

Country spotlight

Ukraine

Advancing nature-positive investments: Progress and challenges ahead in the EU's Eastern Neighborhood.

Unlocking financing to bridge the funding gap in the forest sector and support ecosystem services under conditions of war.

EU4Environment Regional Workshop, 9 June 2026,

Brussels, Belgium



Task 1. Baseline Assessment

- 1.1 Assessment of **Total Economic Value** of **ecosystem services**
- 1.2 Assessment of **targets for forestry and NRM sectors** in national and international strategies of EaP countries
- 1.3 Assessment of **financing needs** of EaP countries for reaching targets

Task 2. Advisory support for identifying country investment and financing opportunities

- 2.1 Summary overview of **available forest/NRM/financing instruments and tools**
- 2.2 Identification of **investment and market opportunities**
- 2.3 Identification of **recommendations for country investment and financing opportunities**

Task 3. Country-level analysis

3.1
Armenia

3.2
Georgia

3.3
Moldova

3.4 Ukraine

Knowledge sharing and exchange to promote regional and international collaboration on the topic

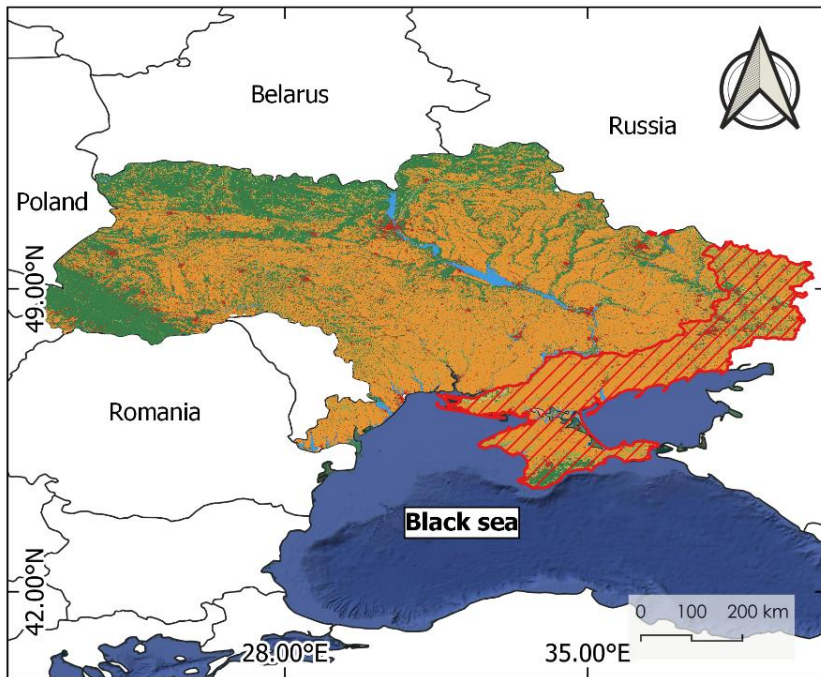
Task 4. Workshop



- **Part 1: Baseline assessment and identification of country investment and financing opportunities.**
- Part 2: Unlocking financing to bridge the funding gap in the forest sector and support ecosystem services.

Ecosystem Assessment

Land Cover & Ecosystem Overview



Legend

- Temporarily occupied territories (2025)
- Land use / Land cover
- Water
- Trees
- Grass
- Flooded vegetation
- Crops
- Shrub and scrub
- built
- bare
- snow and ice

Land Cover: © Dynamic World (2022) , World boundaries: © 2018-2022 GADM, Base map Inset: © Lansat/Copernicus, CRS: EPSG:4326, Author: DSD@unique land use



Ecosystem	Area (million ha)	% of total land area	Trend
Forest	10.1 (2024)	17%	Increasing* from 9.9 M ha since 2017
Grassland	2.36 (2022)	4%	Decreasing: conversion to agric. and forest
Wetland	2.4 (2004)	4%	Decreasing, i.e. due to loss of > 600,000 ha peatlands

Source: (Brown et al., 2022; Ministry of environmental Protection and Natural resources of Ukraine, 2021; Myroniuk et al., 2024; Parente, Mesquita, et al., 2024)

*Note on forest area: Latest data from remote-sensing based inventory analysis suggests ca. 11.2 million ha (data not yet officially adopted).

Above numbers for the whole of Ukraine.

Note on occupied areas: analytics based on land cover and land use map of Ukraine in 2025 using Dynamic World dataset. Occupied territories as reported by the ISW as of January 2025 (Barros, 2025).

Ecosystem Assessment

Forests



Estimated value of forest ecosystem services per year:

Fuelwood – USD 200-300M

Timber – USD ca. 700M

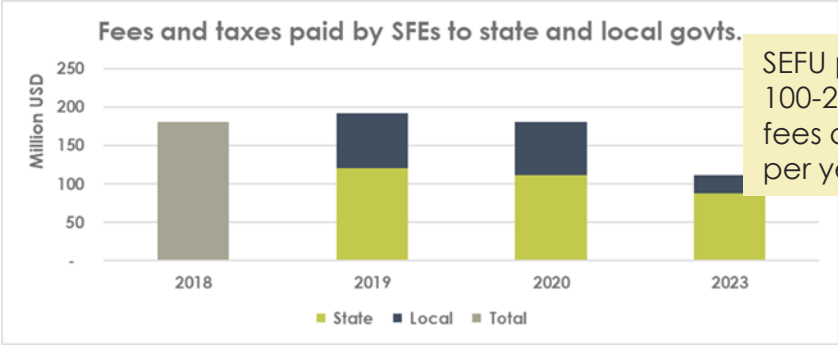
Non timber forest products – USD 25M

Recreation – USD 743M

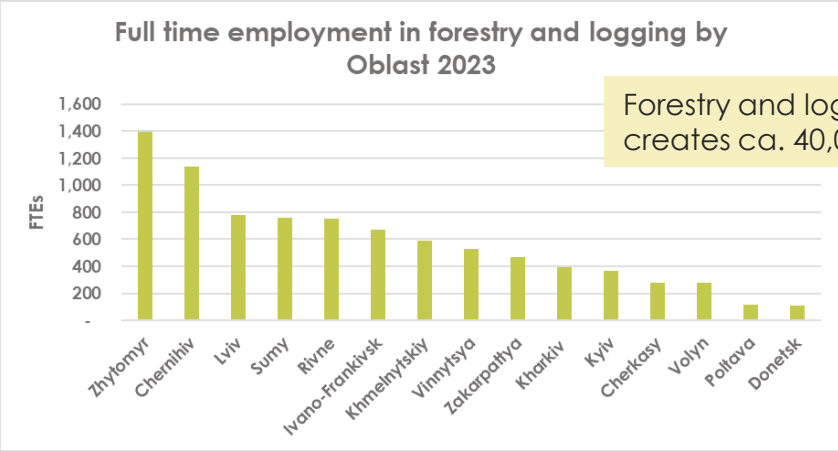
Water services – USD 420M

Carbon sequestration – USD ca 400M

Sources: Timber: (State Statistics Service of Ukraine, 2023), market pricing; Fuelwood: Estimated based on 8.6 million m³ at rural heating values; NTFPs: (Tkach et al., 2023; Yavorska et al., 2022); Forestry Agency Reports; Carbon sequestration: InVEST model (2024); SCC/VCM price range; Soil retention, Water flow regulation, Tourism: (Tkach et al., 2023).



SEFU pays USD 100-200 million fees and taxes per year



Forestry and logging creates ca. 40,000 FTEs

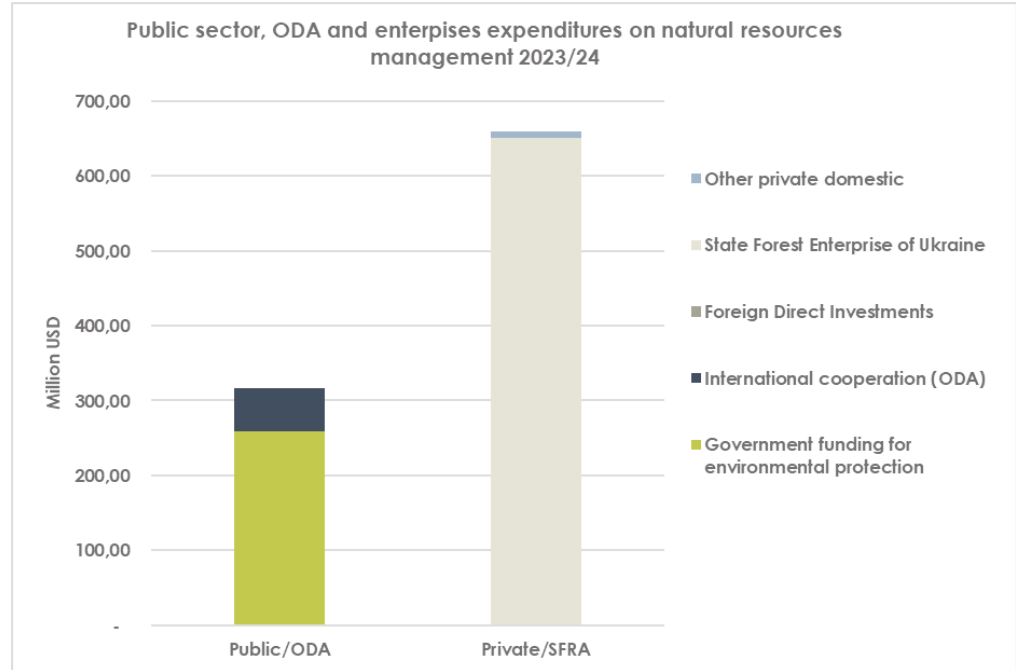
Financing Sources (1)



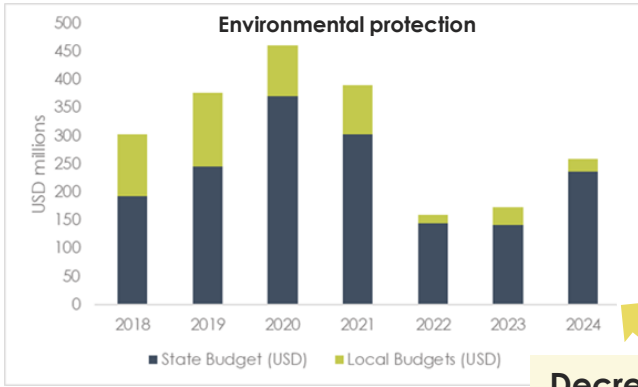
Ca. **USD 1 billion** expenditures on **natural resources management (NRM)** in 2023/24, of which:

- ca. **25%** on environment protection by central and local governments, i.e. through **Ministry of Economy, Environment and Agriculture** of Ukraine.
- ca. **70%** by **State Forests Enterprise** of Ukraine (SEFU) on forest management and nature conservation in forest areas.

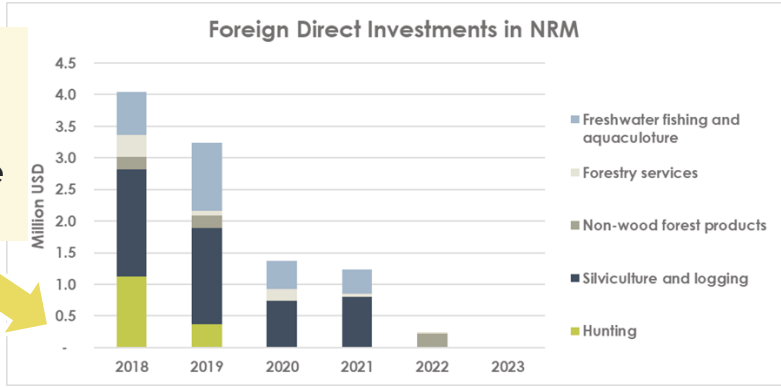
Other private sector financing (domestic and foreign direct investments) is low; peat concessions and inland fisheries/aquaculture.



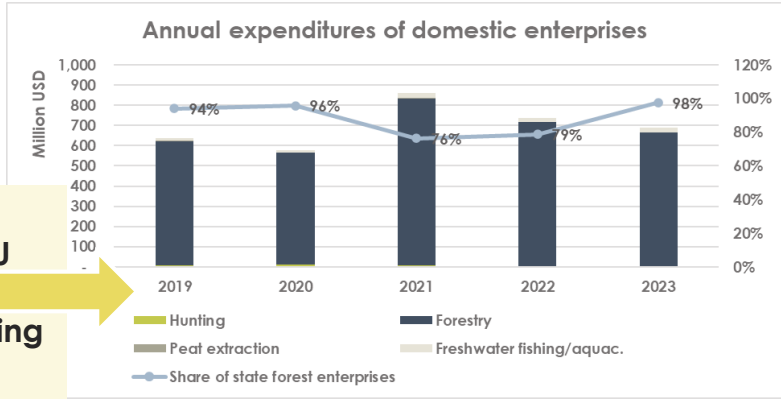
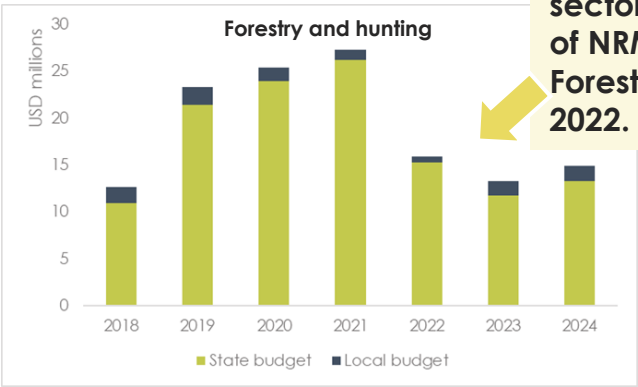
Financing Sources (2)



Decreasing trends in FDI inflows, i.e. since start of the war.



Decreasing trends in public sector financing of NRM and Forestry since 2022.



Only domestic sector, i.e. SFEU maintains stable/increasing budget.

Natural resources development targets



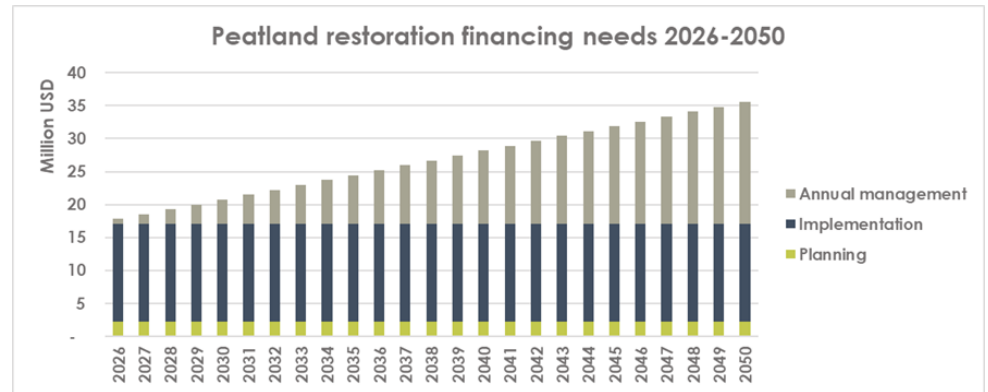
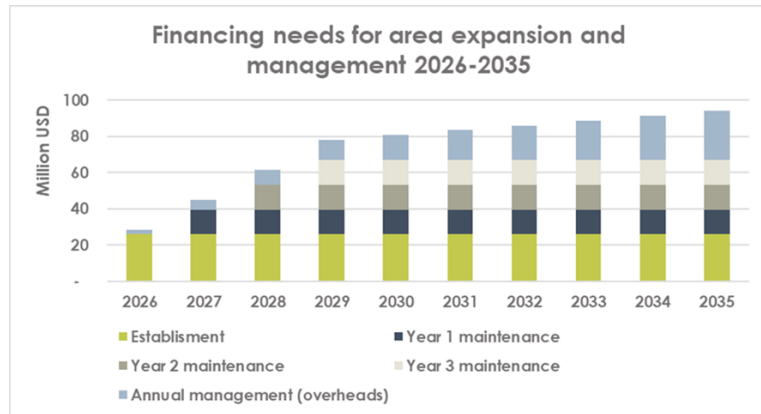
Biome	Area targets	Period	Sources	Considerations
Forests	Expansion by 1 million hectares	2035	Ministry of environmental Protection and Natural resources of Ukraine, 2021: Increase forest cover of the country's territory to at least 18% (=11.8 million ha from 10.4 million ha as recorded by NFI, 2011). Green Country Campaign (Presidential Decree 228 of 2021): 2021-2031. Increase forest area by 1 million hectares.	By 2025 ca. 100,000 hectares have been planted. A recently conducted NFI suggests that the baseline of 2011 may have been too conservative.
Wetlands	Rehabilitation of 307,000 hectares of peatland	2050	Target refers to the EU Restoration Directive that requires member states to restore half of the degraded peatlands by 2050. This converts to 307,000 ha in Ukraine.	No reliable and systematic data for the assessment of baseline and achievement status of peatland management in Ukraine. The proposed target is not an officially adopted figure!

Financing Needs



Annual financing needs to achieve NRM targets requires USD 47 to 130 million per year (=20%-50% of actual public NRM expenditures).

Biome	Area targets	Period	Total financing needs (million USD)	Annual financing needs (million USD per year)
Forests	Expansion by 1 million hectares	2035	738	28.9 to 94.2
Wetlands	Rehabilitation of 307,000 hectares of peatland	2050	667	17.8 to 35.6
Total			1,405	47 to 130



Financing Instruments: Forest area expansion



Investor Type	Potential Roles in Forest Area Expansion	Public Finance Instruments	Private Finance Instruments	Market-Based Instruments	EU / International Instruments
State Forest Enterprises	<ul style="list-style-type: none"> Lead afforestation projects on state lands Enter into joint ventures with the private sector Implement sustainable forest management 	<ul style="list-style-type: none"> Tax exemptions on forestry revenues Reallocation of tax payments to fund expansion Subsidies for afforestation costs 	<ul style="list-style-type: none"> State budget allocations, where legally eligible (restricted by Procedure No. 1016-2017) Sovereign or sub-sovereign green bonds ODA concessional loans 	<ul style="list-style-type: none"> Future PES revenue integration Carbon credits from afforestation projects 	<ul style="list-style-type: none"> Common Agricultural Policy (CAP) funds for afforestation LIFE Programme for resilience projects Ukraine Facility grants and guarantees—afforestation to be framed under green transition or resilience goals
Agricultural Land-owners	<ul style="list-style-type: none"> Provide land for afforestation Enter joint ventures with SFEs or investors Undertake private greenfield afforestation 	<ul style="list-style-type: none"> Tax deductions for converting farmland to forest Subsidies for afforestation, planting, and maintenance Preferential land tax rates for reforested lands 	<ul style="list-style-type: none"> Private equity co-investment in JVs Concessional loans for afforestation 	<ul style="list-style-type: none"> Revenue from PES contracts Carbon credits from afforestation 	<ul style="list-style-type: none"> LIFE Programme for afforestation

Just for visualization

Investor Type	Potential Roles in Forest Area Expansion	Public Finance Instruments	Private Finance Instruments	Market-Based Instruments	EU / International Instruments
Wood Processing Industries	<ul style="list-style-type: none"> Invest in upstream forest expansion 	<ul style="list-style-type: none"> Subsidies for sustainable sourcing certifications 	<ul style="list-style-type: none"> Participations in greenfield JVs Corporate green bond issuance 	<ul style="list-style-type: none"> FSC certification premium pricing Potential PES revenues if involved in sustainable management 	<ul style="list-style-type: none"> EFSD+ guarantees for sustainable wood sourcing projects LIFE Programme co-funding for biodiversity considerations
	<ul style="list-style-type: none"> Invest in forestland as a long-term asset Seek revenue from timber production and/or ES 	<ul style="list-style-type: none"> Tax deferral or incentives on forest asset purchases Reduced taxation on income from sustainable forest management 	<ul style="list-style-type: none"> Green bonds for acquiring or expanding timberland Pooled investment vehicles blending private and public funds 	<ul style="list-style-type: none"> Carbon credits as revenue streams Biodiversity credits in emerging markets 	<ul style="list-style-type: none"> Ukraine Facility support for blended finance vehicles Technical assistance via LIFE or other EU funds
Investors in NbS	<ul style="list-style-type: none"> Seek investment returns through climate and biodiversity outcomes Participate in carbon mar- 	<ul style="list-style-type: none"> Tax deductions for NbS investments Preferential treatment of returns from climate-positive assets 	<ul style="list-style-type: none"> Green bonds backed by the NbS project revenues Blended finance with first-loss capital 	<ul style="list-style-type: none"> Carbon credits PES agreements Biodiversity credits 	<ul style="list-style-type: none"> LIFE Programme for nature restoration EFSD+ for de-risking NbS investments Horizon Europe for innovative NbS approaches

Financing Instruments: Peatland restoration



Table 1: Instruments for Mobilizing Financing for Peatland Restoration in Ukraine (by Investor Type)

Investor Type	Potential Roles in Peatland Restoration	Public Finance Instruments	Private Finance Instruments	Market-Based Instruments	EU / International Instruments
State Forest Enterprises	<ul style="list-style-type: none"> Lead restoration on state-managed peatlands Participate in PPPs with private investors Integrate paludiculture into forest management 	<ul style="list-style-type: none"> Subsidies for re-wetting infrastructure costs (e.g. canal blocking) Tax exemptions on revenues from ES Earmarking part of environmental taxes for peatland restoration 	<ul style="list-style-type: none"> State budget allocations for restoration Sovereign green bonds to finance landscape-scale projects Concessional loans via DFIs 	<ul style="list-style-type: none"> Carbon credit revenues integrated into SFE carbon flows PES for water purification, biodiversity, flood mitigation, etc. 	<ul style="list-style-type: none"> EU grants for restoration projects Horizon Europe Research and Innovation (R&I) for paludiculture innovations
Agricultural Land-owners	<ul style="list-style-type: none"> Offer drained peatland for restoration Engage in paludiculture ventures Form JVs with NbS investors 	<ul style="list-style-type: none"> Tax deductions for converting agricultural peatland to wetland use Subsidies for peatland restoration 	<ul style="list-style-type: none"> Concessional loans Private equity investment 	<ul style="list-style-type: none"> Biodiversity credits for re-wetting projects PES contracts for water storage, flood mitigation Biodiversity credits for restored habitats 	<ul style="list-style-type: none"> LIFE Programme support for biodiversity restoration Horizon Europe for sustainable agriculture transitions
Peat Extraction Companies	<ul style="list-style-type: none"> Transition post-extraction sites to restored wetlands Form JVs with NbS investors for rehabilitation 	<ul style="list-style-type: none"> Tax relief for proactive restoration Reduced regulatory fees for early rehabilitation 	<ul style="list-style-type: none"> Private equity investment in restoration ventures Blended finance with DFI risk-sharing 	<ul style="list-style-type: none"> Carbon credits from re-wetting projects PES revenues for water purification and ES 	<ul style="list-style-type: none"> LIFE Programme co-financing for post-extraction restoration Ukraine Facility support for transition strategies

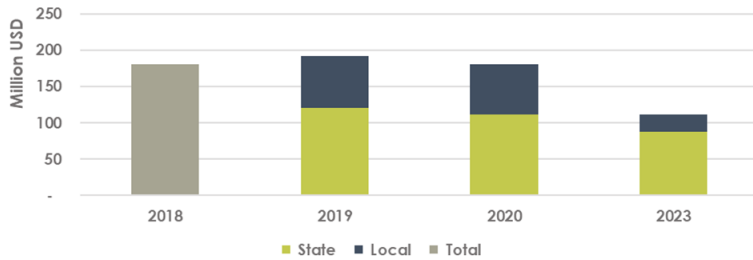
Just for visualization

Financing Instruments: Options (selection to be detailed in part 2 of the presentation)

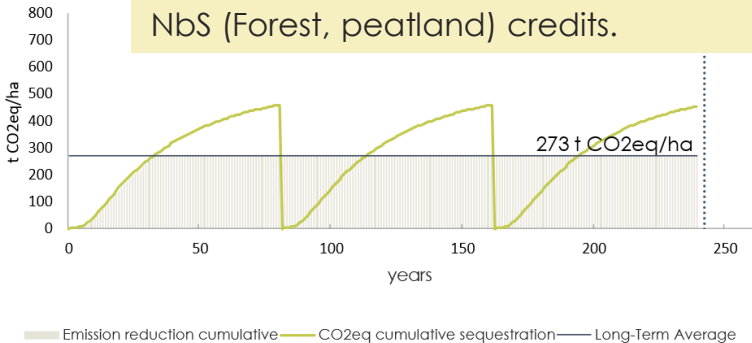


Government budget: tax exemptions for SEFU investments or creation of reforestation budgets from SFRA/SEFU tax revenues.

Fees and taxes paid by SFEs to state and local govts.



Market based: Carbon markets for NbS (Forest, peatland) credits.



EU Investment Framework

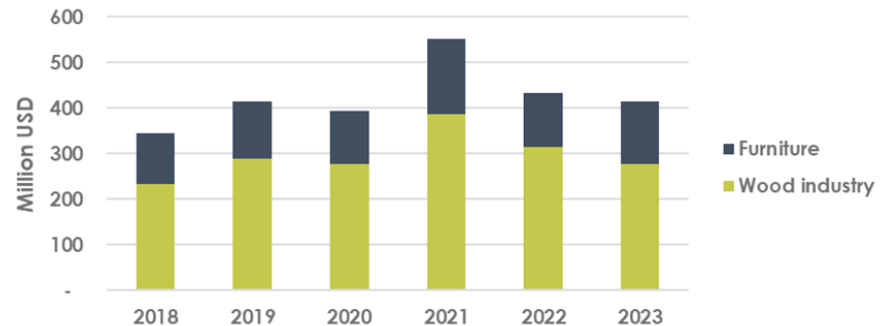
The framework is backed with €1 billion in guarantees and €400 million in grants to un-lock investments for Ukraine's recovery and reconstruction.

=> Enhance the active role and contribution of NRM for reconstruction!



Green bonds/guarantees/preferential loans for enterprises in forestry value chains.

FDIs in wood processing sectors





- Part 1: Baseline assessment and identification of country investment and financing opportunities.
- **Part 2: Unlocking financing to bridge the funding gap in the forest sector and support ecosystem services in times of war.**

Effects of war (selection)



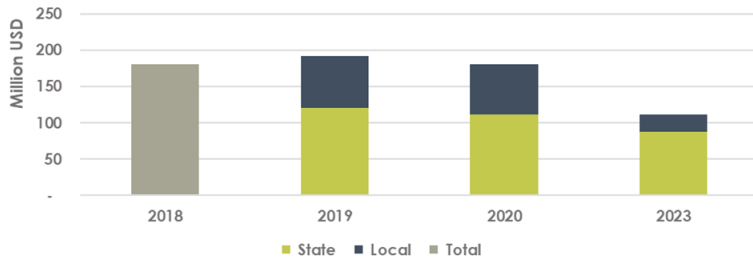
Effect	Description and requirements
Occupied area (forest area/ wood supply)	<p>12% of Ukrainian territory occupied (May 2026). By May 2026, war has destroyed 165,000 Hectares of Ukraine's forests, and overall environmental losses topping USD 22.5 billion.</p> <p>Vast areas contaminated and mined.</p> <p>Strong localized impact but only a limited effect on overall national wood supply (only 0.5 million m³ originated from occupied territories before 2022).</p>
Destroyed buildings and infrastructure (wood markets)	<p>More than 250,000 buildings had been damaged or destroyed (UNECE, 2024). The RDNA4 estimates the needs for reconstruction in the housing sector at US\$83.7 billion (2025–2035), increasing the demand for materials, including wood. Note: Ukraine has been a net importer of wood construction products even before 2022. Lack of wood industry</p> <p>Rebuilding of all destroyed buildings by using mass timber would require the use of 7.8 million to 10.4 million m³ of softwood over a period of three to five years (Utkina et al 2023). This converts to ca. 2 million m³ additional roundwood volumes required per year (over a five years period), or an increase of 30% compared to plan.</p>
Volatile workforce availability and demand	<p>Reduced availability of work force during war, increasing availability/demand in post-war economy, destruction of work places in wood industry. Workforce in wood industry dropped by 15,000 FTEs since 2022.</p>
Environmental damages (compensation/ sequestration)	<p>Massive environmental damages in forests and wetlands (i.e. in the southern Oblasts).</p> <p>Forest fires, increased wood demand for energy and construction, etc. require counteracting measures by expanding forest areas, change of forest management, and restoration of peatlands.</p> <p>Aim to restore carbon pools and ecosystem services.</p>

Financing Instruments: selected options

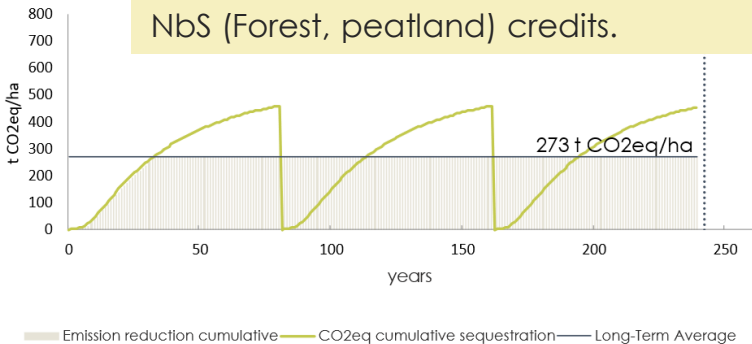


Government budget: tax exemptions for forestry investments or creation of reforestation budgets from SEFU tax revenues.

Fees and taxes paid by SFEs to state and local govts.



Market based: Carbon markets for NbS (Forest, peatland) credits.



International cooperation

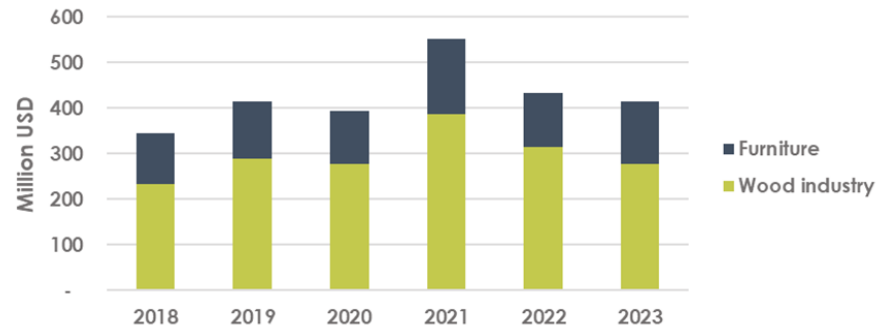
The framework is backed with €1 billion in guarantees and €400 million in grants to un-lock investments for Ukraine's recovery and reconstruction.

=> Enhance the active role and contribution of NRM for reconstruction!



Green bonds/guarantees/preferential loans for enterprises in forestry value chains.

FDIs in wood processing sectors

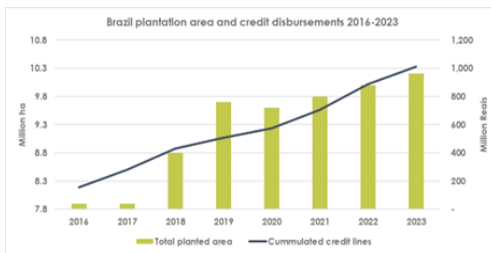
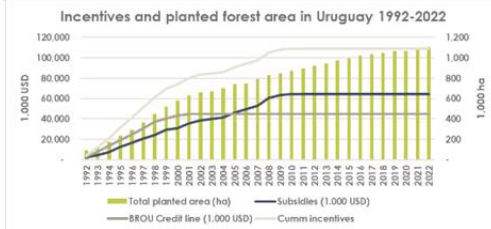


Financing Instruments: Incentive schemes and preferential loans financed through government tax revenues from forestry



Lessons from Latin America suggest a high potential for rapid area expansion and crowding-in of private equity through tax based incentives schemes and loan products.

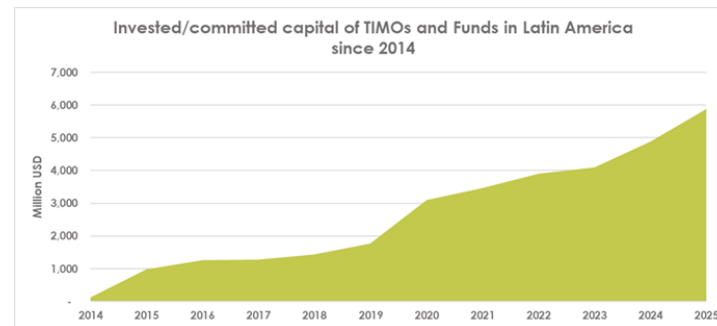
Area expansion through public incentives



- Most public instruments in LAC phased out, and private equity is now the main driver of area expansion.
- Most of currently active incentive schemes target restoration and small-scale reforestation.
- Tailored credit lines, that leverage private capital, have been rather successful in countries with reduced market risk (Brazil, Uruguay).

Area expansion through private capital

- Public incentives have boosted greenfield plantation establishment, creating a pool of investable assets across the region.



Source: Based on investors' information and unique's investment database. Invested/committed capital in LAC since 2014. Includes investment in brownfield and greenfield.

Ukraine:

- **100 Million USD from SEFU taxes could finance >100,000 ha (700-1,000 USD/ha establishment costs): Incentives or loans ??**
- **Who? SEFU, ATCs, private individuals and corporates, wood industry, ...**

Ukraine:

- **FDIs in agriculture/forestry in Ukraine restricted.**
- **Lacking framework for JVs/PPPs with SEFU.**

Financing Instruments: EU Ukraine Investment Framework



The framework is backed with €1 billion in guarantees and €400 million in grants to un-lock investments for Ukraine's recovery and reconstruction.

=> Enhance the private sector role in NRM and NRs' contribution to reconstruction!

Program	Purpose	Volume	Development Finance Institution (DFI)	Relevance for NRM (ie, Forest and peatlands)	Program	Purpose	Volume	Development Finance Institution (DFI)	Relevance for NRM (ie, Forest and peatlands)
Better Futures Programme, Resilience, Reconstruction, & Regeneration of Ukraine	To accelerate investments in renewable energy such as wind power projects, battery energy storage systems, transport, digital sector, and industrial investments, including steel production, construction materials, and processing.	€350 guarantees €17.5 million technical assistance	IFC	Wood qualifies as an energy and construction material.	Financial Inclusion Recovery Programme	To enhance access to finance for small and medium-sized enterprises (SMEs) and invest in their production capacity.	€140 million guarantees €30 million investment grants €7 million technical assistance	European Bank for Reconstruction and Development (EBRD)	Wood qualifies as an energy and construction material.
					Hi-Bar Programme	To mobilise finance to accelerate the net-zero transition in the energy sector.	€150 million in guarantees €7.5 million technical assistance	EBRD	For the restoration of peatland under commercial extraction

Private sector investments, e.g. pre-fab timber housing

Roundwood demand:	50,000 m ³ /a
Production value:	USD 300 million/a
Total capex:	USD 40 million
Total employment:	1,500 FTEs
Output:	1,000 units per year
Financing:	Private capital, preferential loans, bonds, guarantees



Financing Instruments: Carbon Markets



Financing forest area expansion/management changes through participation in carbon markets.

=> Bridge the long investment-return gap in European forestry.

Questions regarding additionality, suitable national approaches, and an enabling legal framework need to be

More detailed feasibility required!

Approach	Context	Carbon market potential	Constraints
Afforestation/Reforestation – Direct Planting	National target of one million hectares.	High potential where additionality can be demonstrated, i.e. reforestation on suitable non-forest land and reforestation is not BAU.	<ul style="list-style-type: none"> • Availability of land for S. • Technical capabilities of other actors for area expansion.
Afforestation/Reforestation – Assisted natural regeneration	Estimates of 0.5 to 2 million ha self-seeded forests in various stages exist in Ukraine of which vast areas not yet recognized as forest.	Good potential. Support forest expansion and restoration through a low-cost pathway. However, typically less credit potential per ha compared to direct planting.	<ul style="list-style-type: none"> • Loss of control over productive agricultural land. • Lower economic returns hinders ATC commitment.
Improved forest management	Switch from conventional “clear-felling” system to continuous cover forestry, and better fire and pest control. Stepwise implementation in Ukraine in process.	Good potential but significant economic trade-off (-50%) (mid-term temporary conservation).	<ul style="list-style-type: none"> • Economic trade offs and local wood supply shortages. • Foregone tax revenues.

Viability of carbon projects in Ukrainian forestry?



NOTE: Values benchmarked from the Verra Registry, using filters for European projects, applicable methodologies, and a minimum status of under validation. Further analysis is required to assess the Ukrainian context.

Approach	Typical project duration	Carbon credits potential per hectare	Carbon credit gross revenues per hectare (10 USD/ton)	Comments
Afforestation	40-60	120-350	1,200-3,500	High estimates: Only achievable if additional at high opportunity costs.
Improved Forest Management	ca.40	90-250	900-2,500	Requires thorough assessment. Carbon revenues may not compensate for temporary economic losses assessment
Assisted regeneration	Up to 100	100-250	1,000-2,500	Interesting option, but does not compensate for switch from Agriculture to Forestry.

Financing Instruments: Roadmap



To achieve practical implementation, Ukraine will need to:

- Formalize legal definitions of ES, carbon credits, and environmental benefits
- Enact comprehensive carbon market legislation
- Refine PPP frameworks for ES JVs
- Improve accessibility and transparency of environmental funds for PES-aligned activities

Phase 1: Short-Term Priorities (0–18 months):	Phase 2: Medium-Term Priorities (18–36 months):	Phase 3: Long-Term Priorities (36–60 months):
<ul style="list-style-type: none">• Complete national land use planning.• Complete peatland inventory and legal reforms.• Draft enabling legislation and PPP frame-works.• Secure EU and donor commitments for guarantee facilities and technical assistance.	<ul style="list-style-type: none">• Launch pilot projects with blended finance.• Issue the first green bonds dedicated to afforestation• Develop market infrastructure for carbon credits and PES.• Operationalize carbon and PES markets.	<ul style="list-style-type: none">• Scale investments through pooled funds and private participation/PPP.• Establish Ukraine as a credible market for forest and peatland nature-based solutions.

Thank you

unique land use GmbH

Schnewlinstr. 10

79098 Freiburg, Germany

Tel +49 761 208534 – 0

unique@unique-landuse.de

www.unique-landuse.de