





## 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.

## "NAIL" LTD - NAILS PRODUCTION



### Company overview

**Location:** Khmelnytskyi **Key products:** nails **No. of employers:** 231 **Main markets:** Ukraine

Main markets: Ukraine Founding year: 1994 Certifications: EPAL, UIC



Founded in 1994, "Nail" LTD is a manufacturer of nails from Khmelnytskyi. Alongside the traditional types of nails that include building, finishing, and roofing nails, the company also produces special nails, namely loose and in coils ones, which are used to manufacture wooden containers and pallets. Besides these, the company also produces various fasteners (such as self-tapping screws, bolts, confirmats, nuts, washers, threaded rods, anchors, and drills). Motivated to analyse its equipment's efficiency 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

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2 RECP options focused on resource savings 2

Medium payback period (less than four years, on average) 3

Reduction of gas consumption by 7,000 cubic metres per year 4

Reduction of 14.95 tonnes of CO<sub>2</sub> -eq per year

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 the following two were prioritised. The suggested RECP recommendations included low and medium-cost measures:

**RECP Option 1. Installation of a heating substation:** This proposal consisted of installing a heating substation to automatically regulate the heat supply in the office and other industrial premises. This would ensure that the heat is evenly distributed throughout the company's premises, based on the outdoor temperature. It would also significantly reduce the consumption of natural gas by the two boilers used for heating.

**RECP Option 2. Installation of aerators:** This proposal consisted of installing aerators on the taps to reduce the water required to fulfil the needs of the company's staff by 10%.

#### SAVING ACHIEVEMENTS

#### **Main RECP actions**

OPTION 1	Installation of a heating substation
OPTION 2	Installation of aerators

### **Economic key figures**

RECP OPTIONS	INVESTMENT (EUR)	SAVINGS (EUR/YR)	PAYBACK PERIOD (YR)
Option 1:	11,700	1,832	6.4
Option 2:	132	146	0.9

## **Resource savings**

RECP OPTIONS	NATURAL GAS (M³/YR)/%	WATER (M³/YR)/%
Option 1:	7,000/19.8	/
Option 2:	/	228/10

## **Total pollution reduction**

RECP OPTIONS	TOTAL CO <sub>2</sub> -EQ (TONNES/YR)	WASTEWATER (M³/YR)
Total:	14.95	228

With the aim to enhance production processes and minimise resource use, our company became part of the RECP Clubs programme, which enlightened us on the significance of consistently monitoring the levels of resource consumption and fostering energy-saving awareness among our employees. Moving forward, we have plans to persistently enhance our efficiency, said the director, Mr. Oleksandr Rudyi.

The introduction of RECP Clubs programme has been part of the EU-funded EU4Environment Action and executed by UNIDO. In this context, "Nail", LTD 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: <a href="https://www.eu4environment.org">www.eu4environment.org</a>

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