding should include funding for the translation of the pollution measurement methods (National Standards of Ukraine) listed in the Resolution since currently they are approved but not translated into Ukrainian.