MINISTRY
OF NATIONAL DEVELOPMENT

Hungary - RES 2020

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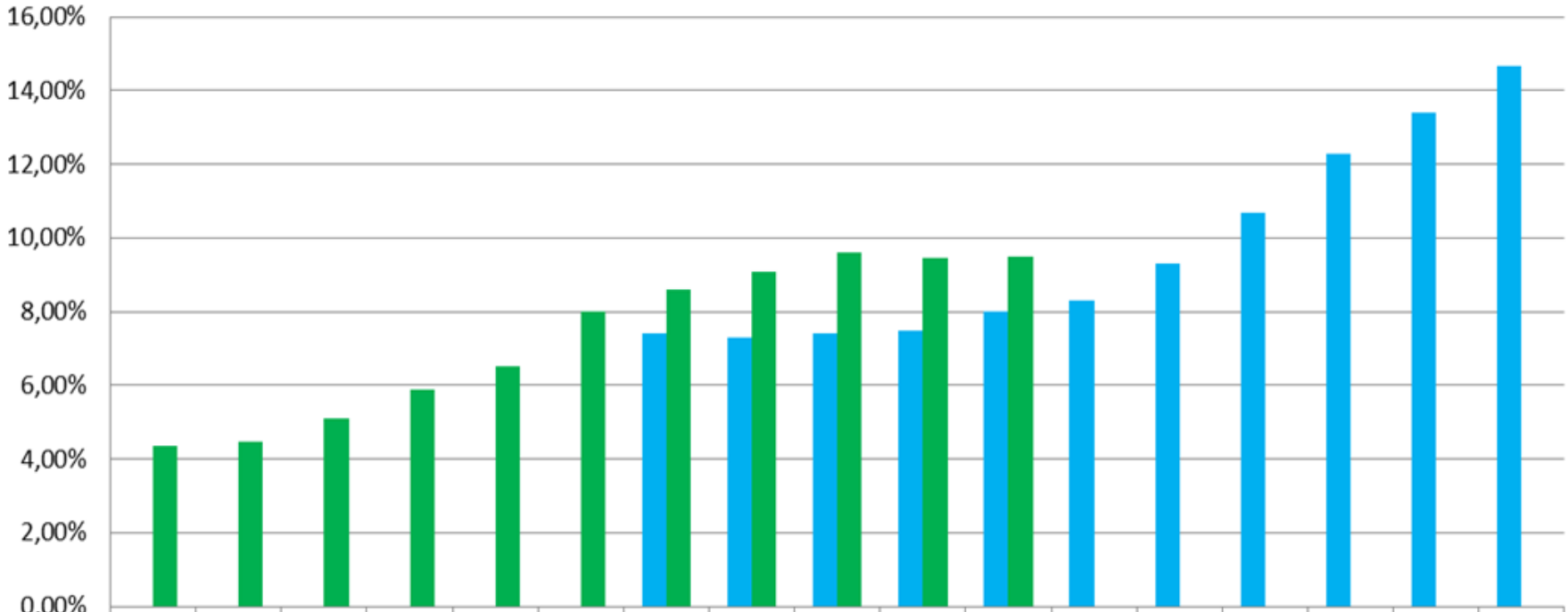
Head Department
Green Economy Development

- **I. The present and 2020**
- **II. The Operational Programmes**
- **III. The operating aid for electricity production from renewable energy sources (METÁR)**
- **IV. National subsidies for greening of housing: „Warmth of Homes”**

I.

The present and 2020

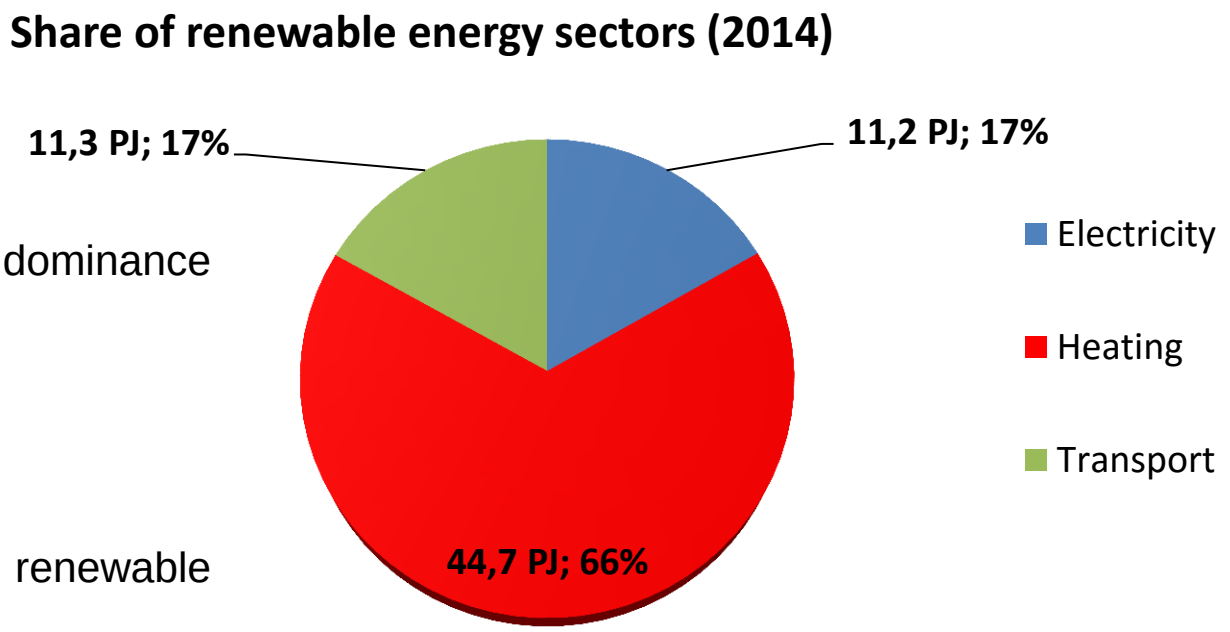
The share of the renewable energy sources (2014) (EuroStat)



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
NCST terv	0,00%	0,00%	0,00%	0,00%	0,00%	0,00%	7,40%	7,30%	7,40%	7,50%	8,00%	8,30%	9,30%	10,70%	12,30%	13,40%	14,65%
Tényadat	4,37%	4,47%	5,09%	5,89%	6,50%	8,01%	8,59%	9,07%	9,59%	9,46%	9,51%						

Share of renewable energy sector - 2014

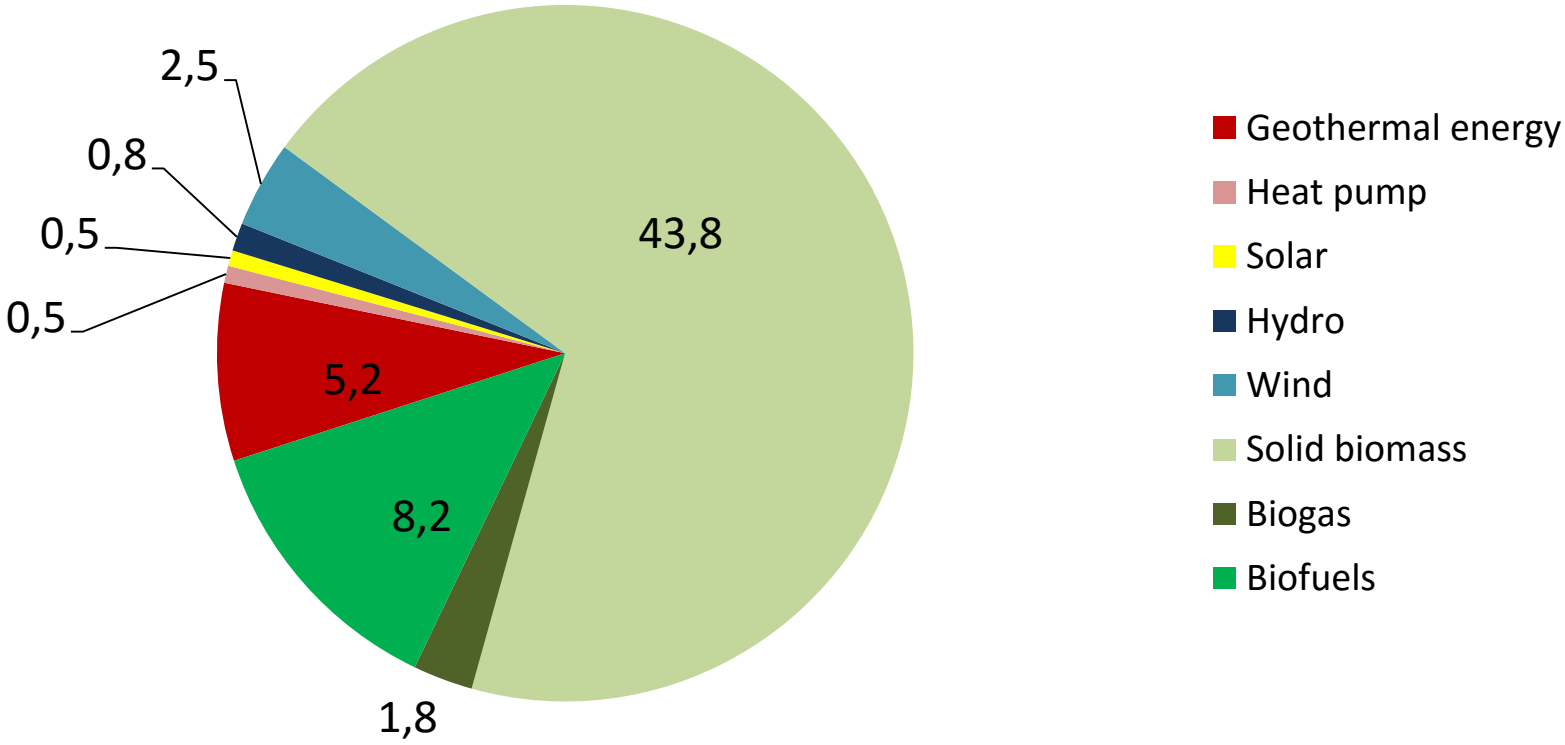
Renewable energy: the dominance of the **heating sector**



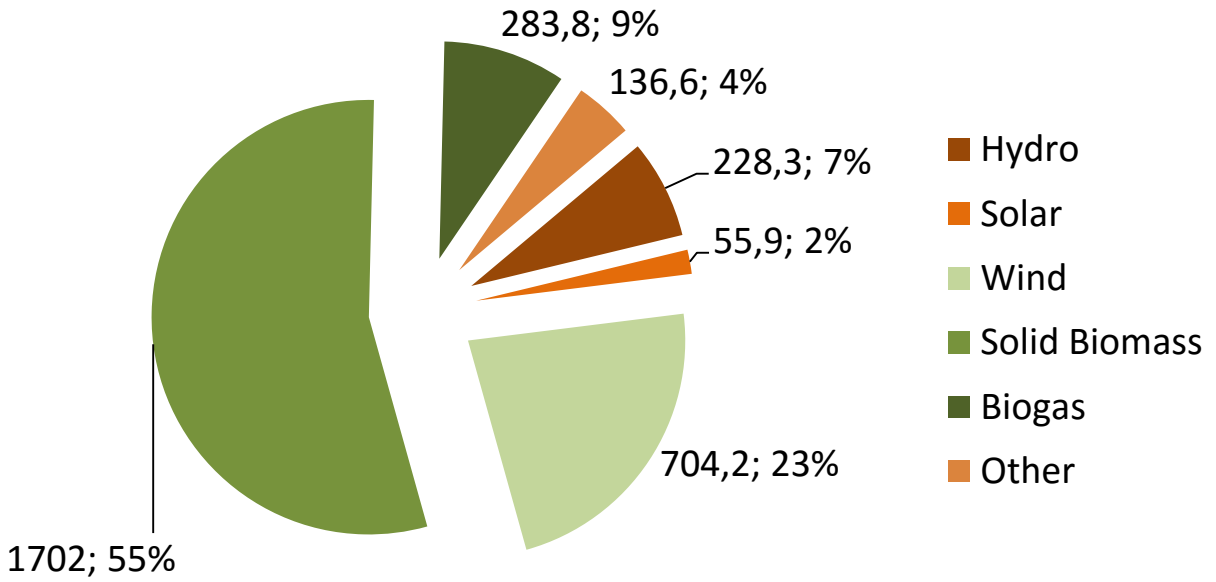
The combination of the renewable energy use in 2014:

- **66% heating**
- **17% electricity,**
- **17% transport**.

Renewable energy consumption by energy source in Hungary (2014, Eurostat) [PJ]

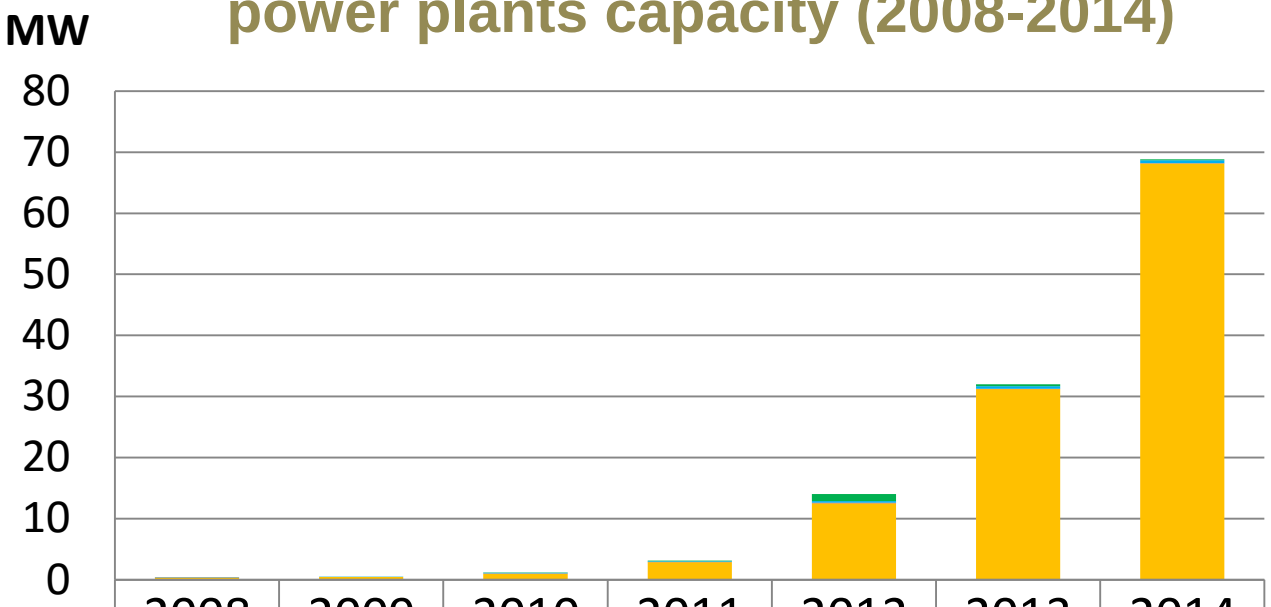


Renewable electricity production (2014) (GWh)



The total renewable electricity production **grew by 9%.** Compared to the 2013's 2828 GWh, **in 2014 it was 3111 GWh**.

The development of small-scale domestic power plants capacity (2008-2014)



	2008	2009	2010	2011	2012	2013	2014
biogas	0	0	0,05	0,07	1,18	0,31	0,16
Wind	0,01	0,06	0,1	0,13	0,25	0,4	0,5
Hydro	0,02	0	0,04	0,04	0,09	0,06	0,06
Solar	0,36	0,46	0,99	2,88	12,52	31,21	68,13

Plans for 2020, PJ

	For the 13% target	For the 14,65 % target
Gross final energy consumption	628	628
Required renewable energy consumption	82	92
Transport renewable energy consumption	15	15
Electricity renewable energy consumption	15	15
Heat renewable energy consumption	52	52
Missing renewable energy	**0**	**10**

II.

The Operational Programmes

Renewable energy and energy efficiency related incentives in the operational programmes

OP	ESB Funds	Priority axis	Source (Billion HUF)
EEEOP	CF	5.	308,4
EDIOP	ERDF	4., 8.	245,8
TOP	ERDF	3., 6.	190,6
CCHOP	ERDF	5.	23,5
Total			768,4

Environment And Energy Efficiency Operational Programme

*The **overall objective of EEEOP** is that **economic growth built on high value added production and extension of employment should be implemented in harmony with protection of human life and environmental elements** – taking account of long-term changes as well.*

Measures:

1. ***Measure:*** Promoting green electricity generation for the grid from non building based renewable sources
2. ***Measure:*** The modernisation of buildings for energy efficiency purposes, combined with the use of renewable energy sources
3. ***Measure:*** Energy efficiency development of district heating and heat supply systems and running them from renewable energy sources
4. ***Measure:*** Awareness raising programmes

III.

The operating aid for electricity production from renewable energy sources (METÁR)

Guidelines on State aid for environmental protection and energy 2014-2020
2014/C 200/01

The METÁR fulfills the basic requirements of the EU Guidelines as follows:

- Producers receiving the *operating aid* from METÁR above the market reference price, as a surcharge (premium).
- Beneficiaries have to bear the costs of deviations from the previously accepted daily schedule of electricity production.
- The new system ensures that no renewable electricity producers are receiving premium in case of negative electricity market prices if this period is exceeding 6 hours.
- The payment entitlements shall be distributed by competitive bidding (tendering) procedures, in order to maximize cost efficiency

METÁR package of legislation

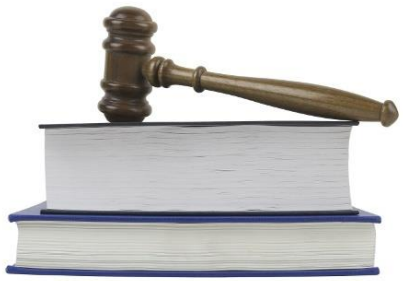
a) Concept

- there were consultations on the concept, and the legislative text were negotitated with the diffrerent stakeholders
- Prenotification phase

b) Legislation: It is planned to change Electric Energy Act, there will be new METÁR decree

- official notification phase

c) Further legislation: (ministerial and other decrees)



Exemptions in METÁR according to the Guidelines

The following electricity producers are enabled to receive feed-in tariff, remaining the main present feed-in tariff national system :

- Power plants below 0,5 MW capacity;
- Demonstration projects.

Feed-in tariff and Demonstration projects

- **In the case of power plants, with small capacity (up to 0.5 MW)** and demonstration projects, METÁR feed-in tariff will be used. The energy produced will be taken over by the Hungarian Electricity Transmission System Operator Company Ltd. (hereinafter: referred to as MAVIR) and will be sold on the market operated by HUPX Ltd.

- **In the case of power plants with medium capacity (between 0.5 and 1 MW),** administrative premium support will be granted to producers, without any *competitive bidding procedure (no tenders).* The prices and principles are regulated *in MEKH decree, in special cases* (eg. demonstration projects) MEKH is to decide by individual cases, on the basis of calculations under the MEKH decree.

- The Hungarian system similarly to the EU Guidelines treats the demonstration projects as exceptions

Premium System

- The power plants must sell the electricity produced from renewable sources on the free market at market price
- Producers receiving the operating aid from METÁR above the market reference price, as a surcharge (**premium**)
- The benchmark for the **floating premium** price is the market reference price, i.e. not the price actually gained by the producer
- Producers real income = market price + premium
- **Brown premium**: the operating aid provided for biomass/biogas power plants after depreciation of the power plants

The competitive bidding process

- The aid shall be allocated to the cost efficiency through bidding process
- General competitive bidding procedures are not fully compulsory in 2016, as it is enough the tender only 5% of new entry renewable energy capacity, but according to our expectation after 1 Jan 2017 competitive bidding rules are compulsory.
- The premium price support is for a **maximum** 20 years long period.

IV.

National subsidy programme for greening of housing:

- to facilitate the energy eff. invesments of flats, apartment houses (block buldings) etc.
- „Warmth of Homes”

Warmth of Homes

Subprograms	Source	Number of applications
Houshold Machine Replacement Subprogram (refridgerators)	799 m HUF	25 821 Pcs.
Window and Door Replacement	1,1 bn HUF	2 821 Pcs.
Heating System Refurbishment (Boiler Replacement)	1,25 bn HUF	2 782 Pcs.
Complex Energy Efficient Reconstruction of Apartment Houses	11,8 bn HUF	491 Pcs.
Houshold Machine Replacement Subprogram (washing machine)	1,9 bn HUF	44 248 Pcs.
Total:	16,8 bn HUF	76 163 Pcs.

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CO2 reduction effect of „Warmth of Homes" Programs

Washing machine Replacement:
3 365 521 kWh/year – 3 121 648 kg CO2
10-15.000 HUF yearly savings per houshold

Refrigerator Replacement:
9 577 974 kWh/year – 8 795 490 kg CO2
12-20.000 HUF yearly savings per houshold

Window and Door Replacement Program:
10 224 176 kWh/year -- 1 961 640 kg CO2
30-75.000 HUF yearly savings per houshold

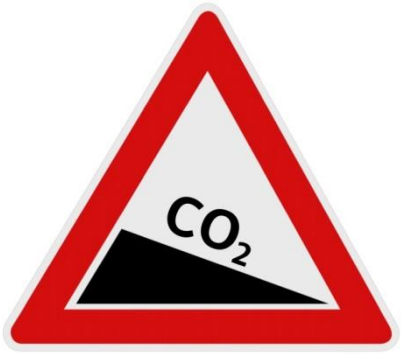
Heating System Refurbishment (Boiler Replacement):
21 995 623 kWh/year -- 4 663 700 kg CO2
30-100.000 HUF yearly savings per houshold

Energy Efficient Renovation of Apartment Buildings:
94 489 969 kWh/year – 20 932 180 kg CO2
30-180.000 HUF yearly savings per houshold

ongoing

More than 138 000 000 kWh /year energy savings

More than 38 000 000 kg CO2 savings per year



Thank you for your kind attention!

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