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Advancing resource efficient and cleaner production in Georgia

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.

"NEKTARI-2008" LTD - SOFT DRINKS PRODUCTION



Company overview

Location: Kobuleti Key products: soft drinks, disposable utensils No. of employees: 20 Main markets: Georgia Founding year: 2008

"**Nektari-2008**" is a small lemonade producer and manufacturer of disposable plastic utensils (bottles and cups). Established in 2008, the company's production is now concentrated on a single large site divided into two buildings. Its main product is lemonade, with a production capacity of 5,356 tonnes per year, followed by disposable plastic cups (with a capacity of around 151 tonnes per year). The company's major concern was the high energy costs, as electricity is the most expensive source of energy in Georgia. Motivated to decrease both consumption and 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.

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 option was prioritized and successfully implemented by the company. The suggested RECP recommendation requires a payback period of less than five years:

RECP Option 1. **Installation of an on-grid photovoltaic (PV) solar system:** The measure consisted of installing a grid-connected (on-grid) solar PV system with a maximum available capacity of 500kWp. By implementing this RECP measure, the company started to significantly decrease its annual energy costs, as well as the corresponding amount of CO₂-eq emissions.

SAVING ACHIEVEMENTS

RECP measure

OPTION 1	Installation of on-grid solar PV system

Economic key figures

RECP OPTIONS	INVESTMENT (EUR)	SAVINGS (EUR/YR)	PAYBACK PERIOD (YR)
Option 1:	324,324	79,152	4.1

Resource savings

Total pollution reduction

RECP OPTIONS ELECTRI	CITY (KWH/YR) RECP OF	$\mathbf{PTIONS} \mathbf{TOTAL} \mathbf{CO}_2 - \mathbf{EQ} (\mathbf{TONNES} / \mathbf{YR})$
Option 1: 7	00,000 Total	: 72.8

The company's main goal was to curb excessive electricity consumption and tackle the high annual energy costs. Thanks to the UNIDO RECP Demonstration Project, the company learned about the potential benefits of installing a PV solar panel and successfully proceeded with the recommended measure. The results, paired with the overall positive experience of being a RECP Demonstration Company have inspired the staff to be more confident when thinking of technological upgrades in future, said the company director, Mr. Davit Dalakishvili.

The introduction of RECP has been part of the EU-funded EU4Environment Action and executed by UNIDO. In this context, **Nektari-2008** 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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