

EU Danube Region Strategy PA 8 LIGHTHOUSE

GREEN TECH, CIRCULAR ECONOMY & CIRCULAR BIOECONOMY

# Neo-Eco Ukraine

Signature Project: VALOBLAST





















### Basics

Neo-Eco Ukraine Name:

**Country:** Ukraine

**Scoring:** 48/50

#### **Contact Person (Neo-Eco Ukraine):**



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#### **Contact Person (Neo-Eco France):**



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Neo-Eco | Circular Economy Consultancy

#### **Key Project Data:**



Since 2022



Funded by multiple funding sources including EU LIFE and Horizon Europe, as well as several country agency fundings: Swedish Institute, Helvetas (Switzerland), Green Danida (Denmark), FASEP and Région Sud (France) and

CPVA (Lithuania)



















### About the project

**Neo-Eco Ukraine**, a sister company of Neo-Eco France, was set-up in May 2022 and has a dedicated team of eleven people in offices in Kyiv, Mykolaiv (Ukraine), and Lille (France).

#### Focus:

- Circular economy + sustainable construction
- Transformation of construction + industrial waste into low-carbon materials for Ukraine's recovery
- Contribution to Ukraine's economic + environmental sustainability by creating jobs + supporting local communities

#### Mission:

Promote **sustainable development** through **eco-friendly practices** and **community engagement** 



20+ projects since 2022



500,000 tons of debris recycled



95% overall recycle rate



5 eco products designed + created

















#### **Neo-Eco Ukraine**



### **Activities**

Neo-Eco has 17 years of experience in the circular economy and eco-materials + is leading a range of sustainable reconstruction and community regeneration projects across Ukraine, including Kryvyi Rih, Mykolaiv, Odesa, Chernihiv, Sumy and Dnipropetrovsk.

#### Services:

**Studies + Consultancy** *e.g. waste management and asbestos abatement* 

Project Management Implementation
e.g. Design to build and sustainable reconstruction

**Eco-materials**e.g. Biogas to energy and plastic for insulation























### Selection of Projects

Since 2022 Neo-Eco Ukraine has been involved in more than 20 projects in Ukraine.

Here is a selection of the projects and their impact:

#### Hostomel Rubble Recycling Pilot Project (completed)

**Objective:** Demonstrate a circular economy model for post-war

reconstruction

Impact: 7,150 m³ landfill avoided; 1,735 tonnes CO<sub>2</sub> saved; €135,000

cost savings; Scalable methodology for Kyiv region

#### **South Mykolaiv – Rubble Cleaning by Veterans** (completed)

**Objective:** Combine sustainable reconstruction with social reintegration Impact: 95% recycling rate, 20,000 m<sup>3</sup> waste avoided; 4,000 tonnes CO<sub>2</sub>

saved; €400,000 cost savings; 30 veterans engaged

#### Zelenyi Hai – Green Modular School and Bomb Shelter

(until 2026)

Objective: Build circular, resilient infrastructure for children and

communities

**Impact:** Supports 200 children; uses 10 local eco-materials; €2.7 million

project value

#### **TEPLO – Bio-based Soviet Building Retrofit** (until 2026)

Objective: Improve energy efficiency + promote bio-based

prefabrication

Impact: Energy savings + better living conditions; Skills

development + circular construction showcase

#### Asbestos White Paper and Laboratory (ongoing)

**Objective:** Improve health + safety by addressing asbestos risks **Impact:** National capability for asbestos detection + safe removal;

Regulatory + training support

#### Low-Carbon Cement Green Concrete and

(Mykolaiv) (until 2027)

**Objective:** Demonstrate climate-resilient construction materials

Impact: 80,000 tonnes CO<sub>2</sub> saved annually; 50,000 m<sup>3</sup> waste

diverted; 40 vulnerable people employed; scalable + cost-effective

production

#### **VALOBLAST Odesa project**

→ More information on the next slides



















### **VALOBLAST Odesa Project - Methodology**

In the VALOBLAST project, Neo-Eco Ukraine is working on the transformation of contaminated or underused sediments into certified eco-construction materials in the Odesa region.

- Quantify: Identify + estimate the volume of sediment deposits in the Odesa Oblast using GIS mapping + hydrological data
- 2. Sampling: Conduct representative sediment sampling at 3–5 strategic locations, including ports + river mouths
- Analyse: Perform laboratory tests on the collected samples  $\rightarrow$  Results will guide the classification of sediments for different valorisation pathways

- 4. Formulate: Develop sediment-based material formulations using additives such as geopolymers or lime
- 5. Test: Pilot the use of sediment-based materials in small-scale constructions in Odesa
- **Implement:** Deploy the validated materials in real urban or infrastructure projects in Ukraine
- Disseminate: Transfer project and methodologies to Marseille through targeted dissemination actions, including two workshops involving port authorities and SMEs



















### **VALOBLAST Odesa Project - Impact**



#### **INNOVATIVE**

Transformation of contaminated or underused sediments into certified ecoconstruction materials

Combining advanced material formulation with circular economy principles



### **SUSTAINABLE**

Replicable, step-by-step methodology

→ which can be applied in other ports or river regions



#### **SCALABLE**

Reducing dependence on virgin raw materials, lowering CO<sub>2</sub> emissions + fostering local green value chains is broadly needed Making the model both environmentally + economically viable for long-term adoption



















## Results (Neo-Eco Ukraine in general)

- Embed social + sustainable initiatives > to empower vulnerable communities during reconstruction
- Solid public outreach encouraging waste reduction, reuse, recycling, local jobs + cost savings
- Advocacy includes asbestos-safe recycling, territorial waste management + community-led circular methods

- Knowledge transfer + capacity building on local material valorisation + circular economy practices
- Regular innovation in line with latest technologies including AI + data collection

### **Barriers**

- Ongoing war has impacted timelines
- Ukrainian regulations are not always in line with EU laws + standards
- Circular economy is still relatively new to Ukraine + first impressions by communities can be negative + in-depth knowledge sharing + resident awareness programmes are required















