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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.

"MONICOL" LTD - DRIED FRUITS PRODUCTION

Company overview



Location: Nimoreni

Key products: dried and peeled nuts, spirits

No. of employees: 189

Main markets: Moldova, Europe, USA, Asia

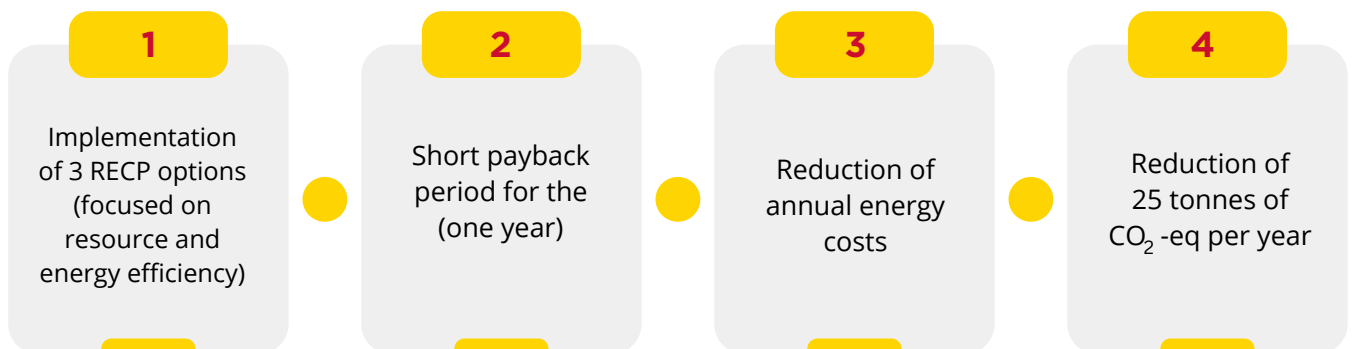
Founding year: 2001

Certifications: ISO 9001, HACCP, BSCI, IFS, BR C, BCS
ÖKO-Garantie Kiwa, BIO Suisse, EU Organic, USDA Organic, Naturland



"Monicol" is a dried fruits and spirits producer. Founded in 2001, the company invested a lot in developing both the range of products and production facilities, thus becoming one of the market leaders in this field. It exports its products to the European Union, the USA, Singapore, and China. Monicol is especially committed to use the full extent of its products, including the by-products which are used in the processes of meshing and distillation, as well as boiler fuel. Also, the company has a return policy that allows its suppliers to recycle and reuse the packaging materials. Motivated to identify measures to improve energy efficiency and reduce costs, 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 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 by the company. The suggested RECP recommendations require a short payback period of one year:

RECP Option 1. Insulation of the dryer's roof: This measure consists of insulating the dryer's roof with a hard mineral wool of 14 cm in order to reduce heat losses, electricity consumption, and to prevent the burnout of the motors.

RECP Option 2. Installing variable speed drives (VSD) on the circulation fans: This measure consists of installing VSD to control air circulation and level of humidity during the drying process and, thus, reduce electricity consumption and provide motor protection as the fan speed can be programmed and controlled.

RECP Option 3. Insulating the steam pipes and valves: This measure consists of insulating the steam pipes with rockwool in order to reduce electricity costs and improve the safety of the workers.

SAVING ACHIEVEMENTS

Main RECP actions

OPTION 1	Insulation of the dryer's roof
OPTION 2	Installing variable speed drives on the circulation fans
OPTION 3	Insulating the steam pipes and valves

Economic key figures

RECP OPTIONS	INVESTMENT (EUR)	SAVINGS (EUR/YR)	PAYBACK PERIOD (YR)
Option 1:	1,033	1,033	1
Option 2:	1,550	1,550	1
Option 3:	129	388	1

Resource savings

RECP OPTIONS	ELECTRICITY (KWH/YR)
Option 1:	30,000
Option 2:	68,000
Option 3:	15,000

Total pollution reduction

RECP OPTIONS	TOTAL CO ₂ -EQ (TONNES/YR)
Total:	25

“ Established in 2001 by Dumitru Vicol (an entrepreneur with over 30 years of managerial experience), the company produces high-quality dried fruits (including walnuts, prunes, cherries, pears, apples, tomatoes), as well as alcoholic beverages, which are shipped to national and international customers (in over 20 countries). Monicol is also one of the leading wholesale and retail suppliers of organic and conventional walnuts/walnut kernels and dried plumbs in the country. ”

The introduction of RECP has been part of the EU-funded EU4Environment Action and executed by UNIDO. In this context, **Monicol** joined 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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United Nations Industrial Development Organization
Ms. Tatiana Chernyavskaya
EU4Environment Project Manager
Tel: +43 1 26 0 26 5520
E-mail: t.chernyavskaya@unido.org



Organisation for Entrepreneurship Development
Bulevardul Ștefan cel Mare și Sfint 134
Chișinău, Republica Moldova
Tel: +373 22 295 741
E-mail: info@oda.md