



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 is an effective means to 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.

"NATURAL PRODUCT - CEZAR" LLC - DAIRY PRODUCTION

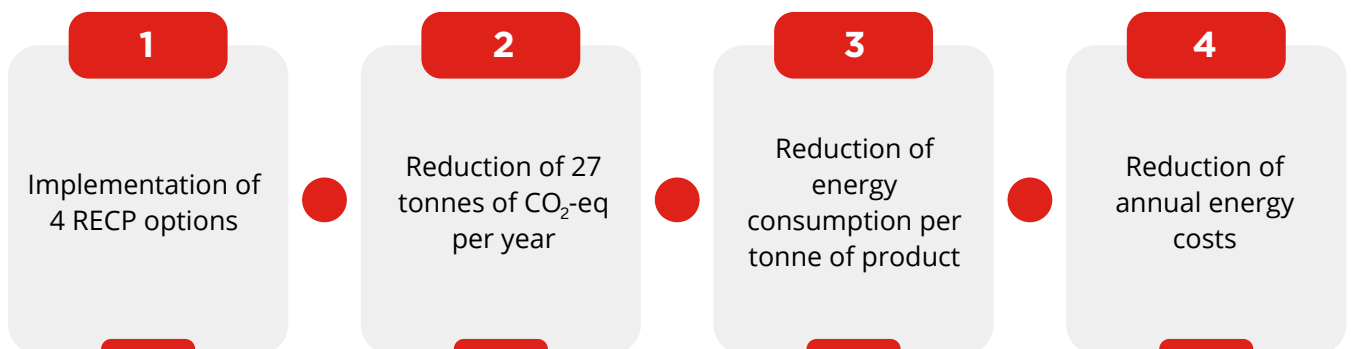


Company overview

Location: Tsalka, Lower Kartli
Key products: dairy (mainly cheese)
No. of employees: 7
Main markets: Georgia
Founding year: 2015

"Natural Product - Cezar" is a dairy producer from Tsalka. Its staff was actively involved in the activities related to the RECP Clubs, including the training course on business environmental profile, energy efficiency, water efficiency and wastewater minimization, materials efficiency and waste minimization, the responsible use of chemicals, hazardous waste, and means to reduce emissions. The course resulted in the development of the RECP Action Plan which included four RECP options. Due to the pandemic, it was challenging for the enterprise to allocate internal financial resources and find investments or appropriate loans to implement the RECP measures. Motivated to improve resource efficiency and reduce energy consumption, the company participated in the RECP Clubs programme under EU4Environment (2019-2024). This publication shows the company's experience reported after the monitoring exercise.

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 prioritized. The suggested RECP recommendations for medium-cost measures:

RECP Option 1. Replacing the electric water heater with a solar-based one: this would help save the energy required for heating water and reduce CO₂-eq emissions.

RECP Option 2. The installation of a photovoltaic (PV) system: The installation of the PV system with a capacity of 50 kW would help generate electricity and reduce the amount of CO₂-eq emissions.

RECP Option 3. The installation of a gas steam boiler: This measure would help the company be more cost-efficient (by switching from electricity to natural gas).

RECP Option 4. The thermal insulation of the fridge's walls and top: This would help save energy.

SAVING ACHIEVEMENTS

RECP measures

OPTION 1	Replacing the electric water heater with a solar-based one
OPTION 2	The installation of a photovoltaic system
OPTION 3	The installation of a gas-based steam boiler
OPTION 4	The thermal insulation of the fridge's walls and top

Economic key figures

RECP OPTIONS	INVESTMENT (EUR)	SAVINGS (EUR/YR)	PAYBACK PERIOD (YR)
Option 1:	12,000	5,681	2.1
Option 2:	45,000	6,588	6.8
Option 3:	7,000	3,344	2.1
Option 4:	5,000	3,174	1.6

Resource savings

RECP OPTIONS	ELECTRICITY (KWH/YR)
Option 1:	68,863
Option 2:	85,000
Option 3:	/
Option 4:	38,469

Total pollution reduction

RECP OPTIONS	TOTAL CO ₂ -EQ (TONNES/YR)
Option 1:	9.6
Option 2:	11.9
Option 3:	/
Option 4:	5.4

The introduction of RECP has been part of the EU-funded EU4Environment Action and executed by UNIDO. In this context, **Natural Product - Cezar** joined the RECP training and assistance 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

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