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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.

"SAGAREJO-2009" LLC - EGGS PRODUCTION



Company overview

Location: Sagarejo, Kakheti Key products: eggs No employees: 22 Main markets: Georgia Founding year: 2009

"**Sagarejo-2009**" is an eggs producer. 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. 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 four were prioritized. The suggested RECP recommendations included medium and low-cost measures:

RECP Option 1. The installation of a photovoltaic (PV) system: the installation of a 200 kW PV system would help generate the electricity needs for the company, also reducing the amount of CO_2 -eq emissions.

RECP Option 2. Replacing the diesel-powered air heater with an electric and automatically-controlled one: this measure would introduce a new source of power for the air heater in the chicken incubator, as well as reduce the CO_2 -eq emissions.

RECP Option 3. The establishment of a manure composting scheme (collection of dry matter): the measure would facilitate the collection and selling of the dry matter for the price of approximately 24 EUR per tonne.

RECP Option 4. The use of electric vehicles instead of diesel-powered ones: this entails the replacement of diesel-powered mini-vans with electric ones in order to reduce the costs of transportation and the respective amount of CO_2 -eq emissions.

SAVING ACHIEVEMENTS

RECP measures

OPTION 1	Installing a photovoltaic system	
OPTION 2 Replacing the diesel-powered air heater with an ele automatic-controlled one		
OPTION 3	Establishing a manure composting scheme	
OPTION 4	Replacing diesel-powered vehicles with electric ones	

Economic key figures

RECP OPTIONS	INVESTMENT (EUR)	SAVINGS (EUR/YR)	PAYBACK PERIOD (YR)
Option 1:	180,000	28,050	6.4
Option 2:	5,000	9,609	0.5
Option 3:	5,000	20,000	0.3
Option 4:	15,000	12,375	1.2

Resource savings

RECP OPTIONS	ELECTRICITY (KWH/YR)
Option 1:	340,000
Option 2:	130,950
Option 3:	/
Option 4:	171,233

Total pollution reduction

RECP OPTIONS	TOTAL CO2-EQ (TONNES/YR)	WASTE (TONNES/YR)
Option 1:	47.6	/
Option 2:	3,404.7	/
Option 3:	/	800
Option 4:	4,452.1	/

The introduction of RECP has been part of the EU-funded EU4Environment Action and executed by UNIDO. In this context, **Sagarejo-2009** 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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United Nations Industrial Development Organization

Ms. Tatiana Chernyavskaya EU4Environment Project Manager Tel: +43 1 26 0 26 5520 E-mail: <u>t.chernyavskaya@unido.org</u>



Energy Efficiency Centre Georgia

0160, 19 D.Gamrekeli Str. VI floor, office 611, Tbilisi, Georgia Tel: +99 53 2224 25 42 E-mail: <u>eecgeo@eecgeo.org</u> Web: <u>www.recp.ge</u>