

## 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.

### "CHAP CHAP" LLC - SHOE PRODUCTION



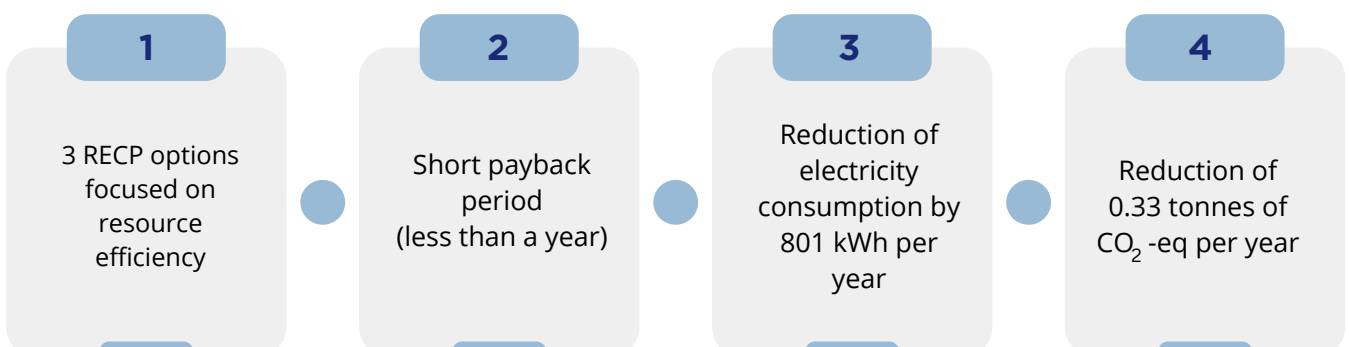
#### Company overview

**Location:** Khmelnytskyi  
**Key products:** indoor shoes  
**No. of employers:** 12  
**Main markets:** Ukraine  
**Founding year:** 2016



"Chap Chap" LLC is a light industry producer of house shoes for adults and children (mainly home slippers). Founded in 2016, the company holds a leading position in the Khmelnytskyi region market, producing approximately 70,000 pairs of shoes every year. Motivated to analyse the efficiency of its equipment and develop resource-saving options, 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 three RECP options to reduce energy consumption, harmful emissions, and waste generation. The first two options were prioritised and already implemented by the staff:

**RECP Option 1. Using a two-blade stamp for cutting soles:** This measure involved using a two-blade stamp for cutting the shoes' soles, significantly reducing the electricity required to operate the press.

**RECP Option 2. Replacing the single blades in the sole cutting machine with double ones:** This measure referred to combining two blades that were operated separately into a double solid blade for cutting the sole blanks. It significantly reduced ethylene-vinyl acetate (EVA) rubber waste and the electricity required for operating the press.

**RECP Option 3. Thermal insulation of the glue activation chamber:** This measure proposed to install protective thermal insulation boxes to reduce heat loss into the environment and reduce electricity consumption.

## SAVING ACHIEVEMENTS

### Main RECP actions

OPTION 1	Use of the two-blade stamp for cutting the sole
OPTION 2	Replacement of single blade in the sole cutting machine
OPTION 3	Thermal insulation of the glue activation chamber

### Economic key figures

RECP OPTIONS	INVESTMENT (EUR)	SAVINGS (EUR/YR)	PAYBACK PERIOD (YR)
Option 1:	/	43	/
Option 2:	220	390	0.6
Option 3:	12	39	0.3

### Resource savings

RECP OPTIONS	ELECTRICITY (KWH/YR)/%	MATERIALS (TONNES/YR)/%
Option 1:	420/3.5	/
Option 2:	420/3.5	0.03/10
Option 3:	381/3.2	/

### Total pollution reduction

RECP OPTIONS	TOTAL CO <sub>2</sub> -EQ (TONNES/YR)	WASTE (TONNES/YR)
Total:	0.336	0.032

“ Our company aimed to assess its ability to reduce production costs by minimising resource consumption through the RECP Clubs programme, considering our need to modernise. We learned that the efficient operation of our enterprise requires regular monitoring of resource consumption and a deeper examination of opportunities to increase resource efficiency. As we plan to continue expanding and modernising our production, the RECP Clubs programme has inspired us to significantly reduce operating costs by implementing the suggested RECP measures, said the director, Mr. Ihor Yavdosiuik. ”

The introduction of RECP Clubs programme has been part of the EU-funded EU4Environment Action and executed by UNIDO. In this context, **"Chap Chap", LLC** joined 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](http://www.eu4environment.org)

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