# **Zwack Unicum Plc.**

# YEARLY RESULTS ACHIEVED WITH MEASURES OF ENERGY EFFICIENCY

2023





This report was made on behalf of Zwack Unicum Plc. (1095 Budapest, Soroksári road 26.)

Contact on behalf of Zwack Plc.: Ottó Kurcsinka

Facility manager and energy engineer

Topic manager on behalf of AlfaPed Ltd.: Péter Gellért

Service development director

e-mail: peter.gellert@alfaped.hu

Contact on behalf of AlfaPed Ltd.: Zoltán Czinege

Research development director

e-mail: zoltan.czinege@alfaped.hu

#### Disclaimer:

The full content of this report is a property of AlfaPed Ltd. and Zwack Unicum Plc. The disclosure of this report or any part of this report, the citing of any of the content elements, the use and utilization of this report or any technological know-how, which has been explored and presented in this report may only take place exclusively with the consilient prior written consent by both of the owners.

# **CONTENTS**

1.	Total energy consumption	3.
2.	Measures to increasing energy efficiency.	4.
3.	Attitude formation activities.	6.
4.	About the energy specialist	7.





#### 1. TOTAL ENERGY CONSUMPTION

This document was made for Zwack Unicum Plc. (1095 Budapest, Soroksári road 95.) on the basis of the following laws and regulations: the 2015. LVII. Law of energy efficiency, the 122/2015. (V. 26.) Government decree, and the 2/2017. (II. 16.) decree by the Hungarian Energy and Utility Regulation Bureau.

Fig. 1. presents the distribution of the total energy consumption by energy sources in 2023.

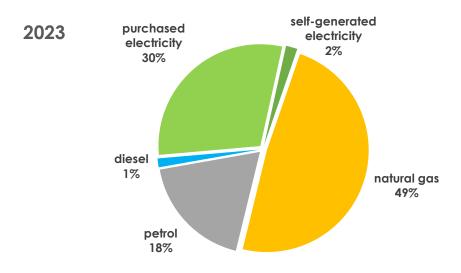
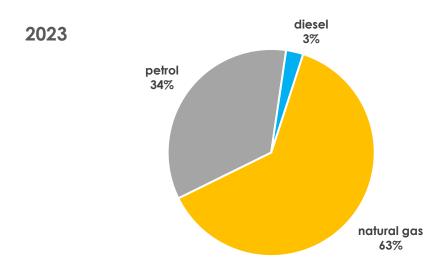


Fig. 1. Distribution of the total yearly energy consumption by energy sources

Fig. 2. presents the distribution of carbon dioxide emission amongst the used energy sources.



In the name of energy consciousness, Zwack Unicum Plc. has been buying green electricity since September 2019, so the carbon dioxide emissions associated with electricity are zero.



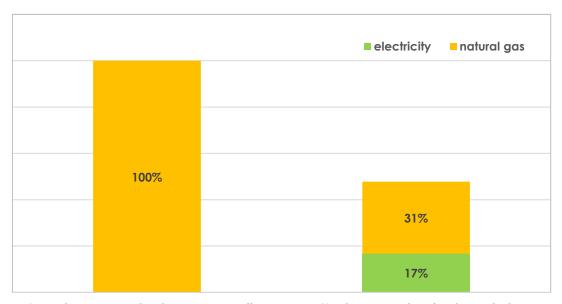


# 2. MEASURES TO INCREASE ENERGY EFFICIENCY

The following table shows the energy efficiency measures to be implemented in 2023. The extent of the planned energy savings show how much reduction in the use of the given energy carrier is expected as a result of each measure.

**Table 1.** Measures to increasing energy efficiency

	Measures taken	Location	Energy source	Extent of the planned energy savings	Realisation date
1.	Geothermal heat pump system installation	Dunaharaszti	natural gas, electricity	52,21%	2023.02.28



Annual average natural gas consumption

Heat pump system implemented

In the figure above, we have assumed 100% natural gas consumption before the heat pump system was installed. The new system is expected to use 52% less energy at the Dunaharaszti site. Thus, future energy use will drop to about 48%, of which natural gas will represent 31% and electricity 17%.





### 3. ATTITUDE FORMATION ACTIVITIES

We believe that environmental education and attitude formation have a prominent rule in solving the environmental problems our society is facing these days. We can preserve and protect the health of our environment by steering the consumer habits into a positive direction.

In this spirit, we would like to join forces to raise people's awareness of the small things, practices and conscious purchases and use that can make our environment and that of our fellow citizens more liveable in the long term.

Table 2. Attitude formation activities

Description of activities	Location	Frequency, per year	Participants reached, cap
Annual training for factory and office staff, highlighting the Company's renewable energy targets	all sites	1	253
Planting the second Miyawaki forest	Budapest IX.	1	0
Sustainability Lecture - MVÜK Zrt Business Community of Hungarian CEOs	Budapest	1	150
Installing a smart TV to display energy efficiency processes	Soroksár, Dunaharaszti	1	0





#### 4. ENERGY SPECIALIST

AlfaPed, Developer, Manufacturer and Service Provider Ltd has been present on the domestic market since 2005. In the nearly 20 years since its foundation, we have maintained our belief in professionalism and, in order to grow, we have built a team of expert engineers to cover the full spectrum of energy audits and inspections. We have recently carried out energy loss mapping work for a number of multinational companies and mediumsized enterprises, and through our studies and surveys we have sought to establish the direction and scope of energy improvements. Our work is characterised by a complexity and systems approach, but we also carry out specific focus reviews on request, if the Client's interest so requires.

Conscious energy management processes based on energy loss mapping and the resulting energyefficient operation are in the interest and responsibility of businesses. The widespread dissemination of these processes, based on the EU directive, has been greatly facilitated by the domestic legislation for large companies with the LVII Act of 2015. With our experienced professionals, we have also joined the process and supported the energy efficiency efforts of many large domestic companies in recent years by implementing and maintaining ISO 50001 energy audits and systems. Our experts have passed the mandatory auditor exam of the Hungarian Energy and Public Utility Regulatory Office and we are also qualified to carry out energy audits.

Our references from the last almost 20 years include energy audits for several multinational companies such as BOSCH, BPW, BUSCH, etc. and we are currently acting as energy consultants for ARCONIC, BUSCH, CONTINENTAL and several large corporate clients. We have also carried out energy audit activities for several of our clients such as BOSCH, LUFTHANSA, HYDRO and RTL. In addition, we provide EEOS consulting services for several of our partners such as HANKOOK, SHELL and WABERER'S.

In addition to energy auditing and energy consultancy services, our company also offers a range of value-added services to our clients, such as:

- audit service enabling the use of corporate tax,
- EKR advice and certification
- development of an energy development plan and/or strategy,
- instrumental review,
- implementation and support of a standardised energy management system (ISO 50001),
- development of a real estate development concept,
- building energy consultancy
- feasibility study,
- education, awareness-raising
- LEAN based energy workshop.