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# **Integrated National Energy and Climate Plan Data & Assumptions, Croatia**

**11th Regional Exchange of Modelling Experts  
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- NECP drafting in Croatia started in 2018 (strongly related with development of the new National Energy Strategy, until 2030 with outlook until 2050)
- Energy Institute Hrvoje Požar provided expert support to the Ministry in charge of energy and climate for both documents
- First NECP draft submitted to the EC in December 2018
- Drafting continued in early 2019 (impact assessment, 5th dimension, aligning the content with the adopted Regulation)
- EC recommendations received in June 2019
- Final NECP submitted to the EC in December 2019
- Since then one revision (RES in transport)

- SECTION A: NATIONAL PLAN
  1. Overview and Process for Establishing the Plan
  2. National Objectives and Targets
  3. Policies and Measures
- SECTION B: ANALYTICAL BASIS
  4. Current Situation and Projections with Existing Policies and Measures
  5. Impact Assessment of Planned Policies and Measures
- APPENDICES
  - Report on Parameters and Variables Used (xls)
  - Energy balance and indicators (xls)
  - Article 7 Measures and methods for implementing (doc)
  - Policies and measures (xls)
  - Report on GHG Emissions by sector and type of gas (xls)

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- Demographic projections until 2050 (low, medium and high projections), made for the purpose of the energy strategy development (below The Aging Report 2015)
- GDP and GVA projections until 2050, made for the purpose of the energy strategy development (using the medium demographic projection)
- Fossil fuel prices: IEA WEO 2017, “New Policies Scenario” + extrapolation after 2040
- ETS prices: EU reference scenario 2016 + own projections until 2030
- Technology costs: IEA WEO 2017 + Fraunhofer-Institute for Solar Energy Systems + own projections

- All energy consumption sectors modelled within the Energy strategy
  - MAED, MESSAGE, PLEXOS
  - BAU, S<sub>1</sub> (high ambition), S<sub>2</sub> (moderate ambition)
- All other GHG emission sectors modelled within the Low Carbon Development Strategy
  - LEAP
  - BAU, NU<sub>2</sub> (high ambition), NU<sub>1</sub> (moderate ambition)

## NECP goals





- Set for all five dimensions
- Main goals are:

<b>ETS emissions reduction compared to 2005</b>	At least 43%
<b>Non-ETS emissions reduction compared to 2005</b>	At least 7%
<b>RES share in gross final energy consumption</b>	36,6%
<b>RES share in transport</b>	14%
<b>Primary energy consumption</b>	344,4 PJ
<b>Final energy consumption</b>	286,9 PJ

# Inputs received from the EC (1/2)

- March 2019: primary energy consumption or gross inland consumption?
  - primary energy consumption = gross inland consumption – non-energy uses

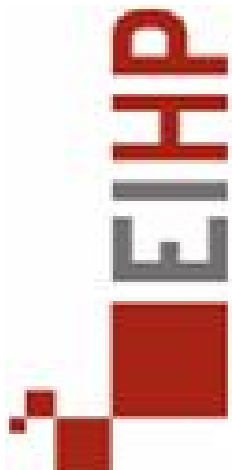
- June 2019:

	National targets and contributions	Latest available data	2020	2030	Assessment of 2030 ambition level
	Binding target for greenhouse gas emissions compared to 2005 under the Effort Sharing Regulation (ESR) (%)	-8	+11	-7	As in ESR
	National target/contribution for renewable energy: Share of energy from renewable sources in gross final consumption of energy (%)	27.3	20.1	36.4	Above 32 % (result of RES formula)
	National contribution for energy efficiency: Primary energy consumption (Mtoe) Final energy consumption (Mtoe)	8.3 6.9	10.7 7.0	8.2 6.9	Low Low
	Level of electricity interconnectivity (%)	52	102	Not provided	N/A

- [https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32019H0903\(11\)&from=EN](https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32019H0903(11)&from=EN)



# Questions, comments?



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