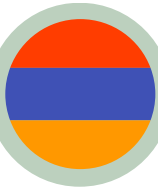




Funded by the European Union



Advancing resource efficient and cleaner production in Armenia

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.

"JULIANNA" LLC - FURNITURE PRODUCTION



Company overview

Location: Tairov

Key products: railings (handrail), kitchen furniture, wardrobe closet, metallic details, closets, tables, metallic cabinets, office furniture, and other products

No. of employees: 15

Main markets: Armenia

Founding year: 1999

Established in 1999, "**Julianna**" is a manufacturer of furniture that currently operates under "Wood Company" LLC. The enterprise spreads across 0.25 hectares, where both the manufacturing workshop and the store are located. The production of furniture is order-based and it accounts for 70% of the company's total income. Some of the long-term goals include sales increase and market expansion, as well as the improvement of the working environment for staff. Motivated to address production costs and product quality, 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

1

4 RECP options (focused on cost reduction)

2

Reduction of 15 tonnes of waste per year

3

Material savings of 0.078 tonnes per year

4

Reduction of 5.1 tonnes of CO₂-eq per year

Action implemented by:

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. These include medium and low-cost measures:

RECP Option 1. Investing in noise control technology: This measure would reduce noise and the discomfort of the employees by improving the design and performance of the tools and precision machines.

RECP Option 2. Gas control for the cutting and moulding process: This consists of replacing the old wood stove with a pyrolysis boiler that would significantly decrease the level of harmful substances by providing a full combustion of the medium-density fibreboard (MDF) leftovers. Simultaneously, this would also better protect the health of the workers.

RECP Option 3. Installing a ventilation system in the paint workshop: This focuses on improving the paint shop practices and compliance with safety and national regulations, and on reducing the consumption of paint.

RECP Option 4. Investing in dust control measures: This measure suggests investing in an aspiration bag to collect the industrial dust, especially wood-based one, to improve the working conditions of the employees.

SAVING ACHIEVEMENTS

Main RECP actions

OPTION 1	Investing in noise control technology
OPTION 2	Gas control for the cutting and moulding process
OPTION 3	Installing a ventilation system in the paint workshop
OPTION 4	Investing in dust control measures

Economic key figures

RECP OPTIONS	INVESTMENT (EUR)	SAVINGS (EUR/YR)	PAYBACK PERIOD (YR)
Option 1:	300	200	1.5
Option 2:	10,000	817.7	12.2
Option 3:	3,500	523.5	6.7
Option 4:	180	150	1.2

Resource savings

RECP OPTIONS	MATERIALS (TONNES/YR)/%	ELECTRICITY (KWH/YR)/%
Option 1:	/	/
Option 2:	/	12,635/50.4
Option 3:	0.08/18.3	/
Option 4:	/	/

Total pollution reduction

RECP OPTIONS	TOTAL CO ₂ -EQ (TONNES/YR)	GENERAL WASTE (T/YR)	MATERIAL WASTE (T/YR)
Total:	5.1	15	0.08

“ Our company was facing low energy efficiency and significant levels of pollution. Thanks to the RECP Demonstration Project, within the company, we learned how to systematically reduce production costs and rationally use our resources. As the company plans to improve the working environment and conditions for the employees, the RECP project has inspired us to come up with new ideas regarding the future implementation of RECP measures, said a member of staff. ”

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