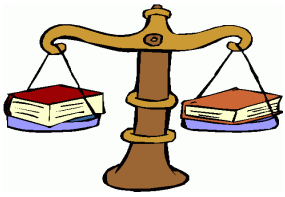


North Macedonia experience regarding the ratification and implementation of Gothenburg protocol, barriers and next steps

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Background on the involvement of CLRTAP

International obligation



- LRTAP Convention 1997
- Active involvement in WGSR and EB meetings since 2006
- 8 Protocols ratified in 2010
- Party to Gothenburg protocol in 2014
- Amendments of the three last protocols not ratified yet

Status of NEC Directives

- 2010/81/EC - old NEC Directive 100% transposed
- 2016/2284/EC - transposed 11% in national legislation

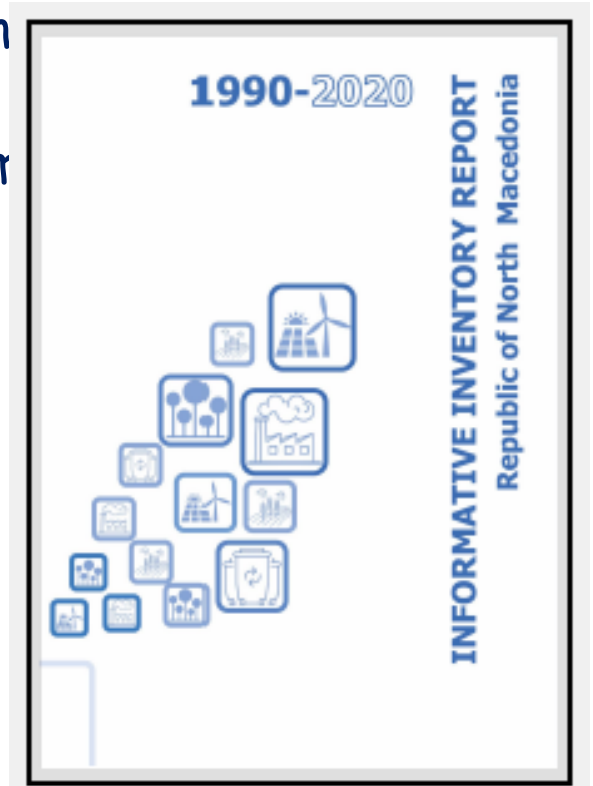
National legislation

Law on Ambient Air Quality - prepared and adopted in 2004, amended several times

- Bylaws:
 - Bylaw on national emissions ceilings
 - Bylaw on the use of EMEP methodology as national methodology
 - Bylaws on emission data reporting
 - Bylaw on ELV
 - Bylaw on emission measurements

Background on the involvement in CLRTAP

- Emission inventory for all pollutants for whole time serial is reported on yearly base since 2016 and started with basic pollutants in 2005
- IIRs were prepared by consulting company (2006, 2010, 2012), but from 2016 IIR onwards is prepared and reported on yearly basis by MEPP team received award for significant improvements in 2012 and 2016
- LPS emissions are reported on regular base
- Emissions per new EMEP grid reported in 2017 and 2021
- Projections are not reported-**this is one reporting obligation that we do not comply with**
- Info on CLRTAP and emission inventory available on our portal <http://air.moep.gov.mk/>
- Emission inventory became solid base for all strategic documents for prioritization of sectorial measures!

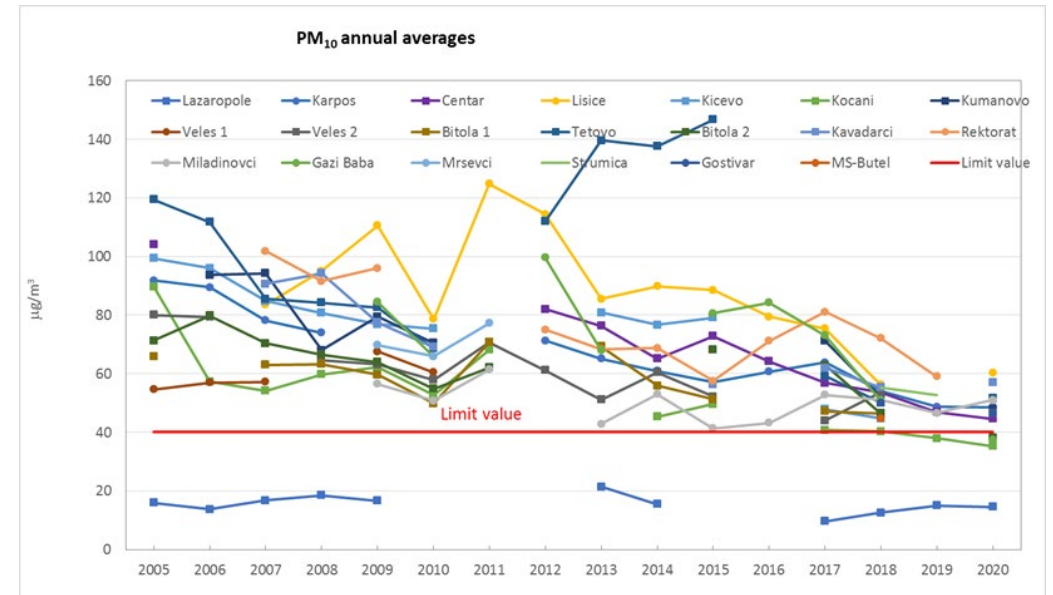
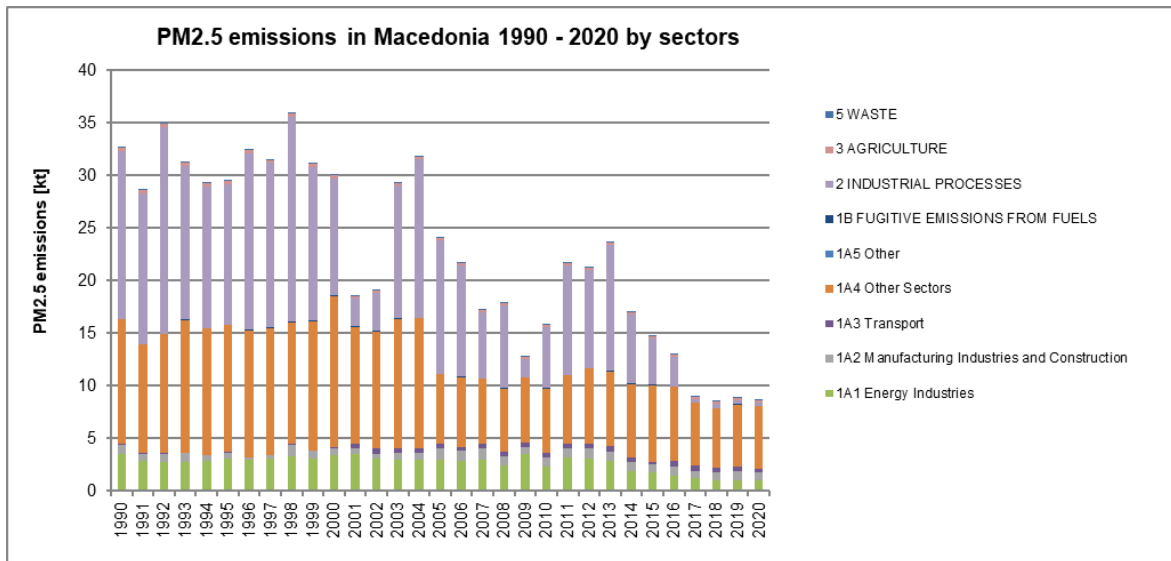
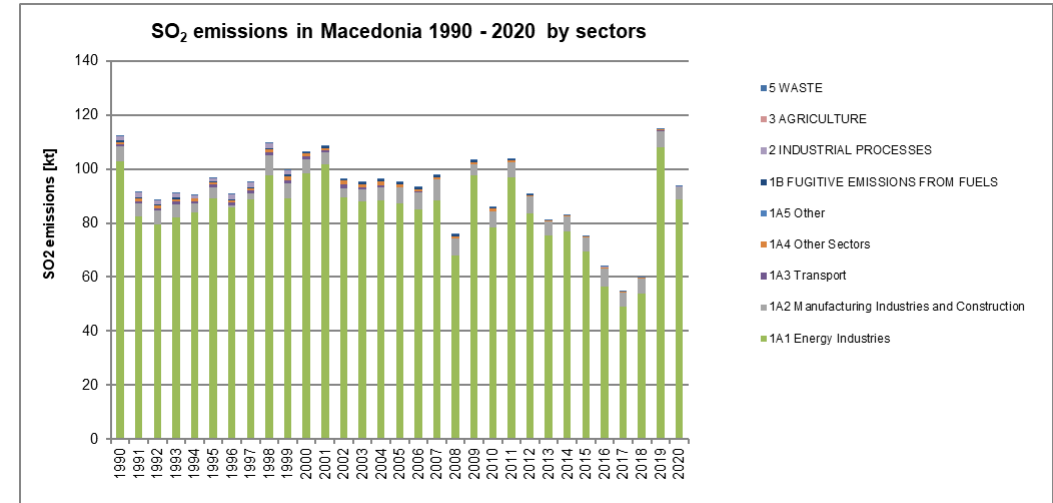




Two most challenging sectors

Energy production participates contribute to emissions of: SO_x (95%), Ni (65%), Hg (51%), Cd (25%) TSP (24%), NO_x (22%), Pb (21%), PM₁₀ (20%) PM_{2.5}(12%)

Combustion in households and administrative facilities contribute to emissions of: PM_{2.5} (69%), CO (68%), PAHs (65%), Cd (51%), TSP (39%), PM₁₀ (46%), Pb (29%) and NMVOC (25%)



Identification of sources and implementation of measures

- Government - Plan for Clean Air was prepared and Programs for reducing the air pollution for 2019 -2021 have been adopted and implemented for change of heating in governmental and local institutions
- MEPP - Within the project "Tackling Air Pollution in the City of Skopje", funded by the SIDA and implemented by UNDP, during the 2021 replacement of the old windows/doors, façade and roof insulation and similar;
- ELSUs - subsidies for procurement of inverter air conditioners and pellet stoves for households
- ME- Program for promotion of renewable energy sources and encouragement of energy efficiency in households - subsidies for households to purchase pellet stoves, built-in collectors systems, PVC or aluminum windows and installation of photovoltaic panels





Three biggest barriers for ratification of the amendments of the Gothenburg Protocol

- ✓ ELV given in the Annexes of the amended Gothenburg are still not transposed in the National legislation. The IED and MCP are not transposed yet but the procedure for their transposition has began.
- ✓ There is limited technical capacity for preparation of emission reduction commitments that will be incorporated in the Annex II. The knowledge for modeling in different sector is limited. Therefore we depend on EU projects support on this activity.
- ✓ No strategic documents were developed for reduction for air emissions in the latest years due to limited capacities and knowledge. The previous documents like National emission reduction plan for LCPs, National air quality plan 2012-2017 and National emission reduction program under Directive 2010/81/EC were developed with technical support within projects and TAEIX workshops.
- ✓ The implementation of amendments will require major financial investments especially in energy production sector and households combustion sector. Due to energy crisis and financial crisis implementation of BAT in this sector becomes more difficult.

What helped so far and which are our further needs?

What kind of support has helped so far?

Continuous improvement of inventory using TAEIX instrument, EU projects-most useful Twining projects, TFEIP workshops, COPERT workshops, regional meetings, Stage 3 review reports and participation (3 experts).

What has been most welcome? The expert missions in which we have hands on training with technical experts.

What further support besides financial support is still needed?

Further improvement of the national emission inventory in particular - introduction of Tier 2 methodology in the categories Domestic heating and Solvents, Trainings on using methods for time series consistency (data gap filing), uncertainty analysis, QA/QC

Support in transposition and implementation of MCP directive



Next steps towards ratification

EU4Green

Preparation of reduction commitments for 2030 for NO_x, SO_x, NH₃, PM_{2.5} and VOCs accordance with Annex II of the amended protocol (possibility to be prepared in this project for WB country)

Exchange of international and regional experiences (air quality plans, modelling, domestic heating and agricultural waste burning)

Development of Implementation plan to establish an ecosystem impacts monitoring system

IPA II technical proposed project "Support for implementation of Air quality directives":

- Full transposition of the new NEC directive in National legislation
- Preparation of DSIP for the amended Gothenburg Protocol
- Preparation of National Air Pollution Control Program for the period 2025-2035
- Establishment of working group for implementation of NAPCP and implementation of protocols

Adoption of the Law on industrial emissions and new Rulebook on ELV

Ratification of the amendments of the Gothenburg protocol



Thank you

