



-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 instrument to lower production costs whilst improving the SMEs' competitive advantage and applying environmentally friendly practices. As well, RECP is considered an effective tool to introduce and promote Circular Economy principles among SMEs.

"KINDZMARAULI" LLC - alcoholic beverages -

Company overview

Address: Kvareli
Key products: alcoholic beverages (wine and vodka)
No. employees: 50
Main markets: local markets, international export
Founding year: 1996
Management systems: ISO 22000



"Kindzmarauli" LLC is a traditional winery from the town of Kvareli. The company is also located in one of the most popular centres for wine production in the Kakheti region. Currently, "Kindzmarauli" LLC produces up to 15 types of wine and approximately 720,000 bottles per year. Presently, their wines are also exported to 10 countries. The company also produces various spirits, such as vodka and brandy, the latter having an ageing period between 3 and 23 years.

Motivated to boost its energy efficiency, the company joined EaP GREEN in 2015. This publication shows the company's experience reported after the monitoring exercise conducted in 2020, five years after the programme ended.

Benefits

- Implementation of 2 RECP options (focused on energy efficiency)
- Short payback period for the required investment (less than one year)
- Reduction of electricity consumption per tonne of product: 20%
- Energy savings that generated a reduction of 5.3 tonnes of CO₂ eq/year



The project's approach

During the **RECP monitoring**, the production site was examined and several RECP options were identified, out of which the following two were prioritized and gradually implemented by the company staff. Some of the suggested RECP recommendations were low-cost measures, whilst others required considerable investments:

RECP option 1. Improving the insulation of the ceiling and walls. In order to decrease the excessive thermal losses from the building's envelope, the external walls and ceiling were thermally insulated.

RECP option 2. The proper installation of a cooling equipment (installation of cooling units close to the reservoirs). To optimize energy consumption and reduce the maintenance costs associated with the cooling equipment (chillers), all cooling units were relocated closer to the water reservoirs.

Saving achievements

RECP MEASURES

Option 1: Improving the insulation of the ceiling and walls

Option 2: The proper installation of a cooling equipment



ECONOMIC KEY FIGURES

	Investment (Euro)	Saving (Euro/year)	PBP (years)
Option 1:	890	1,646	0.5
Option 2:	4,700	3,335	1.4
Total:	5,590	4,980	



RESOURCE SAVINGS

	Electricity (kWh/year)
Option 1:	18,700
Option 2:	37,900

Total: 56,600

TOTAL POLLUTION REDUCTION

CO₂-eq
(t/year)

Total: 5.33



Company insight

After the successful implementation of the RECP measures, the company now strives to increase its production capacity. Future plans also include investments to increase the quality of production, increase staff awareness and improve the overall management system.

*"Kindzmarauli" LLC was motivated to join the RECP Demonstration Project to learn about efficient means to address its excessive power consumption in the cooling units. As well, the company staff noted an inefficient and irrational consumption of electricity which they aimed to rectify. The RECP experience revealed the importance of regular inspection and monitoring of all production processes in order to identify issues in a timely manner. The company plans to improve its production capacity and the overall management system, said **Mr. Tamaz Konchoshvili, the Director of "Kindzmarauli" LLC***

The introduction of RECP has been part of the EU-funded programmes: **EaP GREEN** (2013-2017) and **EU4Environment Action** (2019-2022) executed by UNIDO. In this context, "Kindzmarauli" LLC joined the RECP training and assistance programme under EaP GREEN, and was monitored under EU4Environment. Follow-up visits have also been conducted under EU4Environment, to check on the implemented RECP options after the EaP GREEN Programme ended. 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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