



# WASTE X<sup>TM</sup> - SOLUTION

**From waste into concrete**

*Smart Materials & Technologies for **greener** Concrete industry & Waste management companies*



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EcoUp Oyj



ISIN FI4000511563



# Finnish circular economy group EcoUp Oyj

EcoUp's objective is to advance green construction industry by providing solutions to the sector's rapidly growing need for low-carbon materials and for enhancing circularity



## Company Facts



Est.1979



6



Revenue  
30.7 Milj.€  
(2024)



200



30 milj. kg  
materials  
anually



2 main  
business  
areas

## Ekovilla®

- Ekological thermal insulation materials
- Ekological asphalt fibers
- Assembly services
- CO2 Removal Certificates (CORC'S) Puro.earth

## EcoUp Technologies

- Recycling technologies for C&D waste
- Technologies for Slag grinding
- Sustainable Material technology services
- Waste-based end products

Smart materials & technologies for  
**greener** concrete industry & waste  
management companies





Mineral wool



Bricks



Glass



Concrete



Gypsum



Blast-furnace  
slag

Replace cement with waste:

**-85%**

CO2 Emissions

**40%**

Lower binder costs

**+6x**

Binder options



EcoUp Oyj, Technologies

# WASTE X<sup>TM</sup> - SOLUTION

From waste into concrete

*Choose one, two or all...*

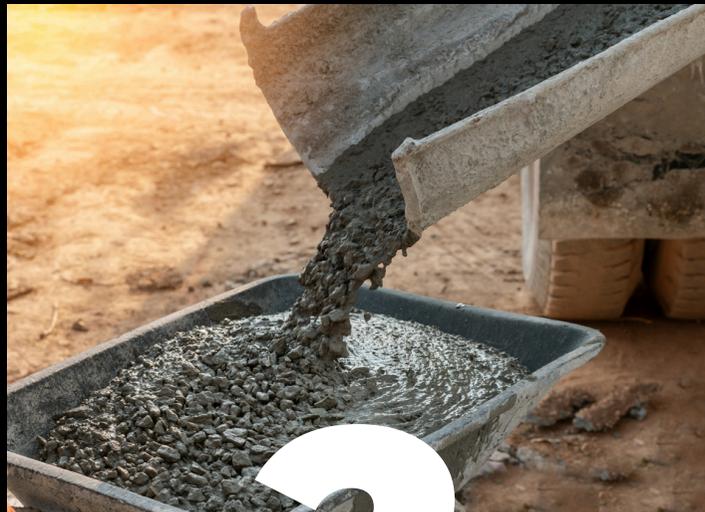


1

5-7

## Recycling Technologies

Recycling technologies for demolition waste and blast-furnace slag



2

8-11

## Material Services

Mixes for waste-based, low-carbon, low-cement to cement-free concrete



3

12-13

## Products

Boost your brand by choosing ecological waste-based products

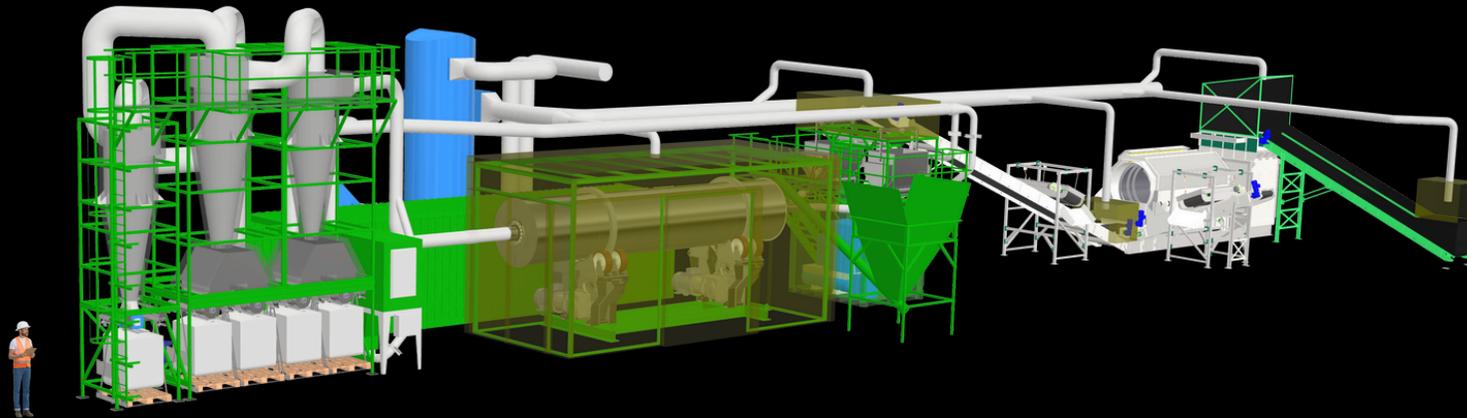


# WASTE X<sup>TM</sup>

Patented Recycling Technologies for waste-based raw material production



# Modular solution for construction & demolition waste recycling



-  Mineral wool
-  Glass
-  Bricks
-  Concrete
-  Gypsum
-  Blast-furnace slag



Payback period: up to

**3**  
years

## Patented Recycling technology for demolition waste

EcoUp WasteX is a patented, end-to-end processing line for recycling waste mineral wool as well other waste materials such as bricks, glass, concrete, gypsum & slag into re-usable raw material

Instead of landfill, demolition waste is transformed into clean, micron-sized pulver, and can now be used as a binder for geopolymers concrete, for instance

## Technical specification

- **Capacity:** 5/10/15 t/h
- **Specific energy consumption** 30-60 kWh/t
- **Space needed** 15 m x 35 m
- **End product:** raw materials replacing cement in concrete

[www.ecoupwastex.com](http://www.ecoupwastex.com)



# WasteX- Slag Grinder



## WASTE X™ -Slag Grinding

Payback period: up to

**3**  
years

### Self-sufficiency in binder production!

- WasteX Slag grinder combines reliable and widely used ball mill technology with innovative patented features, making the process simpler as well as cost- and energy-efficient

### Unique features include:

- Integrated classifying zone within the grinding mill = no separate clasifying equipment needed
- Integrated pneumatic feed & drying system = no additional drying of the GBFS needed: lower's the energy consumption

### Technical specification

- **Capacity:** 5/10/15 t/h
- **Specific energy consumption** 30-50 kWh/t
- **Space needed** 15 m x 20 m
- **End product:** Ground Granulated Blast Furnace (GGBFS)
- Process is dimentioned to be affordable & easy to operate by a middle/large scale concrete producer

# Europe's top geopolymer lab tailors binder mixes to your needs



## Raw materials in

## Recycling process

## Concrete mix designs

**Portland cement**



**Traditional concrete**

**Blast-furnace slag**



**GGBFS**

WasteX-made GGBFS  
cheaper than market  
GGBFS



**Slag concrete**

Cost-advantage, Low-carbon

**Demolition waste**



**Geopolymer powder**

Zero-cement, zero-carbon binder material



**Geoblend™ concrete**

For high-value, non-structural products.  
Low-to-zero CO2.  
Cost-advantage

Local raw material, generates waste processing revenue



# Cement-free concrete Geoblend<sup>™</sup>

## -85% CO2 vs. common concrete

When cement is replaced with a waste-based binder-system, based on geopolymer chemistry, a hard material similar to concrete is produced

The carbon footprint is up to 85% lower compared to most common concrete

## Applications & feasibility

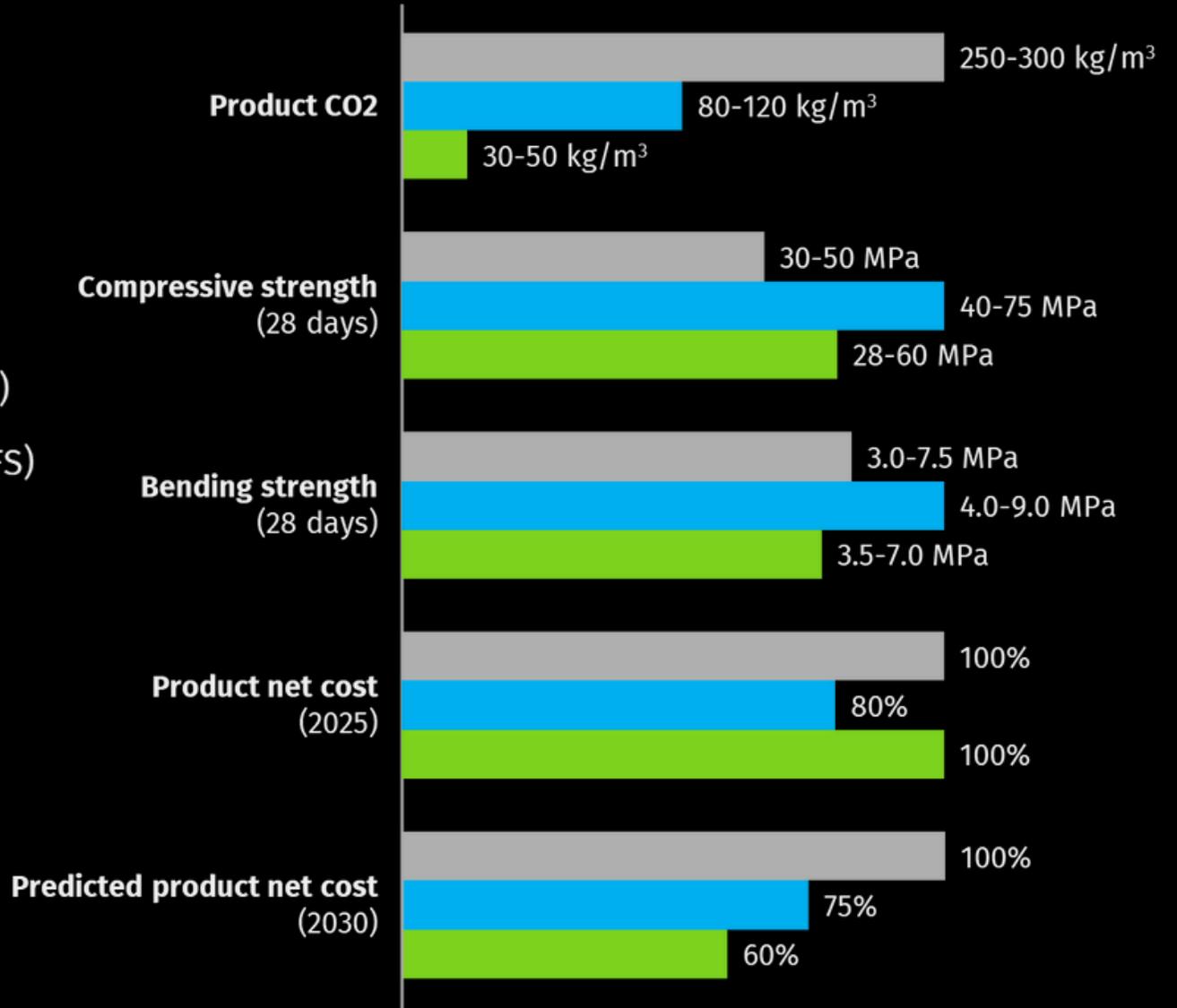
A material similar to concrete, Geoblend can be used as various coatings, cast or pressed infrastructure and decoration products.

Geoblend is already cost-competitive compared to cement. In the future, it will be even more advantageous as cement prices and waste fees continue to rise



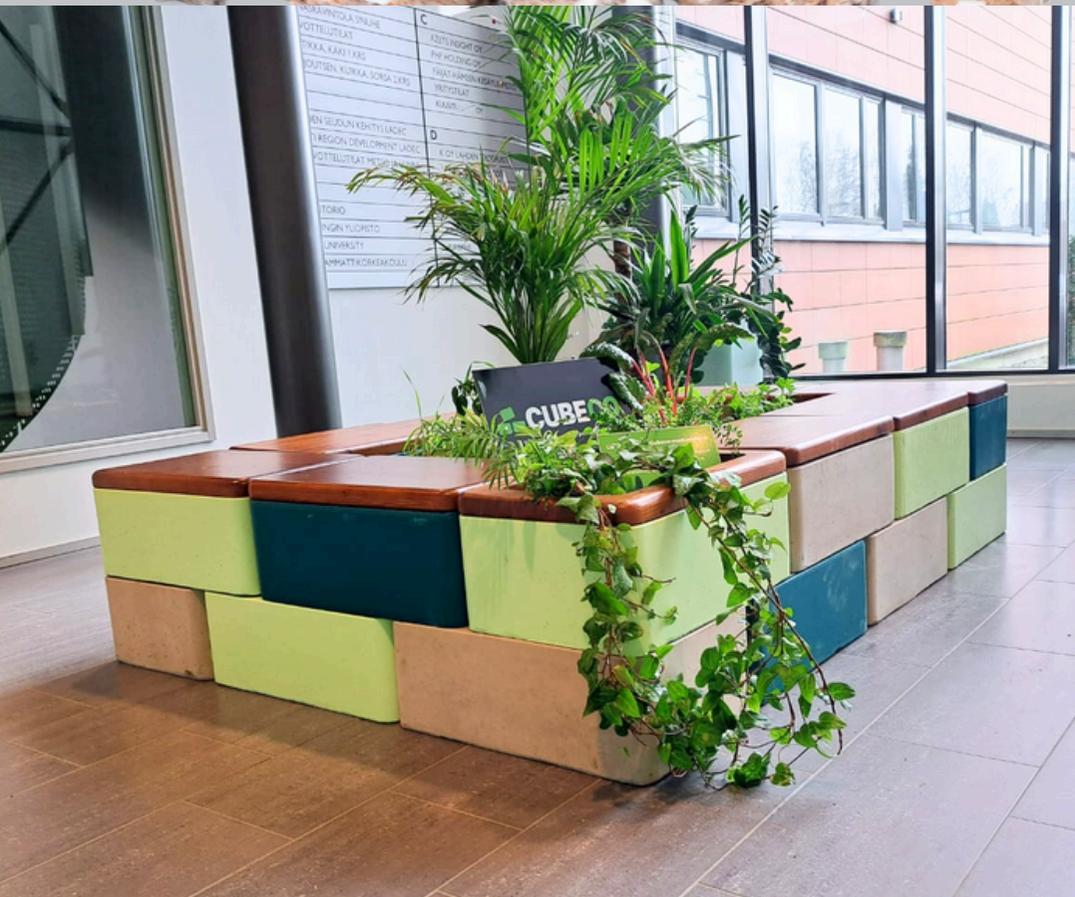
# Performance comparison

- **Traditional concrete** (Portland)
- **Slag concrete** (GGBFS + Portland)
- **Geoblend™** (Geopolymer + GGBFS)





Waste Based Products



Green premium products-  
without emissions

ecUp®

EcoUp Oyj, Technologies



# Turn waste into value!

## WasteX-Solution

### is versatile

#### Time to join the party!

Regulations and customer sustainability requirements are driving demand for low-carbon concrete products. Now is the time to join the party!

#### Competitive advantage for your products

When everything goes green, you need to stand out. And that's the promise WasteX-Solution provides!

## Contact us!



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