





Convention on Long-range Transboundary Air Pollution: Using UNECE air quality indicators as monitoring and evaluation tools



**UNECE/Air Convention Secretariat** 







Regional training on *air quality* and *emissions to air* statistics and indicators Geneva, 4-5 May 2023

#### **Overview**



- CLRTAP background & key successes
- Areas of work under the Convention
- Role of emission inventories in the air quality management process
- Coordination of emission inventory-related work under the Convention



# UNECE Convention on Long-Range Transboundary Air Pollution (Air Convention)

#### **ENVIRONMENT**

- Signed in 1979, entry into force in 1983
- First international treaty to deal with air pollution on a broad regional basis
- 51 Parties in the UNECE region
- Framework Convention, has been extended by 8 protocols covering a number of pollutants
- Emission targets agreed for the following pollutants: sulphur, nitrogen oxides, volatile organic compounds, persistent organic pollutants, heavy metals, and particulate matter, including black carbon



#### **Status of ratification**



Convention/protocols	Amended	Entry into force	Parties (orig./amend.)
1979 CLRTAP			51
1984 EMEP Protocol			47
1985 Protocol on the Reduction of Sulphur Emissions			25
1988 Protocol on the Control of NOx Emissions			35
1991 Protocol on the Control of VOC Emissions			24
1994 Protocol on further reduction of Sulphur			29
1998 Protocol on Heavy Metals	2009	2022	35/24
1998 Protocol on Persistent Organic Pollutants	2012	2022	34/24
1999 Gothenburg Protocol	2012	2019	29/27

#### 40 years of success



- Decoupling of economic growth and air pollution trends has avoided 600,000 premature death in Europe and North America
- Average life expectancy is today 12 months more than in the hypothetical unabated world
- Emission reductions by 40 to 80 % since 1990 in the region:
- sulphur: 70%,
- nitrogen oxides: 40%
- Particulate matter concentrations at European measurement sites declined by a third between 2000 and 2012





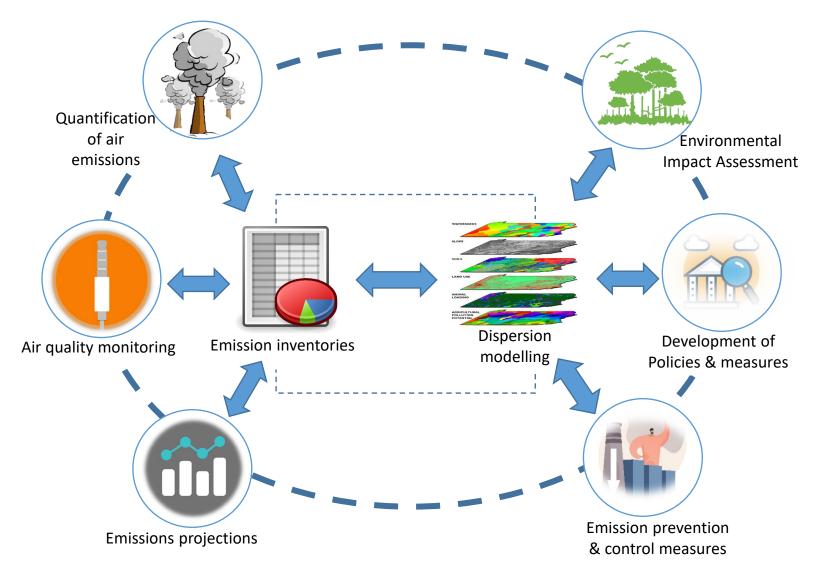
#### **Areas of work**



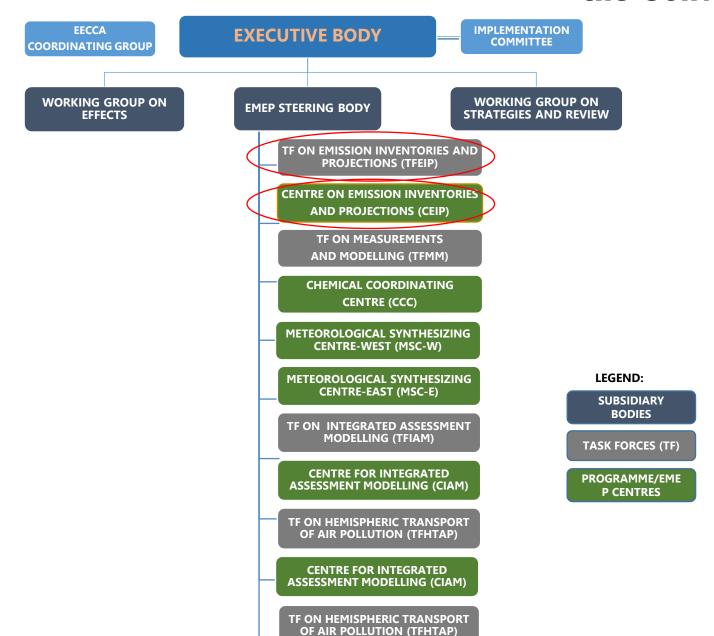
- International agreement setting emission reduction targets
- Science underpinning policy:
  - ✓ The Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP)
  - ✓ The Working Group on Effects
- Compliance monitoring
- Capacity-building and awareness raising



# Role of emission inventories in the air quality management process



## Coordination of emission inventory-related work under the Convention









### Thank you!

anna.kaplina@un.org

http://www.unece.org/env/lrtap/welcome.html













