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Energy management at household level

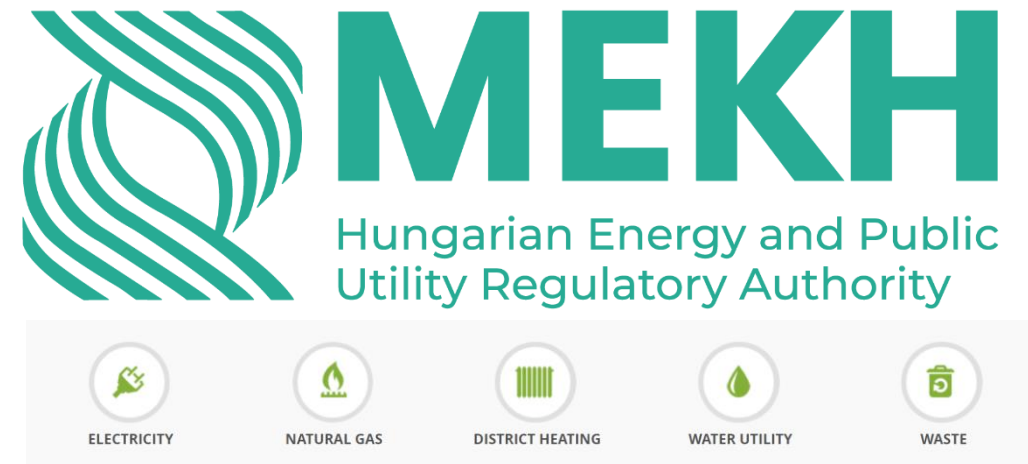
26th May 2022

Hungarian Energy and Public Utility Regulatory Authority
Clean energy, sustainable environment

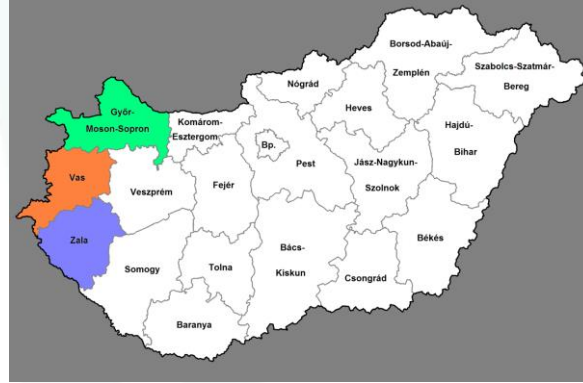
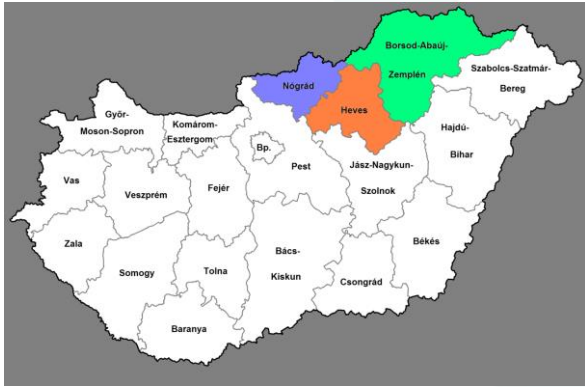
Hungarian Energy and Public Utility Regulatory Authority (MEKH)

Who we are?

- regulatory body of the energy and public utility market
- supervising sectors of strategic importance
- Our responsibility covers e.g.:
 - licensing
 - supervision
 - price regulation
 - tariff and fee preparatory tasks
 - pricing of public waste management services
 - energy-statistics related tasks
 - Energy Efficiency Obligation Scheme
 - METÁR tender (Hungarian Renewable Energy Support System Scheme)

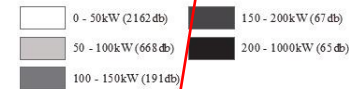


Household-size small photovoltaic power plants 2021



In proportion of the population, 42% more residential household-size small photovoltaic power plant

1000 fő állandó lakosra jutó lakossági HMKE kapacitás (kW) 2020. október 31-én



In proportion of the population, 14% more non-residential household-size small photovoltaic power plant

9 102 pcs

60 170 kW



14 032 pcs

91 654 kW

2 891 pcs

44 160 kW



2 216 pcs

38 376 kW

RESIDENTIAL

NON-RESIDENTIAL

Energy poverty

Participation of MEKH in ACTION A7

- Preparation and presentation of an educational material for those who are involved in informing the locals
 - e.g.: members of the Network of Energy Counsellors, The Hungarian Charity Service of the Order of Malta etc.
- Sneak peek:
 - defining the methodology of basic energy condition assessment (which can also be performed by nonprofessionals)
 - Energy communities - purpose, regulation, benefits
 - energy modernization proposals for nonprofessionals

Where's the leak? #1

...common ways homes lose energy

- Lighting
 - $>50 \text{ lm/W}$ → considered to be enough
 - LED lifetime → 30,000 hours to 50,000 hours
 - ✓ 17 years of your LED lights switched on for 8 hours a day
 - LEDs use 75% less energy than incandescent lights and last 25 times as long
 - pay a bit more upfront ↔ reduce your energy bill



Where's the leak? #2

...common ways homes lose energy

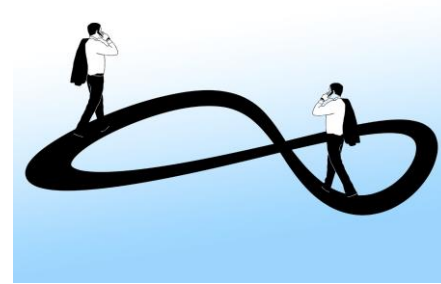
- Modernization and replacement of doors and windows
 - with thermostat - up to 15-20% of heating energy costs saved per year
- Insulation of the buildings
 - approx. 25% energy savings can be achieved
 - payback time of several decades
 - sometimes for aesthetic reasons
 - Hungarian average: „FF” (201-250 kWh/m²/year)
- Reducing the temperature of the heated room by 1 ° C
 - approx. 6% energy saved!



The vicious circle

Investing to reduce energy bills

- In theory it is simple to reduce energy consumption
 - Ready to use technical solutions
 - Skilled building contractors
- In reality the refurbishment cost is a barrier - insufficient financial funds in residential sector
 - With high energy bills it's difficult to save money for an investment
 - Without modernisation it's impossible to reduce energy bills and save money for future investments
- Possible solutions
 - ESCO
 - Government subsidies



Thank you for your attention!

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