



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.

"LOZ TEXTIL" LTD - CLOTHING MANUFACTURER

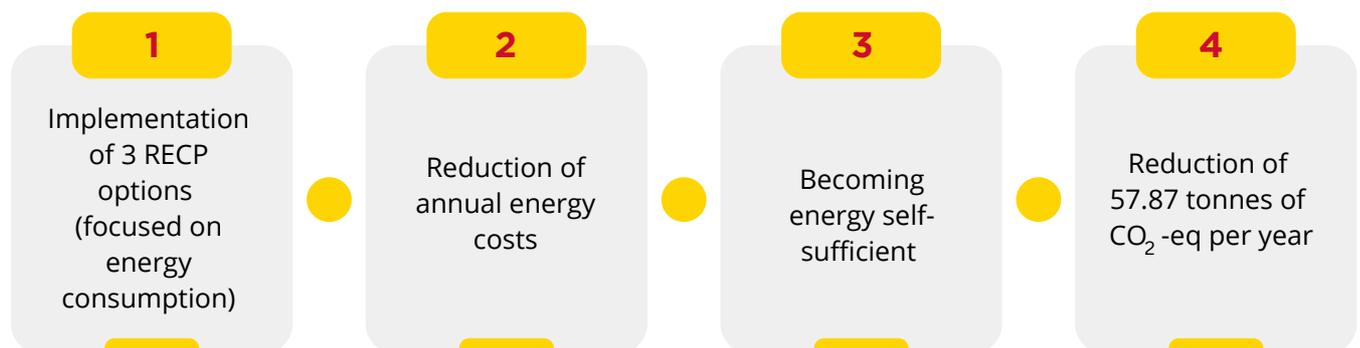


Company overview

- Location:** Lozova
- Key products:** special clothes for medical use
- No. of employees:** 72
- Main markets:** Romania, Italy
- Exportation quota (%):** 100
- Founding year:** 2012

"Loz Textil" specialises in the production of medical clothing and scrubs. The company spreads across 0.32 hectares, with the building covering 840 square meters. During the handling of raw materials, a considerable amount of textile waste is generated, which is later returned to the supplier of the raw materials for further recycling abroad. Motivated to improve its productivity and environmental performance by better streamlining the management of materials and energy sources, 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 three were prioritised by the company:

RECP Option 1. Installing photovoltaic (PV) solar panels. This would help the company be less energy-dependent and significantly reduce electricity costs.

RECP Option 2. Changing the heating source: This measure consists of replacing the coal-based heating of the premises for a more environmentally-friendly option. So, the existing hot water-based heating system with radiators can be kept and the base load of heating will be supplied with air-to-air heat pumps. These would significantly reduce the environmental impact and emission of pollutants into the atmosphere.

RECP Option 3. Streamlining the ventilation system: This measure consists of upgrading the current ventilation system which has a manual start, with one that includes a recovery option, to ensure an energy-efficient ventilation.

SAVING ACHIEVEMENTS

Main RECP actions

| | |
|----------|-------------------------------------|
| OPTION 1 | Installing PV solar panels |
| OPTION 2 | Changing the heating source |
| OPTION 3 | Streamlining the ventilation system |

Economic key figures

| RECP OPTIONS | INVESTMENT (EUR) | SAVINGS (EUR/YR) | PAYBACK PERIOD (YR) |
|--------------|------------------|------------------|---------------------|
| Option 1: | 58,921 | 11,057 | 6.7 |
| Option 2: | 14,373 | 743 | 12.3 |
| Option 3: | 5,217 | 366 | 15.3 |

Resource savings

| RECP OPTIONS | ELECTRICITY (KWH/YR)/% | COAL (KWH/YR)/% |
|--------------|------------------------|-----------------|
| Option 1: | 67,500/85.79 | / |
| Option 2: | -17,665/-22.45 | 100,549/25.47 |
| Option 3: | -1,625/-2.06 | 17,473/4.42 |

Total pollution reduction

| RECP OPTIONS | TOTAL CO ₂ -EQ (TONNES/YR) |
|--------------|---------------------------------------|
| Total: | 57.87 |

“Our company joined the project to improve its productivity and environmental performance by evaluating the consumption of raw materials, streamlining resources, and investing in waste management in order to become more environmentally-friendly. Thanks to the RECP Demonstration Project, we learned that a systematic analysis of the efficiency of our production and energy systems is particularly important. As we plan to become energy-independent in the near future, the RECP Project has inspired us to come up with new ideas and approaches regarding implementation of RECP measures, said the administrator, Mr. Valentin Cvasov.”

The introduction of RECP has been part of the EU-funded EU4Environment Action and executed by UNIDO. In this context, **Loz Textil** 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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