National Bank of Ukraine

NBU Sustainable Finance Development Policy

2025

The development of sustainable finance in Ukraine should be based on a systemic approach, awareness of climate and environmental threats, and related social challenges of the 21st century, in line with the global concept of sustainable development, Ukraine's EU integration efforts, and a clear roadmap for the near future.

Contents

1. Basic Concepts and Terms

The terms used in the NBU Sustainable Finance Development Policy 2025 (hereinafter the Policy) have the following meaning:

Biodiversity means the diversity of living organisms arising from all sources, including terrestrial, marine, and other aquatic ecosystems and the environmental complexes of which they are a part. Biodiversity includes diversity within species and between species and ecosystems.

Verifier means an officially accredited entity selected by the issuer of green bonds to protect the interests of investors through independent external control (verification) for compliance with the requirements consistent with the recommendations of leading capital market participants regarding the issuer's policy on green bonds, selection of projects for full or partial financing and/or refinancing with funds raised from the issue of green bonds, targeted use of funds raised from the issue of green bonds and reporting of the issuer of green bonds on the impact.

Environmental impact has the meaning stipulated in the Law of Ukraine *On Environmental Impact Assessment.*

Sustainable finance means integration of environmental, social, and governance (ESG) criteria into financial services to achieve sustainable development results, including mitigation of and adaptation to the adverse effects of climate change.

Sustainable development means long-term economic prosperity, less dependent on the use of limited resources and the exploitation of the natural environment, and more socially inclusive. Sustainable development includes environmental, social, economic, and governance aspects, which are closely interlinked.

Green economy (low-carbon economy) means an economy with low carbon emissions that uses resources efficiently and is in the public interest.

Closed-loop economy, or **circular economy,** means a model of economic development based on the recycling and rational consumption of resources. As such, a closed-loop economy is an alternative to the traditional, linear economy. A closed-loop economy is characterized by the creation of new alternative economic approaches that aim to minimize the negative human impact on the environment.

Greenwashing means misleading creditors about the use of borrowed funds and/or misleading the investor about the institution's intentions to achieve sustainable development goals taking into account ESG factors in order to secure preferences.

Environmental and social (ES) risks means the probability of losses or additional expenses, or loss of planned income, or loss of reputation of a financial institution due to the negative financial impact of current or future ESG factors on counterparties and their assets.

Environmental, social, and governance (ESG) factors means factors that can have both positive and negative effects on the financial performance or solvency of an entity, an individual, or the sustainable development of a country, and factors related to ESG issues.

Ecological footprint means a measure of how much biologically productive land and water space a country needs to produce all the biological resources it consumes, and to absorb the waste it generates using advanced technology and management.

Impact reporting means the reporting of the issuer of green bonds on the environmental impact of a project that is fully or partially financed and/or refinanced with the funds raised from the issue of green bonds, and that follows the impact reporting recommendations of the EU Green Bonds Standard (EU GBS) and the International Capital Markets Association (ICMA), and that is consistent with the Law of Ukraine *On Environmental Impact Assessment*.

Green economy (low-carbon economy) means an economy with low carbon emissions that uses resources efficiently and is in the interests of society as a whole.

ESG-related investment benchmarks means benchmarks that include specific sustainability goals that help assess and compare the effectiveness of sustainable investment over time.

Transmission channels means cause-and-effect channels that explain how these risk drivers affect institutions through their counterparties and the assets they have invested.

Key features of green bonds means the elements of the green bond model defined by the EU GBS and the ICMA Green Bond Principles (GBP).

Low-carbon economy means an economy based on energy sources that produce low levels of greenhouse gas emissions.

Environmental project has the meaning stipulated in the Law of Ukraine *On Capital Markets and Organized Commodity Markets.*

Risks of transition to the low-carbon economy model (hereinafter **transition risks**) are the risks of any negative financial impact on the financial institution arising from the current or future consequences of the transition to an environmentally sustainable economy for its counterparties or invested assets.

Sustainable development means a long-lasting economic prosperity that is less dependent on using limited resources and exploiting the environment, is more socially inclusive, and includes closely interrelated ESG aspects.

EU Green Bond Standard (EU GBS) means a standard of the green bond model approved by the European Commission to clarify whether the actions of the issuer of green bonds can ensure transparency and comparability of the green bonds market and the development of sustainable finance.

Taxonomy of economic activity means a classification system that establishes a list of environmentally sustainable economic activities and thresholds (technical screening criteria) that can clearly determine which economic activity is in line with sustainable development, environmental goals, and principles of sustainable economic activity. Such a taxonomy helps investors, issuers, and project promoters focus on the transition to a low-carbon, risk-resistant, and resource-efficient economy, and facilitates a climate disclosure system.

Environmental and social risk management (ESRM) of projects that are fully or partially financed and/or refinanced with funds raised from the issue of green bonds means a system of social and environmental management of the issuer and/or developer/operator of the project that creates the ability to continuously identify, assess, and minimize ES risks arising from the preparation and implementation of a project that is fully or partially financed and/or refinanced with funds raised from the issue of green bonds.

Physical risks are the risks of any negative financial impact on the financial institution arising from the current or future impact of factors of physical impact on the counterparties or the assets they have invested.

2. Vision of Sustainable Finance Development in Ukraine

2.1. Mission, goals, and objectives of the Policy

Policy mission is to form a holistic vision of the key principles of sustainable finance development in Ukraine and the actions of the NBU necessary to implement these principles and to ensure that both banks and nonbank financial institutions consistently adapt to changes that will promote financial stability.

Policy goals:

1) to facilitate sustainable economic development of Ukraine
2) to promote environmental consciousness and social responsibility in Ukraine's financial sector
3) to ensure that financial institutions regulated by the NBU comply with environmental objectives, the principles of sustainable economic activity, and the principle of prioritizing energy efficiency, which are identified by the European Green Pact
4) to help the development of a closed-loop economy in Ukraine as a decisive factor in achieving a climate-neutral, resource-efficient, and competitive economy.

All Policy goals are interconnected and complementary.

Policy objectives:

1) to improve corporate governance in banks and nonbank financial institutions, taking into account ESG factors.
2) to introduce requirements for environmental and social risk management in financial institutions regulated by the NBU
3) to introduce ESG disclosure standards for financial institutions
4) to take measures to increase financial literacy of the public about the development of sustainable finance in Ukraine
5) to take climate change into account while pursuing financial stability.

Policy is an integral part of the global, European, and national trends toward sustainable development. Given the unpredictability of climate challenges, as well as other possible threats to the country, the European continent, and the world, the Policy may be revised/supplemented to ensure its relevance to the general economic context and facilitate the development of sustainable finance in Ukraine.

3. Current State

3.1 Global Development and Ukraine's Stance on Sustainable Finance

3.1.1 Global Vision of Sustainable Finance Development

At the beginning of the 2020s, humanity faces major climate and environmental challenges due to the changing climate and degrading environment. Climate change is a global-level problem that the world is trying to resolve through the reduction of carbon dioxide emissions (CO_2) and other greenhouse gases, primarily in the energy sector, by consuming less fossil fuel (coal, oil, and gas) or by substituting it with renewable/alternative energy sources. Environmental pollution may be a local or international problem that harms people, fauna, and flora in the polluted area. It is caused by exhaust fumes from vehicles, emissions from metallurgy, water pollution, waste mismanagement, and more.

Economic activity is a major contributor to climate change and environmental pollution. Since the 19th century, the growth in average global temperatures and the saturation of the atmosphere with greenhouse gases such as CO_2 and methane (CH_4) have been caused by the burning of fossil fuels and deforestation[1]. Ecological footprint, a ratio that compares the resources consumed by households, corporations, and public authorities with the potential for the Earth's biological regeneration, has risen to 1.7[2].

According to the Network for Greening the Financial System (NGFS), which includes almost 100 supervisory institutions and central banks, among them the NBU, the world is currently at a crossroads where it must choose one of the two ways of economic development:

- successful transition to clean (zero greenhouse gas) emissions by 2050 or
- failure to make the transition, leading to the aggravated greenhouse effect and global warming by 3°C and more by 2100, with all the negative consequences[3].

The UN General Assembly in September 2021 noted that the last decade had been the hottest in history, and that the concentration of greenhouse gases continued to rise, saying that humanity must urgently change course no later than ten years from now[4].

Climate and environmental challenges are causing structural changes in the economy/finances. These challenges are currently recognized by the European Central Bank as the two main risk factors[5]. According to the Bank

1 Climate Change 2021. The Physical Science Basis. – IPCC. WMO. UNEP. 7 August 2021: https://www.ipcc.ch/report/ar6/wg1/#FullReport

2 Global Footprint Network: https://www.footprintnetwork.org/

3 NGFS Climate Scenarios for central banks and supervisors. June 2021: https://www.ngfs.net/en/liste-chronologique/ngfs-publications

4 75th UN General Assembly spotlights Climate Action: https://public.wmo.int/en/media/news/75th-un-general-assembly-spotlights-climate-action

5 Guide on climate-related and environmental risks. European Central Bank (November 2020): https://www.bankingsupervision.europa.eu/press/pr/date/2020/html/ssm.pr201127~5642b6e68d.en.html

for International Settlements, climate and environmental challenges are one of the sources of systemic financial risks that may cause the next global financial crisis[6].

To meet climate challenges and achieve a sustainable future, countries are guided by global agreements: UN Framework Convention on Climate Change (1992) and the Paris Agreements[7]. To meet climate challenges and achieve a sustainable future, countries are guided by global agreements: UN Framework Convention on Climate Change (1992) and the Paris Agreements[8 9]. It was also stablished that starting 1 January 2021, each country would choose its own targets for reducing/limiting greenhouse gas emissions (Nationally Determined Contributions, NDCs)[10]. The main objectives of the Paris Agreement are: (a) to keep global average temperatures well below pre-industrial levels plus 2°C and to focus on limiting temperatures to pre-industrial levels plus 1.5°C, as this will significantly reduce climate change risks and their impacts; (b) to increase the capability to adapt to the negative effects of climate change, to support the fight against climate change, to develop low greenhouse gas emissions in a way that does not threaten food production; (c) to harmonize financial flows with the path of development, with the fight against climate change, and with low greenhouse gas emissions.

In Europe, the European Green Course (December 2019) proclaimed the following goal: to make Europe the first climate-neutral continent by 2050, focusing on a closed-loop economy as a decisive factor in achieving a climate-neutral, resource-efficient, and competitive economy[11]. A closed-loop economy is defined as an economic system in which the value of products, materials, and other economic resources is preserved as long as possible, increasing their efficient use in production and consumption, and thus reducing their environmental impact and minimizing waste and emissions at all stages of their life cycle, including through the application of waste hierarchy[12]. Pursuant to the Green Course, the European Commission approved a number of strategic documents, such as: Green Deal Investment Plan (January 2020), which, in particular, established the Green Bond Standard, the new Circular Economy Action Plan (March 2020), and the Strategy for Financing the Transition to a Sustainable Economy (July 2021)[13 14 15 16].

A virtual climate summit initiated by the U.S. President in April 2021, which brought together representatives of 17 countries – the largest generators of greenhouse gas emissions, as well as dozens of other countries – announced ambitious new climate targets for reducing greenhouse gas emissions[17].

---

6 The green swan. Central banking and financial stability in the age of climate change. Bank for International Settlements 2020: https://www.bis.org/publ/othp31.pdf

7 United Nations Framework Convention on Climate Change, UNFCCC (1992): https://zakon.rada.gov.ua/laws/show/995_044#Text

8 Transforming our world: The 2030 Agenda for Sustainable Development. Resolution adopted by the UN General Assembly (2015): https://sdgs.un.org/2030agenda

9 Paris Agreement on Climate Change. – UN (2015): https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement

10 До 31 грудня 2020 року зобов'язання зі скорочення або обмеження викидів парникових газів установлювалися в межах Кіотського протоколу та стосувалися лише обмеженого кола країн.

11 A European Green Deal (11 December 2019) : https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1588580774040&uri=CELEX:52019DC0640

12 Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32020R0852

13 The European Green Deal Investment Plan (14 January 2020): https://ec.europa.eu/commission/presscorner/detail/en/fs_20_48

14 European green bond standard: https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/european-green-bond-standard_en

15 European Commission: A new Circular Economy Action Plan (11 March 2020): https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1583933814386&uri=COM:2020:98:FIN

16 European Commission. Strategy for Financing the Transition to a Sustainable Economy (6 July 2021): https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52021DC0390

17 Leaders Summit on Climate Summary of Proceedings (April 2021): https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/23/leaders-summit-on-climate-summary-of-proceedings/

Achieving the goals of transition to a low-carbon and resource-efficient economy, as well as ensuring its sustainability, requires a clear public policy of sustainable finance, which provides not only a deep understanding of the content of environmental and social risks, but also an effective system for managing such risks. By financing relevant programs and projects, banks and other financial institutions play a key role in decarbonizing the economy and developing its resource efficiency. As demand for sustainable financing grows, central banks and other regulators are gaining deeper knowledge of climate risks that can affect both individual financial institutions and the financial system as a whole, by BIS estimates[18]. At the regular annual meeting of the IMF and the World Bank in late 2019, representatives from the EU and a number of other countries established the International Platform on Sustainable Finance (IPSF), which they tasked with exchanging and disseminating information on best practices in environmentally sustainable finance, exploring various initiatives and identifying barriers and opportunities that will contribute to the international development of environmentally sustainable finance, and strengthening the international coordination of sustainable finance efforts based on nation-specific and region-specific factors[19].

Climate challenges are global in nature but they are linked to the local environment. In sustainable development of each country/region, environmental factors are seen in broader context, i.e. they include climate factors. Environmental factors affect societies and are largely defined by the nature of economic activity management, making social and governance factors mandatory for sustainable development. The European Commission's documents stress that sustainable finance should take into account environmental, social and governance considerations when making financial decisions[20]. Such approach ensures more long-term investments and sustainability of both individual projects and programs and the economy as a whole.

In the context of sustainable finance development, Regulation 2020/852 of the European Parliament and of the Council on the establishment of a framework to facilitate sustainable investment[21] sets out six environmental objectives and four principles of sustainable economic activity.

The environmental goals that countries need to pursue in order to achieve sustainable investment are as follows:

1) climate change mitigation
2) adaptation to climate change
3) sustainable use and protection of water and marine resources
4) transition to a circular (closed-loop) economy
5) pollution prevention and control
6) protection and restoration of biodiversity and ecosystems.

In line with principles of sustainable economic activity, an economic activity shall qualify as environmentally sustainable if said economic activity:

(1) contributes substantially to one or more of the six environmental objectives. Whether a contribution is qualified as substantial depends on a specific environmental objective. For example, pursuant to the Paris Agreement, stabilization of greenhouse gas concentrations from activities related to renewable energy, energy efficiency, sustainable transport, etc. is required to mitigate the climate change impacts. Technical screening criteria qualify the objective as substantially contributing.

[18] BIS Annual Report 2020/2021: https://www.bis.org/about/areport/areport2021.pdf

[19] International Platform on Sustainable Finance: https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/international-platform-sustainable-finance_en#documents

[20] European Commission. Overview of sustainable finance: https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/overview-sustainable-finance_en

[21] Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32020R0852

(2) does not significantly harm any of the environmental objectives.
Substantial contribution to the environmental objective should not be achieved by causing significant harm to another environmental objective. Technical screening criteria qualify the objective as significantly harmful.

(3) is carried out in compliance with the minimum social safeguards[22].
The principle concerns how, not what, economic activity is conducted.
It requires compliance with the OECD Guidelines for Multinational Enterprises[23], the UN Guiding Principles on Business and Human Rights[24], relevant documents of the International Labor Organization[25], and the International Bill of Human Rights[26].

(4) adheres to technical criteria.
The 21st century financial policy is largely shaped by climate and environmental challenges, which is reflected in such concepts as green finance (environmental finance), sustainable finance, climate finance, and low-carbon finance. Each concept is used when it comes to making decisions about funding and generating cash flows in terms of seemingly different, though intersecting/overlapping, factors of human activity (Figure 1).

- Environmental factors refer to mitigation and adaptation to climate change, as well as the quality and functioning of the environment and natural systems in a broader sense. These are, for instance, loss of biodiversity, greenhouse gas emissions, renewable energy, energy efficiency, depletion/pollution of natural resources, waste management, ozone layer depletion, changes in land use, ocean acidification, and shifts in nitrogen and phosphorus cycles.

- Social factors refer to rights, people's welfare and interests, including the issues of gender inequality, inclusion, labor relations, labor standards, healthcare and safety, relations with local communities, activities in conflict-affected areas, health and access to medicines, consumer protection, conventional weapons, investment in human capital and communities.

- Economic factors refer to the impact of investees on economic conditions at the local, national, and global levels. Some sectors of economic activity include both direct financial results and risks and indirect effects (employment, supply chains, and infrastructure provision).

- Corporate governance factors refer to managing companies seeking to attract investment, and include the following issues: management structure, supervisory board, its size, skills and independence, executive remuneration, rights of shareholders, interaction with stakeholders, information disclosure, business ethics, prevention of and counteraction to bribery and corruption, internal control and risk management, and relationships between the company's supervisory board, its executive body, shareholders, and other stakeholders.

22 This principle requires (for green/sustanable activity) compliance with the OECD Guidelines for Multinational Enterprises (https://www.oecd.org/corporate/mne/), the UN Guiding Principles on Business and Human Rights (https://www.business-humanrights.org/en/big-issues/un-guiding-principles-on-business-human-rights/), relevant documents of the International Labour Organization (https://www.ilo.org/global/standards/lang--en/index.htm) and the International Bill of Human Rights (https://www.escr-net.org/resources/international-bill-human-rights).

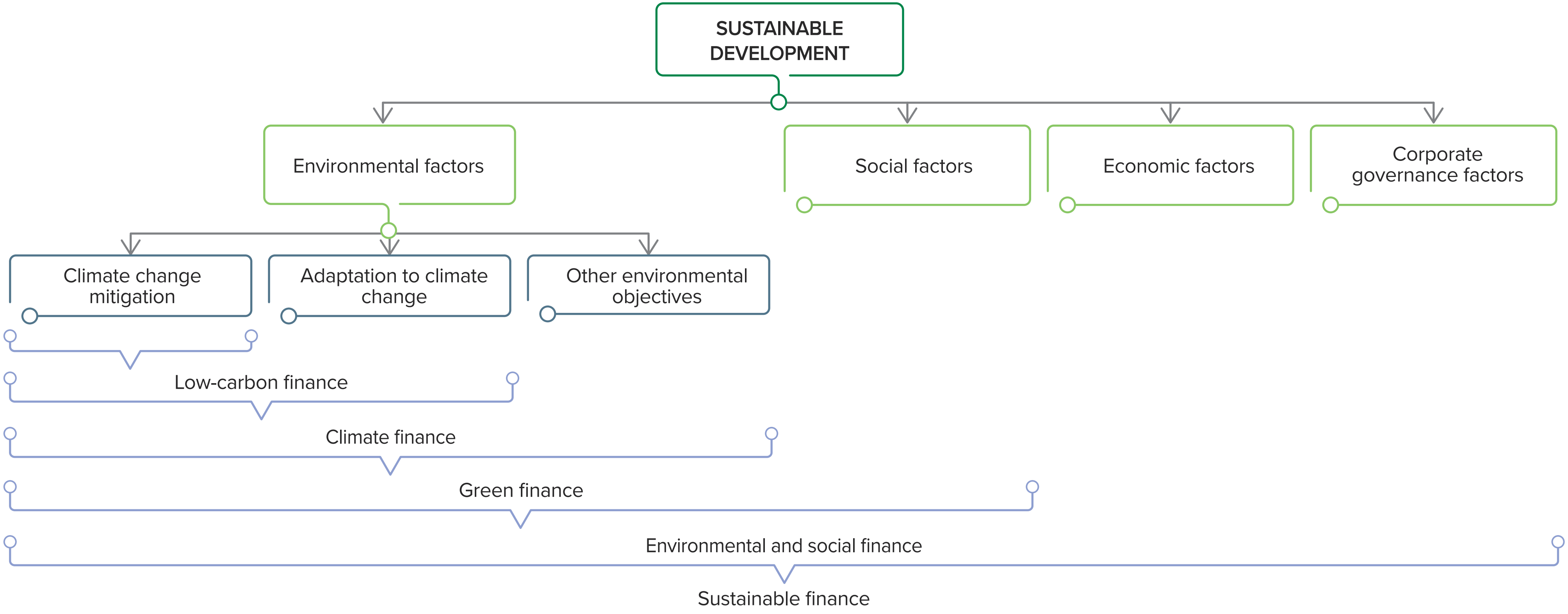
23 OECD Guidelines for Multinational Enterprises: https://www.oecd.org/corporate/mne/

24 UN Guiding Principles on Business and Human Rights: https://www.business-humanrights.org/en/big-issues/un-guiding-principles-on-business-human-rights/

25 International Labour Organization: https://www.ilo.org/global/standards/lang--en/index.htm

26 International Bill of Human Rights: https://www.escr-net.org/resources/international-bill-human-rights

Figure 1. Sustainable development and sustainable finance components and their relationship[27]



Employee relations and executive remuneration play a fundamental role in ensuring the inclusion of social and environmental considerations in the decision-making process. The leading role of a supervisory board that pays due attention to social and environmental issues and the integration of the ESG factors into a bank's strategy is an integral part of today's good corporate governance in a bank. The bank's supervisory board is responsible for the implementation of the bank's strategy that should be aimed at sustainable development. The bank's policy should include assessment of the ESG factors impact on the bank's long-term sustainability and define the needs for mitigating the adverse effect of these factors on the bank and expand the expertise of the bank's top-management on environmental, social and governance issues.

The concept of sustainable development is key to developing a policy of sustainable finance and means a long-lasting economic prosperity that is less dependent on using limited resources and exploiting the environment and is more socially inclusive. Sustainable development includes environmental, social, economic, and governance factors that are closely interrelated.

[27] Design of Sustainable Financial System. Definitions and Concepts: Background Note. – UNEP (September 2016): http://unepinquiry.org/wp-content/uploads/2016/09/1_Definitions_and_Concepts.pdf

Sustainable finance consists of several levels and:

- in a broader sense, includes environmental, social, economic, and governance factors
- in a narrower sense, covers only green finance, i.e. factors related to the environment
- in the narrowest sense, focuses on the issues of mitigation of and/or adaptation to climate change.

Climate finance is primarily related to the UN Framework Convention on Climate Change[28], which defines it as a local, national, or transnational financing drawn from public, private, and alternative sources of financing. The role of climate finance is critical to reduction in greenhouse gas emissions and adaptation to the adverse effects of climate change.

Green (sustainable) finance covers a broader spectrum than climate finance, as it includes other environmental objectives and risks. As a rule, green finance is associated with greater focus on greening private investment flows, rather than funds raised by the state. Green finance is synonymous to sustainable finance and means achieving economic growth while reducing pollution and greenhouse gas emissions minimizing waste and improving efficiency in the use of natural resources[29].

Sustainable finance is accompanied by effective management of environmental and social risks.

Environment and Social Risk Management refers to a system that creates the ability to continuously identify, assess, and minimize ES risks arising from the preparation and implementation of a project that is fully or partially financed and/or refinanced with funds raised from the issue of green bonds. This risk management system is a mandatory component of sustainable development policy, which is important for financial institutions, their clients (corporate loan applicants), and investors (Figure 2).

Climate challenges can be grouped into two categories of climate risks:

1) transition risks (risks of transition to a low-carbon economy)
2) physical risks.

According to the NGFS, both risk groups could affect the economy/financial system at micro-and macro levels through a range of different transmission channels resulting in significant financial losses (Figure 2).

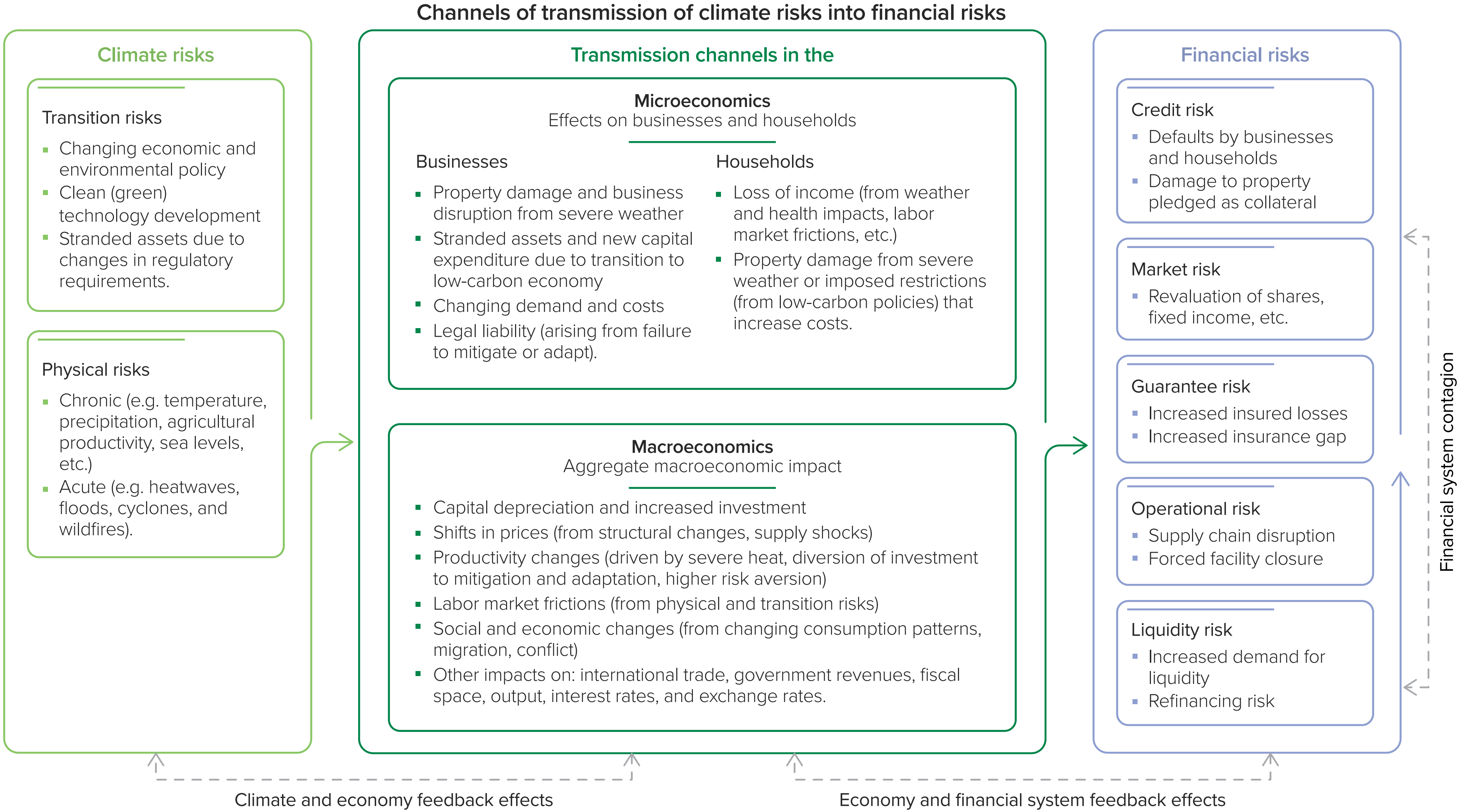
- Transition risks relate to potential financial losses from a rapid transition to a low-carbon economy and high-speed transformations that are driven by changes in economic and environmental policy, consumer preferences, social norms, image, market advantages, clean (green) technology development. For example, climate-related transition risks arise when explored fossil fuel reserves will not be extracted and turned into assets, or when a fire sale of assets leads to a sharp decline in asset prices. Too rapid a transition to a low-carbon economy increases transition risks and can pose a serious threat to financial stability.

Transition risks affect the profitability of businesses and wealth of households, creating financial risks for lenders and investors. These risks will also affect the broader economy through investment, productivity, and prices, particularly if the transition leads to acquiring assets.

[28] The UN Framework Convention on Climate Change (1992): https://zakon.rada.gov.ua/laws/show/995_044#Text

[29] OECD. Green Finance and Investment: https://www.oecd-ilibrary.org/environment/green-finance-and-investment_24090344

Figure 2. Importance of environmental and social risk management systems for banks and their clients, such as corporate loan applicants and investors[30]



[30] Source: https://firstforsustainability.org

Climate risks and impact channels thereof on the economy/finance[31]

- Physical risks stand for economic and financial losses associated with the consequences of climate change (average temperature increase, change of the global sea level) and extreme weather associated with climate change (strong and frequent windstorms, floods, draughts etc.)

Physical risks have two ways of affecting the economy/finance:

- critical consequences due to extreme weather destabilizing business and inflicting property damages. For instance, global warming may result in stable adverse effect on the economy, increasing risks for insurers due to impairment of insurance cover and assets

- chronic consequences due to increasing temperatures, sea level and precipitation may have particular effect on labor, capital, land, and natural capital in certain regions. Such changes require respective adjustments and major investments for companies, households, and governments.

Despite the gravity of climate challenges, humanity has a real prospect to ensure sustainable development of the economy/finance turning the climate and environment issue into certain possibilities.

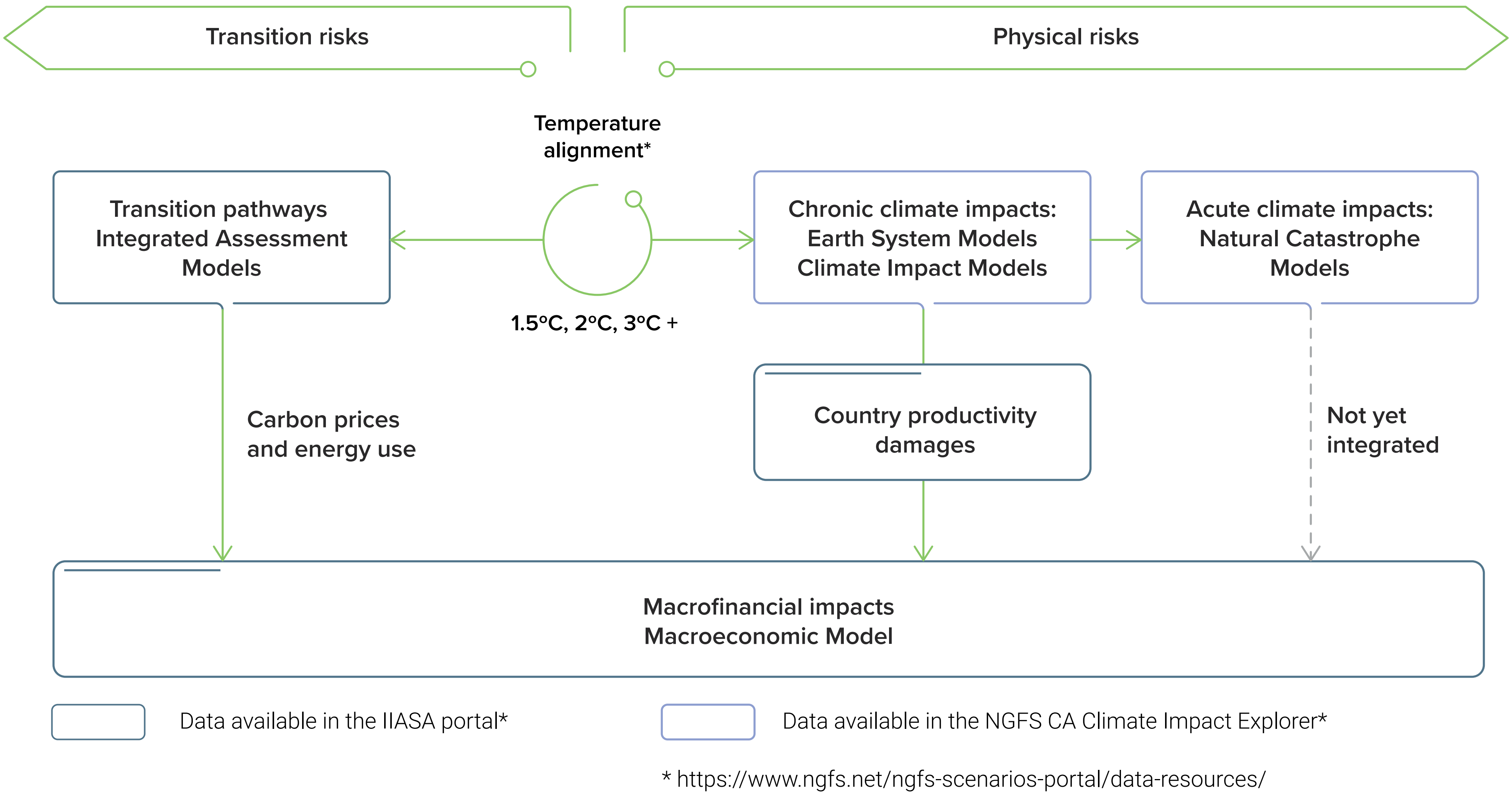
At present, there is no commonly defined model for managing climate risks (transition risks and physical risks) and assessment of risk impact on the economy. According to NGFS experts, such assessments should be based on public data generated by a selected set of models and adjusted respectively (Figure 3).

Environmental and social risks are associated with the following events and processes:

- air pollution and air quality
- energy use
- wastewater and water quality
- use of hazardous materials
- waste accumulation
- land pollution
- damage to biodiversity and natural resources
- labor conditions
- occupational health and safety
- health, security, and welfare of local communities
- land acquisition and resettlement
- cultural heritage.

[31] NGFS Climate Scenarios for central banks and supervisors (June 2021): https://www.ngfs.net/en/liste-chronologique/ngfs-publications

Figure 3. NGFS suite of models approach to assess climate risks (transition risks and physical risks) and respective impact on the economy/ finance[32]



[32] NGFS Climate Scenarios for central banks and supervisors (June 2021): https://www.ngfs.net/sites/default/files/media/2021/08/27/ngfs_climate_scenarios_phase2_june2021.pdf

The Framework of the International Finance Corporation (IFC)[33] have become globally recognized as a benchmark for environmental and social risk management covering as follows: IFC Performance Standards[34] defining clients' responsibilities for managing their environmental and social risks, and IFC Corporate Governance Methodology[35] being an approach to evaluate and improve the corporate governance.

Large investments are required to achieve environmental and economic goals. The scope of required investment greatly exceeds the capacities of the public sector. Thus the Strategy for Financing the Transition to a Sustainable Economy of the European Union[36] specifies that the purpose of the public financial policy is to channel private financial flows into activities ensuring sustainable development. This will require facilitating the financial sector development along the following three lines:

- re-orienting investments towards more sustainable technologies and businesses
- financing growth in a sustainable manner over the long-term
- contributing to the creation of a low-carbon, climate resilient and circular economy.

Save for corporate governance covering the environmental, social, and governance factors, as well the environmental and social risk management system, the Strategy for the transition to circular economy determines at least three sustainable finance frameworks:

1) assessing and selecting projects for funding with consideration of
   - at least one of the six environmental objective and all four principles of sustainable business as set out in Regulation of the European Parliament and of the Council on the establishment of a framework to facilitate sustainable investment[37]:
   - approach prescribed by the Sustainable Europe Investment Plan of the European Union that prioritizes the energy efficiency as the first principle that should be applied to ensure that energy efficiency is taken into account wherever relevant (from generation to the end consumer) helping avoid waste of resources linked to the generation, transmission, distribution and use of energy that is actually not needed[38]

2) disclosure of information by financial institutions on operation sustainability

3) set of tools for drafting and adopting decisions on sustainable finance and preventing greenwashing.

Selecting projects for the development of sustainable finance is based on respective taxonomy for business activities. As of 2021, there is no uniform taxonomy for business activities, and business entities apply both officially recognized and market taxonomies[39]. The World Bank (WB) devised a Guide on Developing of the National Green Taxonomy[40]. The European Green Course declares the goal to create a solid research-based business taxonomy that establishes a list of environmentally sustainable economic activities and thresholds (technical screening criteria) that can clearly determine which

[33] IFC Sustainability Framework: https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/policies-standards/sustainability+framework

[34] IFC Performance Standards: https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/policies-standards/performance-standards

[35] IFC Corporate Governance Methodology: https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/ifc+cg/investment+services/corporate+governance+methodology

[36] European Commission. Strategy for Financing the Transition to a Sustainable Economy (July 2021): https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52021DC0390

[37] Regulation (EU) 2020/852 of the European Parliament and of the Council of 18 June 2020 on the establishment of a framework to facilitate sustainable investment: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32020R0852

[38] Sustainable Europe Investment Plan. European Green Deal Investment Plan (January 2020): https://ec.europa.eu/commission/presscorner/detail/en/fs_20_48

[39] Overview and recommendations for sustainable finance taxonomies. ICMA (2021): https://www.icmagroup.org/News/news-in-brief/icma-publishes-overview-of-taxonomies-for-sustainable-finance-and-recommends-success-criteria/

[40] Developing a National Green Taxonomy. World Bank Guide (July 2020): https://documents1.worldbank.org/curated/en/953011593410423487/pdf/Developing-a-National-Green-Taxonomy-A-World-Bank-Guide.pdf

economic activity is in line with sustainable development, environmental goals, and principles of sustainable economic activity. Such a taxonomy will contribute to the transition to a low-carbon, risk-resistant, and resource-efficient economy, and facilitate disclosure of information related to climate. In April 2021, the European Commission approved the Technical Screening Criteria for the economic activity regarding the two first of six environmental objectives (i.e. climate change mitigation (CCM) and climate change adaptation (CCA))[41].

Disclosing information on sustainability of companies operation and their environmental and social impact, as well as on business and financial risks resulting from impact on the environment, is mandatory for the big businesses and voluntary for small and mid-size enterprises. Information disclosure creates awareness for investors and the public of lines of business of financial and nonfinancial companies in terms of sustainable development and traces the correlation of performance indicators of these companies with sustainable economic activity. In line with Regulation (EU) 2019/2088 of the European Parliament and Council on sustainability related disclosures in the financial services sector[42], reporting and disclosing sustainability related information are at the core of the Sustainable Finance Strategy of the European Union.

The initiative of the European Union on disclosure of information by companies on sustainable operation is getting global. The 75th UN General Assembly[43] stressed on the mandatory nature of the commitment of financial and nonfinancial companies to disclose information on the climate effect of their decisions, as well as on the leading role of the financial sector in this process.

In addition to commitments on sustainability related disclosures, the companies are required to report the environmental impact of projects funded from green bonds. This type of reporting should be made public by green bond issuers. Recommendations of the International Capital Market Association (ICMA), hereinafter referred to as "the Recommendations", for impact reporting[44] is one of the fundamentals of the European green bond[45] standard. Provisions of the Recommendations on indicators for assessing the environmental impact of different lines of business are also relevant to the projects that are nongreen bond funded. Impact reporting should be released at least once a year as a separate report or as part of the annual report.

Sustainable finance instruments include benchmarks, standards, and indicators. The framework for such instruments derives from taxonomy-based mandatory disclosures of financial and nonfinancial companies. Financial market players require this toolkit to agree investments with the global/regional climate and environmental goals at the same time ensuring transparency.

Benchmarks are based on the Regulation (EU) 2016/1011 on climate benchmarks[46]. Benchmarking is used for choosing underlying assets and weighing methods and criteria, as well as for setting a trajectory for decarbonization of assets and assessing its accuracy taking into account the global/regional climate and environmental goals.

3.1.2 Ukraine's Sustainable Development Vector

Ukraine is a part of key international agreements for resolving environmental/

41 EU Taxonomy, Corporate Sustainability Reporting, Sustainability Preferences and Fiduciary Duties (21 AprIl 2021): https://ec.europa.eu/info/publications/210421-sustainable-finance-communication_en#taxonomy

42 Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability related disclosures in the financial services sector: https://eur-lex.europa.eu/eli/reg/2019/2088/oj

43 United Nations (September 2021): https://news.un.org/en/story/2020/09/1073422#The%20entire%20financial%20sector%20needs%20to%20adapt

44 Handbook. Harmonised Framework for Impact Reporting. ICMA (June 2021): https://www.icmagroup.org/sustainable-finance/impact-reporting/

45 European green bond standard: https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/european-green-bond-standard_en

46 Regulation (EU) 2016/1011 as regards EU Climate Transition Benchmarks, EU Paris-aligned Benchmarks and sustainability-related disclosures for benchmarks: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32019R2089

climate challenges. In line with the Paris Agreement of 2015[47], Ukraine assumed commitments to reduce its greenhouse gas emissions by 2030 to less than 35% of the emissions in 1990.

To ensure a balanced economic, social, and environmental components of sustainable development, Ukraine joined the global process by choosing 17 UN Sustainable Development Goals for 2030[48] as benchmarks for drafting forecasts and programs, as well as laws. In 2017, Ukraine devised the national system of the Sustainable Development Goals (86 national targets and 172 monitoring indicators) that translated UN goals with consideration of the country's development specifics[49]. In September 2019, the Presidential Decree[50] introduced mandatory monitoring of implementing national Sustainable Development Goals and annual disclosure of findings.

The Ukrainian high-ranking officials have expressed their support to the European Green Course intended to achieve climate neutrality on the European continent until 2050, and stated that Ukraine is an integral part of implementing said Green Course goals and that the European Green Course corresponds to green economy efforts[51].

In March 2021, the Cabinet of Ministers of Ukraine approved the National Economic Strategy for 2030[52] stating that Ukraine intends to reach climate neutrality before 2060. In order to become a climate neutral economy, Ukraine needs to raise about EUR 102 billion capital investments by 2030, i.e. about EUR 10 billion per year (Table 1).

Expert estimate[53] that for achieving climate neutrality, Ukraine needs to implement the following changes:

- increasing energy generation from renewable energy source
- introducing cutting-edge technology (including hydrogen), carbon capture and sequestration (CCS) etc.
- improving energy efficiency in residential and industrial buildings
- reducing internal combustion engine vehicles and advancing electric vehicles
- improving waste treatment and water use practices
- increasing cultivation of organic crops and reducing methane emissions in agriculture
- increasing absorption rates of carbon dioxide by forestation.

[47] Transforming our world: The 2030 Agenda for Sustainable Development. – Resolution adopted by the UN General Assembly on 25.09.2015: https://sdgs.un.org/2030agenda Paris Agreement on Climate Change. – UN. 2015: https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement

[48] UNDP. Ukraine: https://www.ua.undp.org/content/ukraine/uk/home/sustainable-development-goals.html

[49] Sustainable Development Goals: Ukraine. National Address. 2017: https://www.kmu.gov.ua/diyalnist/cili-stalogo-rozvitku-ta-ukrayina

[50] On the Sustainable Development Goals of Ukraine until 2030. Presidential Decree dated 30 September 2019: https://zakon.rada.gov.ua/laws/show/722/2019#Text

[51] European Green Course: https://ukraine-eu.mfa.gov.ua/posolstvo/galuzeve-spivrobitnictvo/klimat-yevropejska-zelena-ugoda

[52] National Economic Strategy for 2030. Resolution of the Cabinet of Ministers of Ukraine No. 179 dated 3 March 2021: https://zakon.rada.gov.ua/laws/show/179-2021-%D0%BF#n25

[53] https://mepr.gov.ua/news/36645.html

Table 1. Investments required for the goals of updated Nationally Determined Contributions to the Paris Agreement for 2021 – 2023[54]

Sector	Capital investment (€ billions)
Total	**102**
1+2. Energy + Industry processes (excluding consumer spending)	93
Agriculture	2
Energy and heat production	26*
Industry	37*
Buildings* (net of consumer spending)	16
Heating	16
Thermomodernization of residential buildings	13
Mining and transportation of energy sources	8
Transport* (net of consumer spending)	3*
Private vehicles*	3
3. Agriculture	2,3*
4. Land use, changes in land use and forestry	3
5. Waste	2

* Sectors require additional estimates considering the change in greenhouse gases emission goals.

In recent years, Ukraine has achieved some progress by significantly reducing energy consumption, increasing the energy efficiency of the economy and developing the renewable energy sector. The total share of renewables in the energy generation increased from 7.9% in 2015 to 11.3% in 2020 (including energy produced at hydropower plants). In 2010-2019[55], Ukraine saw a decline in the energy intensity of the GDP by 32.3%. At the same time, a decline in energy intensity closely correlates with the increase in the share of electricity in the final energy consumption, that grew from 15.6% to 20.3% over that period. Since 1999, the GDP growth has not been accompanied by the proportional increase in greenhouse gas emissions. Also, there is a direct correlation between greenhouse gas emissions and production, supply, use, and consumption of energy resources[56].

In a Joint Statement on the U.S.-Ukraine Strategic Partnership (September 2021)[57], Ukraine confirmed its commitment to attract to the energy sector

[54] Analytical review of updated Nationally Determined Contributions (NDCs) to the Paris Agreement. July 2021: https://mepr.gov.ua/news/33080.html

[55] 2019 data are presented excluding the temporarily occupied territory of Crimea, the city of Sevastopol, and part of the temporarily occupied territories of Donetsk and Luhansk oblasts.

[56] Analytical review of updated Nationally Determined Contributions (NDCs) to the Paris Agreement. July 2021: https://mepr.gov.ua/news/33080.html

[57] Joint Statement on the U.S.-Ukraine Strategic Partnership: https://www.president.gov.ua/news/spilna-zayava-shodo-strategichnogo-partnerstva-ukrayini-ta-s-70485

investment needed to achieve energy independence, decarbonization, and clean energy goals.

The Law of Ukraine *On the Key Principles (Strategy) of the National Environmental Policy until 2030*[58] provides for the introduction of an ecosystem approach to the energy sector policy and improvement of the integrated ecosystem management, implementation of the international standards for environmental management systems and environmental risks management system in all sectors of the national economy.

Sustainable finance development directly depends on the extent to which activities, approved for funding, comply with sustainability criteria. The Law of Ukraine *On Environmental Impact Assessment* (2017)[59] introduced the institution for environmental impact assessment in line with European standards. The Law defines environmental impact as any effects of planned activities on the environment, including effects on people's livelihoods and health, flora, fauna, biodiversity, soil, air, water, climate, landscape, natural areas and objects, historical monuments and other material objects or on a combination of these factors, as well as effects on the objects of cultural heritage or socioeconomic conditions resulting from changes in these factors.

In 2021, Ukraine introduced "green bonds" at the legislative level[60]. Funds from their placement are planned to be used for full or partial financing and/or refinancing of environmental projects. To develop the green bond market, the National Securities and Stock Market Commission (NSSMC) approved Recommendations on "green bonds"[61] that are fully compliant with the best international practices.

The level of environmental awareness and social responsibility of financial and nonfinancial institutions is critically dependent on their corporate culture and good corporate governance system. In recent years Ukraine has taken important steps to improve corporate governance both in the banking sector and real economy, particularly by enhancing effectiveness and independence of supervisory boards, strengthening control environment and improving risk management. At the beginning of 2020, the NSSMC approved a new version of the Corporate Governance Code[62] in line with the OECD Guidelines on Corporate Governance that incorporates provisions reflecting the best practices of applying environmental, social and governance (ESG) operation criteria. The NBU is currently working on the following annexes to the Corporate Governance Code: Annex to the Corporate Governance Code and Annex to the ESG Disclosure Guidelines. This vector is critically important for sustainable finance development in Ukraine.

As of 1 July 2020, the NBU assumed the functions of a regulator of nonbank financial services markets to achieve sustainable development goals in the sector. Since then, the NBU has regulated the operation not only of banks, but also insurance, leasing, and factoring companies, credit unions, pawnshops and other financial institutions (except for professional stock market participants regulated and overseen by the NSSMC).

Steadily moving towards sustainable finance development, in 2021, the NBU joined the Sustainable Banking and Finance Network (SFBN)[63] that brings together financial sector regulators and banking associations to promote sustainable finance according to the best international practices.

[58] On the Key Principles (Strategy) of the National Environmental Policy until 2030. The Law of Ukraine dated 28 February 2019: https://zakon.rada.gov.ua/laws/show/2697-19#Text

[59] On Environmental Impact Assessment. The Law of Ukraine dated 23 May 2017: https://zakon.rada.gov.ua/laws/show/2059-19#Text

[60] On Capital Markets and Organized Commodity Markets. The Law of Ukraine dated 19 June 2020: https://zakon.rada.gov.ua/laws/show/3480-15#Text

[61] Recommendations On the Implementation or Financing of Environmental Projects by Issuing Green Bonds. NSSMC Resolution No. 493 dated 7 July 2021: https://www.nssmc.gov.ua/komisiia-skhvalyla-rekomendatsii-shchodo-rozvytku-zelenykh-oblihatsii-v-ukraini/

[62] Corporate Governance Code: Key Requirements and Recommendations: https://www.nssmc.gov.ua/en/documents/kodeks-korporatyvnoho-upravlinnia-kliuchovi-vymohy-i-rekomendatsii/

[63] Sustainable Banking and Finance Network: https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/sustainability-at-ifc/company-resources/sustainable-finance/sbn

4. Key Elements of Sustainable Finance in Ukraine

4.1. Implementation of environmental, social, and governance (ESG) criteria of financial institutions' operation

ESG criteria must become obligatory elements of financial institutions' corporate governance system. Governance of financial institutions and their projects funding should take into account the following risks, effects, and possibilities:

- *environmental:* potential or actual changes in physical or natural environment (for example, environmental pollution, impact on biodiversity, carbon emissions, use of natural resources, climate change)

- *social:* potential or actual impacts on a territory's population and its labor force in particular (for example, healthcare and labor safety, supply chains, diversity, and inclusion)

- *governance:* structure and processes of corporate governance used for management and control over companies (for example, structure and diversity of supervisory board, ethical conduct, risk management, disclosure of information, transparency).

ESG criteria of operation have to be considered by financial institutions in the following two contexts:

- in the system of corporate standards and managing the impact financial institutions have on the environment. This includes employee value propositions (EVP), corporate social responsibility (CSR), maintaining the ecological hierarchy in waste treatment, energy efficiency on the premises of financial institutions, etc.

- in the risk management system in investments and lending operations of financial institutions.

4.2. Environmental and social risk management (ESRM)

An environmental and social risk management system has to be integrated into the general risk management system of a financial institution ensuring the ongoing identifying, measuring, monitoring, controlling, reporting, and mitigating such risks that arise at the stages of preparation and implementation of projects fully or partially funded by financial institutions, as well as in the actual operations of such institutions.

Environmental and social risk management should cover the following:

- environmental and social policy. Every financial institution should have a policy regarding their environmental and social goals and responsibilities. Moreover, a financial institution, when funding their clients' projects, has to make sure that said projects go in line with ecological goals and principles of sustainable business activity

- procedures for identifying, measuring, monitoring, controlling, reporting, and mitigating environmental and social risks
- availability of qualified staff in a financial institution to ensure the effective environmental and social risk management, as well as training specialists in this area
- preparedness to emergencies and responding to them
- external communications, involvement of stakeholders, and settlement of complaints in the ESG context
- management reporting and disclosure of information on environmental and social risk management.

4.3. Evaluation and selection of projects for funding, depending on their role in sustainable development

When evaluating and selecting projects suitable for funding, it is necessary to remember that economic sustainability is the economic activity that complies with at least one of the six environmental objectives, all four principles of economic sustainability, and the principle of prioritizing energy efficiency.

4.4. Mandatory disclosure by financial institutions of information on their economic sustainability

Financial institutions are required to disclose information on their economic sustainability, impact of their activities on the environment, and the reputational and financial risks arising from the environmental impact of their operation.

5. Road Map for Sustainable Finance

Goal of the Road Map is to define the NBU's actions aimed at establishing a reliable, predictable and stable regulatory framework to develop the sustainable finance in Ukraine, setting a tangible timeframe and covering the need for ensuring consistency and adaptability of the banking system and nonbank financial institutions (NBFIs) to changes.

Sustainable finance is one of the important factors for sustainable development of macro- and microeconomy, therefore the NBU's Road Map for sustainable finance has been aligned with other actions planned by the Ukrainian government.

The Road Map defines the financial regulator's actions necessary for management of possible risks caused by climate challenges and environmental problems, and covers the related social and governance issues.

Taking into consideration the unpredictability of climate challenges and the problems they cause, the Road Map can be regularly reviewed and adjusted respectively.

Area of activity	Types of work to be done	Timeframe (a year)
5.1. Improving corporate governance in banks and NBFIs regarding the ESG criteria	· Overview of the advanced international standards and best practices on inclusion of the ESG criteria in regulations on corporate governance in banking	Q3 2021
	· Overview of the advanced international standards and best practices on inclusion of the ESG criteria in regulations on corporate governance in nonbank financial institutions	Q4 2022
	· Drafting and approving (taking the ESG criteria into consideration) amendments to regulations on corporate governance in banking in line with the best European and world practices	Q1 2022
	· Drafting and approving (taking the ESG criteria into consideration) amendments to regulations on corporate governance in NBFIs in line with the best European and world practices	Q3 2024
	· ESG trainings for market participants	2022–2024 (on a continuous basis)

5.2. Developing the standards on disclosure of information on ESG by banks and NBFIs	· Overview of the advanced international standards and best practices on disclosure of ESG information by financial institutions	Q3 2022
	· Drafting and approving the standards on disclosure of information on ESG by banks	Q4 2022
	· Drafting and approving the standards on disclosure of information on ESG by NBFIs	Q4 2024
5.3. Developing the requirements to banks and NBFIs on environmental and social risk management	· Overview of the advanced international standards and best practices on environmental and social risk management	Q4 2021
	· Developing the requirements to financial institutions on environmental and social risk management, which will serve as practical guidelines to measure and mitigate environmental and social risks	Q3 2022 (for banks) Q4 2024 (for NBFIs)
	· Trainings for market participants on environmental and social risk management in banks	2022–2024 (on a continuous basis)
	· Trainings for market participants on the standards for disclosure of ESG information by financial institutions	2023–2024 (on a continuous basis)
	· Inclusion of issues of identification and management of the sustainable development risks into the system of prudential supervision over banks and insurance companies	Q4 2024
	· Drafting proposals on strengthening the protection against environmental risks through an increase in insurance cover	Q3 2024
	· Drafting proposals and participation in discussions on reflecting the sustainable development risks in the accounting and reporting standards	Q4 2024
5.4. Setting the standards to financial institutions on evaluation and selection criteria for projects to be funded, depending on their role in sustainable development	· Recommendations to financial institutions to disclose information on technical criteria (those that describe the environmental impact) for evaluation and selection of projects to be funded	Q4 2023 (for banks) Q4 2024 (for NBFIs)

	· Within the prudential supervision framework, controlling/monitoring the procedure at financial institutions for evaluation and selection of projects to be funded depending on their role in sustainable development	Q1 2024
5.5. Ensuring the control over disclosure of information by financial institutions on sustainability of their operation	· Developing and approving the recommendations to banks to disclose information on evaluation and selection of projects to be funded depending on their role in sustainable development	Q4 2023
	· Developing and approving the recommendations to NBFIs to disclose information on evaluation and selection of projects to be funded depending on their role in sustainable development	Q4 2024
	· Overview of the advanced international standards and best practices on disclosure of information by financial institutions on sustainability of their operation	Q3 2023
	· Drafting and approving the requirements to banks on disclosure of information on sustainability of their operation	Q4 2024
	· Drafting and approving the requirements to NBFIs on disclosure of information on sustainability of their operation	Q4 2024
	· Performing the control over disclosure of information by financial institutions on sustainability of their operation	Q4 2024 (for banks) Q1 2025 (for NBFIs)
	· Developing an analytical toolbox for ensuring the analysis of information on sustainable finance development based on BI systems	Q4 2024
5.6 Integration of climate aspects into the system of ensuring the financial sustainability	· Research on the world practices and consultations with the leading central banks on evaluation of climate risks impact on the financial stability	Q4 2023
	· Collecting statistical information for evaluation of climate aspects impact on the financial stability of Ukraine	Q4 2023
	· Integration of climate aspects into the financial stability monitoring system · Analysis of the impact of current micro- and macroprudential regulation on encouraging the transition to the sustainable (green) economy · Research on the potential of using the prudential instruments to encourage the transition to the sustainable (green) economy	Q4 2024

	· Applying the prudential instruments to encourage the transition to the sustainable (green) economy · Integration of climate aspects into the NBU's research priorities, particularly with the aim to develop respective modelling tools	
5.7. Organization of work and conducting events on raising the level of financial awareness of economic entities on issues of sustainable finance development in Ukraine	· Conducting press conferences to present the NBU Sustainable Finance Development Policy	Q4 2021
	· Arranging joint public events together with other market participants to provide clarifications on the key points of the NBU Sustainable Finance Development Policy	2022–2025 (on a continuous basis)
	· Initiating conducting an international conference on sustainable finance development in Ukraine	Q4 2022
	· Informing the general public through mass media channels and on the NBU's official website on the work progress and achievements in sustainable finance development in Ukraine	2022–2025 (on a continuous basis)
	· Coverage of the sustainable finance topic in the NBU's official publications	2021–2025 (on a continuous basis)