Progress in global emission scenarios in co-operation with HTAP

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Purpose of the global emission scenarios workshops

- Align/compare global air pollution scenarios with global climate scenarios
- Provide inputs/perspectives from regions outside of UNECE
- The workshops also focus on sector specific issues
  - 2012: mobile sources, large scale combustion, Methane emissions, small combustion, agricultural burning, shipping
  - 2015: India, China, Shipping, Small scale combustion, transport

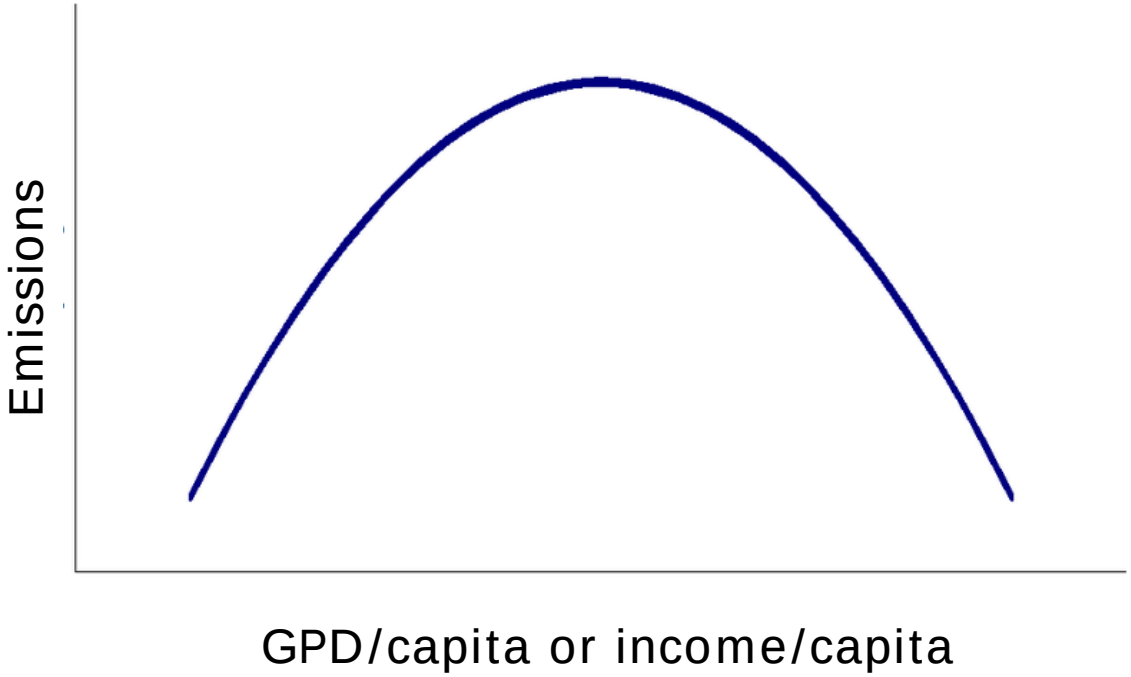
Settings of the workshops

- Large share of non-UNECE researchers participating
- Testing and comparisons of activity data, assumed use of emission control and resulting emissions between GAINS model scenarios and results from sector specialists and region-specialists

Comparing global air pollution emissions in global air pollution scenarios or global GHG scenarios

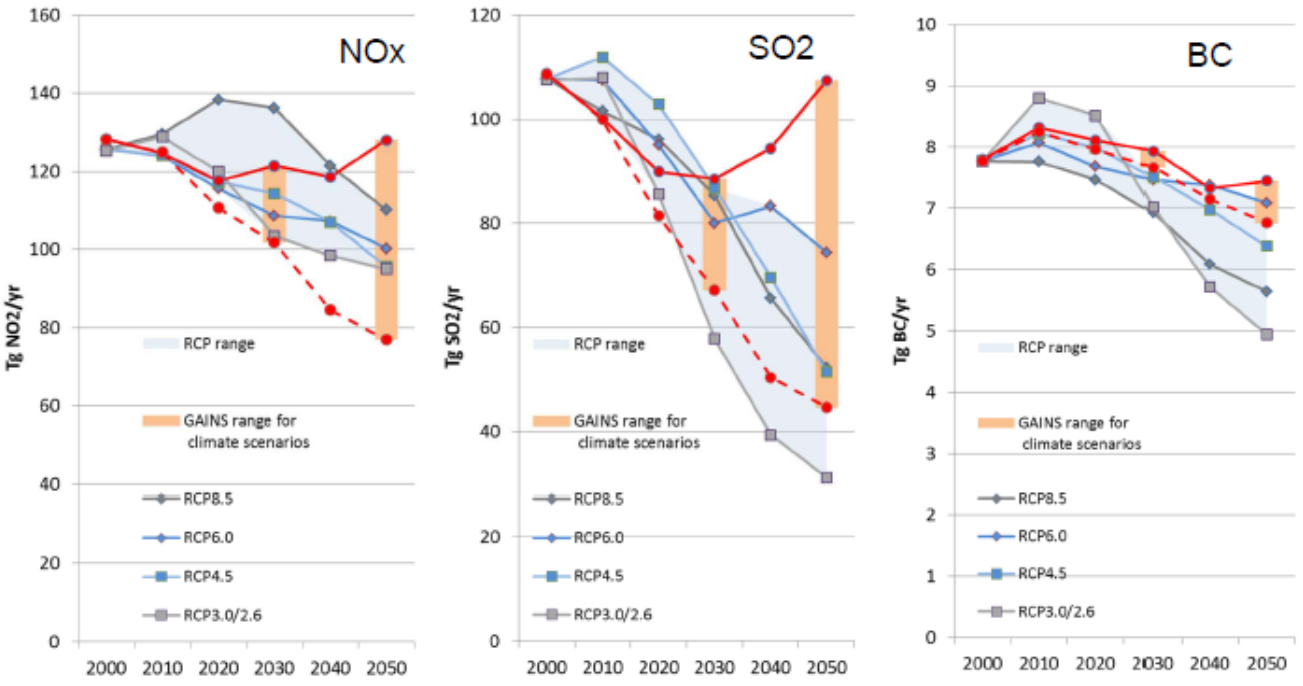
- Air pollution focus:
  - Air Pollution emissions a function of activity data emission factors and emission control
- GHG focus
  - Air pollution emissions a function of economic growth following an inverted U-shape. An environmental Kuznets curve.

The Environmental Kuznets curve



RCP and GAINS (current legislation – CLE)

NO_X ,SO_2 , and BC [**DRAFT comparison – do not quote or cite**]



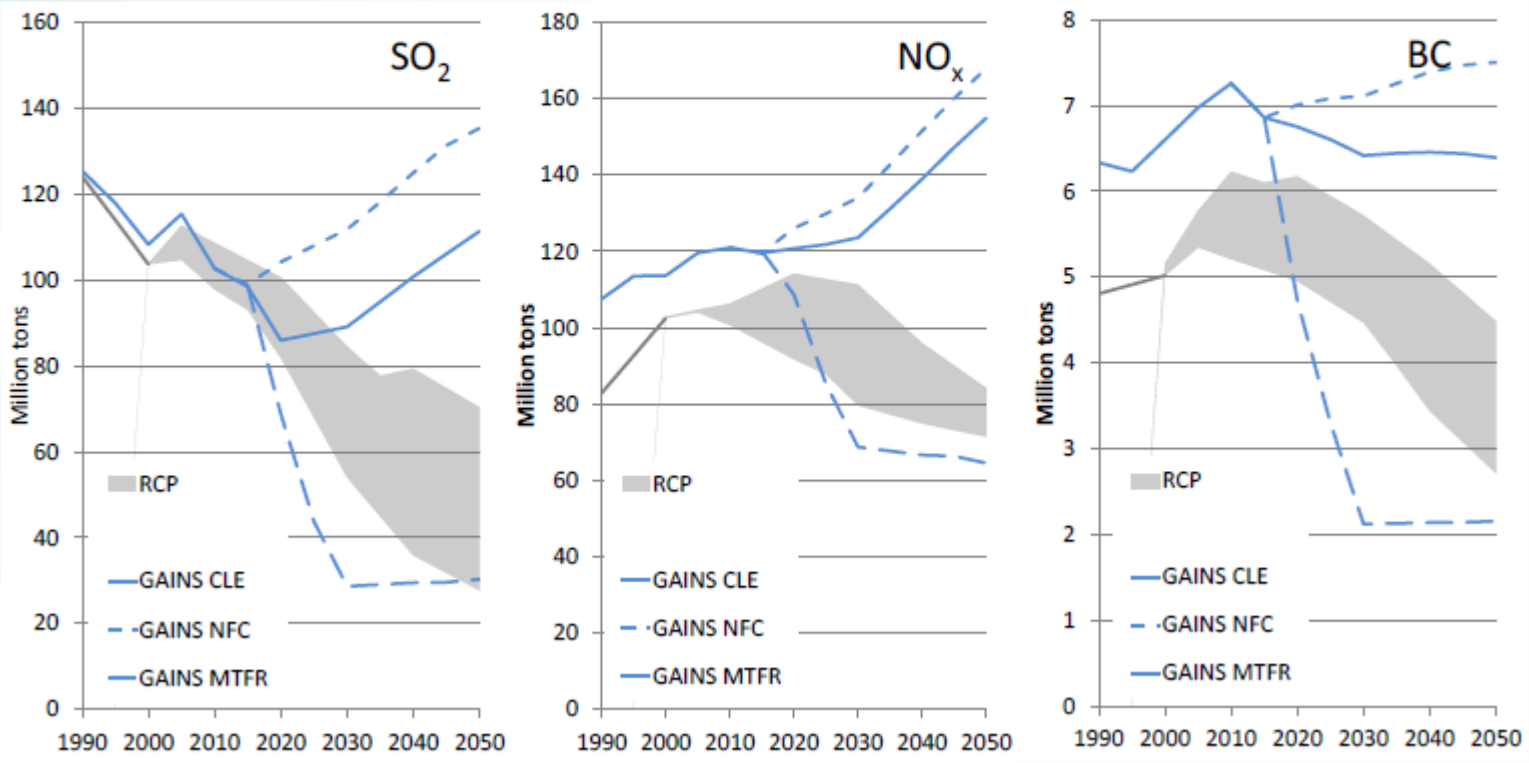
POLES/GAINS reference —› Climate mitigation in red

Nox: Wider range than RCP

SO2: Partly overlapping range

BC: Narrower range

Future air pollutant emissions – the role for AQ policies



The AP NFC —› MTFR scenarios have a wider range than RCP

Conclusions from the 2015 workshop

- The global scenarios developed by IIASA under ECLAIRE can be used for HTAP purposes
- The global scenarios can be used to explore options for international co-operation on shared and similar air pollution problems
- The ozone problem should be adressed on a hemispheric scale
- Global co-operation on air pollution abatement benificial regardless of physical transport of pollutants

Personal note

Workshops a good arena for UNECE outreach

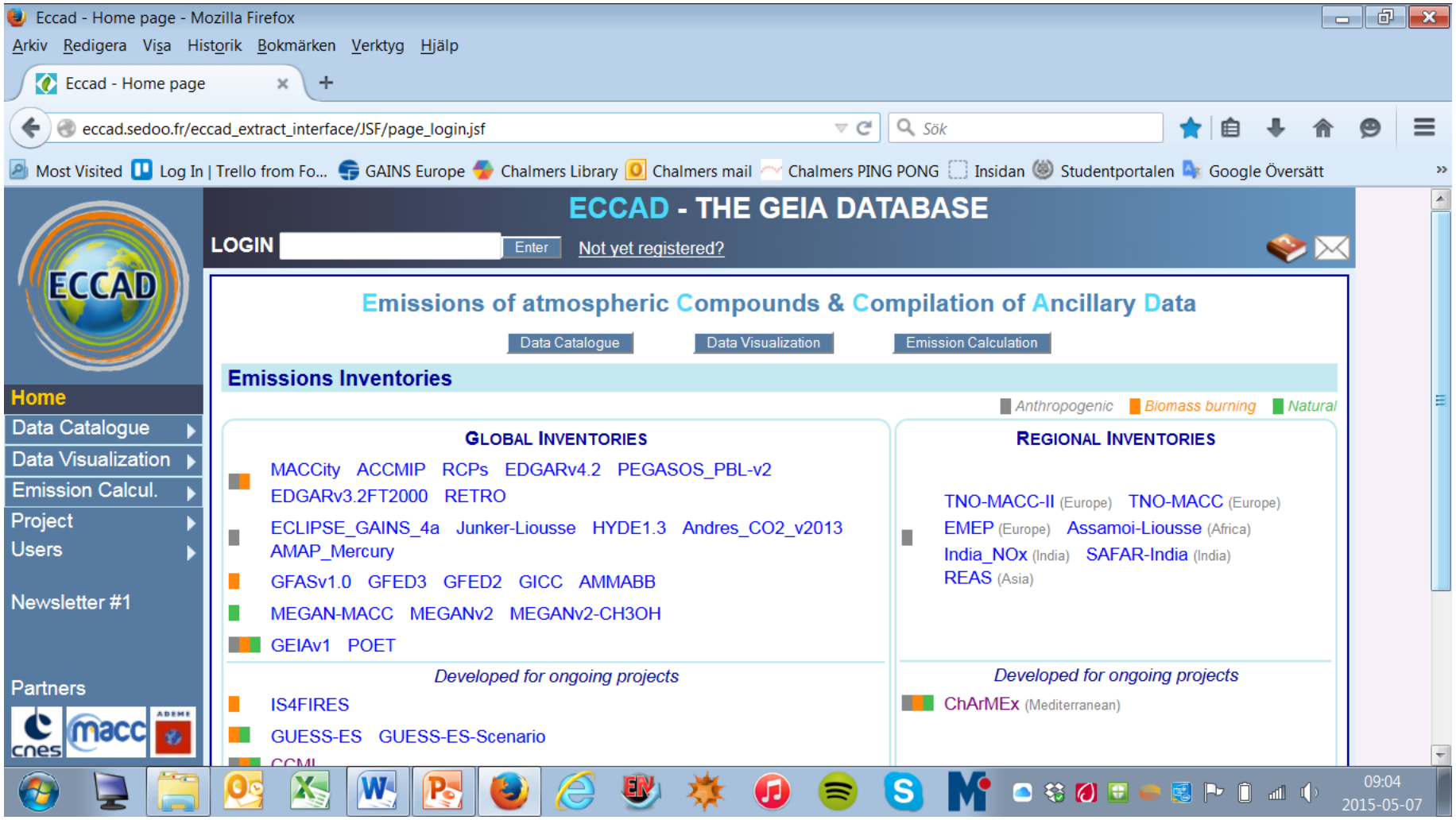
Links to results and presentations

Conclusions and presentations from the 2012 and 2015 workshops can be found at:

www.htap.org

The GAINS model scenarios discussed available at:

http://eccad.sedoo.fr/eccad_extract_interface/JSF/page_login.jsf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Data Catalogue Data Visualization Emission Calculation
Emissions Inventories
Anthropogenic Biomass burning Natural
GLOBAL INVENTORIES
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EDGARv3.2FT2000 RETRO
ECLIPSE_GAINS_4a Junker-Liousse HYDE1.3 Andres_CO2_v2013
AMAP_Mercury
GFASv1.0 GFED3 GFED2 GICC AMMABB
MEGAN-MACC MEGANv2 MEGANv2-CH3OH
GEIAv1 POET
Developed for ongoing projects
IS4FIRES
GUESS-ES GUESS-ES-Scenario
REGIONAL INVENTORIES
TNO-MACC-II (Europe) TNO-MACC (Europe)
EMEP (Europe) Assamoi-Liousse (Africa)
India_NOx (India) SAFAR-India (India)
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09:04
2015-05-07

Thank You for Your Attention

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