



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.

“MY DENIM FACTORY” LTD - CLOTHING MANUFACTURER

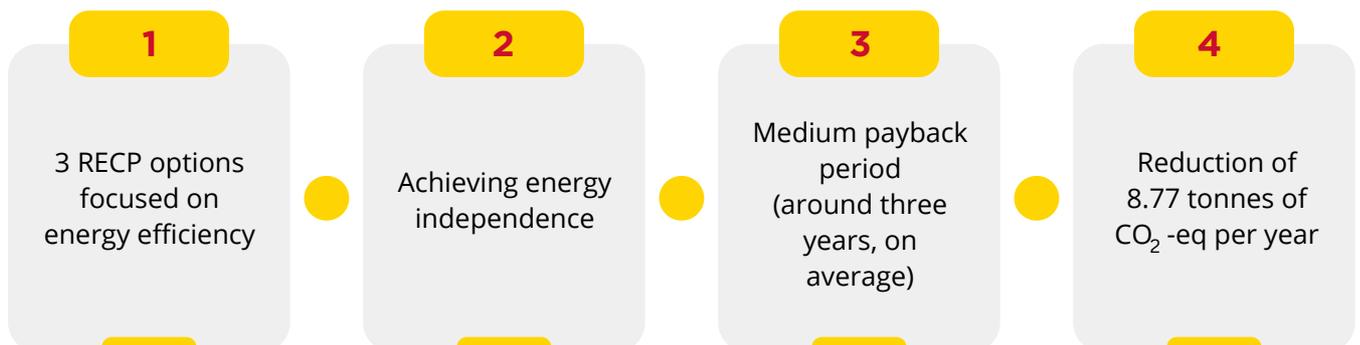


Company overview

Location: Criuleni
Key products: denim clothing
No. of employees: 11
Main markets: Moldova
Founding year: 2022

“My Denim Factory” is a clothing manufacturer specialised in a wide range of denim products, including trousers, skirts, dresses, sundresses, shirts, and jackets. The company sources its fabrics in two colours (white and dark blue denim), which are processed using different chemical agents and ozone generators to achieve the desired look. During the production process, high energy-efficient servo sewing machines are used to lower the overall consumption of electricity. Future plans include establishing an on-site shop to make products accessible to the citizens of Criuleni, and further expanding through retail shops across Moldova. Motivated to improve the lightning system in the production area and achieve energy independence, 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. The recommendations require an average payback period of three years:

RECP Option 1. Record-keeping for fabric and paper waste generation: This measure involves maintaining accurate records of the waste generated from fabric and paper scraps. This would help identify monthly production losses and take them into account when calculating production costs.

RECP Option 2. Installing individual lighting systems for each sewing workplace: This measure consists of installing individual lightning units for each seamstress. This would reduce electricity consumption and improve the working environment for employees.

RECP Option 3. Installing a grid-connected photovoltaic (PV) solar plant on the roof: This measure involves installing a 15kW PV solar plant on the roof to meet the company's energy needs, helping it become energy-independent and significantly reducing electricity costs. Furthermore, any excess electricity would be fed into the grid, potentially generating additional income for the company.

SAVING ACHIEVEMENTS

Main RECP actions

OPTION 1	Record-keeping for fabric and paper waste generation
OPTION 2	Installing individual lighting systems for each sewing workplace
OPTION 3	Installing a grid-connected PV solar power plant on the roof

Economic key figures

RECP OPTIONS	INVESTMENT (EUR)	SAVINGS (EUR/YR)	PAYBACK PERIOD (YR)
Option 1:	/	/	/
Option 2:	215	117	1.8
Option 3:	12,400	2,671	4.6

Resource savings

RECP OPTIONS	ELECTRICITY (KWH/YR)/%
Option 1:	/
Option 2:	876/5
Option 3:	20,000/100

Total pollution reduction

RECP OPTIONS	TOTAL CO ₂ -EQ (TONNES/YR)
Total:	8.77

“ Our company joined the project to improve energy efficiency and the working conditions for our employees. Thanks to the RECP Clubs programme, we learned that even by keeping a simple record of the waste we generate, we can better assess our impact and production costs. As we plan to further improve our economic performance, the RECP project has inspired us to come up with new ideas and approaches regarding the implementation of RECP measures in the near future, said the co-founder of the company, Ms. Elena Timošenco. ”

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

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