

# ▶ Decentralized Recycling of War Debris

Introduction of a decentralized recycling approach to Ukraine by innovatively repurposing war debris on site leveraging advanced Swiss technology and experience.

The project aims to develop and explore decentralized recycling units for sustainable building practices in Ukraine as a solution for reusing of war debris in Ukraine for positive environmental impact and accelerating the reconstruction process.

## ▶ Why this project?

Urban reconstruction in Ukraine faces **challenges due to war debris:**

- The most affected is civilian residential development, with **48,000 buildings** transformed into piles of debris
- Amount of construction waste reached **450,000 tons**
- The **lack of a streamlined method** to sort and separate concrete and repurpose war debris into building materials

## ▶ Project Objectives

- **Reusing the waste:** efficient and environmentally conscious management of war debris
- **Enhancing environmental sustainability in construction:** for emission reduction and environmental sustainability
- **Expediting reconstruction through on-site solutions:** minimizing the logistic costs, accelerating reconstruction

## ▶ Main Stakeholders

- Producers of building materials
- Owners of the buildings
- Landfills and waste management plants
- Local communities
- Associations (both business and public)
- Universities / Researchers
- EU organizations / donors



## ▶ Project Benefits

### Project Team:

Lesia Cherkas

Nataliia Volkodav

Olena Yemets

Iryna Zolotoverkh

Iryna Iakhno



iryna.iakhno@students.bfh.ch

Reduces landfill waste and instead a direct use of debris material on-site

Construction companies are using recycled concrete to minimize costs and transportation ways

An excellent alternative to natural gravel - using recycled concrete in aggregate

An economic and reliable solution in protecting riverbanks, shorelines, and other structures



More about  
CAS Rebuild  
Ukraine



## ▶ Expected outputs

**Partnership:** Ukrainian building / construction company is identified and wants to implement a concrete recycling in their operations

**Pilot project on recycling concrete in Ukraine:** Concrete recycling concept for this specific case, including logistics and economic feasibility

**Raise awareness on advantages of recycling materials to Ukrainian building companies and Local communities:** workshop about comparison and assessment of recycling vs original materials

**Scaling a technology of recycling concrete in Ukraine:** Outlook and roadmap how to transfer solution to other Ukrainian companies

## Acknowledgment

We thank the State Secretariat for Economic Affairs SECO for supporting the CAS Rebuild Ukraine Program, Sponsors for their contribution and Swiss companies that have shared their knowledge with the project team.