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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.

## TELETI POULTRY FACTORY" LTD - CHICKEN & EGG PRODUCTION



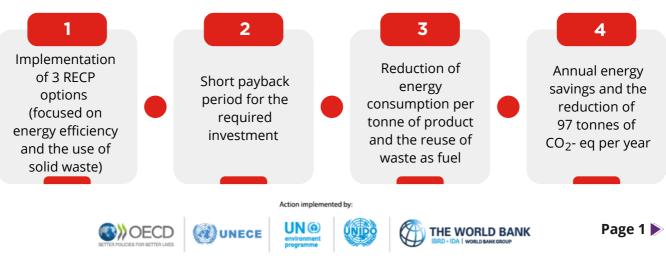
#### **Company overview**

Location: Gardabani municipality, Tsalaskuri village Key products: chicken, eggs No. of employees: 15 Main markets: national (Tbilisi, Rustavi) Founding year: 2014



"Teleti Poultry Factory" is a small-sized poultry farm. Established in 2014, it produces around 14,000 eggs per day and about 5 million eggs annually, which are then distributed to local markets in Tbilisi and Rustavi. The production is concentrated in two buildings intended for incubation and egg production. Currently, the main production site is under significant renovation, as the company plans to build an adjacent building for housing chicken, and to expand existing facilities to withstand an increased load. As a result, the company's attention and resources have shifted towards renovation, with the implementation of RECP measures taking place separately. Nevertheless, motivated to address its excess waste (which is stored on a nearby open field or donated to local farmers as fertilizer), Teleti 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 three were prioritized. These include medium and low-cost measures:

RECP Option 1. Installation of a biogas plant: This mainly consists of the construction of a biogas plant, which would afterwards be integrated into the heating of the building. The heating units would also be modified to run on natural gas. The measure would largely eliminate the company's dependency on fossil fuels and ensure that it is legally compliant with the new environmental regulations that the Government of Georgia plans to implement in the upcoming years. Additionally, the fertilizers resulting from biogas production would also benefit local farmers.

**RECP Option 2. Installation of a heat recovery system:** The installation of a heat recovery system in the building ventilation system will help reduce energy consumption required for heating.

RECP Option 3. Replacing light bulbs with LEDs: The installation of new light-emitting diode (LED) bulbs instead of old incandescent bulbs will decrease electricity consumption and costs.

#### SAVING ACHIEVEMENTS **RECP** measures Installation of a biogas plant **OPTION 1 OPTION 2** Installation of heat recovery system **OPTION 3** Replacing light bulbs with LEDs **Economic key figures RECP OPTIONS INVESTMENT (EUR)** SAVINGS (EUR/YR) **PAYBACK PERIOD (YR)** 40,500 14,000 2.9 Option 1: Option 2: 4,000 3,000 1.3 Option 3: 280 640 0.4

#### **Resource savings**

| RECP OPTIONS | NATURAL GAS (KWH/YR) | ELECTRICITY (KWH/YR) | DIESEL (KWH/YR) |
|--------------|----------------------|----------------------|-----------------|
| Option 1:    | 60,000               | /                    | /               |
| Option 2:    | /                    | /                    | 97,500          |
| Option 3:    | /                    | 7,200                | 1               |

### **Total pollution reduction**

| <b>RECP OPTIONS</b> | TOTAL CO <sub>2</sub> -EQ (TONNES/YR) | WASTE (TONNES/YR) |
|---------------------|---------------------------------------|-------------------|
| Total:              | 97                                    | 720               |

66 The company was facing excessive biomass waste which was difficult to use or recycle. Thanks to the RECP Demonstration Project, we learned to systematically upgrade our technology and invest in awareness raising among management staff. The two are particularly important when it comes to maintaining the good quality of our products and being competitive on the market. As we plan to improve production quality and increase capacity, the RECP Project has inspired us to come up with new ideas and approaches regarding implementation of RECP measures in future, said the company director, Mr. Zviad Gogoladze.

The introduction of RECP has been part of the EU-funded EU4Environment Action and executed by UNIDO. In this context, Teleti Poultry Factory 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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