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# Success stories on waste-related RECP measures from Armenia



Ms. Nune Harutyunyan, National Coordinator of RECP activities,  
REC Caucasus Armenia

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## “SEVANI ISHKAHN-2” CJSC

Sector	1020, "Processing and preserving of fish, crustaceans and molluscs"
Products	Fresh chilled summer trout and Gegharkunik trout with a peeled belly, fresh chilled rainbow trout fillet /red meat /minced, lightly salted rainbow trout fillet in vegetable oil or red meat, rainbow trout fillet cold-smoked without skin, cold smoked rainbow trout fillet, slices or fillet in vegetable oil.
Site address	Factory: Jrarat village, Armavir marz
Website	<a href="https://sevantrout.com/">https://sevantrout.com/</a>
Legally accountable person	Tigran Vardanyan
Phone	+37499777849
E-mail	tigran.vardanyan@sevantrout.com
Size of the company	Medium
No. of employees	10
Annual production	26 120 kg/yr   specify units (e.g. tons/year)
Year of establishment (of the site) / Year of collaboration with EU project	2016 / September 2020
Exportation markets	Armenia, USA, Russia
National market	Armenia

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## Measures proposed

**Process solid waste into feed additive for animals or poultry (Material and waste reduction)**



**Installation of the alternative water pump with a small capacity (Energy Management, Water and wastewater reduction)**

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## Solid waste generation

Fish remain waste generated per year  
**8-10 tons (45-50% of raw fish).**

The company pays around **6587 Euro per year** for removing the waste.



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Proposed measure - grinding fish residues produced during the production and mixing with fish feed as a feed additive

No investments are required.

Expected results - 8.6 tons/year waste reduction.

Saving - 5500 Euro per year (only for not paying for waste removal)

The company will have extra benefits from selling the feed additives

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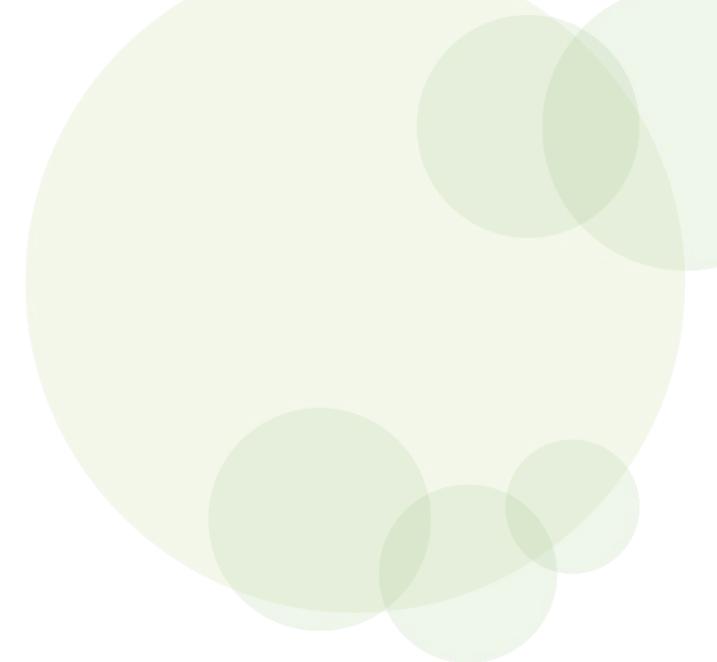




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## Ծնորհակալություն ուշադրության համար!

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# Success stories on waste-related RECP measures from Azerbaijan



Mr. Yashar Karimov, National Coordinator of RECP activities,  
UNIDO Results 2 Component, Azerbaijan

Action implemented by:





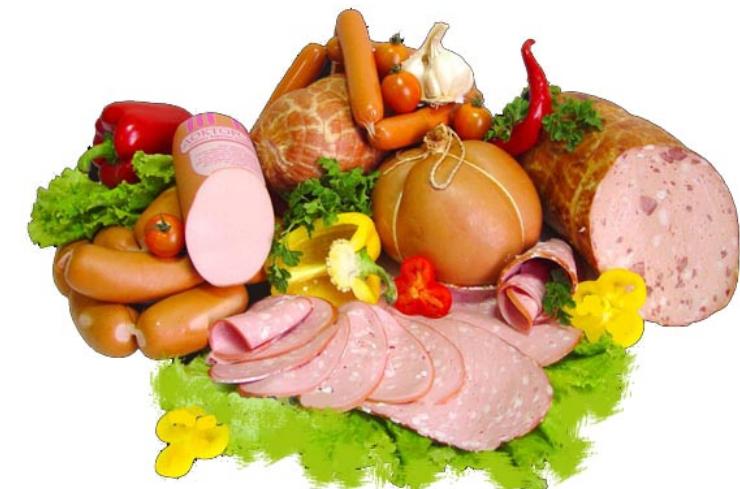
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## «M & T» LTD

Industry Sector	Food Industry/Agriculture
Products	Meat products (sausages, etc.)
Site address	A.Mustafayev str. Baku, Azerbaijan
Contact person for the RECP project	Azada Rzayeva
Phone	+994125301007
E-mail	info@mt-ltd.az
No. of employees	123
Year of establishment (of the site)	1993
Year of collaboration with EU project	2014
Exportation markets, where applicable	N/A
National market, where applicable	Mainly Baku and other big cities





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## Brief description of production process

- Preparation of raw material.
- Preparation of mixture.
- Filling of mixture into skins.
- Cooking and/or smoking process.
- Cooling.



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## Proposed Measure - 1

### Separate collection and selling of recyclable solid waste to recycling companies

Investment – 0

Reduction of waste – 14 T/Year

Financial savings – 200 EUR

Additional income – 800 EUR



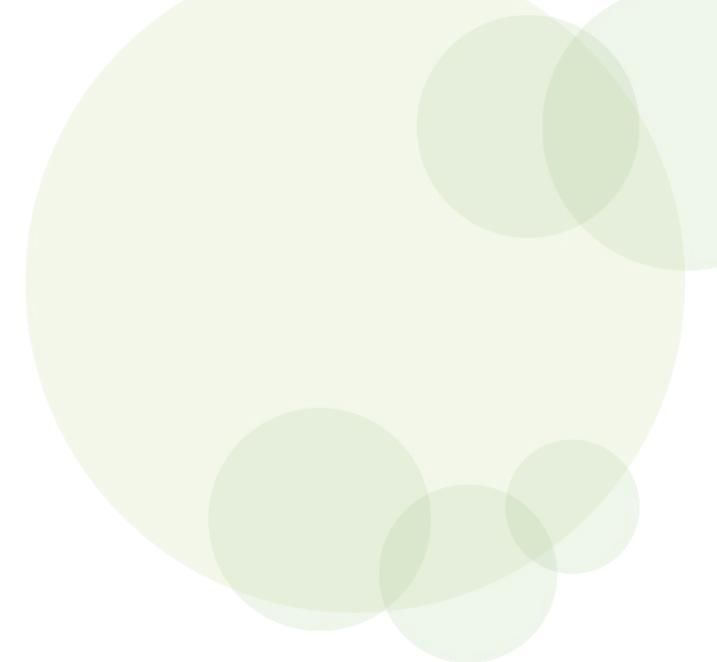
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## Diqqətinizə görə təşəkkürlər!

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# Success stories on waste-related RECP measures from Belarus



Dzmitry Konik, Coordinator on Circular Economy-related activities, RECP Center, Belarus

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## OJSC "Borisovskiy Combine of Bread Products"

Industry Sector	Food Industry/Agriculture	
Products	Flour, cereals and cereal products, pasta, semi-finished flour products, compound feed production	
Site address	41 Truda Street, Borisov, Minsk Region, Republic of Belarus	
Contact person for the RECP project	Victoria Sushkevich	
Phone	+375447334369	
E-mail	suos@uladar.by	
No. of employees	623	
Annual production	220 822	tones/year
Year of establishment (of the site)	1944	
Year of collaboration with EU project	2020	
Exportation markets, where applicable	Moldova, Lithuania, Russian Federation, China, Ukraine, Armenia, Georgia, Azerbaijan	
National market, where applicable	The whole country	

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## Proposed Measures

### 1) Selling husks to companies as raw material for the production of fuel pellets

Investment – 0.00 EUR

Financial savings – 31660 EUR

Immediate Payback

Reduction of waste – 1535 tones/Year

Other benefits - Generating additional profits



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## Proposed Measures

### 2) Condensate recycling

Investment – 2500 EUR

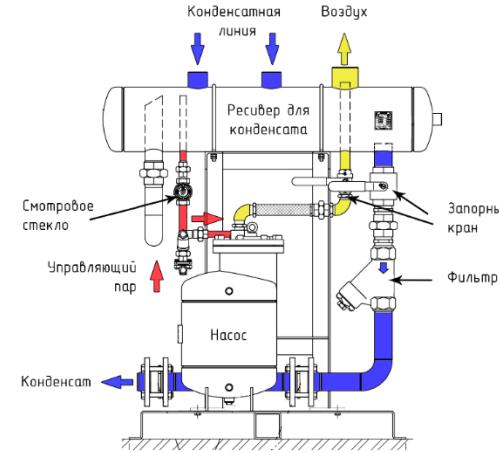
Financial savings – 3400 EUR

Payback period – 1,36 Years

Environmental savings – 424 m<sup>3</sup> of water

Other benefits - 44387 kWh energy,

2 tones of chemical reagents used in water treatment



### 3) Pipe insulation

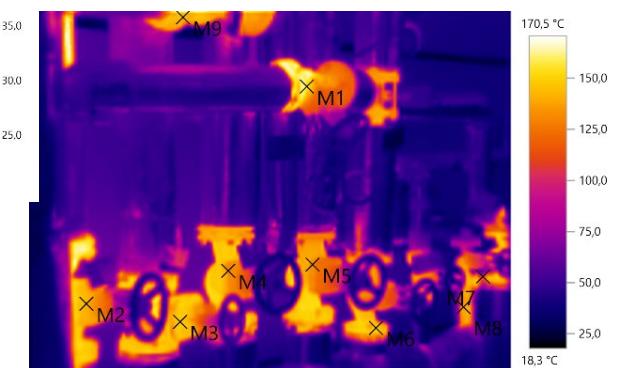
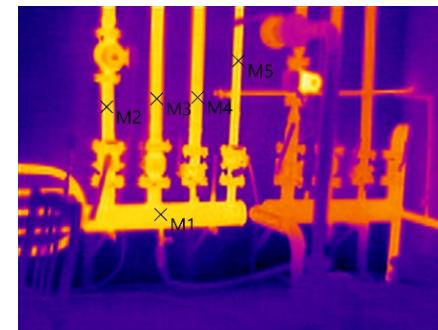
Investment – 2700 EUR

Financial savings – 10280 EUR

Payback period – 0,3 Years

Environmental savings – a reduction of 2.3 t/year of emissions

Other benefits - reduction of natural gas consumption by 2356 m<sup>3</sup> per year



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## OJSC ""Lyakhovichi cannery""

Industry Sector	Food Industry/Agriculture	
Products	Juices, nectars, sauces, natural, canned food, marinades, jams	
Site address	8 Desyukevicha str. Lyakhovichi, Brest Region, Republic of Belarus	
Contact person for the RECP project	Yuri TULENKOV	
Phone	+375163321372	
E-mail	<a href="http://lkz.brest.by">http://lkz.brest.by</a>	
No. of employees	151	
Annual production	19158	tub/year
Year of establishment (of the site)	1949	
Year of collaboration with EU project	2021	
Exportation markets, where applicable	Russian Federation	
National market, where applicable	The whole country	



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## OJSC "Lyakhovichi cannery"

### 1) Composting organic waste

Investment – 670 EUR

Financial savings – 530 EUR

Payback period – 1,26 Years

Environmental savings – 1,809 T.CO<sub>2</sub>/Year



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## OJSC "Lyakhovichi cannery"

### 2) Installing water sprays on the wash hoses

Investment – 250 EUR

Financial savings – 1713 EUR

Payback period – 0,15 Years

Environmental savings – 2903 m<sup>3</sup>/year of clean water, and wastewater

Other benefits - Improved quality and shorter cleaning times for plant rooms and equipment



Принц. действ. пистолетов-распылителей



Точ. струя с дальн. выбросом



Конич. струя



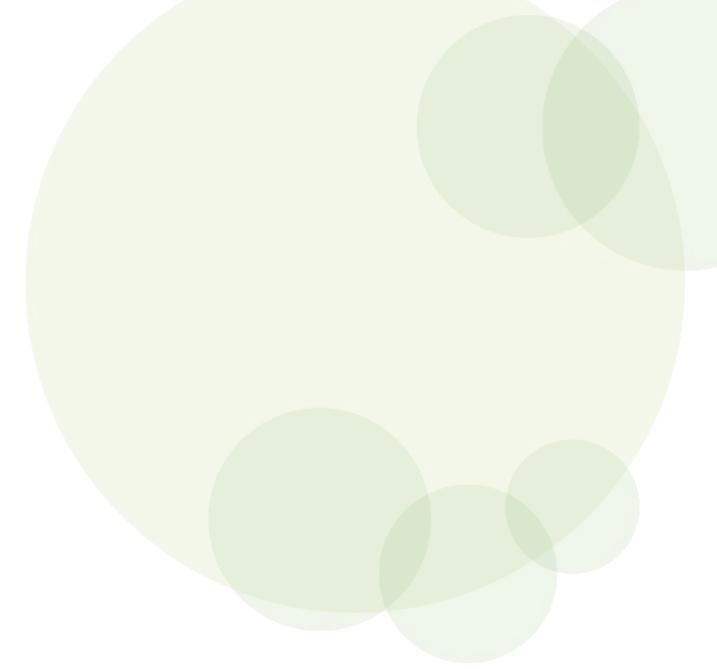
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## Благодарю за внимание!

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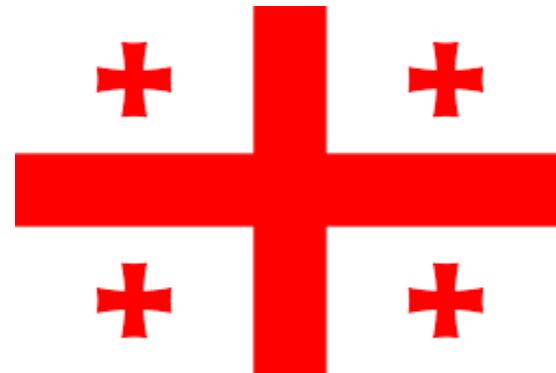




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# Success stories on waste-related RECP measures from Georgia



Mr. Konstantine Barjadze, Energy Auditor,  
Energy Efficiency Center, Georgia

Action implemented by:





## LTD “Teleti Poultry Factory”

Industry Sector	Food Industry/Agriculture	
Products	Eggs	
Site address	Vil. Tsalaskuri, Gardabani Municipality, Georgia	
Contact person for the RECP project	Zviad Gogoladze	
Phone	+995577670760	
E-mail	Poultry.teleti@gmail.com	
No. of employees	15	
Annual production	5 million	Eggs/year
Year of establishment (of the site)	2014	
Year of collaboration with EU project	2021	
Exportation markets, where applicable	N/A	
National market, where applicable	Tbilisi and Rustavi	





## Proposed Measures

### 1) Installation of a Biogas Plant

Investment – **40 000 EUR**

Financial savings – **4 000 EUR (existing production)**  
**14000 EUR (full potential of biomass)**

Payback period – **10 Years (existing production)**  
**2.9 Years (full potential of biomass)**

Environmental savings – **80t CO<sub>2</sub> /year**

Reduction of waste (*manure*) – **500t /year**

Other benefits - **350t of fertilizer**



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## Proposed Measures

### 2) Recuperation of Heat

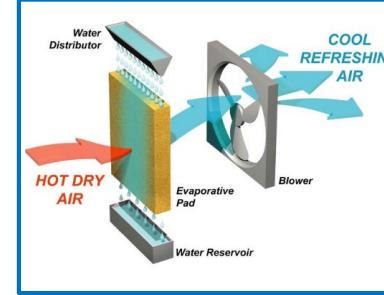
Investment – 4 000 EUR

Financial savings – 3 000 EUR

Payback period – 1.3 Years

Heat Energy saving – 52 kWh of heat can be saved per (delta) 1 °C

Environmental savings – reduction of emissions from diesel/biomass



### 3) Replacement of lighting system

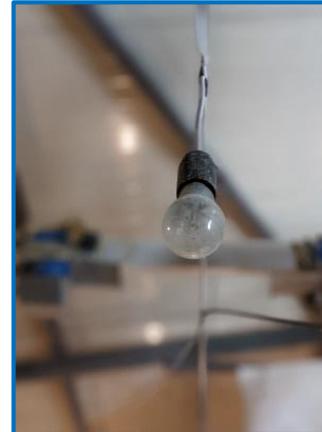
Investment – 280 EUR

Financial savings – 640 EUR

Payback period – 0.4 Years

Energy saving – 7 200 kWh/year

Environmental savings – 1 t CO<sub>2</sub>/year



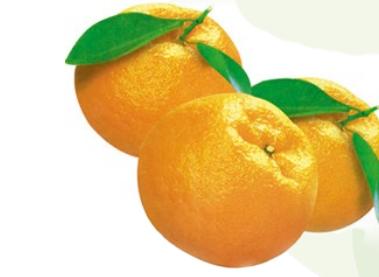
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## LTD “GIAM Group”



<b>Industry Sector</b>	Food	
<b>Products</b>	- Tangerine Juice Concentrate - Tangerine Puree	
<b>Site address</b>	Rustaveli 174, Kobuleti, Adjara Region	
<b>Contact person for the RECP project</b>	Mirian Memarne	
<b>Phone</b>	+995 577559908	
<b>E-mail</b>	mirian-m@yandex.ru	
<b>No. of employees</b>	70	
<b>Annual production</b>	800-1 000	tons/year
<b>Year of establishment (of the site)</b>	2006	
<b>Year of collaboration with EU project</b>	2021	
<b>Exportation markets, where applicable</b>	Japan, Israel, Swiss, Italy...	
<b>National market, where applicable</b>	N/A	





## Proposed Measures

### 1) Utilization of Tangerine Waste as Biofuel

Investment – 8 335 EUR

Financial savings – 42 500 EUR

Payback period – 0.2 Years (*one season*)

Natural gas saving – 17 790 m<sup>3</sup> /year

Environmental savings – 273 t CO<sub>2</sub> /year

Reduction of waste (*pressed tangerine*) – 6 600 t/ year

Other benefits – The waste transportation cost reduction



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## Proposed Measures

### 2) Thermal Insulation of Condensate Tank and Pipes

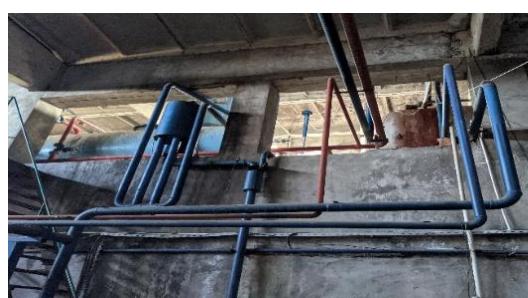
Investment – **1 110 EUR**

Financial savings – **6 020 EUR**

Payback period – **0.2 years (*one season*)**

Natural gas saving – **25 200 m<sup>3</sup>/ year**

Environmental savings – **50 t CO<sub>2</sub>/ year**



### 3) Replacement of Hot Water Circulator Pump

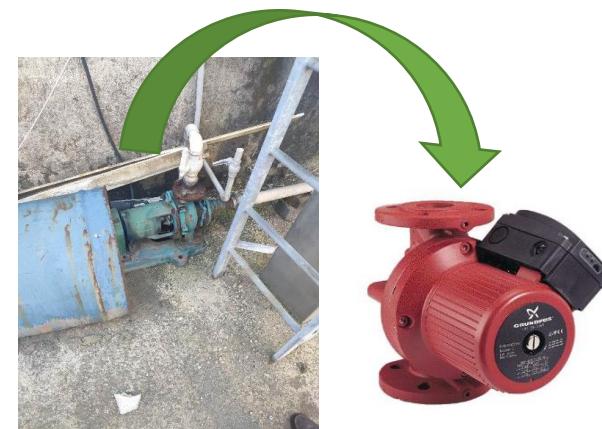
Investment – **1 124 EUR**

Financial savings – **4 250 EUR**

Payback period – **0.3 years (*one season*)**

Natural gas saving – **18 000 m<sup>3</sup> /year**

Environmental savings – **35 t CO<sub>2</sub> /year**

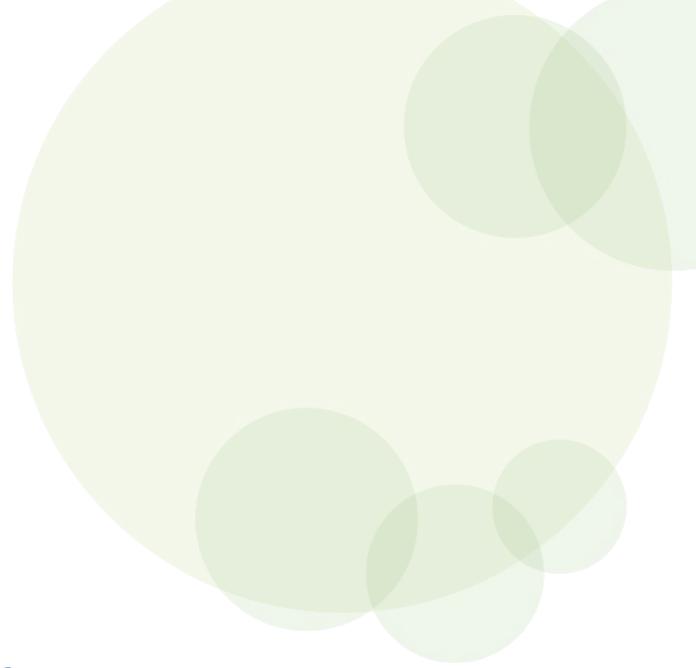


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# გმადლობთ ყურადღებისთვის!

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# Success stories on waste-related RECP measures from Ukraine



Dr. Valeriy Pavshuk, RECP Center, Ukraine

Action implemented by:

## Rakhny Brick Plant, LLC (construction materials)

### Company overview

**Address:** Lisovi Rakhny village, Sharhorod district,  
Vinnytsia oblast

**Key products:** Hyper-pressed facing bricks

**No. employees:** 10

**Main markets:** Ukraine

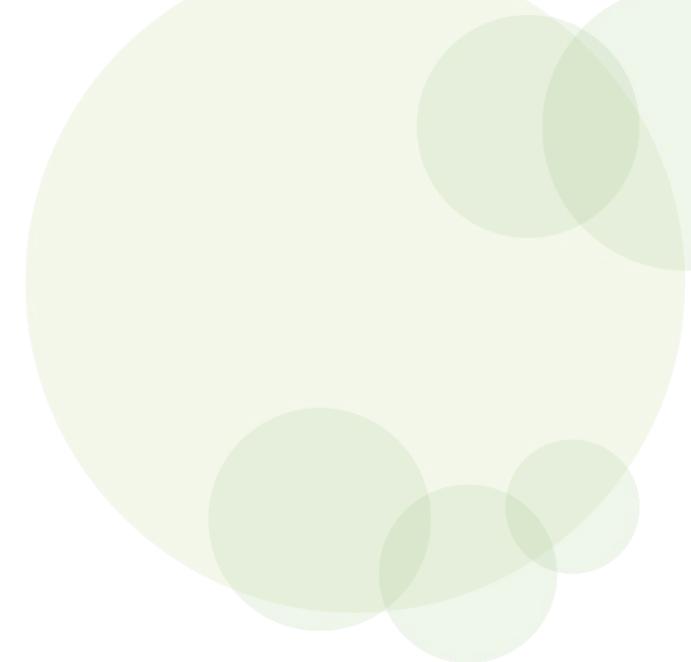
**Founding year:** 2011

**Certification:** own organizational management system



**Rakhny Brick Plant, LLC** produces hyper-pressed facing bricks using a classic technology system where the raw materials extracted from the local deposit fields go through a hyper-press process. The enterprise applies its own internal research to improve the manufacturing process, resulting in high-quality facing bricks.

Action implemented by:



## Benefits

Implementation of 3 RECP options

Payback periods of less than one year

Improvement in material consumption

Reduction of 150 tonnes of waste/year

Reduction of 3 per cent of electricity consumption/year

Emission reduction of 0.65 tonnes of CO<sub>2</sub>-eq/year

Action implemented by:

## Main implemented actions



- Option 1:** Reactive power compensation
- Option 2:** Installing a cooling system for the press machine using hydraulic oil
- Option 3:** Waste processing treatment

Action implemented by:



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## ECONOMIC KEY FIGURES

	Investment (Euro)	Saving (Euro/year)	PBP (years)
Option 1:	590	1,306	0.45
Option 2:	310	1,520	0.2
Option 3:	0	940	0
Total:	900	3,766	-

## RESOURCE SAVINGS

	Waste (tonnes/year)	Materials (tonnes/year)	Electricity (kWh/year)
Option 1:	-	-	1,500
Option 2:	-	1.04	- 61.2
Option 3:	150	-	-
Total:	150	1.04	1,438.8

Action implemented by:



# UKRSTAL DNIPRO-STRUCTURAL STEEL FABRICATION PLANT, PJSC (steel construction)

## Company overview

**Address:** 54 Udarnyiv Str., Dnipro

**Key products:** construction steel

**No. employees:** over 200

**Main markets:** Ukraine

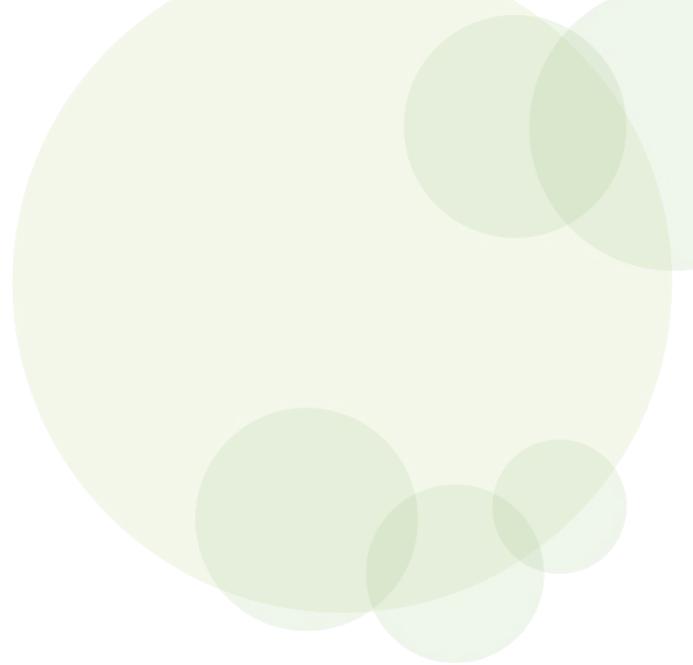
**Founding year:** 1890

**Certification:** ISO 9001, ISO 14001, ISO 45001



**Ukrstal Dnipro, PJSC** produces high quality welded metal structures for various purposes. The firm specialises in the production of metal structures for bridges and for the heavy industry (metallurgical, chemical, defence, and mining industries). Its production capacity is 95,000 tonnes of metal structures per year.

Action implemented by:



## Benefits

Implementation of 13 RECP options

Cost savings of 188,821 EUR/year

Emission reduction of 321 tonnes of CO<sub>2</sub>-eq/year

Reduction of 163.9 tonnes of waste/year and 2,409 m<sup>3</sup> wastewater/year

Reduction of electricity use: 18.4 per cent from the total energy consumption/year

Action implemented by:

## Main implemented actions



- Option 1:** Replacing pneumatic tools with electrical tools
- Option 2:** Optimization of the transformers' switch circuit
- Option 3:** Optimization of the compressor operating modes
- Option 4:** Applying paints which do not require preliminary blasting
- Option 5:** Reduction of metal waste from metal structures
- Other options**

Action implemented by:



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## ECONOMIC KEY FIGURES

	Saving (Euro/year)
Option 1:	7,200
Option 2:	11,825
Option 3:	2,990
Option 4:	36,121
Option 5:	101,379
Others:	29,306
Total:	188,821

## RESOURCE SAVINGS

	Water (m³/year)	Waste (tonnes/year)	Electricity (kWh/year)	Fuel (m³/year)
Option 1:	-	-	79,100	-
Option 2:	-	-	129,900	-
Option 3:	-	-	32,850	-
Option 4:	-	16.9	140,976	-
Option 5:	-	147	-	-
Others:	2,409	-	185,491	39,641
Total:	2,409	163.9	568,317	39,641

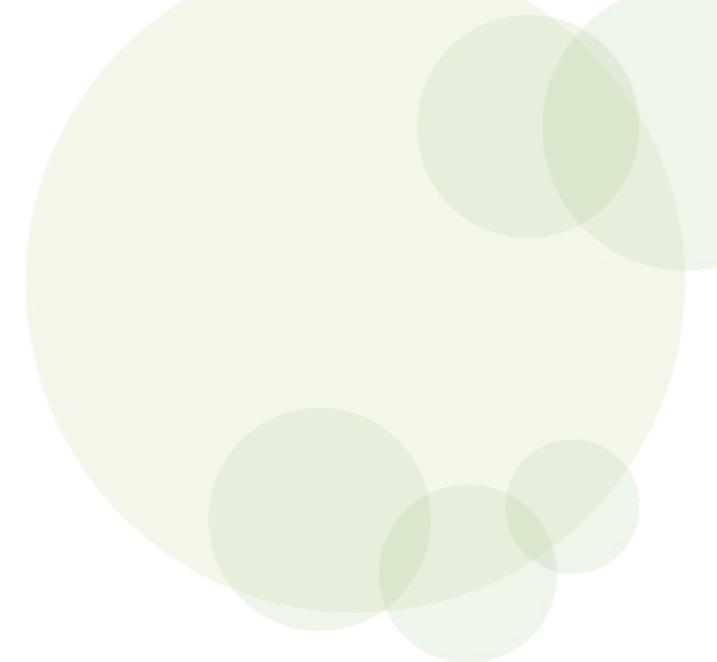
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## Дякую за увагу!

## Thank you for your attention!

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