Regional air quality policy in CLRTAP - the Gothenburg Protocol

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CONVENTION ON LONG-RANGE TRANSBOUNDARY AIR POLLUTION
51 Parties in Europe, North America and Central Asia
The original problems were:

Acidified waters

...and the SCIENCE showed that the cause was long-range transport of pollution needing INTERNATIONAL CO-OPERATION
The problems have evolved and now also include Particulate Matter, Ozone and effects on human health and on plants.
Particulate pollution involves long-range transport events
The Convention and its Protocols

• CLRTAP 1979

• ‘First generation’ protocols:

• ‘Second generation’ protocols:

• Protocols on Heavy Metals and POPs (both 1998)
CLRTAP has reduced emissions........

Emissions of sulphur dioxide in Europe over the period 1880–2004

Source: Verstreng et al. Atmospheric Chemistry and Physics 2007
.........and will continue to reduce depositions as the 1999 Gothenburg Protocol improves on the early Oslo Protocol.
Gothenburg Protocol revised in 2012

• Tighter emission ceilings for $\text{SO}_2$, $\text{NO}_x$, VOC and $\text{NH}_3$ for 2020
• Added a ceiling for $\text{PM}_{2.5}$
• All ceilings to be achieved by 2020
• First environmental policy agreement to include Short Lived Climate Pollutants – Black Carbon
• EECCA/SEE countries closely involved in negotiations – potentially increasing ratifications
Revised Gothenburg Protocol
EU 2020 % reductions on 2005 base

- SO2
- NOx
- VOCs
- NH3
- PM2.5
Exceedence of acidity critical loads
Exceedence of nutrient nitrogen critical loads
But problems still remain – on public health:

Loss in statistical life expectancy due to anthropogenic PM$_{2.5}$

Source: Convention’s Centre for Integrated Assessment Modelling, 2009
Long Term Strategy Priorities of CLRTAP

• Increased ratifications and participation (EECCA)
• Better compliance
• AQ & CC co-benefits
• Core strengths
  - ‘Gothenburg pollutants’
  - Science and policy close links
  - Realign work on POPs and HMs
• Outreach to rest of world
• Streamline structure
• Resolve multiple Protocols
• Resources (secretariat and other)
Increased Ratifications

• Gothenburg Protocol has 25 ratifications
• All EU apart from Norway, Switzerland and the USA
• So effort needed to encourage EECCA/SEE
• Revised Protocol did this – watch this space for ratifications!
• The EU has already played a key role in the Protocol revisions and can continue to encourage and support EECCA/SEE countries efforts
Thank you!