



elekt+romotive

WE ARE THE SOLUTION!

MORE THAN 10 YEARS OF EXPERIENCE IN ELECTROMOBILITY AND THE ENERGY SECTOR



INNOVATIVE TECHNOLOGY SUPPORTING SUSTAINABILITY IN HEALTHCARE

(Energy efficiency, Energy management, V2G)

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Elektromotive Hungaria Kft. has been a registered company since 2011, which, as a pioneer, actively took part in the foundation and creation of domestic e-mobility.

Our goal is to strive for sustainability, to spread the concept of predictable and safe energy use, and to assist in its implementation. A conscious energy consumption solution that ensures unique energy consumption for the building, controls the flow of energy at a high level, so that the operation is not endangered, but a quick return on the amount spent on the investment is guaranteed, and the system must also adapt to the special protection system of the healthcare object.

Currently, the software is already available in its basic state, its development is in progress, the testing of the devices used is continuous, since not all built-in devices are compatible with each other, and not all machines and equipment comply with the applicable legislation.

Currently, there are initiatives for various solutions where the use is coordinated in certain parts, but there is no progress in a complex solution, where the vehicles act as storage, which means that the electric vehicle as a virtual energy reservoir through the V2G electric charger gives and receives the energy to the from a vehicle.

The entire vertical is connected to a producer, forming an energy community.

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Therefore, the most important thing is to determine the selected devices, which, through an energy management software control, equalize the use of over-insured and redundant energy provided by the service provider, so the system works saving RHD.

The special use of the place is ensured by the electric vehicles that are staying there or in a narrower or wider circle, in which the energy is just parked, in addition to the installed battery base, which perfectly balances similar, short-term fluctuations, because it can switch from charging to discharging power in seconds.

The goal is to create a sample investment, where a wide array of devices participates in the implementation, and with software control, measurable savings and maximum safe energy supply of the place of use, even if an external service is interrupted or terminated.

Currently, the energy supply is provided via overhead and ground cables, the supply chain is hectic and expensive to ensure, and for strategic objects, it is vital to create a capacity that can satisfy energy needs in the right order of magnitude and time. The same needs appear on other objects, but everywhere the specific local use must be taken into account and the operation must be planned for the related needs.

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The name V2G, Vehicle to grid, refers to a network in which vehicles are not only connected to each other, but also to buildings and public institutions. They are able to provide energy security to buildings or even temporarily installed objects.

The network enables both medical institutions and special rescue services to ensure that the energy stored in their vehicles provides the necessary and satisfactory continuous energy supply in all situations where the necessary energy is insufficient or not supplied at all. Be it the mobile hospital or a sudden power outage during an unannounced examination.

The key lies in the orderly, if necessary, immediate feeding of the vehicles back into the network. Thanks to network technology between vehicles, car batteries can be charged and discharged based on different signals, so the network can optimize its own energy consumption.

The charging devices installed in the vehicle network therefore take the electrical energy from the car's battery in accordance with the network's needs, simply because of this they are fed back into the network, where this energy continues its journey to the place designated by the network, where it needs to be used.

In summary, we recommend an energy solution that can be made partially or completely independent of power suppliers by optimizing energy use, yet provides energy security even in spite of hectic energy use.

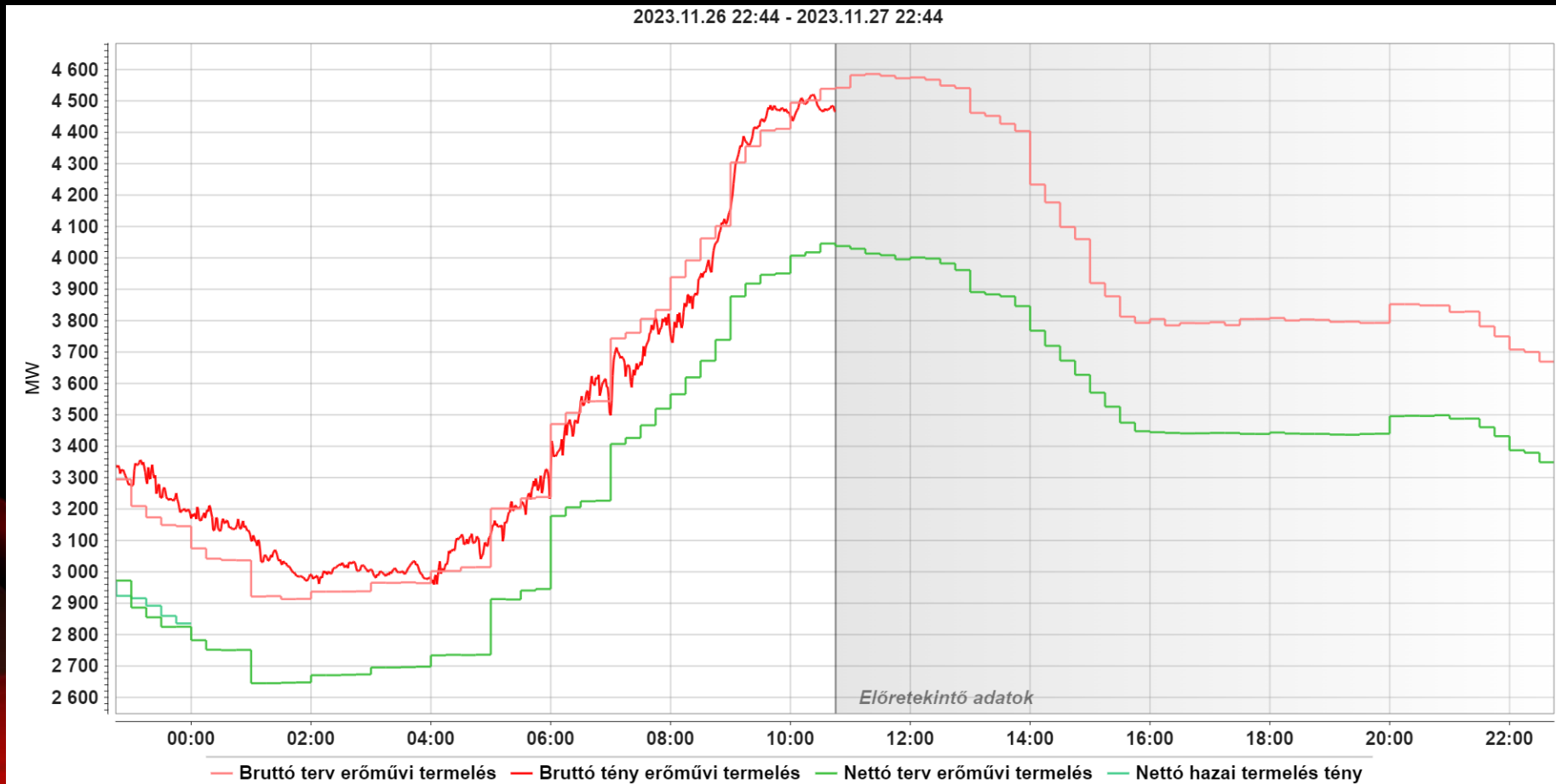
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estimated budget:

Comprehensive, detailed energy audit	Assessment of the current state Determination of peak performance Survey of consumers	HUF 4M /location
Making a feasibility plan		HUF 12M /location
Implementation plan	Creating a plan with authorization	HUF 20M /location
Procurement of equipment	Solar power plant 200kWp (HUF 0,4M/kWp)	HUF 80M
	Installed energy reservoir 120kWh (HUF 0,25M/kWh)	HUF 30M
	Special vehicle purchase	HUF 60M /pc
Implementation	(Location dependent)	HUF 40M
Installation of data collectors and measurement points		HUF 8,5M /pc
Information security, cyber protection, data security		HUF 20M
Software Development	development of existing software	HUF 60M
Project management		HUF 24M /year

HUNGARY'S DAILY LOAD CURVE

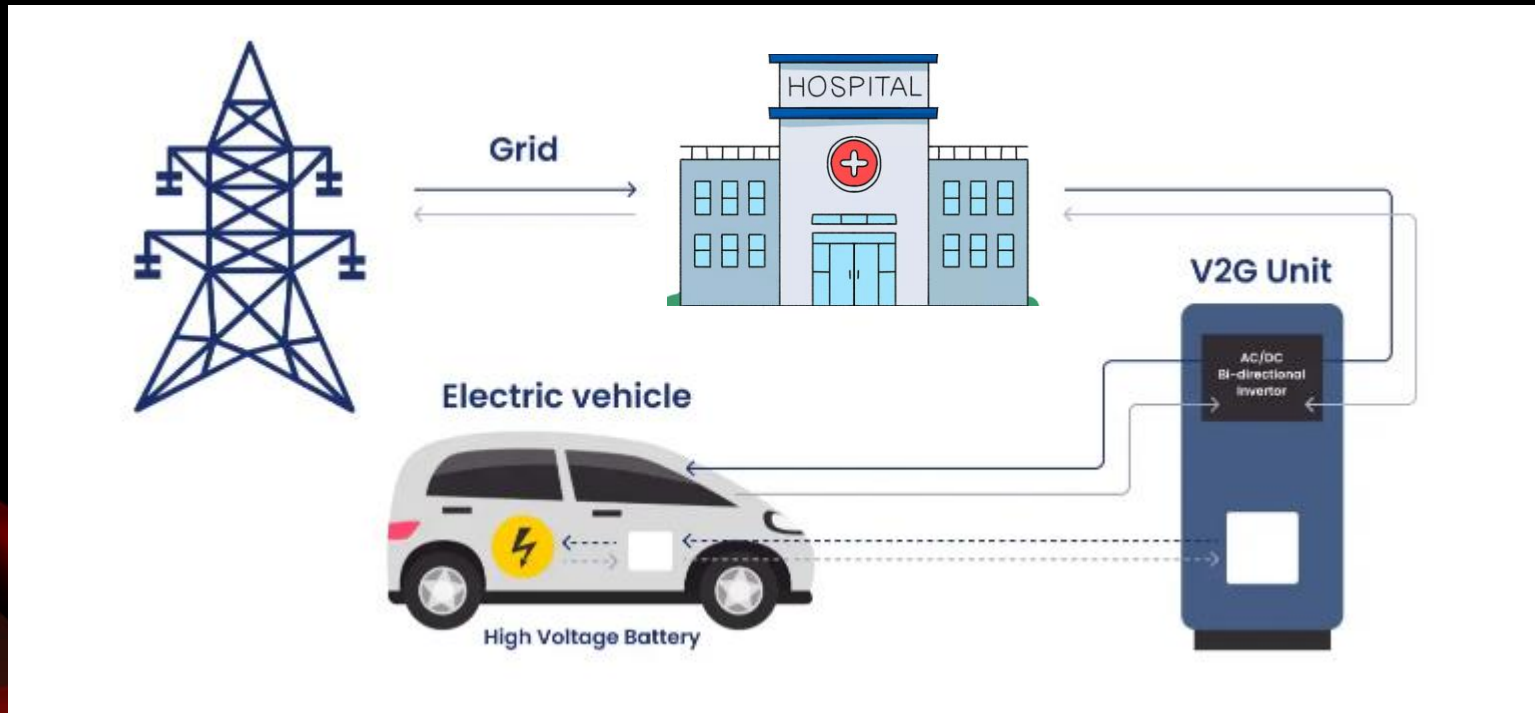
The following picture represents the average daily load curve



OBJECT ENERGY INSURANCE

The backbone of energy insurance is provided not only by electric cars, but also by wind farms and solar systems installed on buildings. Thus, the load curve will be flatter and more predictable.

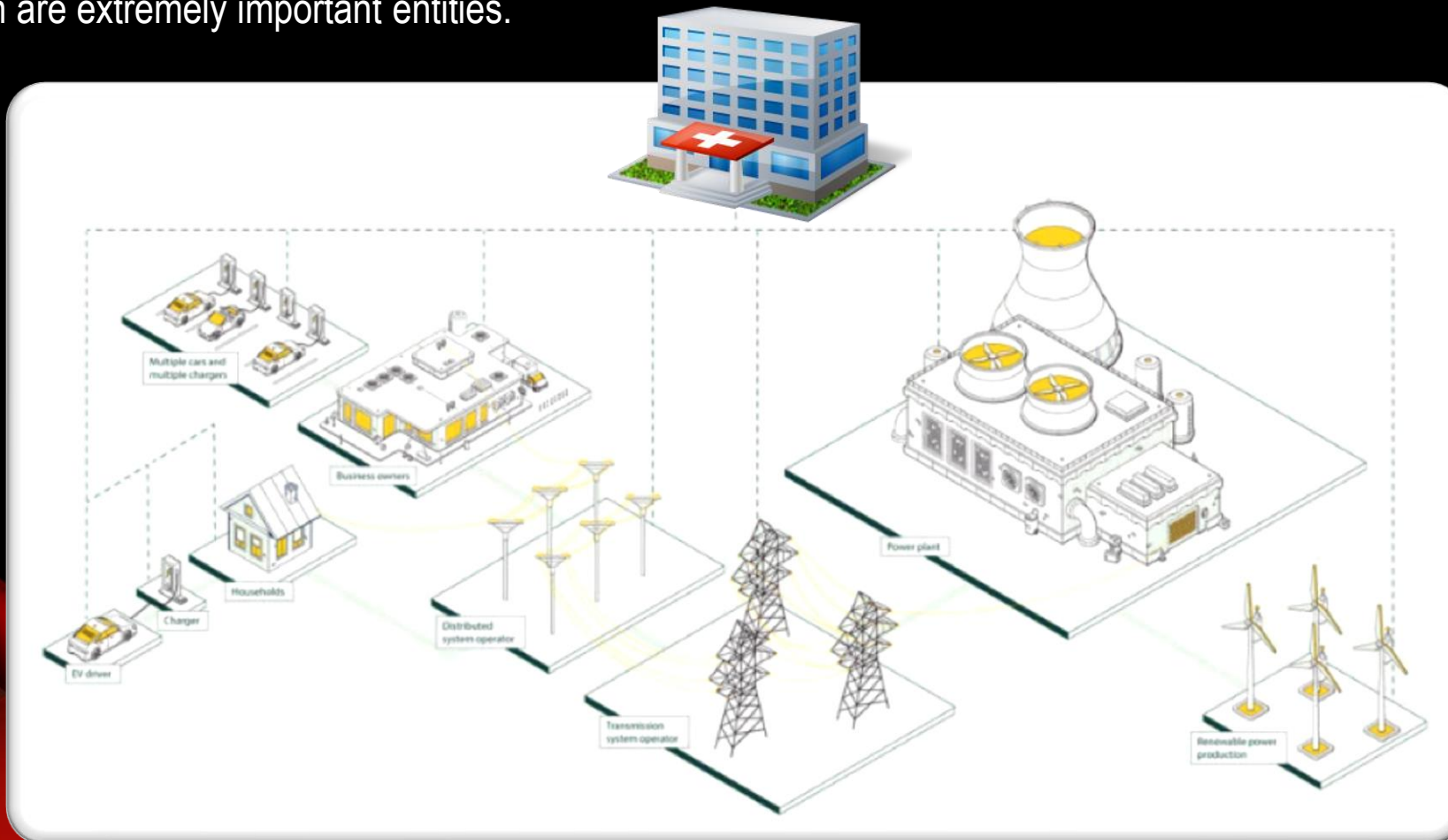
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OBJECT ENERGY INSURANCE

Using the elements of the existing energy network, it forms an independent closed energy system, at the center of which are extremely important entities.

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ENERGY MANAGEMENT

It is able to process the momentary energy demand and to satisfy it immediately, taking into account the unique needs of those in the system.



REFERENCES



GABLINI



SZÉKESFEHÉRVÁR



THANK YOU FOR YOUR ATTENTION





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