Policies and strategies for air pollution abatement and specific measures to implement the protocols to the Air Convention

Summary of reports submitted in 2022

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Summary prepared by the Vice-Chairs of the Working Group

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Reports submitted in 2022:

1. Austria
2. Cyprus
3. Finland
4. Greece
5. Lithuania
6. North Macedonia
7. Poland
8. Republic of Moldova
9. Serbia

Austria

The 1st and 2nd Sulphur Protocols and the Protocol on NOx

- Pollutants: **Nitrogen oxides, sulphur dioxide**
- Sectors: **OMV refinery in Schwechat**

- The refinery is responsible for significant share of the Austrian NOx and SO_2 emissions
- Implementation of the SNOX-plant in the refinery - an effective measure despite the cost of 100 million Euro;
- The by-product of the plant, sulphuric acid, can be sold on the market;
- Between 2006 and 2020, reduction of emissions:

  NOx - from 3.400 t/a to 1.000 t/a

  SO_2 from 3.700 t/a to 330 t/a

Cyprus

The Gothenburg Protocol, Protocol on HM, Protocol on POPs, 2nd Sulphur Protocol

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- Pollutants: **PM, NOx, SO_2, heavy metals, POPs**
- Sectors: **Energy, industry, transport, agriculture and waste management**
  - Electricity: switching to natural gas and the use of renewable sources
  - Industry: a range of measures (modernization, cogeneration)
  - Transport: greening the vehicle fleet, alternative fuels, promotion of public transport;
  - Landfills: recovery and use of biogas;
  - Agriculture: promotion of anaerobic digestion of manure, better manure application, reduced use of fertilizers and use of lower N fertilizers

Finland

The Gothenburg Protocol

- Pollutants: **Ammonia**
- Sectors: **Agriculture**

Updated Action Plan to reduce ammonia emissions from agriculture for 2021-2027:

- Reduction of ammonia emissions to meet emission reduction commitments;
- Interlinked measures including environmental permitting systems; promoting best available technology use; and grants to invest in new/improved techniques as well as research.
- Expected reductions: approximately 3 kt between 2019-2027.

Greece

The 2nd Sulphur Protocol

- Pollutants: **Sulphur dioxide**
- Sectors: **All**

- The national SO2 emission total reported by Greece for the year 2020 was 61.51 kt in the country's submission for 2022, which is 89% lower than its 2010 ceiling of 570 kt.
- List of measures are included in the IIR and concern measures in the electricity production (use of flue gas desulphurisation at large power plants, increasing share of RES technologies and natural gas for electricity production and gradual phase-out of lignite-fired plants which is to be completed by 2028) and also an increased use of low sulphur liquid fuels and natural gas in industry, transport and the residential sector.

Lithuania

The Gothenburg Protocol

- Pollutants: **PM**
- Sectors: **Industry**

- New requirements introduced in 2020 (entered into force on 1 May 2021) for the control and reduction of dust emissions from the storage, loading and transport of solid bulk materials;
- Response to public concern and numerous complaints from residents;
- Preceded by an amendment of the Law on Environmental Protection, which created the necessary legal basis to regulate these activities, requiring operators to apply the necessary mitigation measures;
- The requirements set out the organisational and technical measures that operators must take in order to prevent or reduce the dust emissions from their storage, loading and transport activities. The application depends on the characteristics of the material and the location of the activity. The environmental control authorities reported a reduction in the number of complaints since May 2021.

North Macedonia

The Protocol on POPs

- Pollutants: **PM, TSP, BC, PAHs**
- Sectors: **Energy (combustion of fuels in administrative capacities and households)**

- 3 main programmes to address air quality: promotion of renewable energy sources and encouragement of energy efficiency in households, a national air pollution programme, and local air quality improvement plans;
- Aimed to promote the replacement and increased efficiency of heating in administrative capacities, promoting the use of more efficient household heating systems and use of renewable energy sources for household heating;
- Local air quality improvement plans: Skopje and other cities;
- Result: reduction in emissions of PM, BC and PAHs. Moreover, the use of cleaner fuels has increased in the period 2015-2020 and the use of heavy fuels, gas oil, lignite and biomass has decreased due to subsidies given on local and national level

Poland

The Gothenburg Protocol, the Protocol on HM and the Protocol on POPs

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- Pollutants: **PM, certain HMs and POPs (dioxins/furans, benzo[a]pyrene)**
- Sectors: **Residential heating, business and energy sector, individual heating systems, fuel combustion installations**

- Anti-smog resolutions since 2016 in local regions to address health impacts related to air pollution issues from solid fuel burning in the residential heating sector. Anti-smog resolutions are acts of local law and apply to private, business and agricultural buildings, greenhouses and industrial plants, amongst others;
- Impose restrictions and bans on heating sources and fuel types;
- Between 2013-2020, regions saw significant reductions in total and fine particulate matter and some heavy metals and POPs (dioxins/furans, benzo[a]pyrene).

Republic of Moldova

- Pollutants: **Multiple pollutants**
- Sectors: **Energy, agriculture, waste**

- National Plan for Energy Efficiency until 2021
- Low Emissions Development strategy to 2030: completion of the 1st implementation phase - reduction of GHG emissions from electricity and heat generation and agriculture

Serbia

The Gothenburg Protocol

- Pollutants: **SO_2, NOx, VOC, NH_3, PM**
- Sectors: **Multi-sectoral approach (industry, agriculture, transport, etc.)**

- Programme of Air Protection for 2022-2030 and the associated action plan;
- Objective: to reduce health impacts and damage to ecosystems due to poor air quality by 2030 compared to 2015 levels;
- Basis for further action on air pollution including development, adoption and strengthening of national legislation and continued implementation of European legislation to meet air quality objectives

Thank you!

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