



MINISTRY  
OF NATIONAL DEVELOPMENT



# DEVELOPING THE GREEN ECONOMY IN HUNGARY

ZSOLT GEMESI



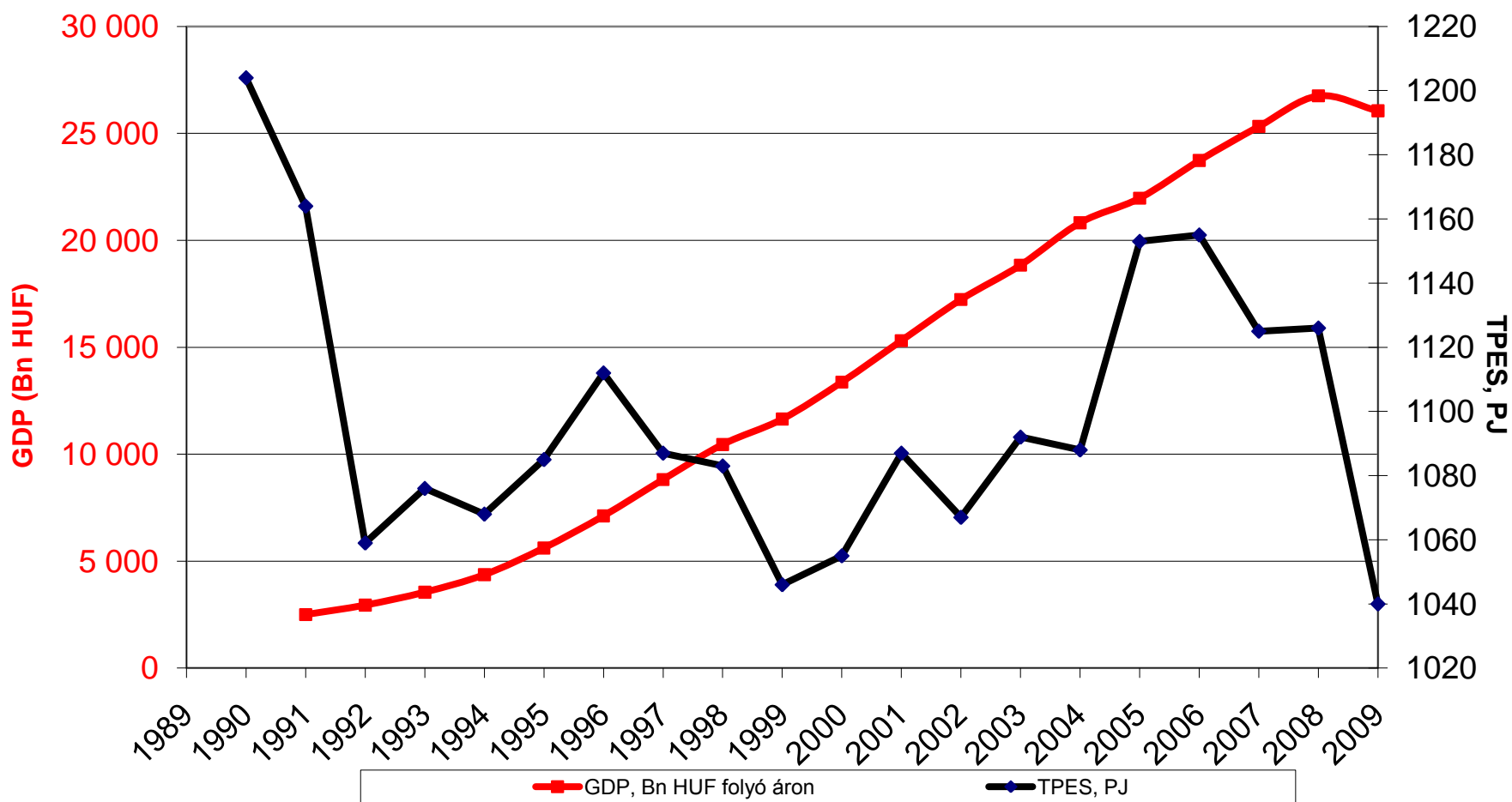
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## OUTLINE

- Energy basics
- Distorting effects of the existing system
- Status report
- Key features of the new system



## GDP & TPES



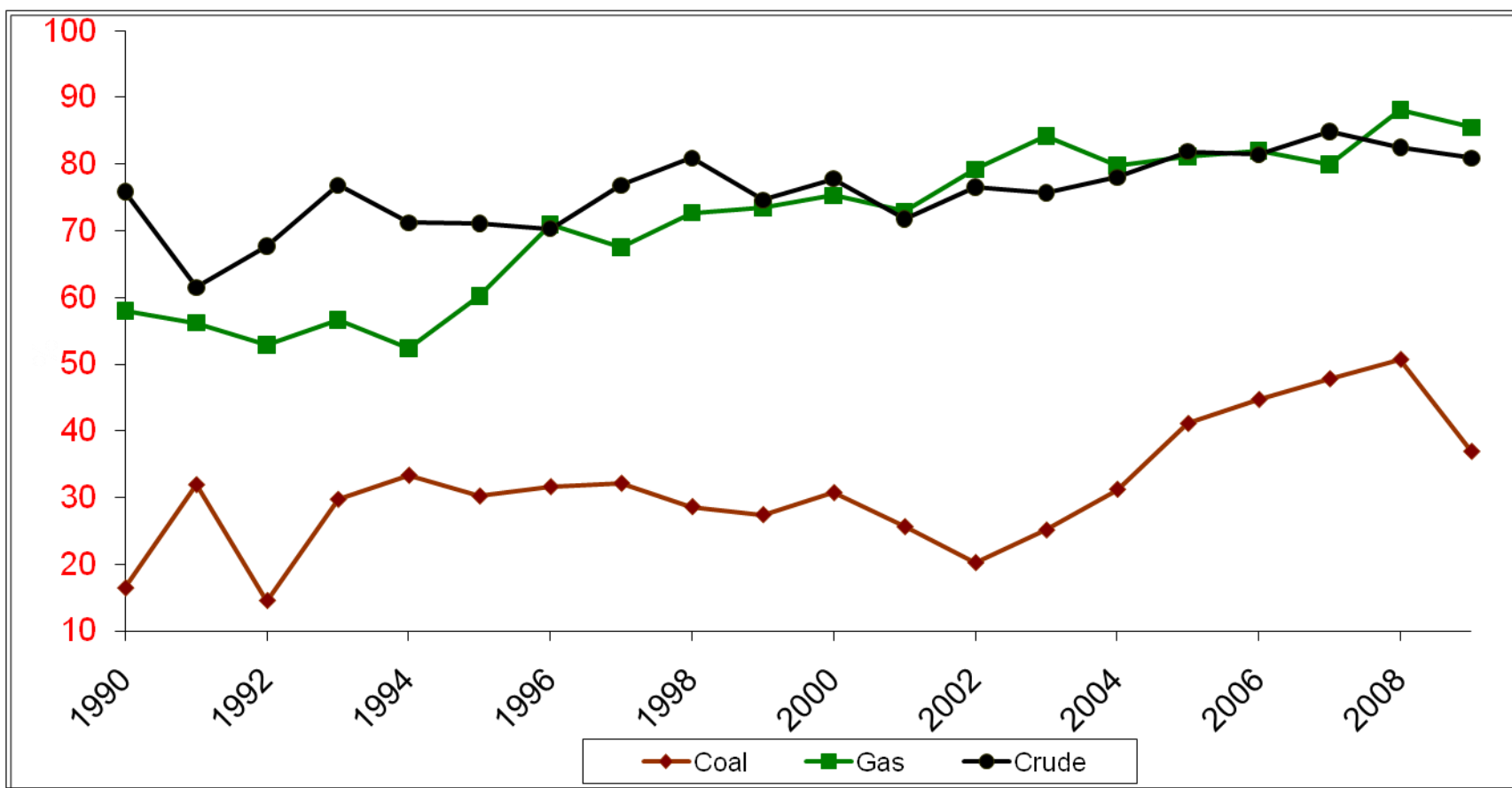
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## ESSENTIAL ENERGY INFO

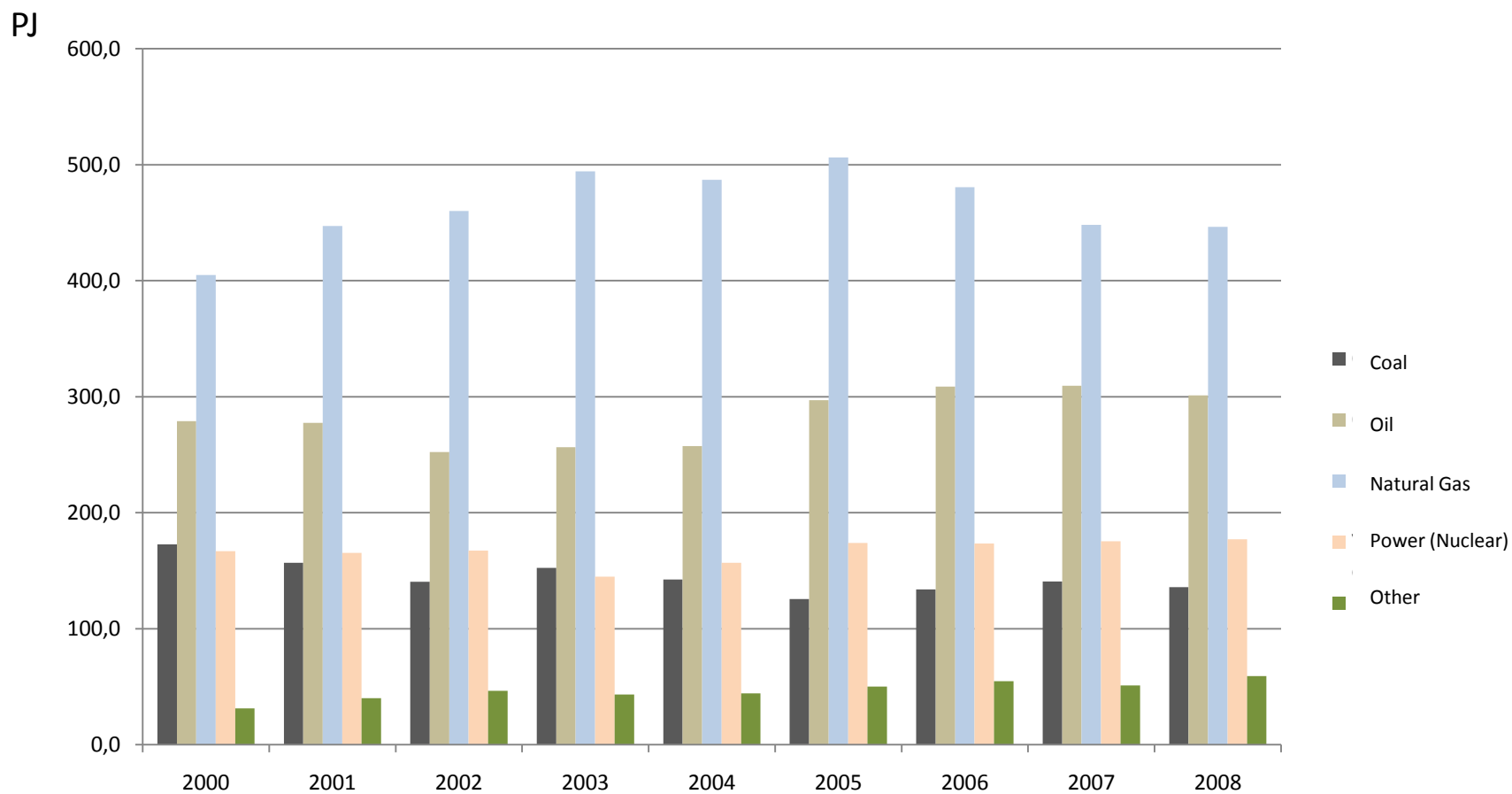
- TPES in 2009: 1 040 PJ
- Domestic production: ~ 440 PJ
- RES in TPES 77 PJ (7.35 %)
- Natural Gas facts:
  - 37% of energy mix (45% in 2003)
  - Import dependency >80 % (same applies to oil)
  - Source of supply – Russia via Ukraine
- Import dependency: 80%



# ENERGY IMPORT DEPENDENCY

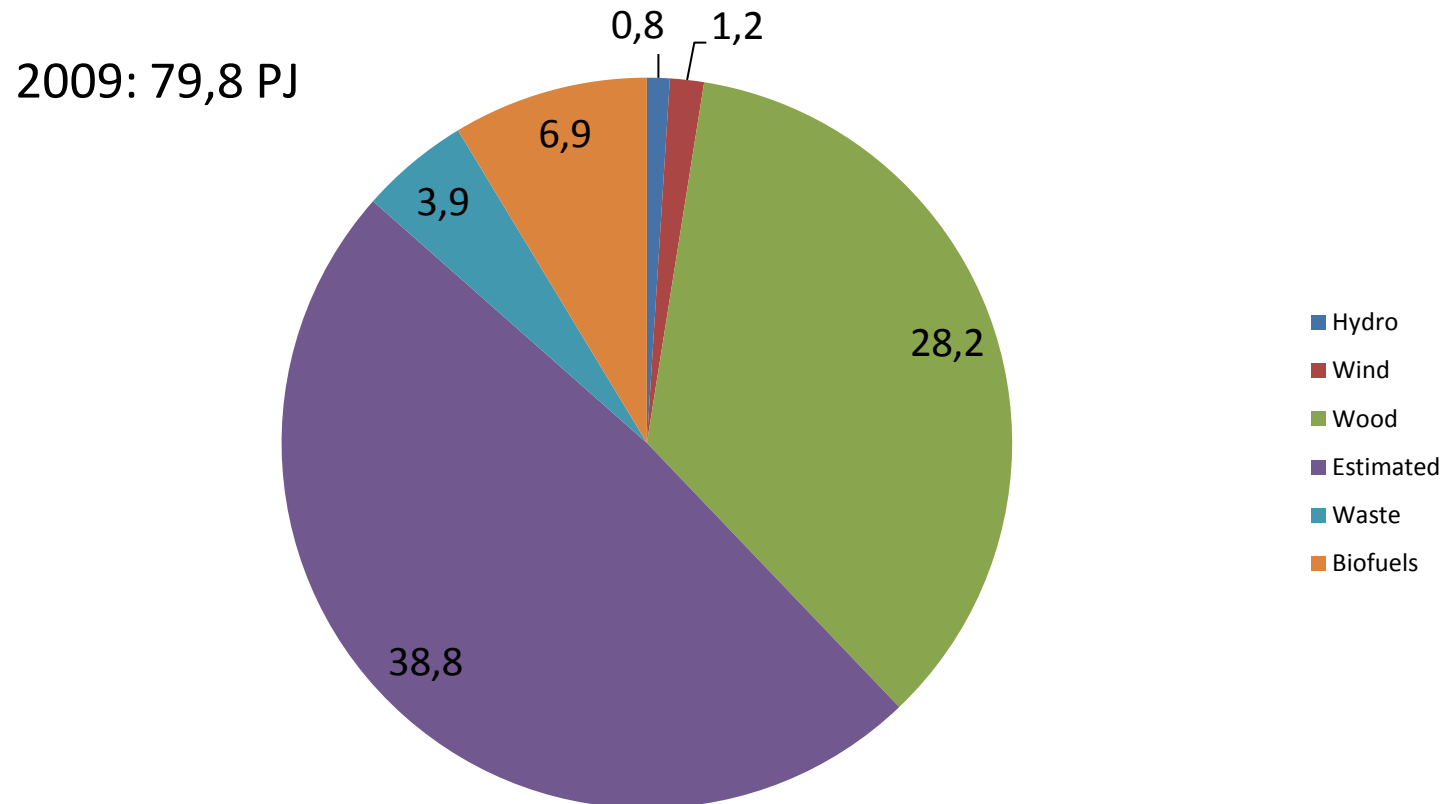


# TPES TRENDS

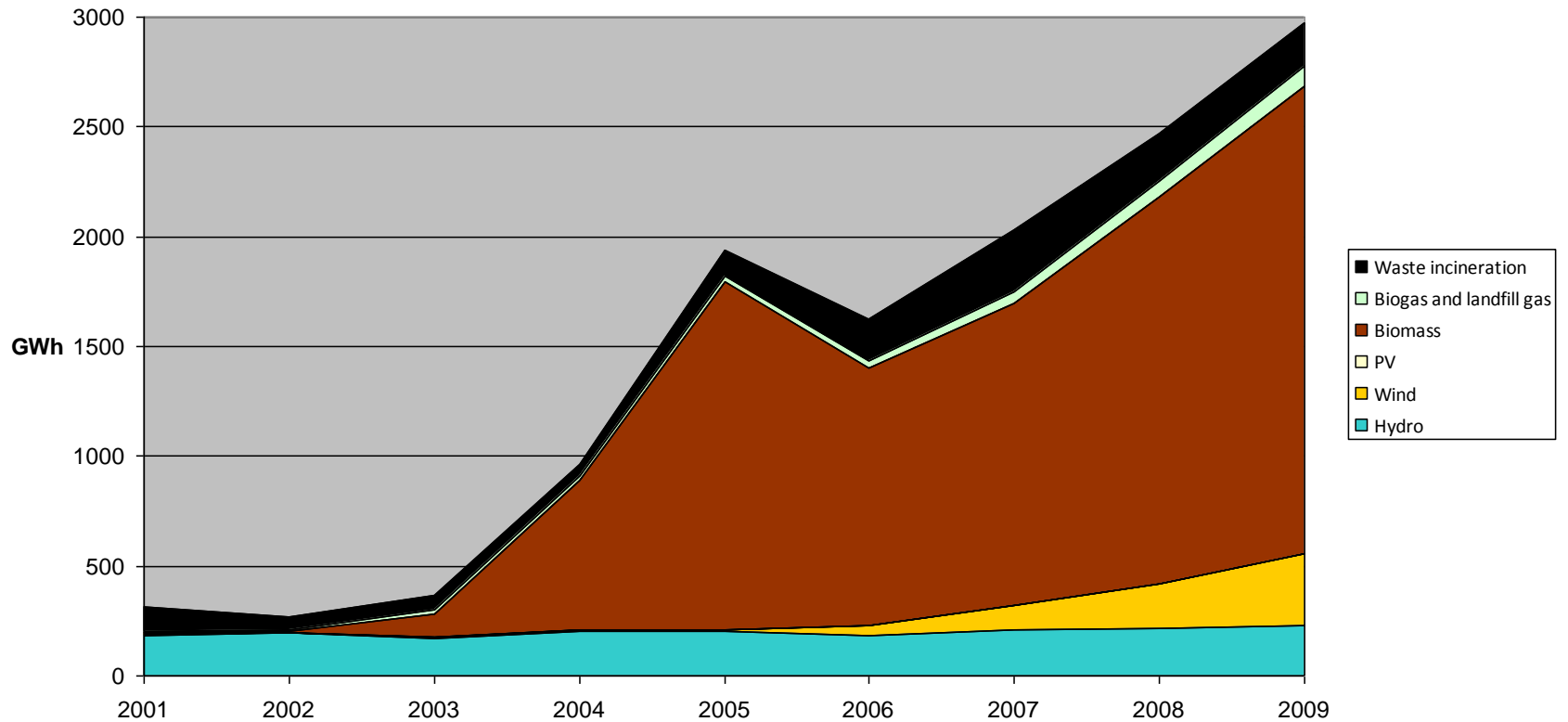


Data source: Energy Center, Hungary

# RENEWABLES IN PRIMARY ENERGY PRODUCTION

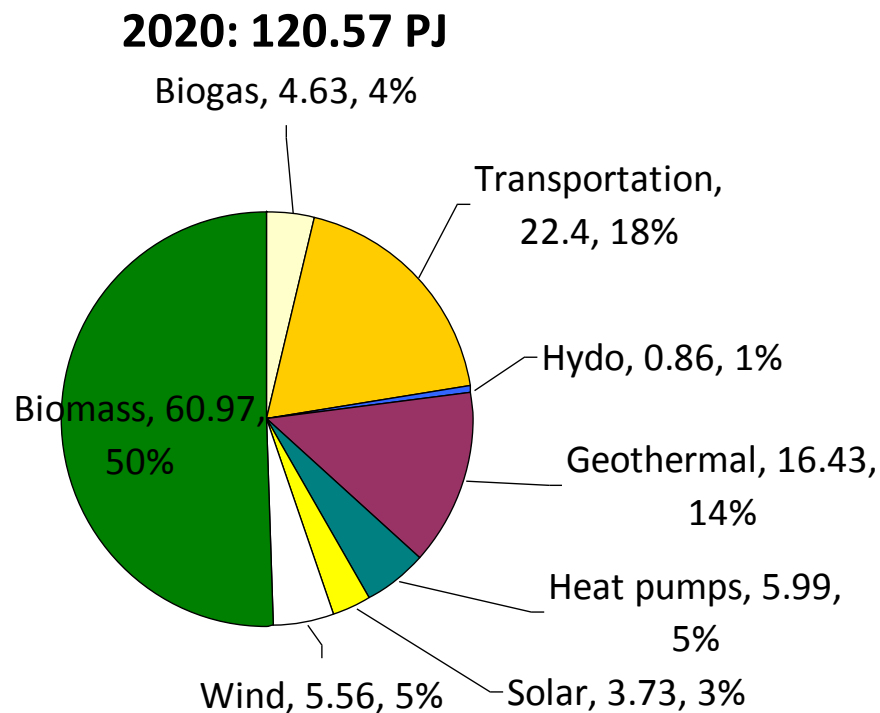
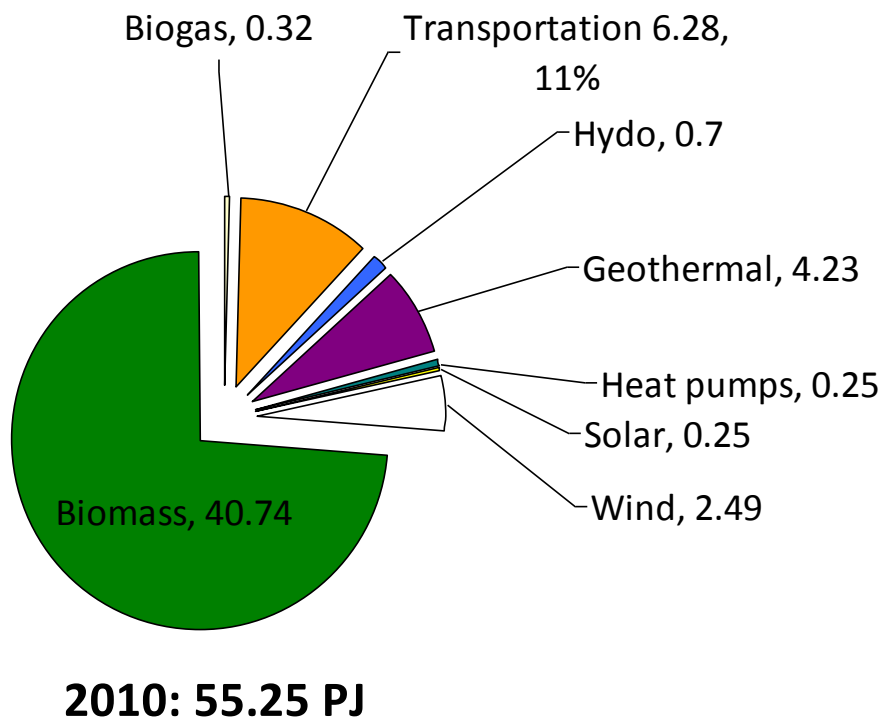


# RENEWABLES IN POWER GENERATION



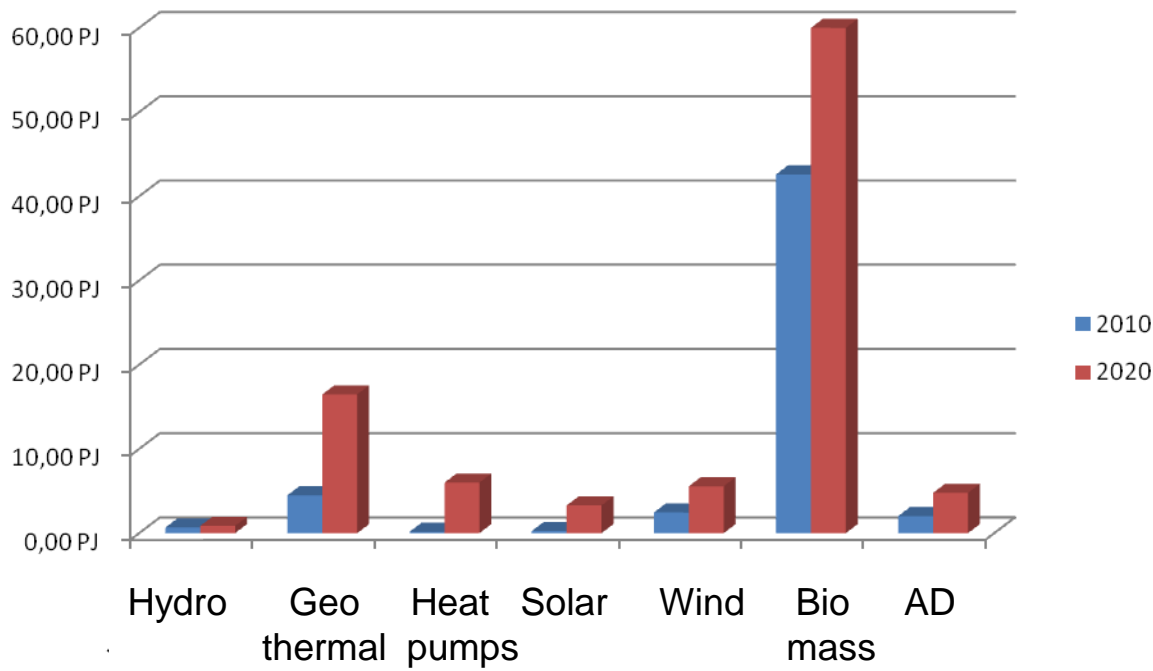


# RENEWABLE ENERGY SHARE IN POWER, H/C AND TRANSPORT SECTOR



## RE MIX STRUCTURAL CHANGES

Renewable energy (PJ)



- Contributes to:
  - Green collar jobs
  - R+I
  - Poverty alleviation

## NREAP Highlights

- 14.65% RES in final energy consumption
- More balanced mix
- Discontinued use of log wood for co-firing in low efficiency power plants
- Roll-out of decentralised, small-medium scale biomass power plants, CHP preferred
- Shift to 2<sup>nd</sup> generation biofuels

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## SUPPORT SCHEMES AND INCENTIVES

- New Szecheny Plan offers 520 M EUR for green economy development
- Feed in tariff system – currently under revision
- Green development fund - planned

## DISTORTING EFFECTS

- Original goal: to support renewables - lost
- Gas-firing power plants bought-in
- Loopholes in the system gave rise to low efficiency wood co-firing units being kept artificially alive
- Energy efficiency went south
- State aid did not trickle down to consumers

## STATUS REPORT

- The existing FIT will be terminated July 1. 2011.
- System will revert to original goal: support renewables
  - Discontinued support for gas CHPs
- Result - 15-20 % RES power, 40-50% in RES heat in 2030
- System will be financed from power billing

## KEY FEATURES OF THE NEW FIT SYSTEM

- Social utility – guiding principle
- DH moratorium
- Biomass
  - Lower capacity thresholds for eligibility
  - Higher efficiency
  - Sustainability criteria
- System will save 20-30 Bn HUF yr<sup>-1</sup>
- Annual quota system - limitations

# DH MORATORIUM

Law on harmonisation of energy regulations passed  
by Parliament

Consequence: DH prices will be set by government  
as of April 15 2011



## BIOMASS – CAPACITY THRESHOLDS FOR ELIGIBILITY

- Forestry biomass for power >10 MW
- Biomass plants <20 MW only if public heat is provided
- Biomass plants > 20 MW if ag residue is used

## BIOMASS – SUSTAINABILITY CRITERIA

- Certificate of origin
- Stricter certification
- Clear definition of firewood
- Set up forestry service

Negotiations with Ministry for Rural Development

Deadline for final proposal to Government: April 30

## KEY PARAMETERS OF THE NEW FIT SYSTEM

- Differentiated FIT
- Periodical review of support
- 15-year eligibility period
- Bonus system
- Brown tariff

## GAS-FIRING CHPs

### Goals:

- Gradual phase-out from FIT
  - Gas power plants waived support as of July
  - Guaranteed feed in for operators that have not recovered CAPEX
  - Support provided for public heat from CHP
- Dialogue with industry about conditions and process
- Guaranteed supply of DH for public.

## ***Result***

***The new RES heat support mechanism will kick-in following EC approval at the onset of the next heating season  
a.k.a October 15.***



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**THANK YOU**

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