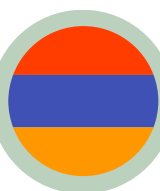




Funded by the European Union



## 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 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.

### "SEVAN AQUA" CJSC - FISH FARMING

#### Company overview



**Location:** Karchaghbuyr

**No. of employees:** 22

**Founding year:** 2015

**Key products:** summer trout, gegharkuni trout, sevan trout, rainbow trout

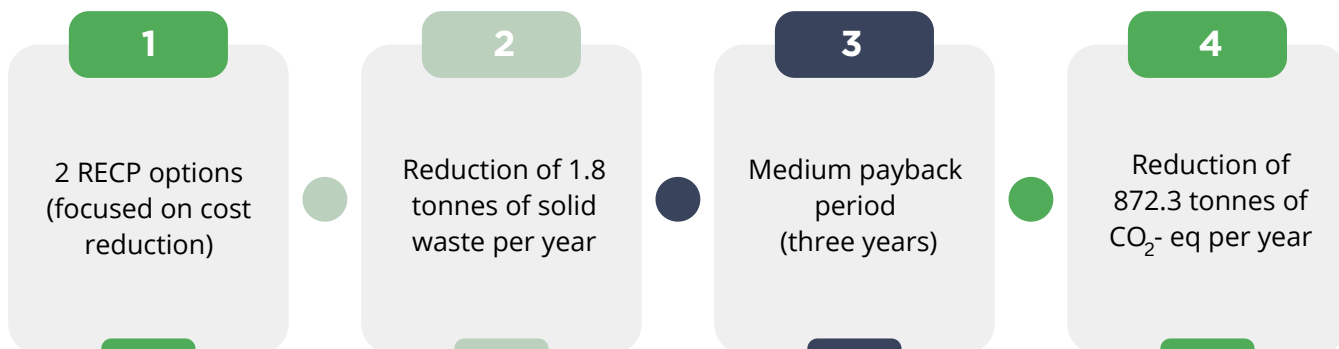
**Main markets:** Armenia, Russia, the USA

**Certifications:** ISO 9001, HACCP (in progress)



"Sevan Aqua" is a state-owned, fish farming company. Established in 2015 to restore the fish stock in lake Sevan, the enterprise continued to exercise its environmental duty and maintain the reproduction and development of the trout fish. Located within the National Park, the company pursues a policy based on clean production, which limits the generation of solid waste and wastewater. As a self-funded organisation, its main goal is to reduce production costs as much as possible. Motivated to address the issues of resource efficiency and cleaner production, the company participated in the RECP Demonstration Project under EU4Environment (2019-2024). This publication shows the company's experience reported after the monitoring exercise conducted in 2022-2023.

### BENEFITS



Action implemented by:



# The project's approach

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

**RECP Option 1. Installation of two ultraviolet (UV) lamps for treating the inflow water:** This measure would provide the disinfection of the fresh inflow water (5%) within the closed cycle system (95%), and prevent fish fingerlings from getting infected.

**RECP Option 2. Installation of a drying system to produce dry humus:** This measure would allow the company to produce high-quality fertiliser from the organic sludge resulting from the sewage treatment plant, and further sell it on the market.

## SAVING ACHIEVEMENTS

### Main RECP actions

#### OPTION 1

Installation of two UV lamps for treating the inflow water

#### OPTION 2

Installation of a drying system to produce dry humus

### Economic key figures

RECP OPTIONS	INVESTMENT (EUR)	SAVINGS (EUR/YR)	PAYBACK PERIOD (YR)
Option 1:	25,385	22,232	3
Option 2*:	1,740	720	3

\*The units consist of 150,000 fish eggs, 128,000 larvae, and 12,220 fingerlings.

### Resource savings

RECP OPTIONS	MATERIALS (UNITS/YR)**	WATER (M <sup>3</sup> /YR)/%
Option 1:	290,220	2,700,000/95
Option 2:	/	/

\*\* The units consist of 150,000 fish eggs, 128,000 larvae, 12,220 fingerlings, and 3,250 packages of feed.

### Total pollution reduction

RECP OPTIONS	TOTAL CO <sub>2</sub> -EQ (TONNES/YR)	WASTE (UNITS/YR)***
Total:	872.3	293,450***

\*\*\* The units consist of 3,250 packages of feed, 150,000 eggs, 128,000 larvae, and 12,200 fingerlings.

“ Our company was facing high production costs. Thanks to the RECP Demonstration Project, we learned to systematically upgrade and modernise our production practices based on resource efficiency and clean production. As the enterprise plans to learn all about the requirements of producing organic food, to tap into new markets where there is a high demand for fresh fish, and to organise regular exports, the RECP project has inspired us to come up with new ideas on the future implementation of RECP measures, said the director, Mr. Vardan Mamikonyan. ”

The introduction of RECP has been part of the EU-funded EU4Environment Action and executed by UNIDO. In this context, **Sevan Aqua** joined the RECP Demonstration project 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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