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Advancing resource efficient and cleaner production in Azerbaijan

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.

CASPIAN CABLE SYSTEMS LLC - WIRE AND CABLE PRODUCTION

Company Overview



Location: Absheron

Key products: wire and cable production

No. of employees: 43

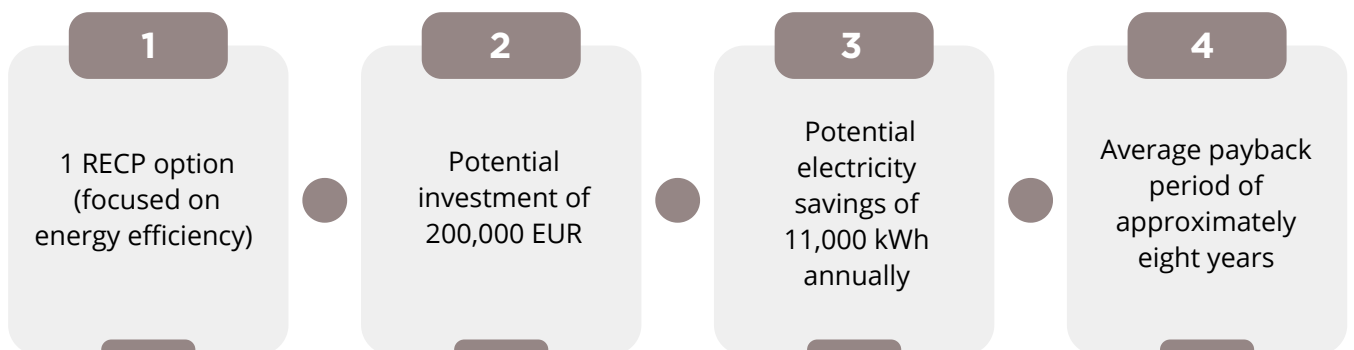
Main markets: Azerbaijan

Founding year: 2019

Certifications: ISO 9001, 2015, 14001, 2005, OHSAS 18001-2007, AZS conformity certificate

“Caspian Cable Systems” LLC is a leading supplier of cable products in the Azerbaijani market, specialising in the production of power and communication cables that meet international quality standards. With an annual production capacity of 200-250 tonnes, and a turnover of 3-5 million EUR, the company is committed to using raw materials efficiently, minimising waste, and reusing materials wherever possible. To achieve these goals, the company has adopted the RECP methodology as a key tool. Motivated to address production costs, the company also participated in the RECP Demonstration Project under EU4Environment (2019-2024). This publication details the company's experience reported after the assessment exercise conducted in 2024.

BENEFITS



Action implemented by:



UNITED NATIONS
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The project approach

During the RECP assessment, a comprehensive analysis of the production processes was carried out. Since the company already meets the key performance indicators for its production, the primary focus of the RECP team was on advancing technological progress related to energy efficiency. The RECP team examined the production site and identified the following option:

RECP Option 1. Installing a reactive power compensation facility: The primary load on the intra-plant network consists of electric motors, which results in a low power factor. This low power factor leads to increased consumption of reactive energy, causing electricity losses across both the internal power networks of the station and the medium and high voltage power supply, distribution, and transmission networks. To address this issue, a suggestion was to install reactive power meters within the station's electrical network to accurately determine the power factor level. Once the power factor is assessed, the parameters for a reactive power compensation device could be calculated and implemented, reducing energy losses and improving overall efficiency.

SAVING ACHIEVEMENTS

RECP measures

OPTION 1

Installing a reactive power compensation facility

Economic key figures

RECP OPTIONS	INVESTMENT (EUR)	SAVINGS (EUR/YR)	PAYBACK PERIOD (YR)
Total:	200,000	5,000	8

Resource savings

RECP OPTIONS	ELECTRICITY (KWH/YR)
Total:	11,000

Total pollution reduction

RECP OPTIONS	CO ₂ -EQ (T/YR)
Total:	2.4

The introduction of RECP has been part of the EU-funded EU4Environment Action and executed by UNIDO. In this context, **Caspian Cable Systems LLC** 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

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