

National and international air pollution challenges – the importance of research

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It started with science.....

70s evidence of acidification of lakes and waterways in Sweden and Norway

80s evidence of increased damage of forests in Europe

90s focus on health effects from air pollutants

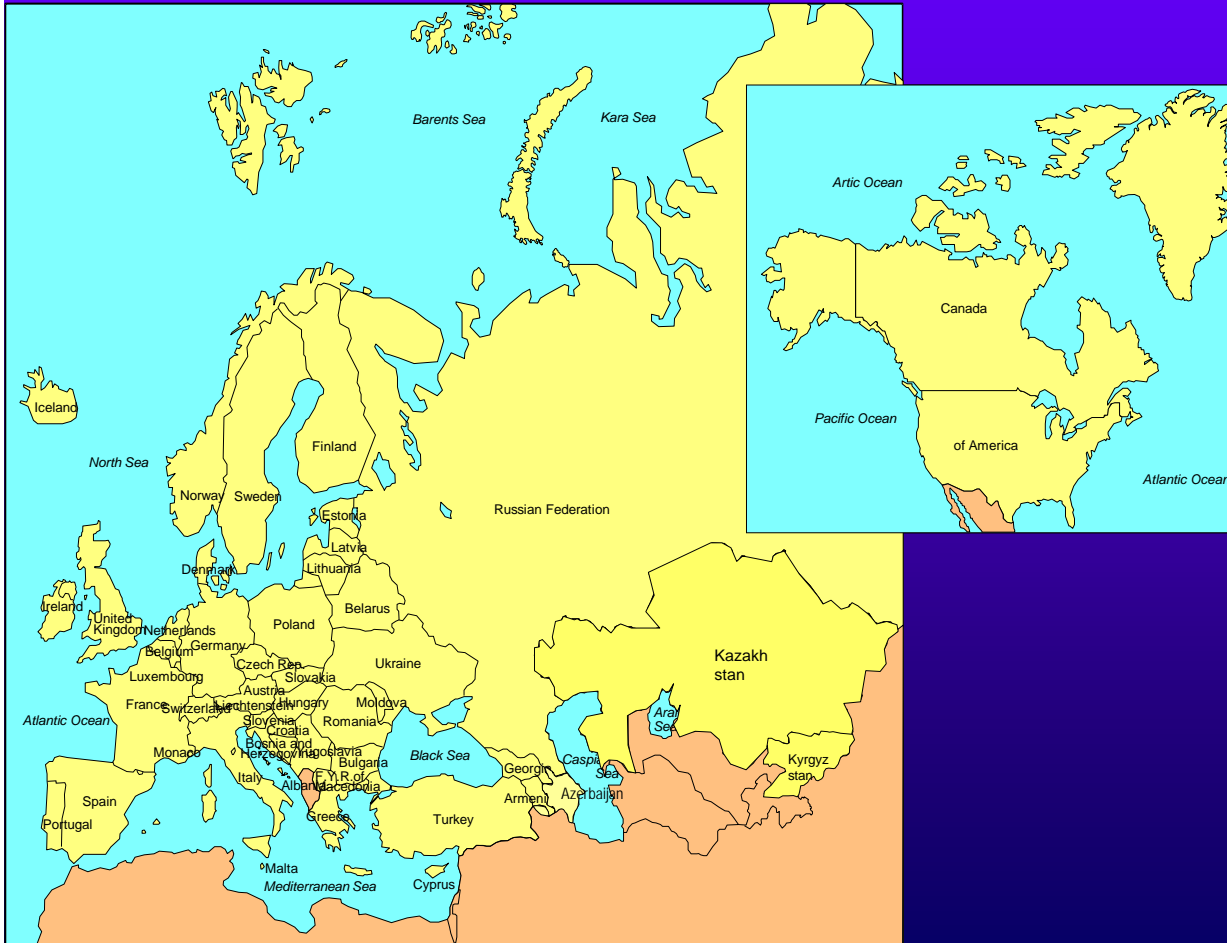


We can not solve our national problems without international co operation !

CONVENTION ON LONG-RANGE TRANSBOUNDARY AIR POLLUTION



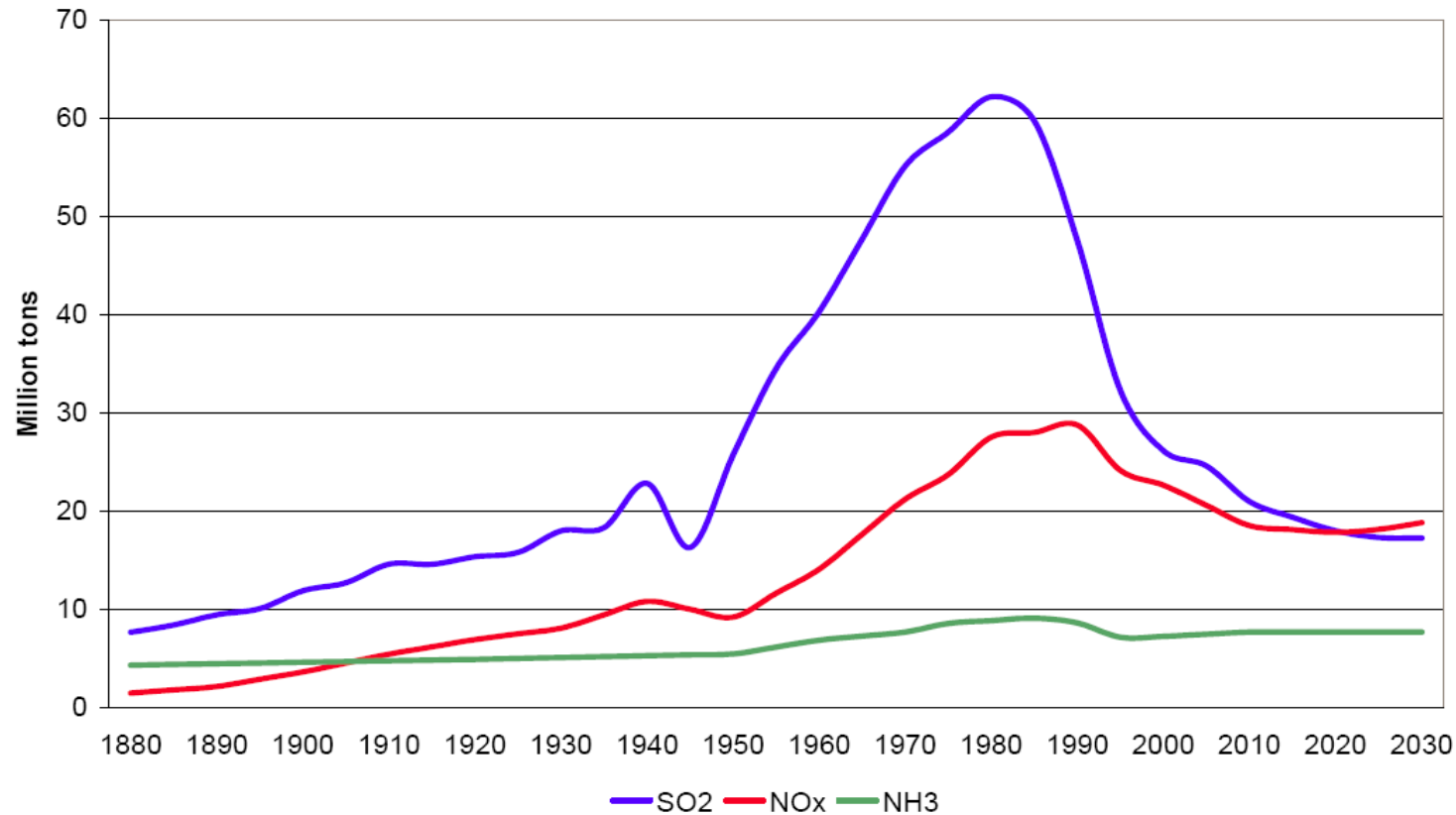
UNITED NATIONS ECONOMIC
COMMISSION FOR EUROPE



- Signed 1979, in force 1983
- 51 Parties
- 8 Protocols
- Covers SO₂ , NO_x, VOC, NH₃, PM , HMs, POPs
- Effect based agreements
- Close interaction between science and policy

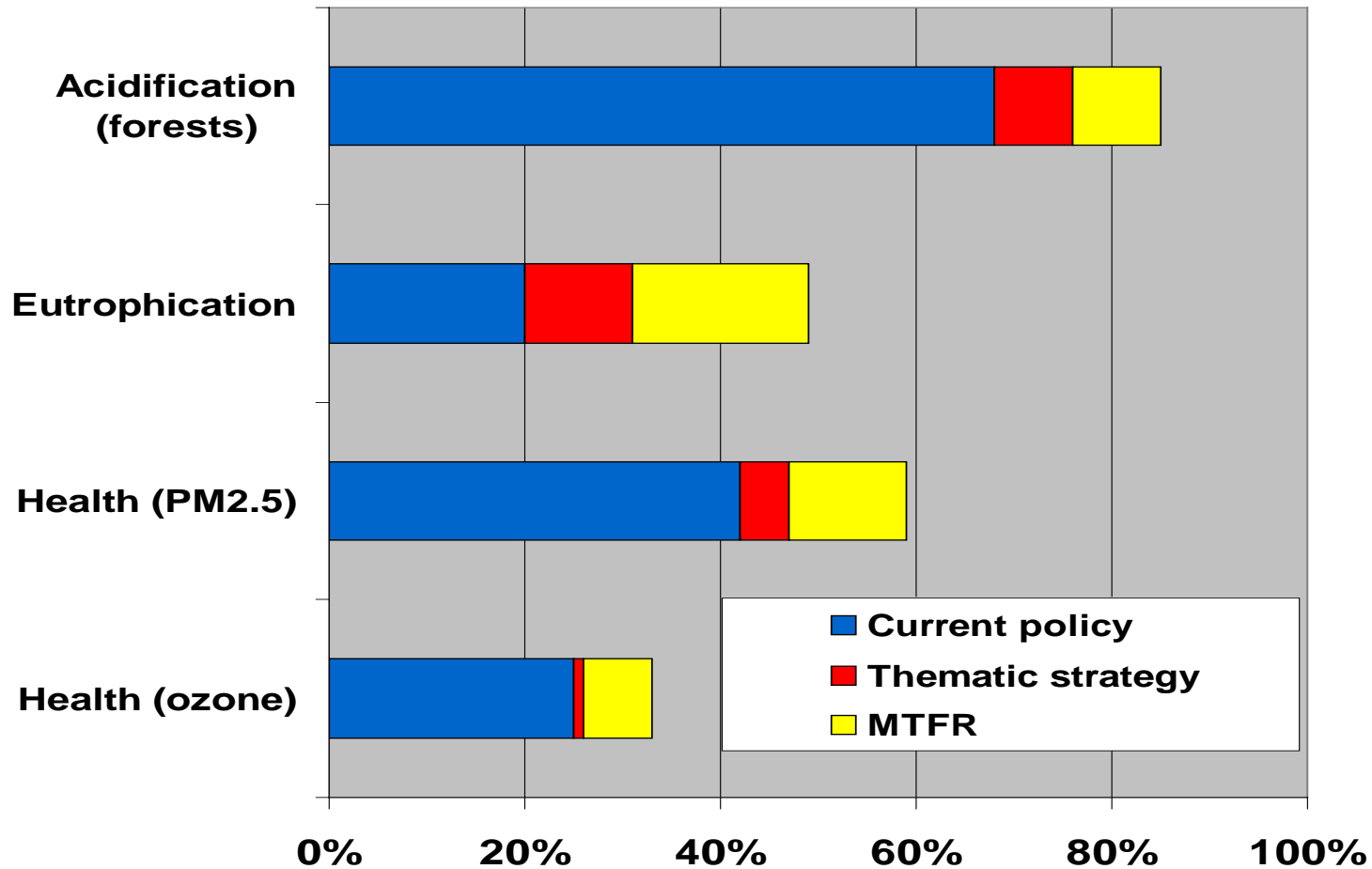


Emissions in Europe 1880 - 2030



Source: IIASA

We are not meeting EUs targets on protection of health and ecosystems



gap-closure from 2000 - 2020.

Source: IIASA

Recent developments and ongoing work

- *Revised POP protocol*

- dec 2009



- *Revised Heavy Metal protocol*

- dec 2012

- *Revised Gothenburg protocol*

- may 2012 - SO₂, NO_x, NH₃, NMVOC, PM_{2,5} (BC)



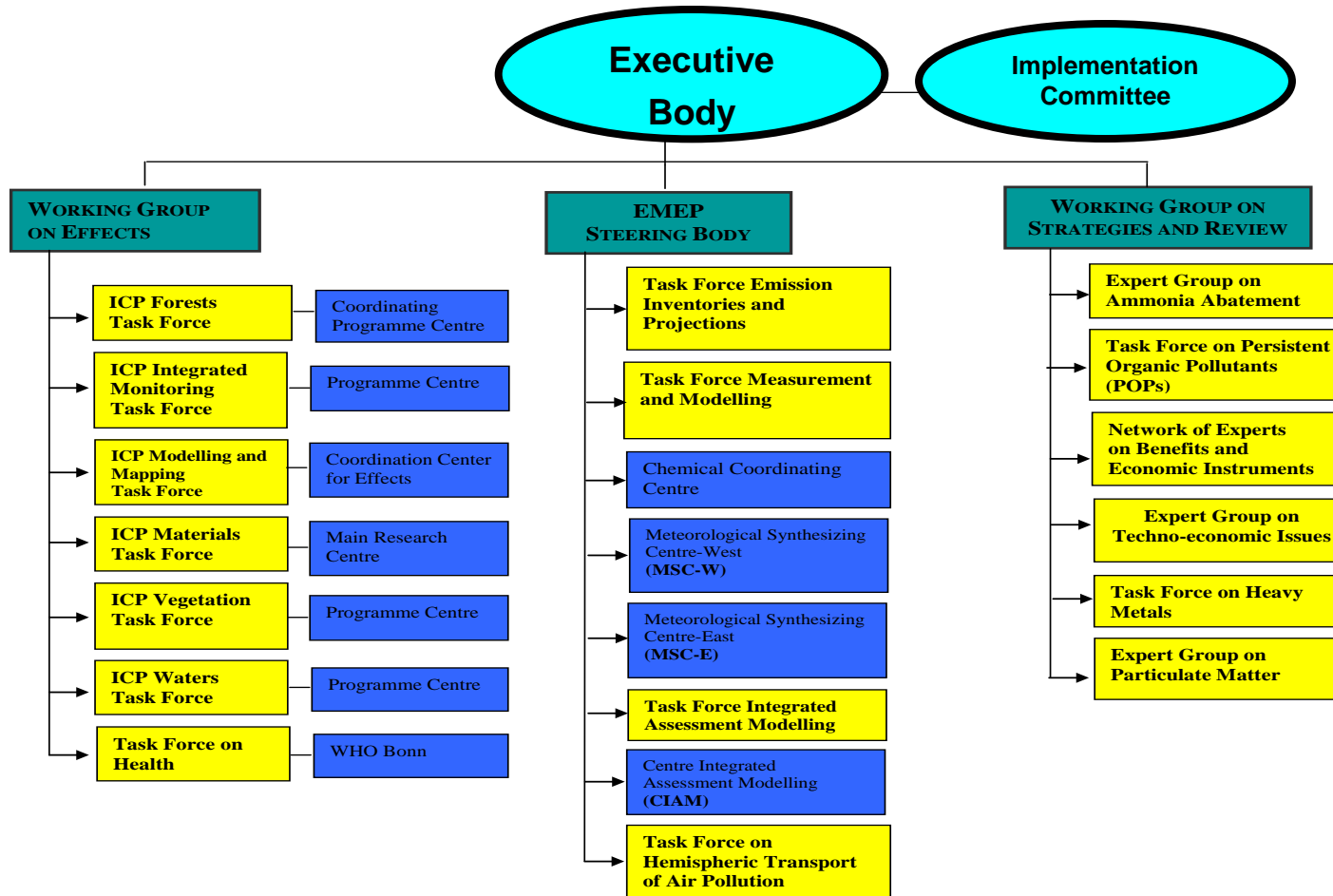
- 2013, the EU "Year of the air"

Thematic strategy, new NECD



Which role did/does research play ?

Research plays a fundamental role !



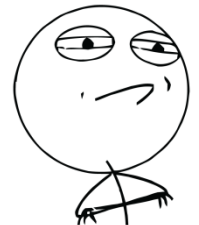
Which role did SCARP play ?

- Important contributions to the international research on air pollutants and their effects.
 - PM, health and climate effects
 - development of the EMEP model
 - effects of N deposition, changes in vegetation
 - IAM, development of the GAINS model
- Essential to bring issues of swedish concern into the process
- Important input to negotiations between countries

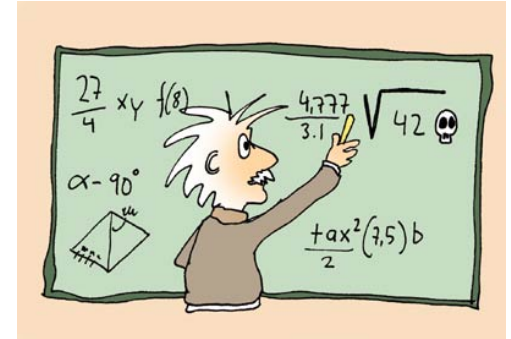
Future challenges

- Ensure compliance with existing legislation
- A sufficient ambition level - the ongoing EU review presents an opportunity
- Some sectors present specific challenges (Agriculture, International shipping, small scale and domestic combustion, Road and non-road vehicles, solvents in products)
- What is the best mix of local, national and regional measures ?
- An integrated approach – climate and air pollution. SLCP.
- How to sell the message ?
- How to create political will ?

CHALLENGE ACCEPTED



The need for further research



The close cooperation between science and policy should continue

- What are the results of our efforts ?
- What may the future look like under different scenarios ?
- What should we focus on to solve current problems ?
- Interdependence ?
-
- Science drives policy but policy also drives science.
- More research is needed to fulfil our commitments for example in the Gbg protocol (PM2,5 and BC)

Taking international air pollution policies into to the future

A science-policy workshop for experts and scientists, policy makers and negotiators, international organisations and industry

Gothenburg, Sweden, 24-26 June 2013.

Purpose: to set the scene for future international and global air pollution policies and how we can achieve improved air quality and ecosystem health and at the same time ensure positive benefits for climate change, biodiversity and other related policy areas.

Organised by the Swedish Environmental Protection Agency and the IVL, in collaboration with international organisations such as the Convention on Long-range Transboundary Air Pollution (CLRTAP), the European Commission, Global Atmospheric Pollution Forum and the European Environment Agency.

<http://www.saltsjobaden5.ivl.se>

To conclude

- A lot has been achieved but more needs to be done
- Science drives policy –policy drives science
- Close cooperation between science and policy is key to success
- the effect based approach should continue and be strengthened
- SCARP has given important contributions to the international research processes
- SCARP has been of utmost importance for the Swedish participation in the international processes
- Come to Saltsjöbaden...in Gothenburg



Thank you !