

Ministry of Economy

NECP-experience

4TH ENERGY AND CLIMATE TECHNICAL WORKING GROUP
VLASTIMIR TRAJKOVSKI

INTRODUCTION

MINISTRY OF ECONOMY

- ENERGY LAW – ADOPTED IN MAY 2018, IMPLEMENTS THE PROVISIONS AND OBLIGATIONS FROM THE THIRD ENERGY PACKAGE OF EU
 - *STRATEGY FOR ENERGY DEVELOPMENT OF THE REPUBLIC OF MACEDONIA UNTIL 2040 IS PREPARED ACCORDING TO THE REQUIREMENTS OF THE NEW ENERGY LAW*
 - ENERGY EFFICIENCY LAW-DRAFT
 - NECP
-

MINISTRY OF ENVIRONMENT AND PHYSICAL PLANNING

- IPA PROJECT ON PREPARATION OF LAW AND LONG-TERM STRATEGY ON CLIMATE ACTION

NECP Progress

The Ministry of Economy remains the national body in charge for development of the NECP;

The NECP Working Group has been established.

The national experts have been identified;

The identified consultants have been involved in the process of development of the energy and climate change. By this, the team of technical experts will secure full synchronization of the national strategic documents in the area of energy and climate;

The gaps and challenges the country is expected to face during the preparation of the NECP are identified and submitted to EnC (November 15th);

The dimension (sub-) groups are established and in general incorporate representatives from the national institutions, academia, municipal authorities, private sector companies, and civil society organizations;

They are all ready to start the “in-practice” work in groups once we have official contract with the technical experts;

NECP National Coordinator:
NECP Technical Coordinator:
Support:

Technical Working Group: 5 Technical Coordinators

International Mentor Support:

**DIMENSION 1:
DECARBONISATION**
National Coordinator:
Technical Coordinator:
Dimension Members:

**DIMENSION 2:
ENERGY EFFICIENCY**
National Coordinator:
Technical Coordinator:
Dimension Members:

**DIMENSION 3:
ENERGY SECURITY**
National Coordinator:
Technical Coordinator:
Dimension Members:

**DIMENSION 4:
ENERGY MARKET**
National Coordinator:
Technical Coordinator:
Dimension Members:

**DIMENSION 3:
R&I and COMPETITIVENESS**
National Coordinator:
Technical Coordinator:
Dimension Members:

Additional Support:
•Expert on GHGE & Waste
•Expert on GHGE & Agriculture
•Expert on GHGE & Forestry

NECP Development

The NECP will be harmonized with the strategic and planning documents and relevant legislation which are in preparation/adoption phase or has been recently adopted:

Draft version of the Strategy for Energy Development up to 2040,

Draft version of the Forth national energy efficiency action plan,

Second biennial update report on climate change,

Third biennial update report on climate change,

Draft version of the Long Term Climate Strategy

Energy Law,

Draft version of the Energy Efficiency Law,

Draft version of the Law on Climate Action

Identification of Gaps and Barriers

against the General framework for integrated NECP

Topics	Priority	Gap	Type of support needed	What if the gap remains
1. Overview and process for establishing the plan	Medium	1.4 Regional cooperation in preparing the plan	EnC support (expert mission)	
2. National objectives and targets	High	The latest modeling results cover the period up to 2040.	1. IPA project can provide financial support on extension of the modeling period in the framework on Long term climate strategy 2. GIZ project can provide financial support on extension of the modeling period in the framework on NECP	NCAP period until 2040 2050 Perspective to be recommended for the next NECP
	Low	2.4.4 Energy poverty (At the moment there is no such analysis)	EnC support (additional human capacity)	Recommendation to be covered in the next NECPs
3. Policy and measures	High	3.1.3 Decarbonisation - Other elements of the dimension (there is no disaggregation on ETS and non-ETS sector)	EnC support (additional human capacity) or other donors (financial support)	ETS non-ETS disaggregation to be recommended for future NECPs
	High	3.2 Dimension energy efficiency (there is no strategy for building renovation as well as updated data on public building stock)	1. Donors (technical support) 2. EnC (technical support)	The household the latest published data from the State Statistical Office will be used, while for the public building, data from the National Program for Energy Efficiency in Public Building.
	Low	3.4.4 Energy poverty (At the moment there is no such analysis)	EnC support (additional human capacity)	Recommendation to be covered in the next NECPs
4. Current situation and projections with existing policy and measures	High	4. 1 Macroeconomic forecast (no long term projections)		For the population the UN data can be used, while for the GDP development of a national long term economic model is needed. In absence of such model, current method will be used.
	High	4.2.1 Decarbonisation - (there is no disaggregation on ETS and non-ETS sector)	EnC support (additional human capacity) or other donors (financial support)	ETS non-ETS disaggregation to be recommended for future NECPs
	Medium	4.3 Dimension Energy Efficiency (there is no study on potential for the application of high efficient cogeneration and efficiency district heating and cooling)		According to the draft version of the Energy Efficiency Law, this type of study should be developed as a part of the Program for the realization of the strategy for energy development. For this NCEP current method will be used
List of parameters and variables to be reported in Section B of National Plans	High	Number of passenger- km: all modes		Data from the State Statistical Office cover only the buses and rail transport, while for the light duty vehicles model for calculation of the passenger-km based on the number of vehicles and fuel consumption will be used

Strategy for Energy

MACEDONIA HAS DEVELOPED A DRAFT VERSION OF A NATIONAL STRATEGY FOR ENERGY DEVELOPMENT UP TO 2040.

THE STRATEGY HAVE THREE SCENARIOS: REFERENCE, MODERATE TRANSITION AND GREEN.

THE STRATEGY DEFINES FIVE ENERGY PILLARS WITH SIX STRATEGIC GOALS, CLOSELY INTERLINKED WITH THE FIVE DIMENSIONS OF THE EU ENERGY UNION STRATEGY:

- SECURITY, SOLIDARITY AND TRUST;
- A FULLY INTEGRATED INTERNAL ENERGY MARKET;
- ENERGY EFFICIENCY;
- DECARBONIZING THE ECONOMY;
- RESEARCH, INNOVATION AND COMPETITIVENESS.

Energy strategy (draft)




Secure, efficient, environmentally friendly and competitive energy system that is capable to support the sustainable economic growth of the country.

Overview of scenarios for the development of Macedonian energy system until 2040

		Reference scenario	Moderate Transition scenario	Green scenario
Vision		Transition from conventional energy based on current policy and least cost principles	Progressive transition from conventional energy based on new policy and least cost principle	Radical transition from conventional energy based on new policy and lignite phase out
Assumption highlights	Demand drivers	<ul style="list-style-type: none"> Macedonian GDP growth to reach neighboring EU countries' GDP per capita levels of today by 2040 Current energy efficiency policies Penetration of EVs 	<ul style="list-style-type: none"> Same GDP growth as for reference Energy efficiency based on enhanced policy (in line with EU Directives / EnC guidelines) Higher penetration of EVs 	<ul style="list-style-type: none"> Same GDP growth as for reference Same as moderate transition but more incentives and advanced technologies Highest penetration of EVs
	Generation investments focus	<ul style="list-style-type: none"> Lignite PP revitalization choice based on least cost principles High focus on RES 	<ul style="list-style-type: none"> Lignite PP revitalization choice based on least cost principles Further focus on RES technology investments 	<ul style="list-style-type: none"> Lignite PP revitalization choice based on least cost principles Extreme focus on RES investments
	ETS entrance	2027	2025	2023
	Commodity prices (WEO 2017) ¹	Based on current policies scenario	Based on new policy scenario	Based on the sustainable development scenario
	Fuel Supply / Availability	<ul style="list-style-type: none"> Lignite production capped at a maximum level of annual supply expected (~ 5 M tons 2018-2035, ~ 3 M tons 2035-2040) Hydro production and wind/solar in line with historical trends and adjusted for new entering power plants Cross Border Capacities (electricity and gas) evolution in line with the ENTSO-E, ENTSO-G and EnC Sustainable consumption of biomass² Battery storage (EVs and pump storage) 		

Energy strategy (draft)

Summary of results vs. indicative 2030 EnC targets

Energy pillar	Indicator	Year 2030 (relative terms)				Year 2030 (absolute terms)			
		EnC target	Reference	Moderate Transition	Green	EnC target	Reference	Moderate Transition	Green
1 Energy efficiency	Energy efficiency 	-32.5% primary <u>OR</u> final vs. BAU	-15.3% primary -10.3% final	-31.2% primary -16.6% final	-34.5% primary -20.8% final	2,862 ktoe primary 1,996 ktoe final	2,975 ktoe primary 2,301 ktoe final	2,414 ktoe primary 2,138 ktoe final	2,300 ktoe primary 2,030 ktoe final
	3 Decarbonisation	GHG emissions 	+13% vs. 2005	-11.4% (-20.9%)	-37.6% (-57.2%)	-43.0% (-64.7%)	14.7 Mt CO ₂ -eq	11.5 Mt (7.4 Mt) CO ₂ -eq	8.1 Mt (4.0 Mt) CO ₂ -eq
	RES share 	33.9% at least	33%	38%	40%	n/a	n/a	n/a	n/a

Results vs. EnC targets EnC 2030 achieved EnC 2030 almost achieved EnC 2030 not achieved Targets not available

Note: The indicative 2030 EnC targets have not been formally adopted during the process of development of the Strategy. The GHG emissions target defined in the EnC Study is economy-wide (covering all IPCC sectors - Energy, IPPU, Waste and Agriculture excluding FOLU), and for Macedonia it reads: in 2030 13% increase of total GHG emissions compared to 2005 emission level. In our Strategy only Energy sector is targeted, so in order to compare EnC GHG target and the Strategy consistent economy-wide target, it is assumed that emissions in all sectors except Energy in 2030 will increase for 13% compared to 2005. The upper values of GHG emissions correspond to Strategy consistent economy-wide figures, while the numbers in brackets correspond to Energy sector figures.

Thank you!

WWW.ECONOMY.GOV.MK

VLASTIMIR.TRAJKOVSKI@ECONOMY.GOV.MK