

ENERGY SPECIALIST – ANNUAL REPORT

2024

IN COMPLIANCE WITH THE FOLLOWING LEGISLATION

Act LVII of 2015

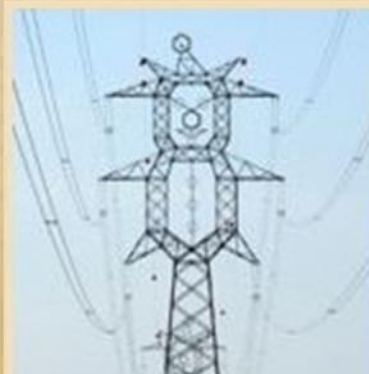
Government Decree 122/2015 (V.26.)

MEKH Decree 2/2017 (II.16.)

COMPANY:	MVM Energetika Ltd.
REPORT DATE:	31 May 2025.
REPORT SUBMITTED:	31 May 2025.
ENERGY SPECIALIST:	Menton Energy Group Kft.



**MENTON ENERGY
GROUP**



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1. PURPOSE OF THE ANNUAL REPORT

Pursuant to Government Decree 122/2015. (V.26.) on the implementation of the Energy Efficiency Act, the energy specialist shall prepare a summary annual report based on the monthly reports prepared for the economic operator required to use it by 15 May of the year following the reporting year, on the energy savings achieved through the energy efficiency improvements implemented and the operational solutions applied, which the economic operator required to use it shall publish on its website by 31 May.

2. GENERAL INFORMATIONS

2.1. INTRODUCTION TO THE SPECIALIST ORGANIZATION

The employees of Menton Energy Group Kft. have more than 10 years of professional experience in the energy sector. Our consultants, energy specialists, design engineers and implementation partners guarantee the comprehensive implementation of all projects, from tendering to implementation.

As an organization accredited by the Hungarian Energy and Public Utility Regulatory Authority, Menton Energy Group Kft. has all the rights and professional experience necessary to perform the activities of an energy specialist.

2.2. THE AUTHORS OF THE REPORT

The following colleagues and experts participated in the preparation of the annual report.

Attila Kovács	Energy specialist Certified mechanical engineer SZÉM6, ME-EN, MV-EN, TÉ, SZÉM5, EN-HŐ, FH, FL, EN-ME, EN-VI MMK directory ID: 01-12640 MEKH directory ID: ESZ-41/2019 and EA-01-44/2016
Zoltán Szabó	Energy specialist Electrical engineer MV-EN, V, EN-ME, EN-VI, ME-EN-VI, Vn MMK directory ID: 13-16070 / 13-66982 MEKH directory ID: ESZ-157/2019

2.3. COMPANY PRESENTATION

General company informations	
Company name	MVM Energetika Ltd.
Headquarters	1031 Budapest, Szentendrei út 207-209.
Company tax number	10760798-2-44
Contact person	Gábor Jósvai Environmental protection expert

MVM Energetika Zártkörűen Működő Részvénytársaság (hereafter 'MVM Ltd.')

is a private limited company registered in Hungary and wholly owned by the Hungarian State. From 1 December 2022, the Ministry of Energy will exercise all ownership rights and obligations over the shares held by the Hungarian State. MVM Ltd. is headquartered in Hungary at 1031 Budapest, Szentendrei út 207-209. Together with the companies it controls, MVM Ltd. forms a vertically integrated national energy group whose operations cover the entire domestic energy sector (hereinafter referred to as the MVM Group). With its power plants, electricity transmission network, gas and electricity distribution networks, and gas (from wholesale to universal service) and electricity trading activities (from wholesale to direct consumer sales), the MVM Group is a competitive strategic holding company and a key player in the domestic electricity and gas markets. The MVM Group also plays a role in the region's energy sector, particularly in the Czech natural gas and electricity trading market through innogy Česká republika a.s. and its subsidiaries, as well as ensuring Hungary's secure natural gas supply by operating four underground gas storage facilities.

MVM Ltd. provides management services to other companies within the MVM Group. These services include management, strategy development, asset management and investment solutions, facilitates cooperation and communication with international organizations and other stakeholders, and provides sustainability performance management, knowledge management, education, training, and certification services.

2.4. LEGAL BACKGROUND

The energy specialist is responsible for promoting energy efficiency and energy-efficient behaviour patterns in the operations and decision-making processes of the economic entity.

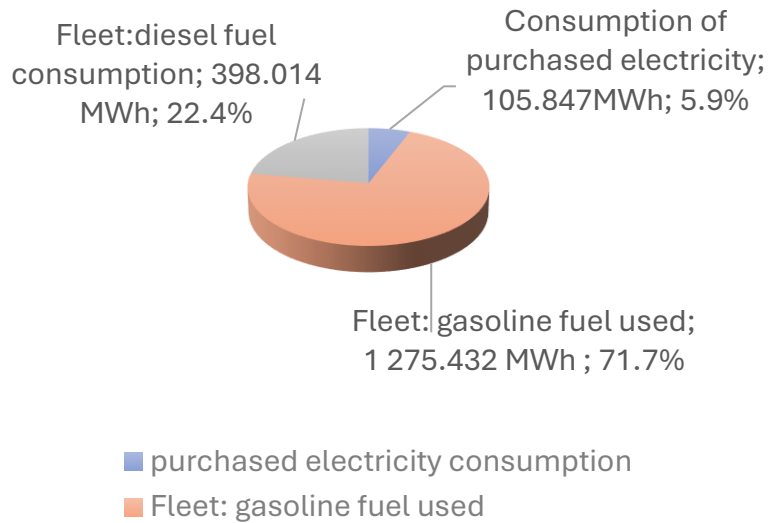
- a) monitors changes in the company's energy consumption and the implementation of energy efficiency measures,
- b) they participate in the preparation of the report pursuant to Section 22/C of the Ehat. tv. and submits the data to the Authority on behalf of the economic operator (see: Section 3(2) of the MEKH Decree 2/2017 (16 February)),
- c) participates in developing the energy efficiency awareness of the company's employees,
- d) they participate as a professional observer and advisor in the regular conduct of energy audits and the development and monitoring of energy management systems in accordance with the EN ISO 50001 standard.
- e) formulates proposals for energy-efficient operating solutions and opportunities to improve energy efficiency,
- f) ensures that the energy savings achieved through implementation of energy efficiency improvements and operating solutions are reported,
- g) prepares monthly reports for the economic operator required to use its services on its activities, the amount of energy consumed by the economic operator required to use its services on a monthly basis, and an assessment of the data in light of previous months consumption data, investments, developments, and other circumstances,
- h) prepares a summary annual report based on monthly reports prepared for the economic operator required to use it by 15 May of the year following the reporting year on the energy savings achieved through the energy efficiency improvements implemented and the operational solutions applied, which the economic operator required to use to publishes on its website by 31 May,
- i) performs tasks related to energy procurement, energy security, and energy efficiency that fall within its remit.

3. SUMMARY ENERGY BALANCE

3.1. ANNUAL ENERGY BALANCE

Name	Use of purchased electricity	Fleet: gasoline fuel used	Fleet: diesel used
Amount of energy (carrier)	105.847 MWh	1,275.432 MWh	398.014 MWh
CO ₂ emissions	38.63 t	318.19 t	106.13 t

Breakdown of the company's energy consumption.



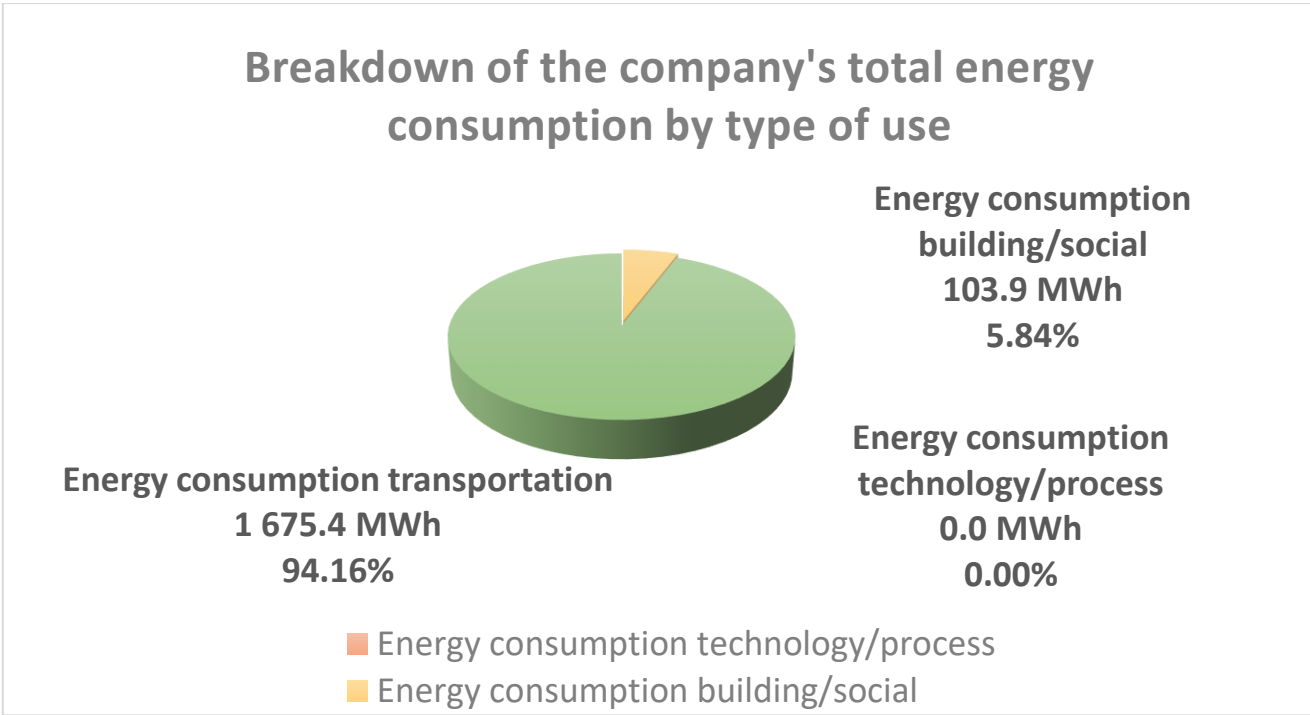
The diagram shows the distribution of the company's energy consumption.

Based on the data:

- The **fleet's gasoline-powered vehicles** consumed the most energy: **1,275.432 MWh**, which accounts for **71.7%** of total consumption.
- The **fleet's diesel-powered vehicles** consumed **398.014 MWh** of energy, or **22.4%**.
- Purchased electricity consumption was the smallest item: **105.847 MWh**, or **5.9%**.

3.2. ENERGY DISTRIBUTIONS (ACCORDING TO 22/C)

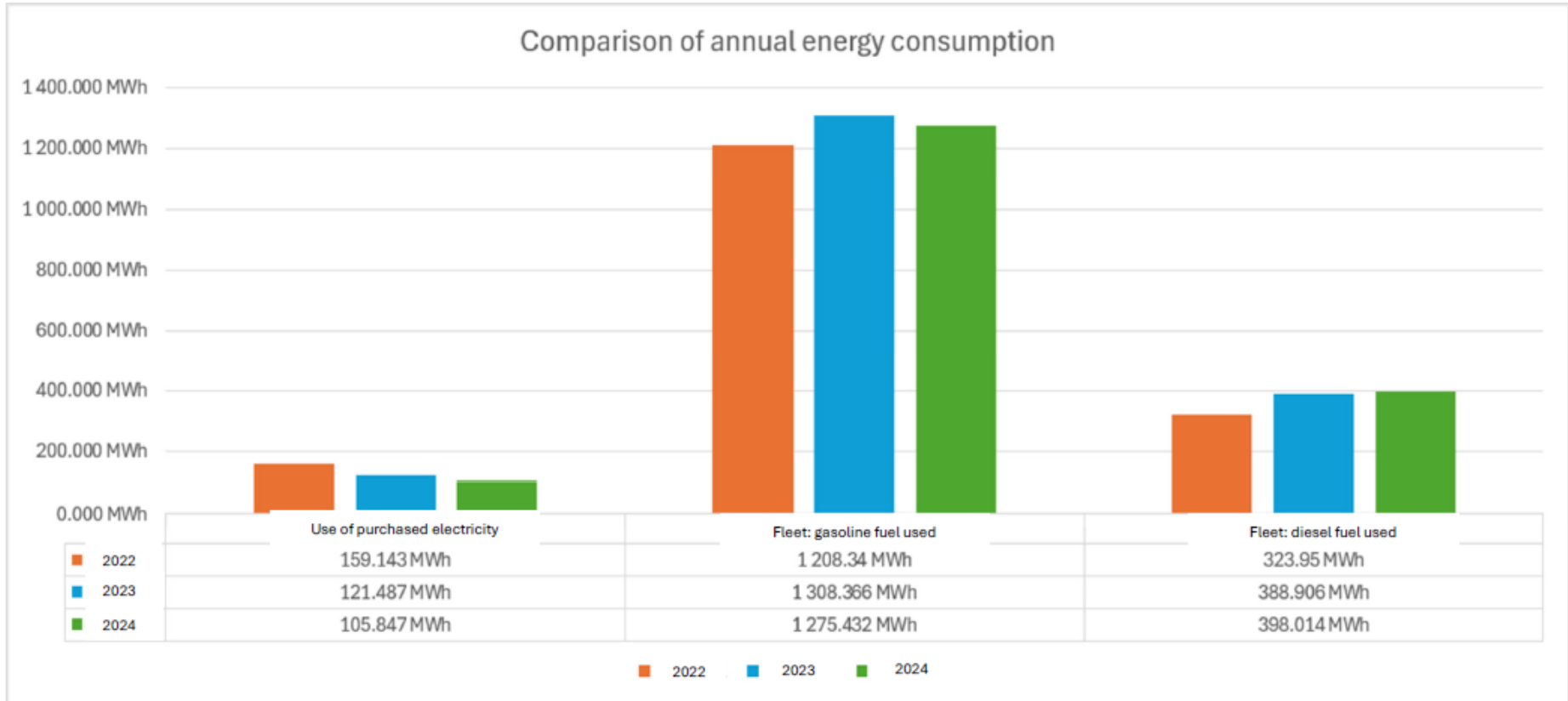
Name	Use of purchased electricity	Fleet: gasoline fuel used	Fleet: diesel fuel used
Energy consumption technology/process	0.000 MWh	0.000 MWh	0.000 MWh
Energy consumption building/social	103.91 MWh	0.000 MWh	0.000 MWh
Energy consumption in transport	1.9 MWh	1,275.432 MWh	398.014 MWh
CO2 emission technology/process	0.00 t	0.00 t	0.00 t
CO2 emissions building/social	37.09 t	0.00 t	0.00 t
CO2 emissions transport	1.55 t	318.19 t	106.13 t



This diagram shows the distribution of the company's total energy consumption by type of use. **Based on the data:**

- The **vast majority of energy** was used for transportation: **1,675.4 MWh**, which accounts for **94.16%** of total consumption.
- **103.9 MWh** was used for **buildings/social purposes**, accounting for **5.84%**.
- There was no energy consumption for technological/process purposes: **0.0 MWh**, or **0.00%**.

3.3. COMPARISON OF ENERGY CONSUMPTION IN 2022-2024



The diagram compares annual energy consumption trends between 2022, 2023, and 2024 in three main categories. The following main **conclusions** can be drawn:

Use of purchased electricity:

- In 2022: **159.143 MWh**
- In 2023: **121.487 MWh** (decrease approximately 24%)
- In 2024: **105.847 MWh** (further decrease approximately 13%)

A steady decline can be observed, which may indicate energy-saving measures or the replacement of electricity.

Fleet: gasoline fuel used:

- In 2022: **1,208.34 MWh**
- In 2023: **1,308.366 MWh** (increase approximately 8%)
- In 2024: **1,275.432 MWh** (slight decrease)

Gasoline consumption peaked in 2023, declined slightly in 2024, but remains the **largest energy consumer**.

Fleet: diesel fuel used:

- In 2022: **323.95 MWh**
- In 2023: **388.906 MWh** (increase approximately 20%)
- In 2024: **398.014 MWh** (further slight increase)

4. RESULTS OF AWARENESS RAISING

Name	Activity characteristics
the nature of awareness-raising activities	Attitudes are primarily shaped within the framework of education, either in person or via e-learning.
location	At our company locations, and on-line
frequency of repetition of the activity	annual
the lifetime of the program	1 year
number of participants actively reached	we reached all colleagues
number of participants reached passively	we reached all colleagues

5. ENERGY EFFICIENCY IMPROVEMENTS

Energy efficiency upgrade of DHW system with heat pump solution

As part of energy efficiency improvements, the domestic hot water (DHW) production system was modernized. The main objective of the investment was to eliminate the low efficiency of the system during the summer period, which was due to the fact that the high-performance gas boilers, designed for heating, were operated also for summertime DHW production.

During the development, the previously used boiler-based DHW production was replaced by a modern air-water heat pump system. Heat pump technology operates with a significantly more favorable annual efficiency (SCOP), thus reducing the primary energy consumption and greenhouse gas emissions of hot water production. The system automatically adjusts to hot water demand and is capable of meeting DHW demand independently during the summer period without starting up the heating system.

As a result of the intervention, the company's annual energy consumption and operating costs have been reduced, while the security of supply and the efficiency of the system have been improved.