



Funded by
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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.

“RĂILEAN-PLUS” LTD - ANIMAL FOOD PRODUCTION

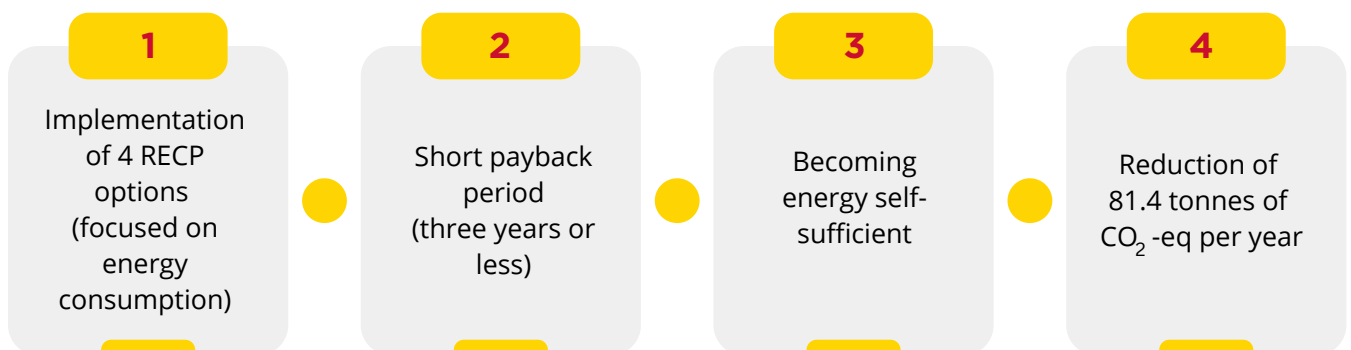


Company overview

Location: Ialoveni
Key products: animal food
No. of employees: 22
Main markets: Moldova
Founding year: 2006

"Răilean-Plus" is an enterprise specialised in producing animal feed. Amongst its products, the company also produces pressed vegetable oil from oil seeds, which is later used as an oil leftover for animal food production (for example, as a supplement full of proteins and vitamins to enrich the animal feed). Motivated to search for solutions to reducing its energy consumption and related costs, the company participated in the RECP Demonstration Project under EU4Environment (2019-2024). This publication shows the company's experience reported after the monitoring exercise conducted in 2022-2023.

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 four were prioritised by the company:

RECP Option 1. Installing an automatic purging valve on the steam boiler. This would reduce steam losses by installing a conductivity-controlled automatic purging valve and reduce the energy needed to heat up the water in the boiler.

RECP Option 2. Installing a heat exchanger for heat recovery. This would help recover the heat from the wastewater and preheat the boiler feed water. It will significantly reduce energy consumption and heat loss through.

RECP Option 3. Installing a variable speed drive (VSD) on the main water pump.

RECP Option 4. Installing photovoltaic (PV) solar panels. This would help the company be less energy-dependent and significantly reduce electricity costs.

SAVING ACHIEVEMENTS

Main RECP actions

OPTION 1	Installing an automatic purging valve on the steam boiler
OPTION 2	Installing a heat exchanger for heat recovery
OPTION 3	Installing a VSD on the main water pump
OPTION 4	Installing PV solar panels

Economic key figures

RECP OPTIONS	INVESTMENT (EUR)	SAVINGS (EUR/YR)	PAYBACK PERIOD (YR)
Option 1:	2,000	18,000	<1
Option 2:	4,000	6,000	<1
Option 3:	1,500	600	3
Option 4:	900,000	280,000	3

Resource savings

RECP OPTIONS	ELECTRICITY (KWH/YR)/%	NATURAL GAS (M ³ /YR)/%
Option 1:	/	3,600
Option 2:	/	850
Option 3:	500	/
Option 4:	250,000	/

Total pollution reduction

RECP OPTIONS	TOTAL CO ₂ -EQ (TONNES/YR)
Total:	81.4

“Our company joined the project to improve its energy efficiency and reduce costs. Thanks to the RECP Demonstration Project, we learned how to monitor, record, and evaluate key data, regularly. As we plan to actively work on CO₂ emission reduction and develop additional further steps with our employees, the RECP Project has inspired us to come up with new ideas and approaches regarding implementation of RECP measures in the future, said a company representative.”

The introduction of RECP has been part of the EU-funded EU4Environment Action and executed by UNIDO. In this context, **Răilean-Plus** joined the RECP Demonstration Project 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

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