

the European Union

# **EU4Environment** Green Economy in Eastern Partner Countries



# <u>ķi</u>

### 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.

### **"MAICAN-COM" LTD - GARMENT PRODUCTION**

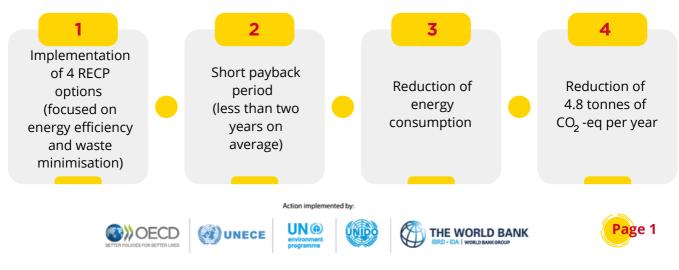


#### Company overview

Location: Chișinău Key products: leisurewear, sportswear, knitwear No. of employees: 350 Main markets: Moldova Founding year: 2009 Certifications: ISO 9001

"**Maican-Com**" is a manufacturer of knitted items, sportswear, and leisurewear for men, women, and children. Founded in 2009 as a small family business with only four sewing machines, the company has grown over the years to become one of the most recognisable brands in Moldova. Situated within Industrial Park Tracom, the company spreads across 1,800 square meters and has 350 employees. Across the country, Maican-Com operates 27 shops. Motivated to improve its resource management and monitoring with the active participation of employees, the company participated in the RECP Demonstration Project under EU4Environment (2019-2024). This publication shows the company's experience reported after the completion of the monitoring exercise in 2022-2023.

### **BENEFITS FROM IMPLEMENTING RECP OPTIONS**



# 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. The suggested RECP recommendations require a payback period of less than three years:

**RECP Option 1. Reducing the air pressure in the compressed air system:** This measure consists of reducing the air pressure in the compressor from 9.2 to 7 bar, which is sufficient for the regular use of equipment. This would also reduce electricity consumption by 8%.

**RECP Option 2. Installation of a variable speed drive (VSD) for the sewing machines:** The measure consists of replacing the old, classic belt drive with a variable speed drive for the five sewing machines. It would allow for the accurate control of the speed and positioning of the needle and significantly reduce electricity consumption.

**RECP Option 3. Installation of a VSD and sliders for the air handling unit:** This measure consists of replacing the classic belt drive on the fans' motor with a VSD and installing sliders on the extraction points to seal them when they are not in use. It would allow for the accurate control of speed, increase power at the extraction points, and significantly reduce electricity consumption.

**RECP Option 4. Optimising the light-emitting diode (LED) lights via presence and daylight sensors:** This measure consists of using the daylight and presence sensors to switch off the lights when there is enough daylight or when nobody is using the working area. The measure would significantly reduce electricity consumption.

### **SAVING ACHIEVEMENTS**

#### **Main RECP actions**

OPTION 1	Reducing the air pressure in the compressed air system
OPTION 2	Installation of a VSD for the sewing machines
OPTION 3	Installation of a VSD and sliders for the air handling unit
OPTION 4	Optimising the LED lights via presence and daylight sensors

### **Economic key figures**

RECP OPTIONS	INVESTMENT (EUR)	SAVINGS (EUR/YR)	PAYBACK PERIOD (YR)
Option 1:	/	400	/
Option 2:	900	700	<1.5
Option 3:	3,000	800	<2.5
Option 4:	500	600	<]

### **Resource savings**

### **Total pollution reduction**

<b>RECP OPTIONS</b>	ELECTRICITY (KWH/YR)		
Option 1:	2,000	RECP OPTIONS	TOTAL CO2-EQ (TONNES/YR)
Option 2:	7,000		
Option 3:	4,000	Total:	4.8
Option 4:	3,000		

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