

2nd webinar series on national experience in long-term energy scenario (LTES) use and development

Janis Rekis
Institute of Physical Energetics (IPE)
Latvia

November - December 2021

Development of scenarios (A)

Governance structure

UNFCCC and EU policies

- Agreements,
 Regulations, Directives,
 Targets
 - GHG Emission and air pollutants
 - RES, energy efficiency

Policy development

- For CC policy is responsible the Ministry of Environmental Protection and Regional Development
- For energy policy is in charge the Ministry of Economics
- Other stakeholders agriculture, transportation infrastructure etc.

National system for GHG emission inventory and projections (coordinated by The Ministry of Environmental Protection and Regional Development)

 Projections on GHG (air pollutants) for submission to the UNFCCC secretariat and European Commission

Policy supporting analyses

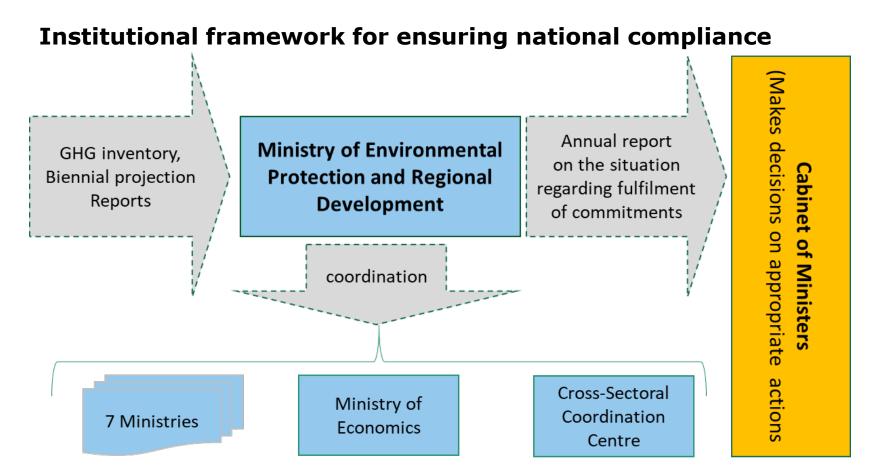
- National Energy and Climate plan (NECP)
- Strategy for the Achievement of Climate Neutrality by 2050
- Fit for 55

IPE participate in national system and supports Ministries with scenario analyses

- Projections of energy sector emission WEM, WAM, Target scenarios
 - Energy use, Renewable energy, Energy efficiency > Emissions
 - Analysis of EU and government policies

Use of scenarios

(example CC policy framework)

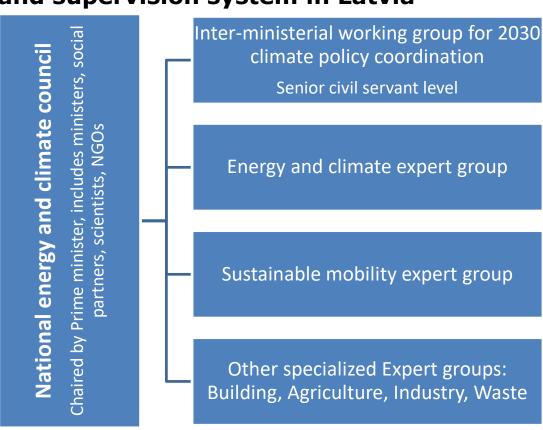


Law On Pollution defines CC policy framework – key responsibilities

Development of scenarios (B)

Governance structure

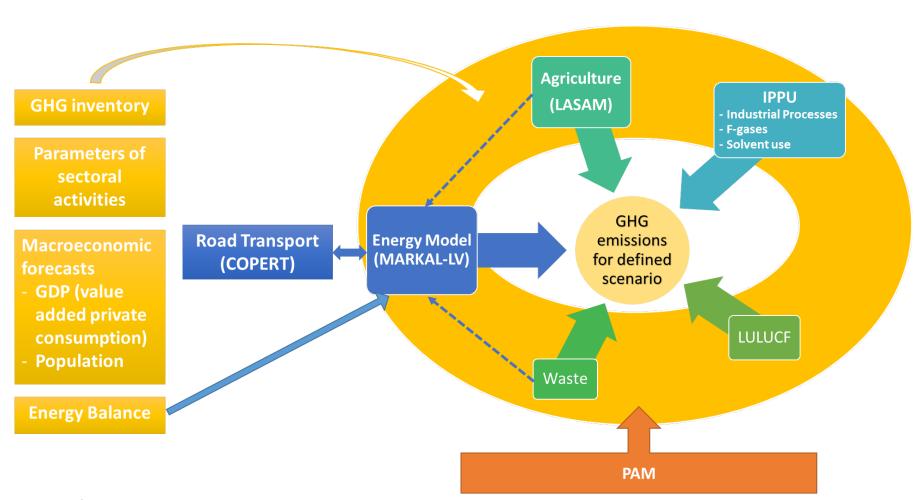
Energy and climate policy management and supervision system in Latvia



- In order to develop the National Energy and Climate plan (NECP), it became necessary to establish a National energy and climate council
 - Among of the tasks is to promote the implementation of long-term energy and climate policy goals and measures in 2030 and beyond in order to ensure Latvia's progress towards climate neutrality in 2050
- Main functions of Energy and climate expert group
 - Coordination of input data for modelling
 - Analytical bases for the revision of the NECP
 - Coordination of the NECP monitoring reports

Development of scenarios

Modelling framework



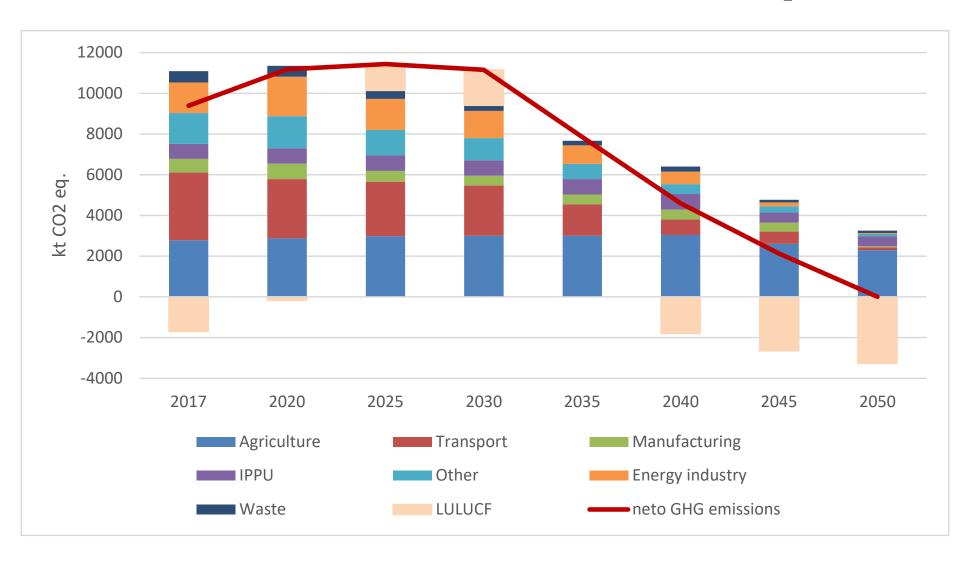
Good cooperation and communication among involved parties is essentially important

Insight into scenario use

- Projections of energy use and emissions (GHG emissions and other pollutants - gases, particles, metals) scenarios (WOM, WEM, WAM, target) for energy sector
 - National studies
 - UNFCCC National Communications and Biannual Reports (starting from 2nd NC)
 - Monitoring EU GHG emissions
 (Commission Decisions 280/2004/EC and 2005/166/EC)
 - Reporting to Convention on Long-

- Range Transboundary Air Pollution
- Latvia's NECP PAMs/Target scenario
- Assessment scenarios for Fit for 55
- PEST Analysis widely-used tool that helps understand the big picture of the Political, Economic, Socio-Cultural and Technological (PEST) environment in which the energy system is operating and build the vision of the future
 - Strategy for the Achievement of Climate Neutrality by 2050

Insight into scenario use GHG emissions in climate neutrality scenario



Insight into scenario use

- Use of scenario analyses to evaluate alternatives in energy sector
 - Identifying least-cost solutions for energy system planning
 - Evaluation of impact of introduction of energy & emissions taxes
 - Evaluation of impact of introduction of different RES targets and use of new fuels/propellants in transport
 - Evaluation of impact of introduction of energy efficiency targets

 Impact assessment of the main policies and measures covered in Energy Development Guidelines

Scenario capacity building

- Integrated scenario modeling capacity has evolved from year to year
 - New statistics appear
 - Importance of LTES increasing
- Government's understanding of modeling and scenario planning
 - The trick is often finding the right talent within the government who understand model use
 - Institutional support is essential for model development
 - Avoidance of various misunderstandings
- Building internal capacity within the government proves trickier both do to skills and people leaving/moving up
- Newly launched project on the development of a new modeling system focused on the development of an energy-environment system (TIMES) and CGE models and soft linkage
 - Interest in using the best practices in the new model development, e.g., IRENA experience in representation of intermittent RE sources and storage processes in Times model

Thank you!

