

INNOVATION AT WORK

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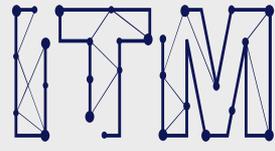
# The Hungarian NECP



MINISTRY FOR  
INNOVATION AND TECHNOLOGY

**Dr. Ottó Toldi**  
*energy- and climate policy analyst*  
Ministry for Innovation and Technology, Budapest, Hungary

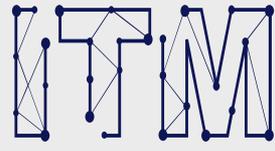
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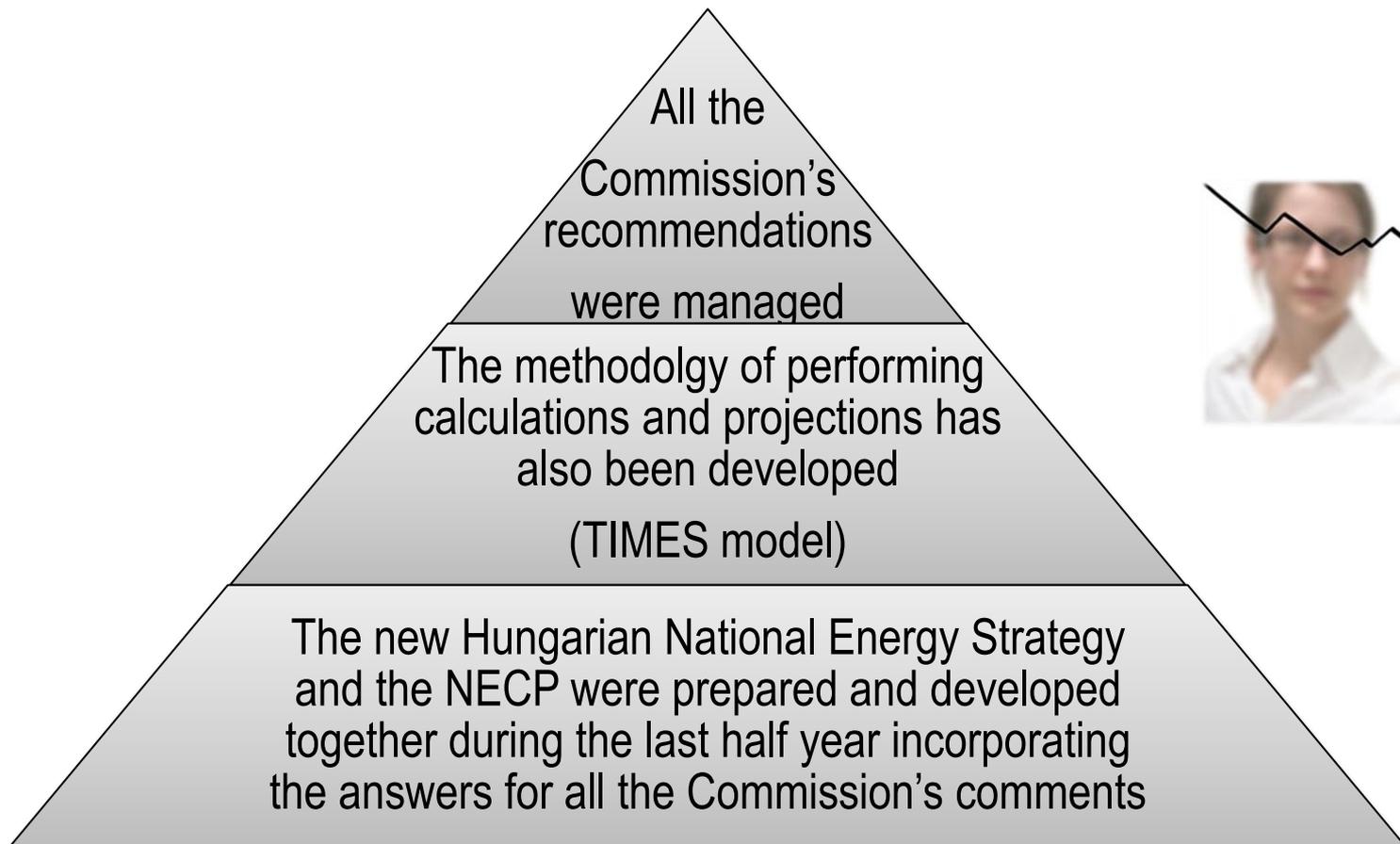
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# State of play of the finalization of the Hungarian NECP



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The government's approval is expected in the beginning of December, and the submission is before the deadline



# How did the preparation of first ever integrated NECP impacted the national energy and climate policy in Hungary

We gained valuable experiences about our own limits in the way towards the climate neutrality and also about the attitude of the Commission still in power

The Commission's criticism in relation to our draft NECP:



- The energy efficiency targets are not ambitious enough,
- The renewable energy targets are also not ambitious enough,
- No further developments in wind energy utilization are planned,
- The future measures in the transport sector are not sufficient enough for lowering the emission (GHG emission of the transport sector should be lower by 7% in 2030 compared to 2015),
- Hungary should plan a 55% reduction in GHG emission, instead of 40% by 2030
- The dominant role of the lignite-fired Mátra Power Plant in the Hungarian emission (its emission is 6,4 tons of CO<sub>2</sub>e annually),
- According to the Commission, the nuclear energy can not be categorized as clean electricity in respect of GHG emission,

# What are the benefits/ potentials of the NECPs and what could be improved

## pros

- Combating climate change and the economic development are not conflicting but rather they can strengthen each other. Those are the ,winners' who can provide technological and economic solutions for that.
- The best approach is when the energy and climate policy are managed in an integrated manner.
- The continental Central Europe is one of the most vulnerable part of the EU to climate change.
- Utilization of the domestic renewable energy sources = decreasing dependency on imported fossil energy



## cons

- The Commission should accept that the nuclear energy is a carbon-free form of electricity generation, and not worse than the renewable energy (especially if the comparison is made on the basis of the whole life cycle).
- The Commission should inform member states about the available financial sources prior to planning periods of future revisions of NECPs

# How the Hungarian government is addressing the Recommendations



| Dimensions        | Indicators   | <br>EU's targets for 2030 | <br>Hungarian targets for 2030 | <br>Commission's recommendations | <br>Most important measures            |
|-------------------|--|--|---|---|---|
| Decarbonisation   | Reduction of GHG emission (%) compared to 1990                       | min. -40%  | min. -40%   | <b>-55 %</b>  | -Climate-friendly conversion of the electricity sector  |
|                   | GHG intensity of GDP   |  | a continuous decrease   |   |   |
|                   | Reduction of GHG emission in the non-ETS sector (%) compared to 2005 | min. -10%  | min. -7%  |   |   |
|                   | Share of RES in the brutto final energy consumption                  | min. 32%   | min. 21%  | <b>23%</b>  | -Promoting PV penetration, greening transportation (e-mobility)<br>-Modernisation of district heating services            |
| Energy efficiency | Final energy consumption   | Indicative 32,5% reduction   | max. 785 PJ compared to the recent 775 PJ (2017)  | <b>„not ambitious enough”</b>   | -Reduction of final energy consumption by 0,8% annually:<br>-Improving energy efficiency in buildings and in the industry |

## The climate neutrality is theoretically accessible but only with the significant contribution of the EU

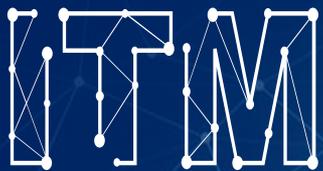
- The climate neutrality is accessible in Hungary through the implementation of deep economic transition programmes
- The preparation of related strategies and plans have been started, their financial requisites were reported to Brussels
- Achieving climate neutrality is possible only with the significant contribution of the EU
- The cost of reaching 2030's climate targets is about 103 bn EUR, from which ~56 bn EUR is the price of climate-friendly transformation of the energy sector
- The cost of achieving climate neutrality is ~155 bn EUR (investing 2.6% of the Hungarian GDP yearly until 2050).



# What are the main novelties (in terms of level of ambition, objectives but also main policies and measures) that you are envisaging introducing in your final NECP



- ❖ **Gas consumption:** from 10 bcm to ~8,7 bcm by 2030 (2040: below 6,3 bcm)
- ❖ **Gas import:** ~70% by 2030 (2040: below 70%)
- ❖ **Share of gas in district heating:** ~50%
- ❖ **Share of carbon-free electricity production by 2030:** ~80% (2040: 90%)
- ❖ **Planned PV capacity:** min. 4000 MW by 2030 (2040: min. 7000 MW)
- ❖ **1 million smart meters by 2030**
- ❖ **Share of imported electricity decreases below 20% by 2040**
- ❖ **Share of RES: 21% by 2030**
  - Transport: min. 14%
  - Heating-cooling: ~30%
  - Electricity: ~25%
- ❖ **GHG-emission:** min. -40% by 2030
- ❖ **Non-ETS emission:** min. -7% compared to 2005
- ❖ **Final energy consumption:** max. 785 PJ (775 PJ in 2017)
- ❖ **The excess final energy consumption can be only RES-originated**



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**Thank you for your attention!**

[otto.toldi@itm.gov.hu](mailto:otto.toldi@itm.gov.hu)