



Funded by the European Union



Advancing resource efficient and cleaner production in Moldova

The RECP methodology

Resource Efficient and Cleaner Production (RECP) is the integrated and continuous application of preventive environmental strategies to **processes, products, and services** to increase efficiency and reduce risks to humans and the environment. RECP is all about producing with fewer resources while minimizing environmental impacts and increasing overall productivity. For **Small and Medium-Sized Enterprises (SMEs)**, the RECP methodology can effectively lower production costs whilst improving the SMEs' competitive advantage and applying environmentally friendly practices. RECP is also an effective tool to introduce and promote Circular Economy principles among SMEs.

“EVECO CONSTRUCTION” LTD - CONSTRUCTION PANELS



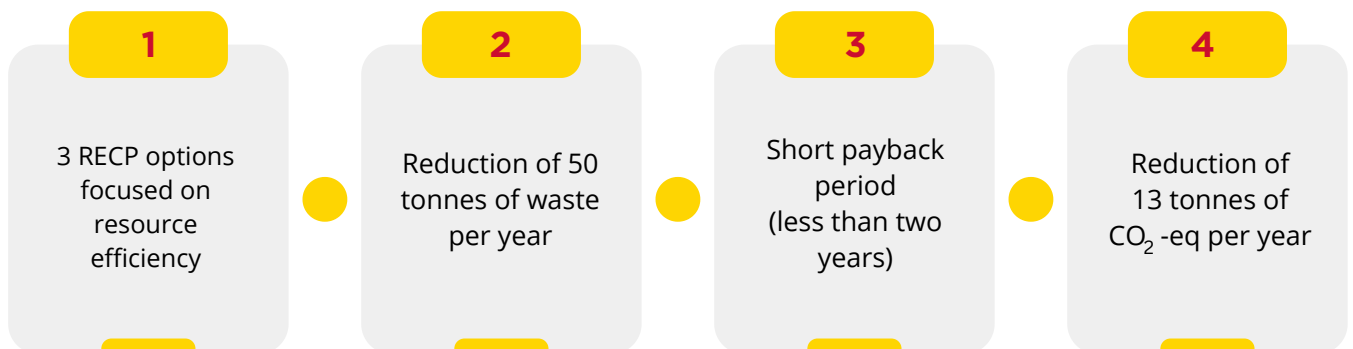
Company overview

Location: Ialoveni
Key products: straw building panels
No. of employees: 9
Main markets: Moldova
Founding year: 2021



“EVECO Construction” specialises in producing environmentally-friendly building panels made out of straw and sawn timber. These are used in the construction of modern and energy efficient buildings. The manufacturing process is both water- and electricity-intensive. During production, the company uses various pieces of equipment to process wood, press straw into panels, shear straw from the surface of the panels, prepare the clay mixtures, and apply the mixtures to the surface of the straw panels. Motivated to improve waste management and the working environment, the company participated in the RECP Clubs programme under EU4Environment (2019-2024). This publication shows the company's experience reported after the monitoring exercise conducted in 2021-2024.

BENEFITS FROM IMPLEMENTING RECP OPTIONS



Action implemented by:



The project's approach

The RECP assessment examined the production site and identified several RECP options, out of which the following three were prioritised. On average, these options require a payback period of less than two years:

RECP Option 1. Installation of a thermal ceiling barrier: This measure consists of installing a heat-insulating thermal ceiling barrier at a distance of approximately 1 metre from the roof. This would create and maintain the required microclimate in the production room for the generation of straw building panels, and ensure proper working conditions for the personnel.

RECP Option 2. Installation of a vestibule near the gate: This measure consists of installing an internal vestibule made out of protective film, near the gate used for vehicle entry. The measure would reduce the uncontrolled cooling of the room, simultaneously reducing the energy required for heating.

RECP Option 3. Production of pellets from straw waste: This measure consists of manufacturing pellets from straw waste (usually generated during the shearing of the side planes of the panels) and their subsequent sale on the market. It would bring to a new use for the generated waste and an additional income for the company.

SAVING ACHIEVEMENTS

Main RECP actions

OPTION 1	Installation of a thermal ceiling barrier
OPTION 2	Installation of a vestibule near the gate
OPTION 3	Production of pellets from straw waste

Economic key figures

RECP OPTIONS	INVESTMENT (EUR)	SAVINGS (EUR/YR)	PAYBACK PERIOD (YR)
Option 1:	1,200	3,750	0.3
Option 2:	450	937	0.5
Option 3:	4,500	3,125	1.4

Resource savings

RECP OPTIONS	ELECTRICITY (KWH/YR)/%
Option 1:	25,000/29
Option 2:	6,250/4
Option 3:	/

Total pollution reduction

RECP OPTIONS	TOTAL CO ₂ -EQ (TONNES/YR)	WASTE (TONNES/YR)
Total:	13	50

“ Our company joined the RECP project with the goal of repurposing generated waste and minimising heat loss. Thanks to the RECP Clubs programme, we are equipped with the ability to analyse resource efficiency in our product manufacturing and identify technological measures for enhancing the organisation of our production processes. As we plan to expand and double the capacity of our company, the RECP Project has inspired us to come up with new ideas and approaches regarding the implementation of RECP measures in the future, said the company manager, Mr. Zahari Dolomanji. ”

The introduction of RECP has been part of the EU-funded EU4Environment Action and executed by UNIDO. In this context, **EVECO Construction** joined the RECP Clubs programme to be monitored under EU4Environment. Follow-up visits have also been conducted to check on the implementation of the recommended RECP options. EU4Environment helps the EU's Eastern Partnership countries preserve their natural capital and increase people's environmental well-being by supporting environment-related action, demonstrating and unlocking opportunities for greener growth, and setting mechanisms to better manage environmental risks and impacts. For more details, visit: www.eu4environment.org

This publication has been produced with the assistance of the European Union. Its contents are the sole responsibility of UNIDO and do not necessarily reflect the views of the European Union.

© – 2023 – UNIDO. All rights reserved. Licensed to the European Union under conditions.



United Nations Industrial Development Organization
Ms. Tatiana Chernyavskaya
EU4Environment Project Manager
Tel: +43 1 26 0 26 5520
E-mail: t.chernyavskaya@unido.org



Organisation for Entrepreneurship Development
Bulevardul Ștefan cel Mare și Sfânt 134
Chișinău, Republica Moldova
Tel: +373 22 295 741
E-mail: info@oda.md