

Advancing resource efficient and cleaner production in Ukraine

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.

"UKRAINE" LLC - FOOD PRODUCTION



Company overview

Location: Karlivka, Poltava region

Key products: meat products

No. of employees: 97

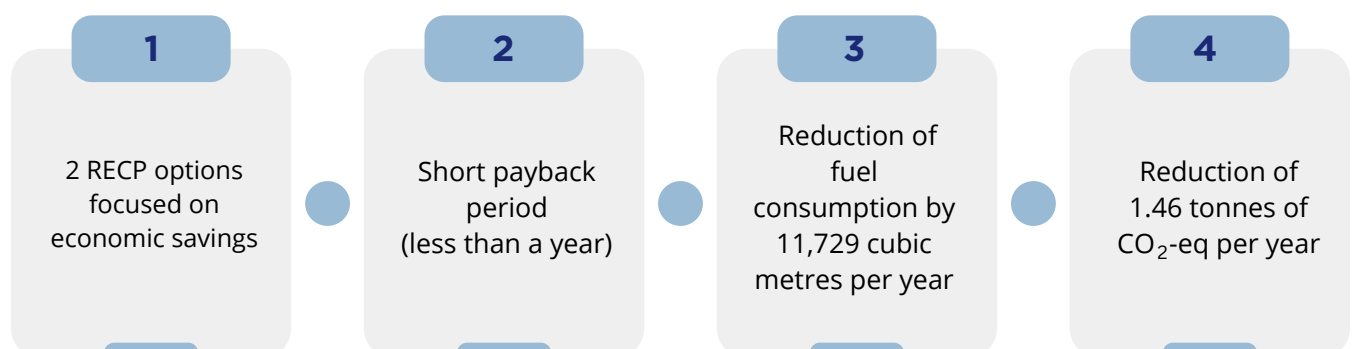
Main markets: Ukraine

Founding year: 2000



"Ukraine" LLC is a company specialising in the production of various types of meat. As raw materials, the company uses pork and poultry meat from its own production line, while small amounts of beef are purchased from external suppliers. From slaughtering to deboning, grinding, all the way to the final products, the company uses a fully closed-system for its production processes. While the enterprise had already implemented a few energy-saving measures on its own (utilising fuel pellets made from crop waste to produce energy for the production process), it was motivated to learn more about resource and equipment efficiency, and develop options to improve its production processes. Hence, 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 2023.

BENEFITS FROM IMPLEMENTING RECP OPTIONS



Action implemented by:

The project's approach

With the support of the RECP self-assessment tool and the contribution of the RECP experts, the company developed its RECP Action plan which identified several RECP options, out of which two were prioritised, and the first one was implemented by the company.

RECP Option 1. Heat insulation of the pipelines: This measure consisted of insulating the pipes with either rubber or polyethylene foam-based materials in order to reduce the heat loss from the pipes. Equipping the pipelines with insulation not only saved energy, but also reduced the use of pellets as fuel. As a result, the pellet boiler is now used only during the cold period, further reducing operating costs.

RECP Option 2. Utilising the waste heat from the refrigeration equipment: This measure proposed utilising the heat generated by the refrigeration machine to heat the water within the hot water supply system.

SAVING ACHIEVEMENTS

Main RECP actions

OPTION 1	Heat insulation of the pipelines
OPTION 2	Utilising the heat from the refrigeration equipment

Economic key figures

RECP OPTIONS	INVESTMENT (EUR)	SAVINGS (EUR/YR)	PAYBACK PERIOD (YR)
Option 1:	455	524	0.9
Option 2:	/	1,562	/

Resource savings

RECP OPTIONS	FUEL (M ³ /YR)	ELECTRICITY (KWH/YR)
Option 1:	1,656	3,244
Option 2:	10,073	/

Total pollution reduction

RECP OPTIONS	TOTAL CO ₂ -EQ (TONNES/YR)
Total:	1.46

“ We encountered challenges in the overall use of resources and equipment. Through the RECP Clubs programme, we realised that even new and modern means of production require periodic monitoring and timely adjustments to maintain efficiency. By participating in the EU4Environment Action, our company has increased its focus on the efficient use of all types of resources and continues to look for new measures to improve resource efficiency, said the chief engineer, Mr. Petro Sadylo. ”

The introduction of RECP Clubs programme has been part of the EU-funded EU4Environment Action and executed by UNIDO. In this context, "Ukraine", LLC joined the 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

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