



Forest Policy Report

SFI/2023

**Commenting and improving draft law
"On investment attraction and economic
stimulation of the implementation of afforesta-
tion measures and implementation of forest
management"
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About the Project “Sustainable Forestry Implementation” (SFI)

The project “Technical Support to Forest Policy Development and National Forest Inventory Implementation” (SFI) is a project established in the framework of the Bilateral Cooperation Program (BCP) of the Federal Ministry of Food and Agriculture of Germany (BMEL) with the Ministry of Environment and Natural Resources of Ukraine (MENR). It is a continuation of activities started in the forest sector within the German-Ukrainian Agriculture Policy Dialogue (APD) forestry component.

The Project is implemented based on an agreement between GFA Group, the general authorized executor of BMEL, and the State Forest Resources Agency of Ukraine (SFRA) since October 2021. On behalf of GFA Group, the executing agencies - Unique land use GmbH and IAK Agrar Consulting GmbH - are in charge of the implementation jointly with SFRA.

The project aims to support sustainable forest management planning in Ukraine and has a working focus on the results in the Forest Policy and National Forest Inventory.

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Content

Introduction.....	4
1. The main ways of economic incentives for implementing measures for forestry and forest management, which are proposed to be defined by law.....	7
1.1. Reimbursement of costs to private forest owners for reforestation activities.....	7
1.2. Introduction of carbon certificates.....	14
1.3. Conclusion of contracts for attracting investments	18
1.4. Acquisition of land plots for public needs	19
1.5. Application of accelerated depreciation of fixed assets.....	20
2. Regarding the principles of economic incentives to be defined by the draft law.....	22

Introduction

Economic incentives are considered to be an integral part of the economic mechanism of management in the field of natural resources use and environmental protection. All economic regulators directly affecting the property interests of natural resource users lead to an understanding of the relationship between economic benefit and compliance with environmental requirements. Therefore, the economic incentive is a kind of combination of environmentally sustainable development objectives and economic interests.

The current environmental legislation defines the main types of economic incentives in the field of protection and use of natural resources, which are reflected in the Law of Ukraine "On Environmental Protection". In particular, Article 48 of the said Law states that Ukraine shall stimulate the rational use of natural resources and environmental protection by means of

- a) granting tax exemptions to enterprises, institutions, organisations and individuals in case they implement measures for the rational use of natural resources... and take other measures aimed at improving environmental protection;
- b) providing short-term and long-term loans on favourable terms to implement measures to ensure the rational use of natural resources and environmental protection;
- c) establishing higher depreciation rates for the main production environmental assets;
- d) tax exemption for environmental protection funds;
- f) transferring part of the environmental protection funds on contractual terms to enterprises, institutions, organisations and citizens for measures to guarantee the reduction of emissions and discharges of pollutants, and for the development of environmentally friendly technologies and production;
- f) providing an opportunity to obtain natural resources as collateral.

Forestry legislation, being a component of environmental law, stipulates in a special law - the Forest Code of Ukraine (Article 99) - that economic incentives in this area can only relate to measures for forest reproduction. In particular, the law emphasises that such measures can take three forms:

1. compensation of costs to forest owners and forest users when they implement measures for forest restoration and forest management;
2. purchase of privately owned land plots for the purpose of forestry or creation of territories and objects of the nature reserve fund;
3. application of accelerated depreciation of fixed assets for agricultural, forestry and environmental protection purposes.

Expenses are reimbursed from the state budget and local budgets.

The procedure for economic incentives for the implementation of forest restoration measures is approved by the Cabinet of Ministers of Ukraine.

The above wording of Article 99 of the Forest Code of Ukraine was recently amended by the Law of Ukraine "On Amendments to Certain Legislative Acts of Ukraine on Forest Conservation", which came into force on 10 July 2022.

However, neither the previous version of the law nor the current one can be recognised as effective and providing real incentives for the development of afforestation on a national scale. There are several reasons for this: not only legal, but mainly economic, organisational and partly social. In the following study, these reasons will be considered in more detail.

At the level of bylaws, the guidelines for further areas of improvement of the legal framework in this area are defined. Thus, the fifth paragraph of subparagraph 3 of paragraph 2 of the Decree of the President of Ukraine No. 228/2021 "On Some Measures for the Conservation and Restoration of Forests" dated 07 June 2021 instructs the Cabinet of Ministers of Ukraine to take measures in the prescribed manner to introduce mechanisms for attracting investment for forest restoration and afforestation.

Paragraph 545 of the Government's Priority Action Plan for 2023, approved by the Cabinet of Ministers of Ukraine on 14 March 2023, No. 221-p, provides for the development of a draft law on attracting investment in forestry.

It should be borne in mind that afforestation and reforestation in general are complex processes that require high-quality legal support, while taking into account natural, social, economic and other factors. The peculiarities of forest resources reproduction are determined by their essence - a forest grows on the ground and is a renewable resource.

The current legislation of Ukraine defines the goals of forest expansion and even specifies their scale. In this context, the key requirement is the declarative requirement provided for in Article 79 of the Forest Code of Ukraine, according to which the goal of forest reproduction in Ukraine is to achieve optimal forest cover by creating new plantations in the shortest possible time using the most economically and environmentally sound methods and technologies. This goal was proclaimed in the 2006 version of the current Forest Code, which stipulates that optimal forest cover should be 20% of the country's territory. In particular, the programme "Forests of Ukraine for 2011-2015", approved by the Cabinet of Ministers of Ukraine on 16.09.2009 №977, envisaged that forest cover would increase by 500 thousand hectares and amount to 16.1% of the country's territory. However, such a large-scale intention has not yet been achieved and is unlikely to be realised in the coming years. Especially given the current harsh economic conditions and the catastrophic consequences for the economy and society

caused by Russia's aggression against Ukraine. At the same time, over the past two decades, the state has not provided adequate funding for the declared measures. For example, in 2016-2018, the State Budget did not provide for the allocation of funds not only for the creation of new forests, but also for the salaries of subsidised forestry enterprises in the industry, scientific institutions, etc.

While in countries with a high level of forest cover, state support for forestry development ranges from USD 9.8 to 23.4 per hectare of forest, in Ukraine it was on average 30 cents in 2015-2020. In Ukraine, such support averaged 30 cents per hectare of forest in 2015-2020, which certainly does not contribute to a quantitative increase in the forest fund. Thus, in 2021, forestry enterprises that are part of the State Forestry Agency created new forests on an area of 3.2 thousand hectares. During 2020-2015, these annual figures also fluctuated between 2-3 thousand hectares.

Therefore, with such funding for forest restoration, it will take Ukraine about 40 years to reach the 20% forest cover target proclaimed by the Law on Environmental Policy. It should be noted that the largest share of revenues to state and local budgets from the forestry sector as of 2021 was the revenues paid by permanent forest users in the form of taxes and fees in the amount of UAH 7 billion 32 million, of which UAH 4 billion 326 million came from the state budget. These amounts are ten times less than the budgetary funding of the forestry sector, especially since it is mainly used to support operations, pay salaries to scientific institutions, maintain departmental institutions of protected areas, etc.

The draft law on economic incentives for afforestation should be aimed at solving complex economic and legal problems in this area, creating effective incentives for the development of private forests and promoting private investment in afforestation.

1. The main ways of economic incentives for implementing measures for forestry and forest management, which are proposed to be defined by law

The main ways of economic incentives for the implementation of forestry and forest management measures, which are proposed to be defined by law, are as follows:

- 1) Compensation of expenses to citizens and legal entities that own forests in private ownership when they implement measures for forestry and forest management;
- 2) Purchase of privately owned land plots for the purpose of forestry or creation of territories and objects of the nature reserve fund;
- 3) Application of accelerated depreciation of fixed assets for agricultural, forestry and environmental protection purposes;
- 4) Issuance of carbon certificates;
- 5) Conclusion of agreements on attracting investments for the implementation of forestry and forest management measures.

Let's take a closer look at each area of economic stimulus that is planned to be enshrined in the regulatory framework.

1.1. Reimbursement of costs to private forest owners for reforestation activities.

Sources of funding.

According to Article 12 of the Forestry Code of Ukraine, citizens and legal entities may acquire land plots for forestry in accordance with the procedure established by law, and may also own forests created by forestry on land plots acquired in accordance with the procedure established by law. Forestry legislation (Article 81 of the LC of Ukraine) also states that forestry can be carried out on lands of all categories in compliance with the requirements for the use of the land plot for its intended purpose.

According to the State Forest Management Strategy until 2035, approved by the Cabinet of Ministers of Ukraine on 29.12.2021 under No. 1777-p, the forest area should be increased by: reforestation on degraded and low-productive lands of all forms of ownership with due regard to the natural conditions of the area and refusal to reforest unique steppe areas; introduction of mechanisms to stimulate reforestation by private landowners, etc.

Pursuant to Article 57(2) of the Land Code of Ukraine, individuals and legal entities have the right to classify land plots (including self-forested land)

owned by them and belonging to all categories of land (except for lands of nature reserve and other environmental protection purposes) as forestry land, and to conduct forestry on them.

Thus, formally, the norms of land and forestry legislation, as amended in July 2022, contain the basic regulatory framework for the creation of forests on privately owned land. The law removed obstacles in the form of the need to prepare a project to change the designated purpose of land plots in case of forest creation. It also granted the right to both legal entities and individuals to conduct forestry on them, essentially without regard to the designated purpose of the land. However, these changes are insufficient to create real incentives for the development of private forestry, as they do not relieve forest owners of a significant number of responsibilities imposed on them by forestry legislation. In order to organise forest management, the forest owner is obliged to fulfil a whole range of duties in accordance with Article 14 of the LC of Ukraine:

- to conduct forest management on the basis of forest management materials (i.e., ordering forest management materials from a specialised organisation is an obligation for every forest owner, regardless of the area),
- carry out other activities in accordance with the requirements of forestry legislation (this includes a set of actions related not only to the creation of forests, but also to their protection, conservation, use, etc;)
- comply with the rules and regulations for the use of forest resources (for example, to cut down trees, the same forest owner must issue a felling ticket and, as a result, keep the relevant documentation),
- maintain primary forest records, provide statistical reports and information on the state of forests and the use of forest resources. In other words, in addition to the above duties, a bona fide forest owner must constantly maintain planning and statistical documentation.

Even for planting forests, citizens, along with forestry enterprises, must prepare forest crops projects in advance, as required by the "Rules for Forest Reproduction" approved by the Cabinet of Ministers of Ukraine on 01.03.2007, No. 303. Forest owners must also record the results of technical acceptance and inventory of forest crops in the relevant forms of technical documentation. In general, private forest owners, as permanent forest users, should record and assess the quality of works related to forest reproduction.

In Ukraine, land use is paid for. Therefore, an additional expense for forest owners is the obligation to pay land tax, the rates of which can range from 0.1% to 5% of the regulatory monetary value of the land plot, depending on the category and various factors.

Forestry, as a type of economic activity aimed at making a profit, is an economic activity. Planting of forest crops, maintenance, and additions will at least require

owners to periodically or permanently engage hired labour. This requires those wishing to engage in forest planting to be registered as an individual entrepreneur or establish a business entity. Thus, at a minimum, citizens who wish to engage in forestry as entrepreneurs will, in addition to the above costs, also be required to pay a single social contribution, and if they have income, a single tax, provided they are on the simplified taxation system.

Other problems are compounded by the fact that Ukraine has virtually lost the experience of private forestry due to the dominance of state ownership of forest land. Moreover, financing for the creation of new forests throughout the period of the country's independence was carried out under state targeted programmes, in fact, within the framework of the outdated administrative vertical of forestry management bodies.

According to the Procedure for the Use of Funds Provided for in the State Budget for Financing Forestry and Hunting, Protection and Conservation of Forests in the Forest Fund, Creation of Protective Forest Plantations and Shelterbelts, approved by the Cabinet of Ministers of Ukraine on 20.12.2017, No. 1016, the Ministry of Environment is the main budgetary administrator. The State Forestry Agency is a lower-level budgetary funds manager and responsible executor of the budget programme. This procedure determines the financing of, among other things, measures for forestry, creation of protective forest plantations, and field protection strips. In accordance with clause 3 of the said Resolution, the recipients of budgetary funds are: state associations (enterprises) that conduct forest management on the lands of enterprises belonging to the sphere of management of the State Forestry Agency; state forestry enterprises belonging to the sphere of management of the State Forestry Agency that do not carry out main use logging in accordance with reasonable indicators, taking into account regional characteristics and natural and climatic conditions.

Thus, the bylaws do not provide for budget support to private business entities for the creation of forest plantations, including shelterbelts.

At the same time, according to clause 2.28 of Article 2 of the Law of Ukraine "On State Support of Agriculture", agricultural activities include, among other things, afforestation, including the creation of protective forest plantations. According to clauses 17-2.12 of Article 17 of the said Law, the state provides support to agricultural producers who maintain and preserve shelterbelts located on agricultural land. The procedure for providing this type of support is determined by the Cabinet of Ministers of Ukraine. However, this law does not contain any provisions that provide grounds for obtaining budgetary subsidies for the development of private forestry, additional financial support, etc. In fact, the procedure for providing support for the maintenance and preservation of shelterbelts is still absent.

However, budgetary funding should not be seen as the only source of financing for reforestation activities. Moreover, in the context of an unprecedented increase in the budget deficit, cuts in secondary expenditures, and their focus on military needs, the likelihood of significant budgetary allocations is low. Therefore, it is worth considering the possibility of attracting the widest possible use of international technical assistance funds and other non-prohibited sources. It is proposed that the relevant draft law provide for the following sources of funding for the relevant measures:

- funds from the state and local budgets;
- funds from international financial institutions, other creditors and investors;
- international technical and/or repayable or non-repayable financial assistance;
- reparations or other penalties from the Russian Federation;
- other sources not prohibited by the legislation of Ukraine.

Compared to the European experience, it is worth noting that forestry development in different countries of the world is also financed by various sources of public funding. These include targeted funds to support forestry and subsidies from the state budgets of EU countries, as well as state support for private forest owners aimed at meeting the needs of society. For example, France has a National Forestry Fund, the main source of which is a special sales tax on wood products. The accumulated funds are used for forest reproduction, protection, and improvement of forest management. Norway has established the Forestry Support Fund, which is used to restore forests, protect them, and promote forestry sales. The main source of funding for the fund is a mandatory 2 per cent tax on the sale of timber, roundwood and wood products. A similar fund also operates within the Italian budget system. It is funded by a special tax on paper pulp and paper products in the amount of 0.6-3.0 per cent of their value.

At the same time, in some EU countries, forestry enterprises receive subsidies from the state budget. In France, subsidies of up to 40% of pre-approved expenditures from the state budget are allocated for the purchase of forest crops, protection of forests from animals, thinning of newly planted forests, and construction and improvement of forest roads.

When considering possible formats of state aid to persons intending to create new forests, one should take into account the provisions of Article 4 of the Law of Ukraine "On State Aid to Business Entities", which defines the following types of state aid:

- 1) provision of subsidies and grants;
- 2) provision of subsidies;
- 3) provision of tax benefits, deferral or instalment of taxes, fees or other mandatory payments;
- 4) debt cancellation, including debt for public services, cancellation of penalties,

compensation for losses to business entities; 5) guarantees, loans on favourable terms, loan servicing at favourable rates;... 6) provision, directly or indirectly, of goods or services to business entities at prices below market prices or purchase of goods or services of business entities at prices above market prices, etc. The criteria for assessing the admissibility of state aid to business entities for environmental protection are approved by the Resolution of the Cabinet of Ministers of Ukraine No. 1060 dated 11.10.2021.

In the context of compensations to forest owners, it is worth paying attention to a relatively recent legal obstacle to the development of forestry. In particular, at the end of 2017, forest planting activities (except for reforestation) on an area of more than 20 hectares, in accordance with Part 3 of Article 3 of the Law of Ukraine "On Environmental Impact Assessment", began to require an environmental impact assessment (EIA). EIA has become a financially and organisationally burdensome procedure for forest users. Due to its scope and requirements, the EIA procedure significantly complicates the implementation of afforestation activities. As practice shows, the cost of EIA reports by specialised private organisations for permanent forest users averages between UAH 100,000 and 300,000. Financing such costs is burdensome even for permanent forest users of state and municipal ownership.

Therefore, in order to systematically address the problem, which would reasonably change/eliminate bureaucratic barriers and reduce costs, it would be advisable to amend the Law of Ukraine "On Environmental Impact Assessment" to increase the size of the forest area requiring EIA from 20 to 100 hectares. An alternative to this step would be to introduce reimbursement of forest owners for the preparation of EIA documentation.

It is natural that in this situation, the share of privately owned forests, according to various estimates, does not exceed 0.2%-0.5% of the area of state forests. The obvious unprofitability in the absence of state support is the main obstacle to private forestry, along with the problems of obtaining ownership of more or less significant land holdings for the creation of new plantations. All of these legal obstacles, combined with the extremely unstable economic situation in the context of armed aggression, lead to the fact that private forestry initiatives in Ukraine are currently at an almost zero level. Obviously, for a pragmatic business, it will be more commercially and investment-attractive (with a payback period of 3-20 years) to grow crops and perennial plantations than to conduct forestry, which will obviously be unprofitable in the 40-year perspective.

However, at present, the current legislation does not define mechanisms for compensating forest owners and forest users for the costs of implementing forest restoration measures. Therefore, it is advisable to include in the draft law the need to develop a procedure for compensating citizens and legal entities with privately

owned forests for their afforestation and forest management activities. Such a regulatory act should be approved by the Cabinet of Ministers of Ukraine.

The forest, with its numerous real resources (timber, secondary forest materials) and imaginary resources (useful properties of forests) cannot be considered only as an object of civil property rights. It is a complex natural formation that has a number of specific properties, since forest cultivation is characterised by an incomparably longer period of production than agricultural cultivation.

Therefore, the future draft bylaw should provide a list of forest management activities that are subject to compensation to forest owners for a period of up to seven years, namely: forestry activities: planting, sowing, reconstruction of plantations, care of forest crops, supplementation of forest crops, tillage for forest crops, procurement or purchase of seeds and planting material, cultivation of planting material, testing of forest seeds, establishment of plantations and their care. Forest management costs should include compensation for forest management costs, soil and typological surveys, other types of forest management (preparatory work, development of territory management projects, surveys and studies of stands, etc.)

Consideration of issues related to compensation should be determined by commissions, which are proposed to include representatives of state bodies, local self-government bodies, and experts. The basis for consideration should be an application with a certain list of documents, which should be entered into the relevant electronic register, etc.

The need to introduce compensation for the costs of creating forest plantations to individuals and private sector entities is due to the need to regulate the mechanism for paying reimbursement for the costs incurred by such entities. Payments for the preparation of forest management materials are also subject to compensation.

The institution of private forestry is quite widespread in European countries, in particular in countries with relatively small forest areas relative to their territory. Thus, in the context of studying the possibilities of state support for private forestry, the European experience is interesting. In Germany, the area of private forests is 4 million hectares (36.4% of the total forest area). With 1.5 million private forest owners, the area of private forests varies from 0.1 to 20,000 hectares and tends to be fragmented due to the inheritance of forests by children. State support to private forest owners is provided for forest protection and conservation activities, forest inventory, monitoring of forests, and mapping. The latter is explained by the fact that it is difficult to carry out the above activities selectively. In addition, in many cases, forest owners are unable to pay for expensive aerial and satellite imagery of forests.

In the Czech Republic, all forests were considered public property until 1990. Today, the state's monopoly on forests has been broken, and they are distributed by type of ownership in the following proportions: state forests - 60%, private forests - 23%, regional forests - 2% and municipal forests - 15%. Up to 95% of the work in private forests is carried out by state forestry enterprises, as only 1% of forest owners have formed cooperatives. For private forests with an area of 50 hectares or more, the forest owner bears all the costs of forest management, conservation and protection. For forest areas of less than 50 hectares, expert advice is paid for by the state.

In Poland, out of 9 million hectares of forest area, private forests account for 20%. The average size of a single forest holding is 1.3 hectares, which indicates a multiplicity (1.3 million people) of small owners, which greatly complicates the management of private forests. All forest management costs are paid by forest owners, and no more than 1% of them are united in cooperatives. Private forest owners can manage their forest plots according to simplified plans developed by state or private forestry enterprises. At the same time, the process of forest management in private forests is controlled by state forestry enterprises.

In Finland, the share of private forests reaches 75%. Metsähallitus, a commercial enterprise founded by the Ministry of Agriculture and Forestry and the Ministry of the Environment, operates in Finland and its tasks are defined by the Finnish Forest Service Act. Today, Metsähallitus is a diversified commercial enterprise. Its two main divisions are budgetary: "Forestry, which provides about 90% of working capital, and Nature Conservation, which provides care and protection. Other divisions are commercial or self-supporting. The latter will be engaged in forest management, including consulting services, growing planting material and recreational services, which are recognised as commercial activities. A similar forest management system is also in place in Sweden and Norway. Since 1990, active forest privatisation processes have been underway in the Baltic States. For example, the share of private forests in Estonia is currently 60%.

In general, the experience of European countries shows that the diversity of forest ownership is more profitable and leads to more even use of forests over time than when the state as the main forest owner is dominant. At the same time, the economic system of forest management should not be fully imitated, as in these countries forest owners are farmers who combine forest management with agriculture. This situation is explained by the fact that private forests are represented by small plots of land that do not provide owners with sufficient income to cover the costs of forest management. It is obvious that forestry by a private enterprise without other sources of income is financially unprofitable, as the current level of root prices does not provide incentives to invest capital in forest cultivation over a long period of time.

In China, where state and collective forests are dominant, private forests are created primarily on inconvenient and unused land. The law is based on the rule "whoever planted the forest is its owner". A programme of afforestation has also been implemented by allocating "bald" mountains, sandy hills and small wastelands for individual forest planting. At the same time, the land remains in state ownership. In addition, since 1984, there has been a practice of transferring property to peasant households or other economic associations on a contract basis. As a result, specialised farms of peasant foresters have been formed in the mountainous regions of China.

Interesting decisions on forest conservation and forest area expansion have been made in Mongolia. This country has established community forestry and encouraged private forestry by stimulating forestry and subsequent purchase of artificial plantations into state ownership. Forestry involves the introduction of forest self-governance at the local level through the involvement of representatives of the population, village administrations, forestry enterprises and scientific institutions. In addition, forestry operations will be carried out through the lease of forest plots by individual families or their groups for a certain period. This takes into account the interests of all parties, as well as the conditions for the protection, reproduction and use of leased forest areas.

At the same time, the lack of economic incentives and limited state aid leads to the dominance of state ownership of forests. For example, in Turkey, almost 3% of forest land was owned by private legal entities until 1945. However, based on the Law No. 4785, all forest land over 5 hectares was nationalised. Current Turkish legislation does not encourage afforestation on privately owned land due to a lack of incentives. These areas are considered forests and are subject to forestry legislation, which prohibits investors from converting forest land to other categories for other uses. Forestry legislation also acts as a disincentive to private forestry, as it prevents investors from using forested areas for recreation, housing and commercial land uses. Private owners also have to cover all costs of forest surveying, management and protection as defined in the Forest Code.

As we can see, this experience of forestry management, which does not encourage private initiatives in forestry, is becoming a significant obstacle to the full development of the forest sector as a whole.

1.2. Introduction of carbon certificates

In 2015, at the 21st session of the Conference of the Parties to the United Nations Framework Convention on Climate Change in Paris, the transition to a low-carbon economy model was declared in the context of sustainable development. The declared model should counteract climate change by using the potential of forests to prevent climate change by absorbing greenhouse gases. First and foremost, carbon dioxide, and the retention of carbon in forest ecosystems. According to various research estimates, stopping the degradation of forests

could reduce the accumulation of global anthropogenic greenhouse gas emissions in the atmosphere by up to 30%. Internationally, the important role of forests as the main terrestrial sink for greenhouse gases is recognised.

According to Ukraine's official national reporting to the UNFCCC (Ukraine's Greenhouse Gas Inventory 1990-2020 - Kyiv 2022), forestry in Ukraine is the only sector of the country's economy that absorbs more carbon than it emits. Therefore, Ukraine's forestry sector has significant potential that remains underestimated and unrealised.

In accordance with the State Forest Management Strategy until 2035, approved by the Cabinet of Ministers of Ukraine dated 29.12.2021 No. 1777-p, it is envisaged to develop measures to adapt forests to climate change and increase forest resilience to climate change by - introduction of modern (innovative) technologies in forestry, forest care, forest protection and conservation, transition to the cultivation and formation of forests close to natural, multi-species and multi-age, using local tree species resistant to climate change in favourable soil and climatic conditions.

In this context, carbon crediting is one of the most promising ways to achieve the goal of increasing forest areas. The carbon credit trading system was introduced by the Kyoto Protocol, signed at the UN Climate Change Conference in 1997, which provides for the implementation of projects to reduce greenhouse gas emissions. Carbon credits are awarded when a project results in reduced or no emissions of gases such as carbon dioxide (CO₂) and methane (CH₄). Carbon credits are a certain quota in the form of a certificate for a country or other entity to emit a certain amount of greenhouse gases. Such a quota can be traded if the full allowance is not used. In other words, the holder of such a carbon certificate has the right to emit one tonne of CO₂ or an equivalent amount of another greenhouse gas. At the same time, such a certificate can be sold on the international market at its current price. The Joint Implementation Mechanism established by the Kyoto Protocol allows industrialised countries to trade these project-specific credits.

At present, carbon credits can be traded on carbon markets voluntarily (voluntary carbon market) or mandatorily (compliance market). Carbon markets are a form of converting CO₂ emissions into a commodity through the trading of carbon allowances and/or carbon credits. Unlike voluntary carbon markets, where the main goal is to neutralise the carbon footprint, motivated by corporate social responsibility and public relations, mandatory markets are regulated by legal documents. Such markets are closely linked to countries' international commitments to reduce greenhouse gas emissions, using the Clean Development Mechanism (CDM) under the Kyoto Protocol or an emissions trading system. Each tonne of CO₂ is measured in carbon credits/quotas or CERs (certified emission reductions). Each CER is awarded for each tonne of GHG that

a project reduces, avoids or removes. Projects wishing to offer allowances in mandatory markets must have proof of actual emission reductions from relevant bodies (validators and verifiers) registered in accordance with the established procedure to guarantee the actual achievement of emission reductions.

The leading platform for such relations is the European Emissions Trading System (EU ETS), which is positioned as the cornerstone of the European Union's climate change policy and its key tool for cost-effective greenhouse gas emissions reduction. It is the largest carbon market in the world. Overall, the global carbon credit market is estimated at around \$215 billion. The ETS trading scheme, as a tool for decarbonising the economy, is also envisaged in the Association Agreement between the European Union and Ukraine.

In this regard, it is promising to implement environmental projects to create new forests as carbon dioxide absorbers and generators of new carbon units that will be able to purchase industries that are unable to switch to carbon-neutral products. A carbon unit can be a liquid security - a carbon certificate (green bond) - that gives the right to emit 1 tonne of carbon. Carbon units are verified by international registry holders of such units.

However, the national legislation does not contain a definition of the term "carbon certificate" in the context of its use in the forestry sector. Also, mechanisms for its issuance, circulation and redemption, maintenance of the relevant register, etc. have not been developed. In other words, a special regulatory framework for organising carbon certificate trading exclusively for the forestry sector has not yet been created. Therefore, we believe it is extremely important to introduce special provisions in the draft law on stimulating afforestation on the circulation of carbon certificates as a separate type of securities.

Establishing a legal, organisational and financial framework for regulating the circulation of carbon certificates will enable domestic business entities to enter carbon markets and receive additional funds for sustainable forestry.

If carbon is priced through the introduction of appropriate taxes or the creation of a workable emissions trading system, it should create economic incentives for the real economy to reduce emissions, thus encouraging the development of innovative technologies and practices. In fact, carbon pricing can generate revenue that can be invested in increasing forest areas as greenhouse gas sinks.

The Law of Ukraine "On Capital Markets and Organised Commodity Markets", as amended since July 2020, directly contains a related subject of legal regulation in relation to carbon certificates - green bonds. According to Article 18(1) of the Law, green bonds may be issued by a person implementing or financing an environmental project. The proceeds from the placement of green bonds are used to finance and/or refinance the costs of an environmental project. If the issuer of green bonds is the state of Ukraine, the proceeds from their placement

are used in accordance with the Budget Code of Ukraine. This law also defines the term "environmental project", outlines the principles of legal regulation of the implementation of such projects, etc. These include projects in the field of alternative energy, energy efficiency, minimisation of waste generation, disposal and recycling, introduction of environmentally friendly transport, organic farming, conservation of flora and fauna, water and land resources, adaptation to climate change, as well as other projects aimed at protecting the environment, implementing environmental standards, and reducing emissions into the environment.

However, the introduction of the above regulation does not guarantee the effective use of such a financial instrument by all categories of bondholders. The experience of countries around the world in organising and developing the green bond market shows that their effective use is possible only if a single comprehensive state policy is developed and implemented, harmonised with international legislation, taking into account the world's leading practices and national conditions. Most countries have developed relevant regulations, defined mechanisms to stimulate the development of the green bond market, and established new international investment standards.

Projects to create new forests on relatively large areas should be implemented as a tool to reduce emissions and increase greenhouse gas absorption. Information on environmental projects should be entered into the relevant register when establishing regulation.

The main difficulty in implementing such projects in the forestry sector will be the need to preserve the results of reforestation over time and the need to continue such measures in the long term. Afforested areas should increase, not decrease. Accordingly, there will be risks of carbon loss, as well as destruction of plantations from fires, diseases, and the suspension of funding for such climate measures for various reasons. Although the nature of such hazards is different, they should have the same effect: complete or partial destruction of the results in the form of carbon storage in tree stands and soils as a result of CO₂ emissions into the atmosphere (due to forest fire, other forest disturbance or termination of funding).

For example, under the laws of the state of California (USA), commercial companies have been allowed to purchase carbon credits since 2015. The price of such a certificate is a century-long lease of a certain forest plot. The size of the plot is calculated so that the amount of oxygen absorbed by the trees completely covers the company's carbon footprint. If the trees stop producing oxygen for any reason, the carbon credit is cancelled. However, the large-scale fires of 2018-2022 in California completely destroyed the entire greenhouse gas protection system designed for 100 years. Therefore, insurance or the creation of appropriate restrictive regulations can be a safeguard against such risks. The regulatory

framework should include appropriate requirements and rules for the above cases.

In general, when determining the types of environmental projects, special attention should be paid to their efficiency, as well as their ability to reduce emissions and increase greenhouse gas absorption in the long term and additionally (to natural systems). At present, the implementation of such projects is hampered by the lack of appropriate standards for their implementation, as well as the procedure for verifying the results to be achieved, determining pricing, etc.

The introduction of a legal framework for the circulation of carbon certificates will make it possible to attract funding for the implementation of environmental projects in the field of forestry, stimulate the socio-economic development of regions, which will have a positive impact on the implementation of the tasks set out in the development strategies of territories and government agencies. At the same time, both domestic and international business entities that will issue carbon certificates (green bonds) will be able to diversify sources of financing for the implementation of relevant projects and gain competitive advantages in attracting additional investment resources. In addition, environmental projects in the field of forestry will form the basis for the formation of a market for forest ecosystem services in Ukraine. In turn, this will significantly increase the economic motivation for forest conservation by local communities and businesses.

1.3. Conclusion of contracts for attracting investments

The draft law on stimulating reforestation proposes to introduce agreements on investments in forest reproduction. Such agreements will be a transaction that defines the procedure and conditions for attracting investments for the implementation of afforestation and forest management measures with the subsequent receipt of remuneration by the investor in the form of a carbon certificate.

In particular, the initiative to enter into an investment agreement for the implementation of forestry measures may come from either the investor or the permanent forest user, forest owner or owner of the land plot where the forestry or forest management measures are being implemented.

It is proposed to attract an investor for the implementation of forestry and forest management measures by permanent forest users of state and municipal ownership on a competitive basis, taking into account the requirements of the Law of Ukraine "On Investment Activity". This law (Article 1 of the Law) defines investments as all types of property and intellectual property invested in business and other types of activities that generate profit (income) and/or achieve social and environmental effects.

According to part 3 of Article 2 of the Law, investment activity is ensured through the implementation of investment projects and transactions with corporate rights and other types of property and intellectual property. An investment project is a set of measures (organisational, legal, managerial, analytical, financial, engineering and technical) determined on the basis of the national system of values and objectives of innovative development of the national economy and aimed at the development of certain industries, sectors of the economy, production facilities, regions, which are carried out by investment entities using assets in accordance with the provisions of this Law. Thus, the creation of forest plantations will create grounds for their classification as investment projects.

An investment project shall be drawn up in the form of planning and calculation documents necessary and sufficient to justify the investment, organise and manage the project implementation within the specified cost and timeframe.

1.4. Acquisition of land plots for public needs

For the development of all forms of forest ownership, the institutional environment of the forest sector is important. In particular, the system of protection of forest land ownership rights, which many researchers consider to be a key factor in the investment attractiveness of forestry in virtually any country. In order to increase the country's forest cover, one of the ways of economic stimulation should be to introduce real opportunities for the purchase of privately owned land plots for forestry purposes.

In accordance with the law, expropriation of land plots and other real estate located thereon for reasons of public necessity is the transfer of ownership of land plots owned by individuals or legal entities to the state or a territorial community for reasons of public necessity by a court decision (Article 1 of the Law of Ukraine "On the Alienation of Privately Owned Land Plots and Other Real Estate Located Thereon for Public Needs or for Reasons of Public Necessity"). In other words, no one can take away a person's land plot, the ownership of which has been duly registered, without a court decision. Compulsory alienation for reasons of public necessity is possible only for land plots that are privately owned by individuals or legal entities. Such alienation is the basis for the termination of private land ownership and the emergence of municipal or state ownership of the alienated land plot. The grounds for expropriation on the grounds of public necessity are the failure to obtain the consent of the land plot owner to buy it for public needs.

Pursuant to Article 7(1) of the Law on Alienation, executive authorities and local self-government bodies, in accordance with their powers and in the manner prescribed by this Law, have the right to purchase land plots and other real estate located thereon owned by individuals or legal entities. This includes for such public needs as forestry. The relevant changes were introduced by the Law of Ukraine "On Amendments to Certain Legislative Acts of Ukraine on Forest Conservation", which came into force on 10 July 2022. Thus, the law provides for

the potential possibility of buying out privately owned land plots for the purpose of creating forest plantations. At the same time, the law did not remove significant inconsistencies

Therefore, the draft law should stipulate that the purchase of privately owned land plots for forestry purposes should be carried out by executive authorities and local self-government bodies in accordance with the procedure established by the Law on Alienation. Prior to this, such plots must be surveyed in accordance with a certain procedure. The procedure for surveying land plots for the purpose of subsequent purchase should be set out in a subordinate act - an order to be approved by the Ministry of Ecology as the relevant central executive body.

As already mentioned, according to the provisions of the Law on Alienation, the purchase of land plots for public needs is not compulsory. Initially, if such a need arises (public necessity), the relevant authorities must make a decision to purchase the land plot in question, then contact the owner of the land plot and negotiate the terms of such purchase. The land plot may be redeemed by entering into a sale and purchase agreement subject to notarisation and state registration, or an exchange agreement in the case of an exchange of the land plot to be redeemed for another. And only if the owner refuses such a proposal, the authorised executive authority or local self-government body may initiate a court hearing on the matter after making a decision to alienate the land plot. In other words, a land plot may be alienated by a court decision.

It is proposed to recognise district state administrations as the entities that make decisions on redemption within the territory of the district,

An important stage of the buyout is the determination of the buyout price. Therefore, the draft law should provide that in the case of land plots where the owners have already established forest plantations and have already paid compensation for the costs incurred, these costs are not deducted from the land plot's purchase price.

1.5. Application of accelerated depreciation of fixed assets

For enterprises, depreciation charges are the main source of investment and partial replenishment of working capital. It is not just a matter of reproducing existing fixed assets, but of regularly replacing their active part - the basic technological equipment that ultimately determines production costs and product competitiveness.

If used correctly, depreciation could become a foundation for scientific, technological and innovative development. Ukrainian legislation provides for five methods of depreciation: straight-line, declining residual value, accelerated depreciation, cumulative depreciation and unit-of-production. The company may apply the depreciation rates and methods provided for by the tax legislation.

The accelerated depreciation method is the most consistent with the ideology of innovative development. The accelerated formation of the depreciation fund expands opportunities for innovation. At the same time, accelerated depreciation is effective for profitable companies that are subject to the general taxation system.

The use of accelerated depreciation allows you to maximise the amount of depreciation compared to the general rules.

In accordance with the Tax Code of Ukraine, when determining the object of corporate income taxation for the period from 1 January 2020 to 31 December 2030, corporate income taxpayers have the right to calculate depreciation in respect of property, plant and equipment:

- Group 4 (machinery and equipment) and Group 5 should use the minimum allowable depreciation period of two years;

- Group 3 (transmission devices) and Group 9 use the minimum allowable depreciation period of five years.

Such property, plant and equipment must simultaneously meet the following requirements:

- commissioned by the taxpayer within one of the tax (reporting) periods from 1 January 2020 to 31 December 2030;
- have not been in use (i.e., are "new" for this particular taxpayer - such non-current assets have not been previously recorded as fixed assets);
- are used in their own business activities and cannot be sold or leased to other persons (except for taxpayers whose main activity is property leasing services).

At the same time, I would like to note that this area of economic incentives is aimed at permanent forest users - branches of the State Enterprise "Forests of Ukraine", other state and municipal forestry enterprises that are income tax payers on a general basis. At the same time, the most optimal tax form for private forestry entities today is the simplified taxation system of accounting and reporting with the payment of a single tax. Therefore, this type of incentive in the field of afforestation should not be considered a priority. However, it should be defined by law as an additional opportunity to reduce the tax base for specialised forestry enterprises.

2. Regarding the principles of economic incentives to be defined by the draft law

The principles of economic incentives at the level of the future law should be defined by the starting points, indisputable obligations that should be objectively inherent in the relevant legal relations.

First of all, the principles of forestry management should be recognised in the draft law as the basis for economic incentives for the implementation of afforestation measures. In particular, such as the continuity and sustainability of forest resources, management on the basis of sustainable development, as well as the application of a scientifically sound approach that is consistent with Articles 43, 19, 55, 64 of the Forest Code of Ukraine.

The law should also provide for openness and publicity as undisputed obligations of the parties to the relationship. These requirements should be met by creating, maintaining and providing open access to information on forested areas, amounts of compensation paid, etc.

Predictability and consistency in this area should be realised through the creation of a stable legislative and regulatory framework for stimulating afforestation and related areas.

Fairness (equality) of economic incentives for forestry is ensured by proportionality of the distribution of state support and possible limitation of the maximum amount of support per entity.

The effectiveness of economic incentives should be implemented through the creation of favourable conditions for the implementation of incentive measures to minimise economic and natural risks in forest management by forest owners and permanent forest users.

The above principles of legal regulation must be reflected in the text of the legal act.