



## 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.

## "BI PLAST" LLC - PRODUCTION OF PLASTIC ITEMS



### Company overview

**Location:** Mtskheta, Mtskheta-Mtianeti region

**Key products:** plastic items

**No. of employees:** 15

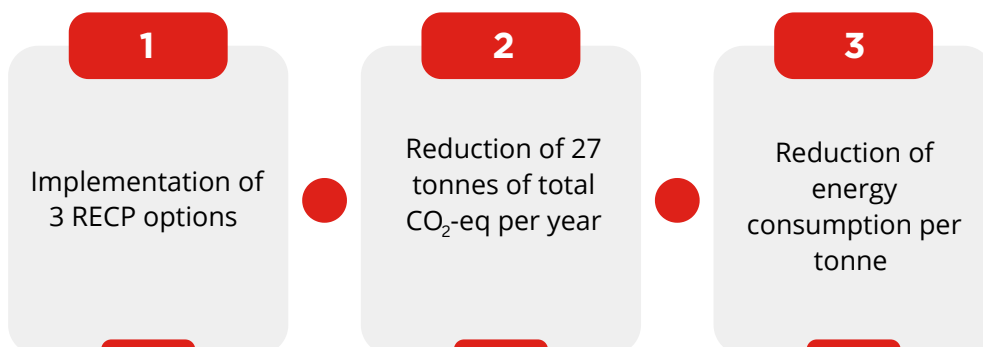
**Main markets:** Georgia

**Founding year:** 2017



"Bi Plast" is a manufacturer of plastic items. 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 three RECP options. Some of the biggest challenges for the enterprise were the allocation of internal financial resources, and access to 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 three were prioritized. The suggested RECP recommendations included medium and low-cost measures:

**RECP Option 1.** Installation of a photovoltaic (PV) system: the measure mainly consists of installing PV panels with a capacity of 100 kW. This would significantly reduce electricity demand and CO<sub>2</sub>-eq emissions.

**RECP Option 2.** Installation of a SCADA system for monitoring and analysing energy data: the Supervisory Control and Data Acquisition (SCADA) system is used for controlling, monitoring, and analysing industrial devices and processes. The system would help to remotely control the manufacturing process, improve data monitoring and analysis at the company level, as well as assist in planning maintenance works.

**RECP Option 3.** Collect and recycle defective polyethylene (PE) woven bags: after considering the cost of recycling, this measure would help decrease the need for raw materials and reduce the amount of generated waste.

## SAVING ACHIEVEMENTS

### RECP measures

<b>OPTION 1</b>	Installation of a photovoltaic system
<b>OPTION 2</b>	Installation of a SCADA system for monitoring and analysis
<b>OPTION 3</b>	Collect and recycle defective PE woven bags

### Economic key figures

RECP OPTIONS	INVESTMENT (EUR)	SAVINGS (EUR/YR)	PAYBACK PERIOD (YR)
Option 1:	90,000	14,025	6.4
Option 2:	6,000	1,859	3.2
Option 3:	1,083	4,542	0.2

### Resource savings

RECP OPTIONS	ELECTRICITY (KWH/YR)	MATERIALS (TONNES/YR)
Option 1:	170,000	/
Option 2:	22,538	/
Option 3:	/	7.5

### Total pollution reduction

RECP OPTIONS	TOTAL CO <sub>2</sub> -EQ (TONNES/YR)	WASTE (TONNES/YR)
Option 1:	23.8	/
Option 2:	3.2	/
Option 3:	/	7.5

The introduction of RECP has been part of the EU-funded EU4Environment Action and executed by UNIDO. In this context, **Bi Plast** joined the RECP Clubs 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](http://www.eu4environment.org)

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