



EEOS in Hungary

First Meeting of *OdysseeMure fit-4-55*

Ármin Böhm

25th April 2023

Zagreb, Croatia

Hungarian Energy and Public Utility Regulatory Authority

Clean energy, sustainable environment

**FOCUS ON THE
CONSUMER**

**INNOVATION AND
ECONOMIC
DEVELOPMENT**

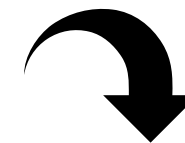
CLEAN

AFFORDABLE

SMART

ENERGY SECURITY

ENERGY EFFICIENCY



**in the field of energy efficiency, final
energy consumption should not exceed
the level of 2005 (785 PJ) by 2030**

**National Energy
Strategy 2030,
with an outlook
up to 2040**

**Strengthening energy independence and energy security, maintaining
the results of utility fee reductions and decarbonising energy
production.**

**National Energy
and Climate Plan**

**Strategic interventions to decarbonise the national energy
system and increase energy efficiency.**



EU ENERGY EFFICIENCY OBLIGATIONS



DOMESTIC LEGISLATION TRANSPOSING EU DIRECTIVES

EPBD

EED

Art. 7 → EEOS →

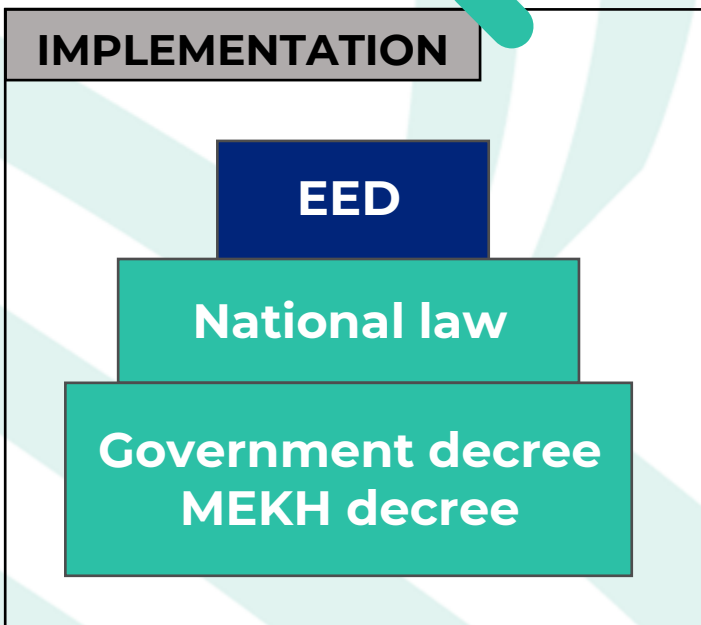
Act LVII of 2015 on Energy Efficiency

Gov. Decree 122/2015 on the implementation of the Energy Efficiency Act

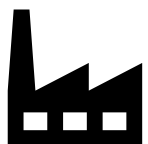
Gov. Decree 176/2008 on the certification of the energy performance of buildings

Decree 7/2006 of the energy performance of buildings

MEKH Decree 17/2020 (Annex I. → catalogue)



EEOS IN HUNGARY FROM 2021



Under the "*polluter pays principle*", companies involved in energy supply are required to achieve the energy savings targets set for them

...by implementing EE investments

... by paying contributions

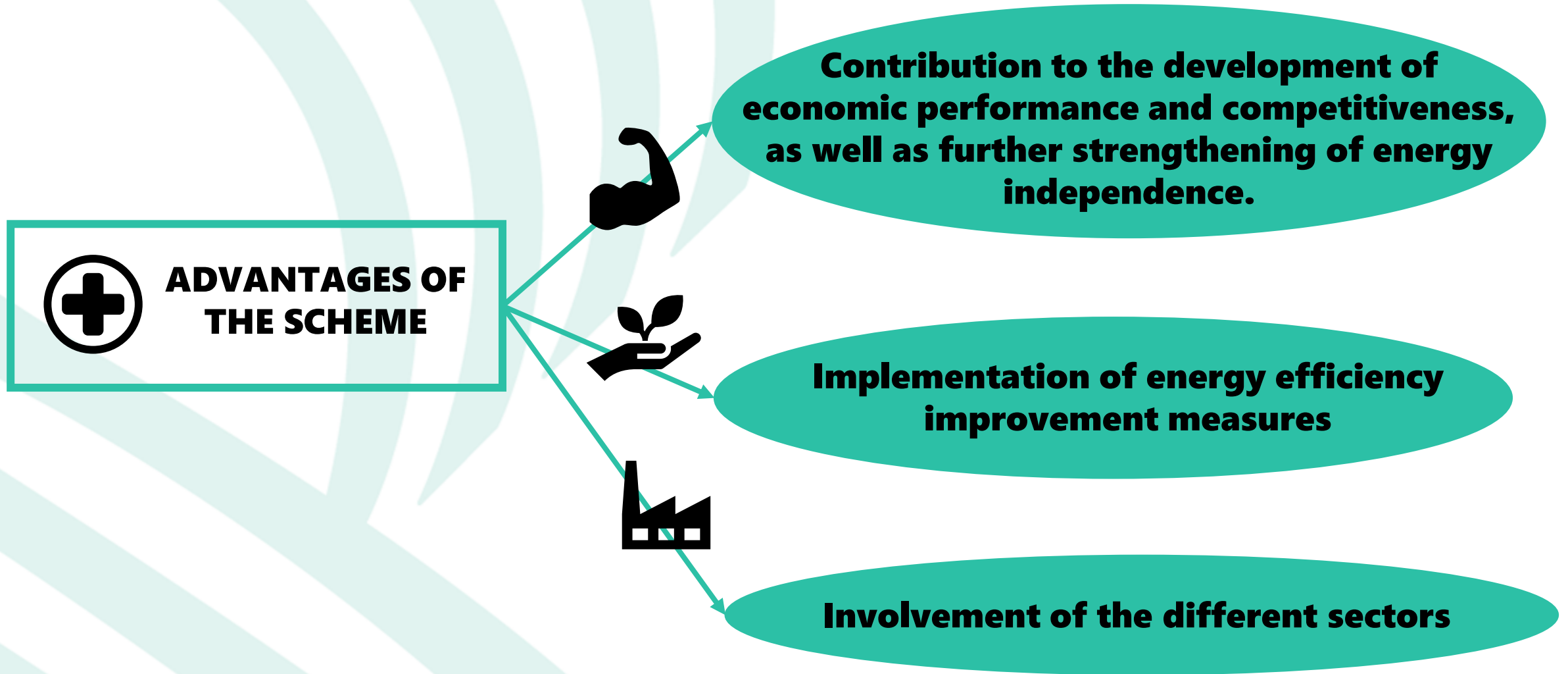


RANGE OF MEASURES

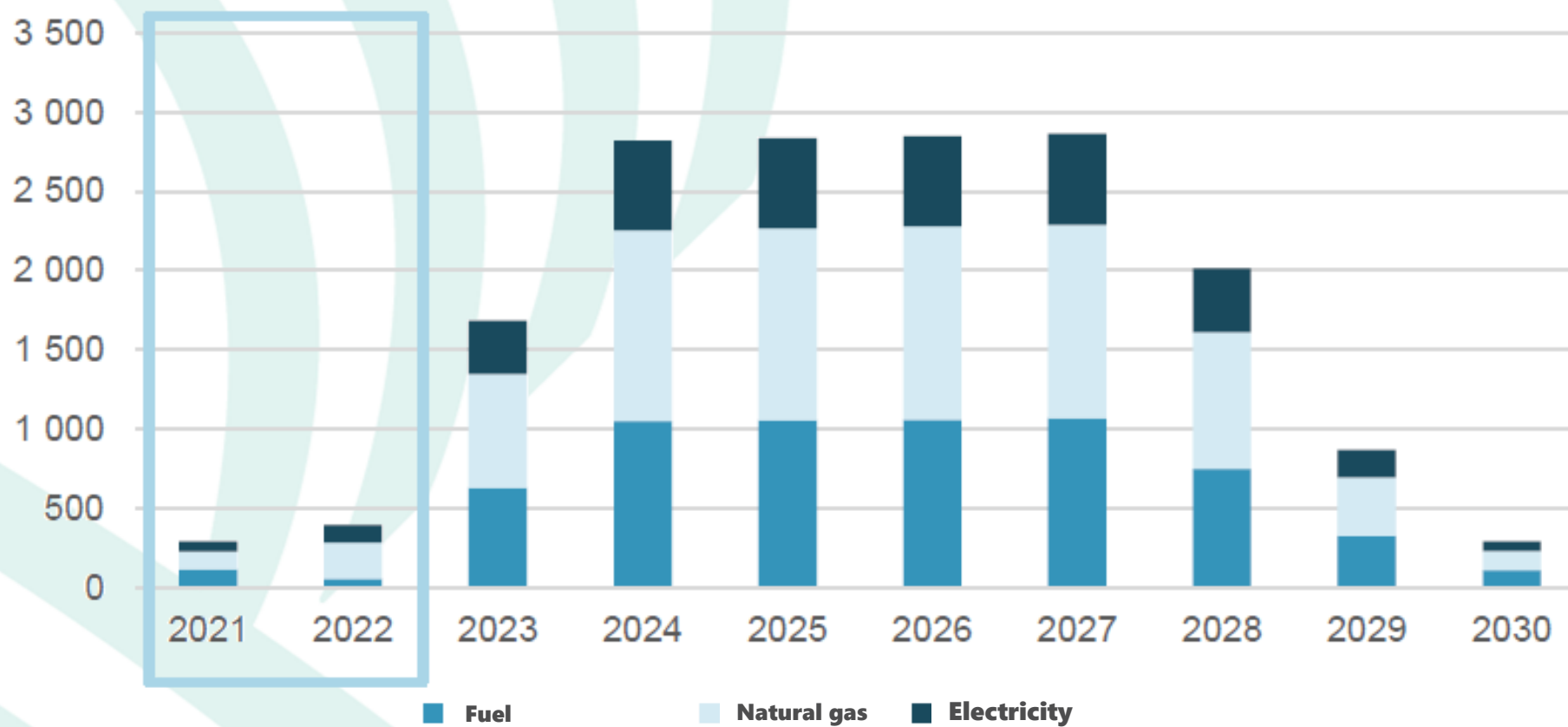
Measures listed in the catalog compiled by the managing authority (MEKH) - the most common energy efficiency investments and measures

Specific measures – not included into the catalog

EEOS IN HUNAGARY FROM 2021



OBLIGATED PARTIES



OUR ENERGY AND CLIMATE POLICY GOALS FOR 2030



40% reduction of GHG emission



21% share of renewable energy

for the period from 1 January 2021 to 31 December 2030, new savings of 0.8% of annual final energy consumption shall be achieved on average over the last three years preceding 1 January 2019

the scheme is projected to deliver 20 PJ of final energy savings by 2030

EEOS CUMULATIVE TARGET (2021-2030): 99 PJ

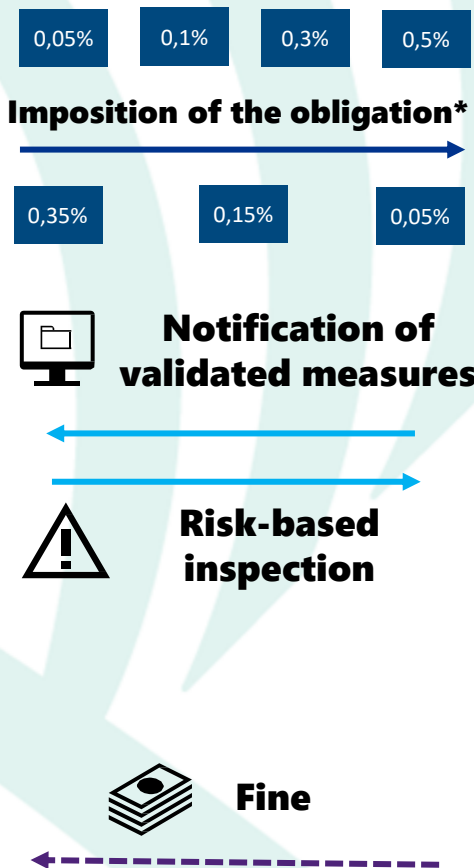
**Target savings from obligated parties:
Given % of energy (under obligation!) sold to end-users in the base year**

PERIOD		BASE (t-2)	TARGET
2021	2021	2019	0,05 %
2022	2022	2020	0,1 %
2023	2023	2021	0,3 %
2024 - 2030	2024	2022	0,5 %
	2025	2023	
	2026	2024	
	2027	2025	0,35 %
	2028	2026	0,15 %
	2029	2027	0,05 %
	2030	2028	

MANAGING AUTHORITY

MEKH
Hungarian Energy and Public Utility Regulatory Authority

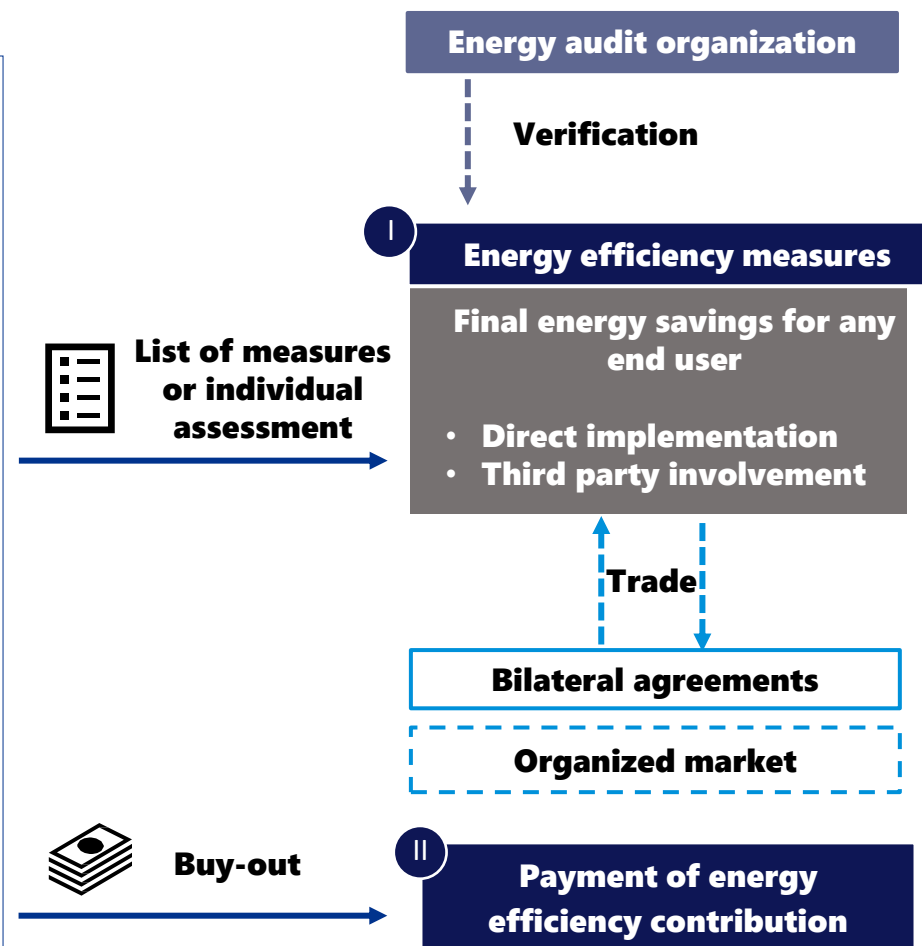
Unit responsible for EEOS



OBLIGED PARTIES

- Licensed electricity traders**
- Licensed universal electricity providers**
- Licensed natural gas traders**
- Licensed universal natural gas providers**
- Companies selling transport fuel to final consumers**

FULFILLMENT OF OBLIGATION





Energy efficiency contribution (buyout)

On the basis of the decision of the obliged party, it can be paid to fulfill the obligation

50 000 HUF* / each not performed 1 GJ / year

The buyout decision can be made until 31 January following the reference year, and it has to be paid within 60 days

Ministry responsible for energy, defined by decree

The obligation can be replaced by paying the contribution



Fine

Legal consequence of non-performance of the obligation

70 000 HUF** / each not performed 1 GJ / year

If retrospective set-off is no longer possible (in the 3rd year following the reference year)

MEKH (managing authority)

The obligation is fulfilled by paying the fine

Due date

Amount

Timing

Recipient of payment

Buyout of obligation



Alternative policy measures

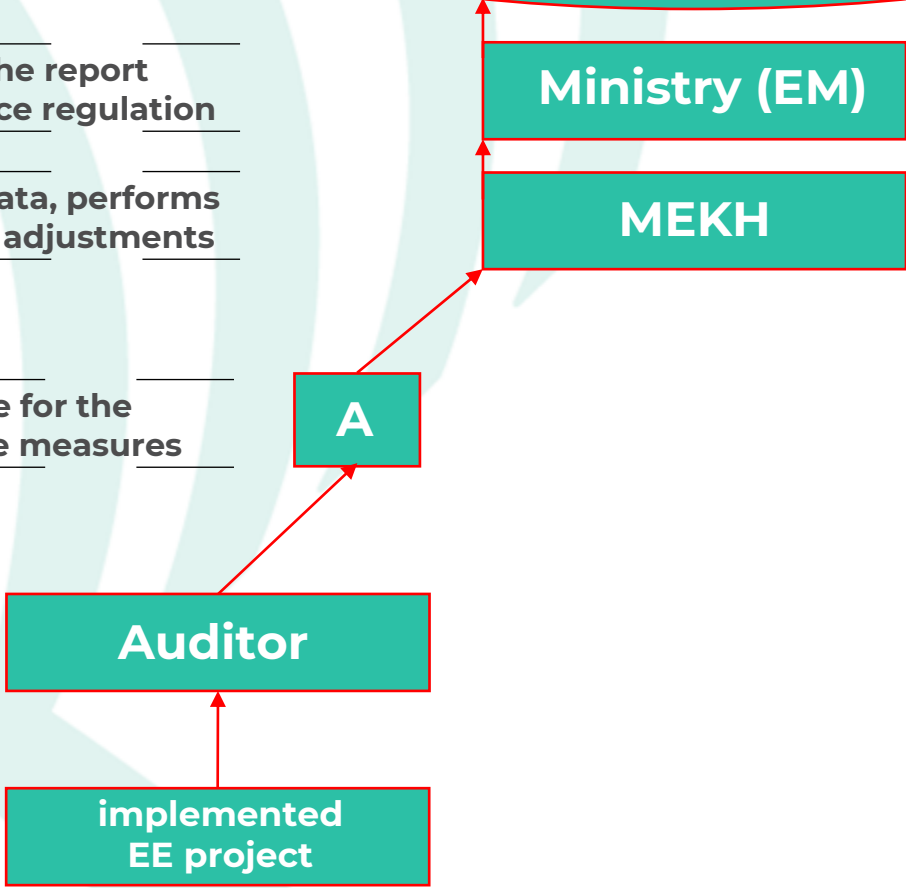
- Awareness raising programs (**National Network of Energy Experts**)
- **Tax relief** measures
- Employment of an **energy expert** at energy-intensive businesses (>400 000 kWh or >100 000 m³ or >3 400 GJ)
- **Direct investment support** for energy efficiency
 - Environmental and Energy Efficiency OP (KEHOP+)
- Primarily non-energy efficiency operational programs
 - Economic Development and Innovation OP (GINOP+)
 - Territorial and Settlement Development OP (TOP+)
- Recovery and Resilience Facility (RRF)
- **Municipality level support programs**
 - Modern Cities Program
 - Hungarian Village Program

EED Art. 7 savings

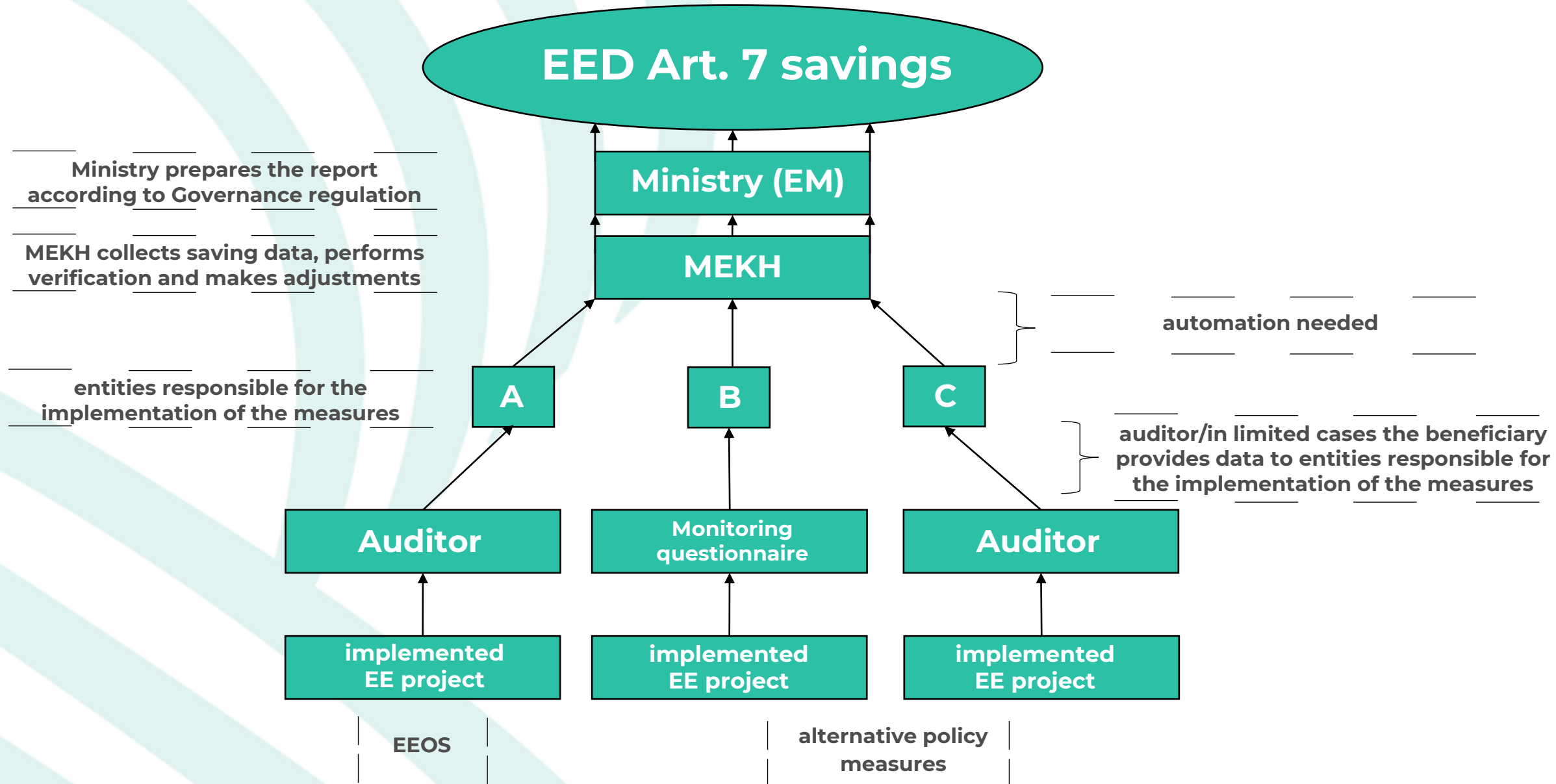
Ministry prepares the report according to Governance regulation

MEKH collects saving data, performs verification and makes adjustments

entities responsible for the implementation of the measures



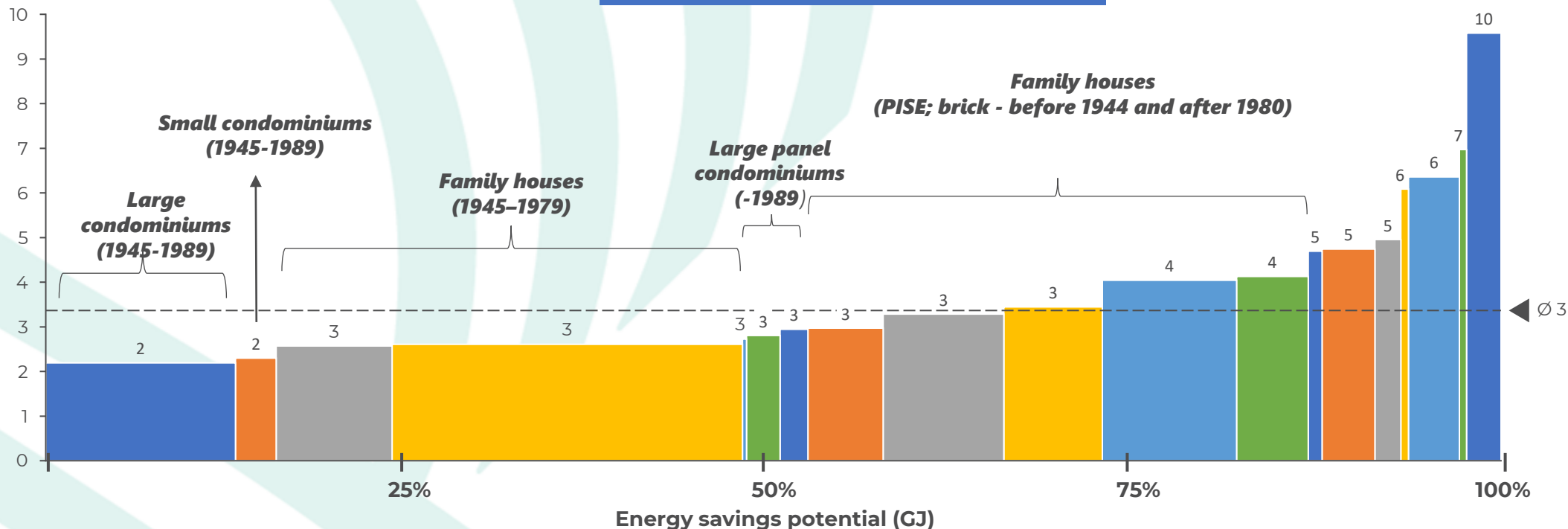
EEOS



Merit order of residential buildings based on lifetime energy savings

Lifetime investment cost
(thousand HUF / GJ)

Insulation, door and window replacement



Total estimated potential

79 PJ

Average investment cost per residence

3,24 million HUF*

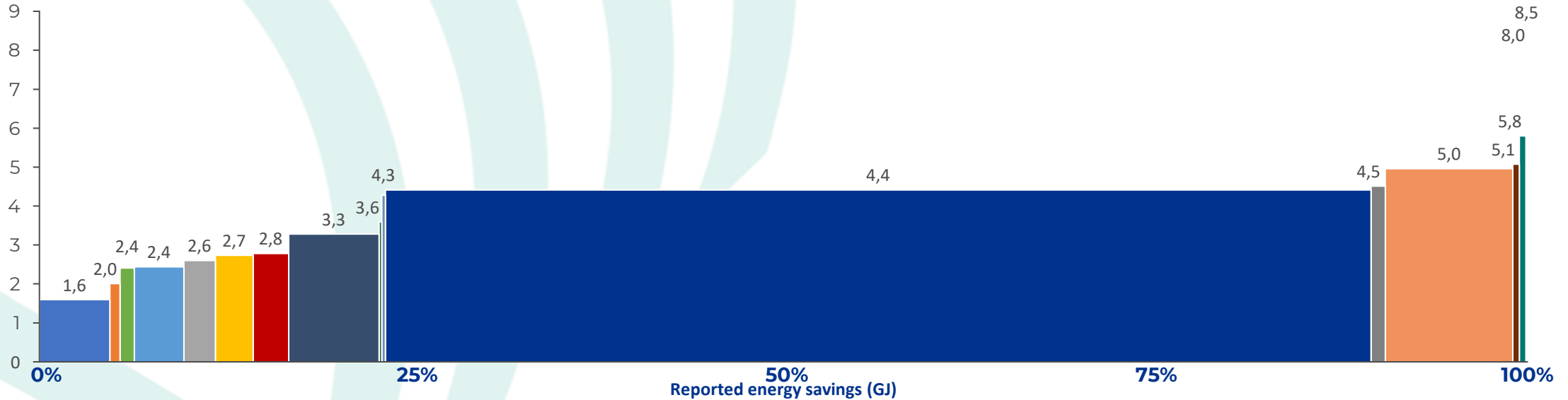
Legend
f: family house
c: condominium

*~EUR 8 617

Source: KPMG analysis, 2020

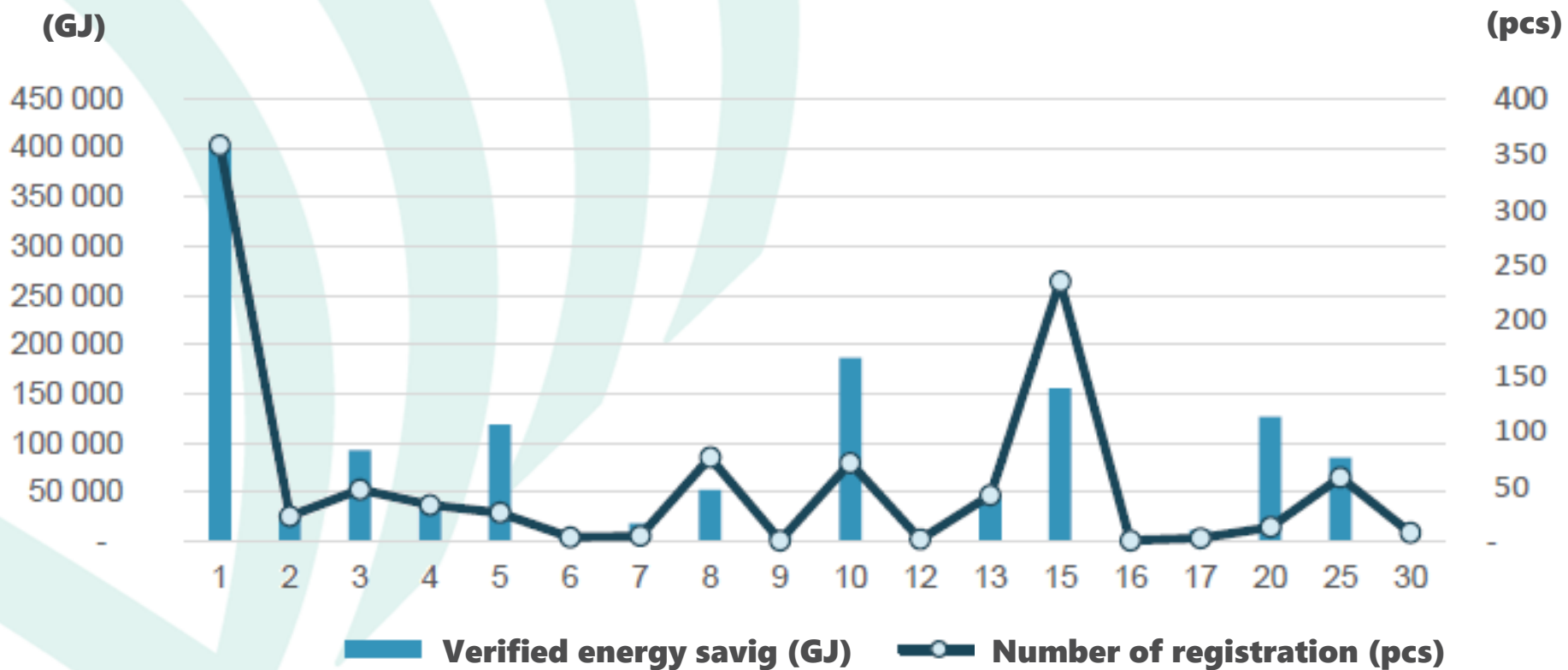
Merit value of average industrial investments costs based on lifetime energy savings

Median investment cost (thousand HUF / GJ)



- Coke ovens and oil refineries
- Wood and wood products (except furniture manufacture)
- Paper, pulp & printing
- Electricity and heat production, other - energy sector
- Non-metallic minerals
- Others - industry
- Non-ferrous metal raw materials, basic iron and steel
- Trade and public services
- Transport equipment
- Fisheries, agriculture and forestry
- Machinery
- Pipeline transport, road, rail, domestic water transport, international air transport
- Food, beverages & tobacco
- Mining and quarrying, extraction of petroleum and natural gas
- Chemical and petrochemicals
- Construction
- Textile and leather industry

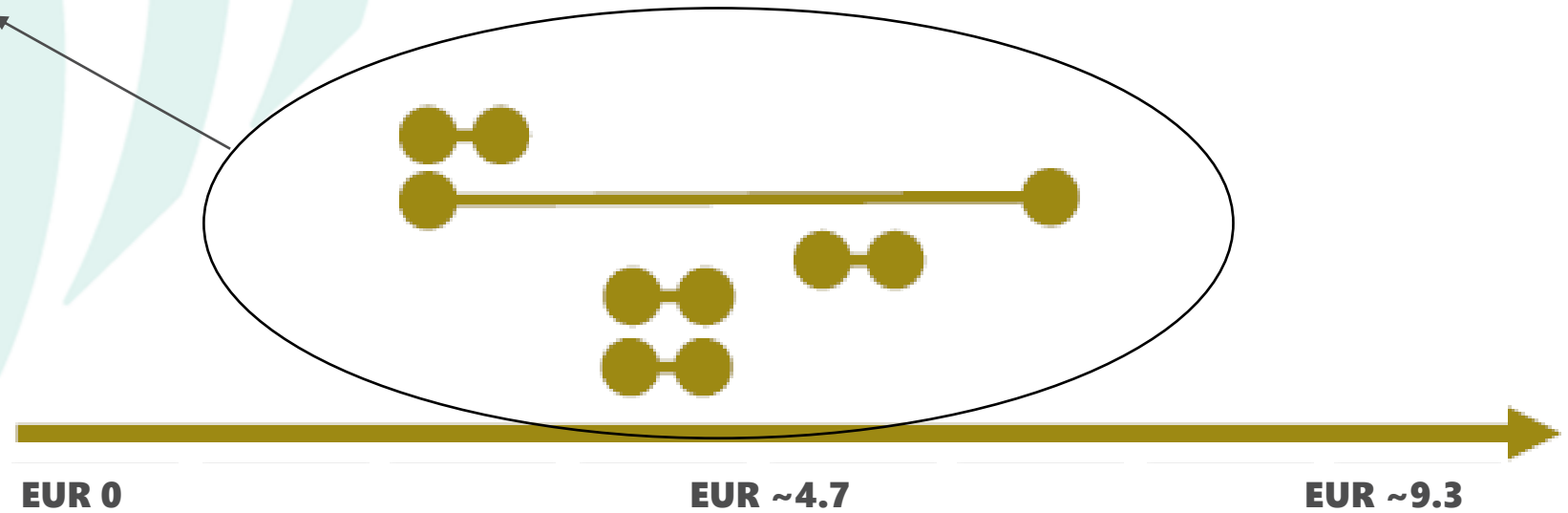
LIFETIME OF SAVINGS





PRICE OF VERIFICATION
(EUR/GJ)

ANONYMOUS SURVEY

Energy audit organization

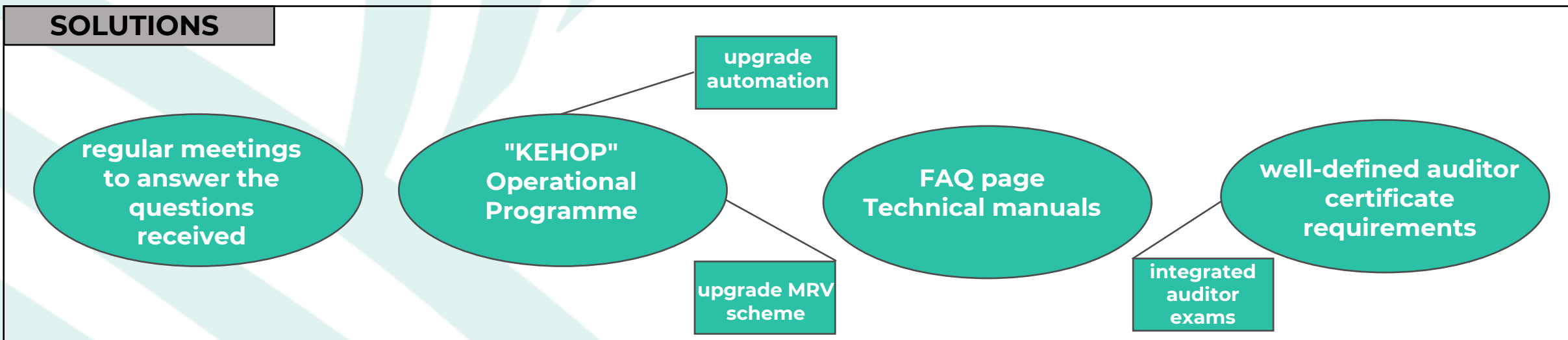
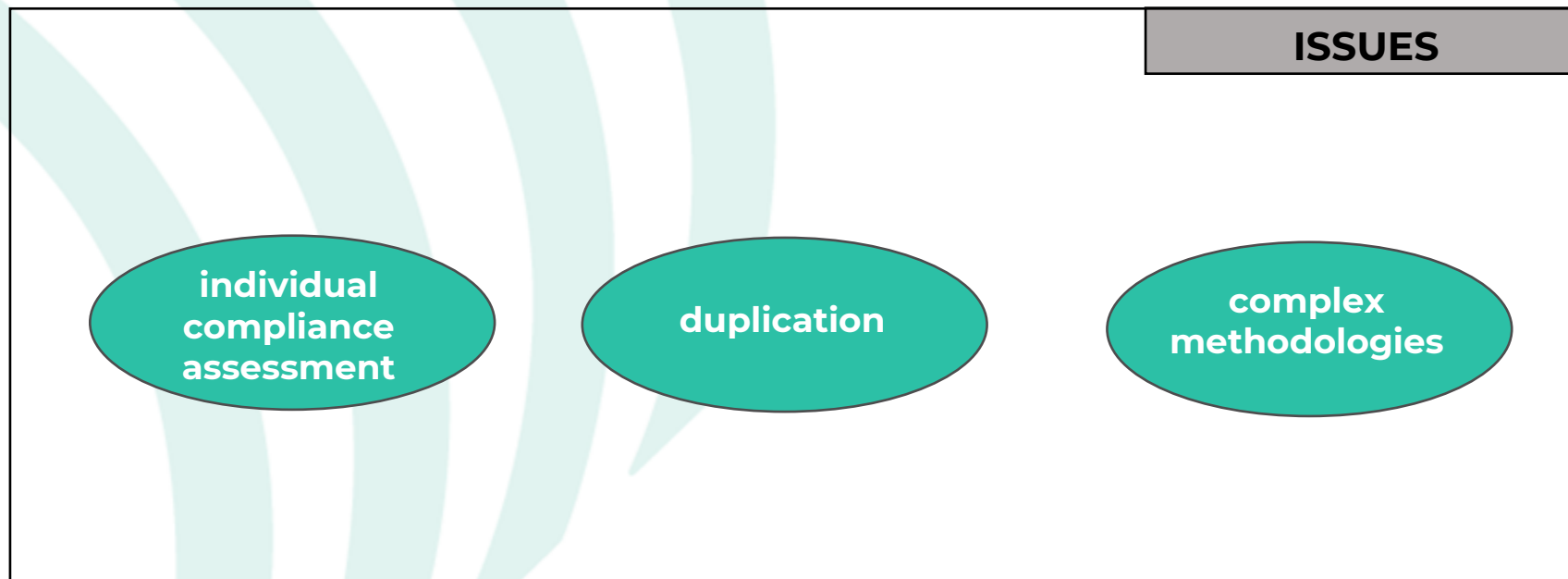


Database of verified energy savings

Számlák  

Szervezet HEM év
KOT2 - KOT2 ▼ 2022 ▼

Azonosító	Projekt	Éven túli	Egyenleg	Áthozat	Foglalás
SZ1bd1f958	EASZ/588/2022	Nem	200	0	0
SZb2c656c2	EASZ/999/2022	Nem	0	0	0
SZbdb9dad2	EASZ-01/2022	Nem	0	0	0
SZcfaf51f7	EASZ-001/2022	Nem	0	0	0
SZe0eac43e	EASZ/33/2022	Nem	33	0	0
SZ49cc860a	EASZ/6 belvett s/2022	Nem	1000	0	0





Thank you for your attention!

Ármin Böhm

bohma@mekh.hu

Hungarian Energy and Public Utility Regulatory Authority

Clean energy, sustainable environment