







## Advancing resource efficient and cleaner production in Armenia

## 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 can effectively 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.

### "HOVIK PAPIKYAN - BEEGINNING" PE - FOOD PRODUCTION

### **Company overview**



Location: Shirak marz, Gyumri

Key products: Honey, honey wine (pomegranate and honey wine,

grape and honey wine, blackberry and honey wine)

No. of employees: 3 Main markets: Armenia Founding year: 2023

Certification: EcoGlobe organic certification (ISO 17065 compliant)

"Hovik Papikyan-BEEGINNING" PE was established in 2023, drawing on local traditions, knowledge, and experience, and taking advantage of the opportunity to experiment with various forms of beekeeping (such as bio-dynamism). The company produces around one tonne of organic honey annually, with its market extending to various regions across the country, including Yerevan. The bio-dynamic approach is based on respecting the natural lifestyle of the bees and keeping the integrity of the colonies. It aims to promote the health of bees by minimising stress factors and by letting them develop in accordance with their true nature. Motivated to address production costs and improve product quality, the company participated in the RECP Green Clubs project under EU4Environment (2019-2024). This publication details the company's experience reported after the assessment exercise conducted in 2024.

#### **BENEFITS**

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3 RECP options focused on energy efficiency 2

Potential energy savings of 12,000 kWh annually 3

Average payback period of 1.6 years

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Potential emissions reduction of 5.04 tonnes of CO<sub>2</sub> annually

Action implemented b











# The project's approach

The RECP assessment examined the production site and identified several RECP options, out of which the following three were prioritised by the company. These include medium and low-cost measures:

RECP option 1: Installing photovoltaic (PV) solar panels: With a capacity of 8 kWp, the PV solar panels would sufficiently cover the company's electricity needs, generating around 12 MWh of electricity annually.

**RECP option 2: Producing compost:** The organic waste from the kitchen, garden, and crop fields could be collected and dried for approximately 8-12 days, then stored into a pit to decompose, resulting in about 500 kg of compost per year.

RECP option 3: Improving the wastewater irrigation system: The technology used to process natural waste (e.g., fruit waste) would allow the company to use 90% of the water from the production process for irrigation, amounting to 4,890 litres per year.

Additionally, two good housekeeping proposals were suggested to better protect the environment, and improve the company's productivity: the construction of a tasting room (investment worth 3,5000 EUR), and the development of ecotourism in Shirak Marz (investment worth 1,000 EUR).

# SAVING ACHIEVEMENTS

### **Main RECP actions**

OPTION 1	Installing photovoltaic (PV) solar panels	
OPTION 2	Producing compost	
OPTION 3	Improving the wastewater irrigation system	

## **Economic key figures**

RECP OPTIONS	INVESTMENT (EUR)	SAVINGS (EUR/YR)	PAYBACK PERIOD (YR)
Option 1:	6,000	1,200	5
Option 2:	_	17.8	-
Option 3:	-	1.2	-

## Resource savings

RECP OPTIONS	WATER CONSUMPTION (M <sup>3</sup> /YR)	ENERGY (KWH/YR)
Option 1:	-	12,000
Option 2:	-	-
Option 3:	4.89	-

## **Total pollution reduction**

RECP OPTIONS	TOTAL CO <sub>2</sub> -EQ (TONNES/YR)	SOLID WASTE (T/YR)
Total:	5.04	0.5

Once all RECP recommendations are fully implemented, the company will benefit from ensuring the necessary comfort and stable microclimate for its bees. So far, the company is expecting economic savings of up to 40-60% by reducing the amount of energy required for heating, said a member of staff from "Hovik Papikyan -BEEGINNING" PE.

The introduction of RECP Green Clubs has been part of the EU-funded EU4Environment Action and executed by UNIDO. In this context, "Hovik Papikyan - BEEGINNING" PE joined the 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:

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