



**Joint TFIAM/ACCENT Workshop on non-binding aspirational targets for air pollution for the year 2050**  
Vredenburg 19, Utrecht, the Netherlands, 5-6 March 2009

## Agenda

### **Introduction**

Welcome and goal of the meeting - **Rob Maas** – Chair TFIAM

What role can 2050 play in the policy process? - **Johan Sliggers**, VROM, NL

### **Session 1: Which effects are relevant?**

**Which targets for exposure and deposition can be defined for 2050?**

#### 1.1 Targets from an effects-oriented view

**Tor Johannesen**, chair WGE.

*The goal of CLRTAP-protocols is to achieve levels of air quality that do not give rise to significant negative impacts on and risks to human health and the environment. The long term objective is no exceedance of critical loads and levels. What challenges can be defined for acidification of forests, lakes and nature areas? What are the challenges for biodiversity loss due to high levels of nitrogen deposition? What are safe levels of ambient concentrations of ozone and particulate matter?*

#### 1.2 Protection of ecosystems: Aspirational targets for acidification and nitrogen

**Jean-Paul Hettelingh**, CCE

*What can be learned from dynamic models? Where should target loads be stricter than critical loads in view of recovery (before 2050?). What areas in Europe remain urgent in view of the low remaining buffering capacity of the soil or irreversible loss in biodiversity?*

#### 1.3 Aspirational targets for the effects of ozone on vegetation

**Gina Mills**, chair ICP Vegetations

*What are possible options for setting effects-based targets for different vegetation types in view of the ozone flux-based risk assessments and the changing climate?*

#### 1.4 Options for long-term O<sub>3</sub> and PM targets: health perspective

**Gerard Hoek**, Task Force on Health

*What are possible options for setting targets for particulate matter exposure?*

#### 1.5 Policy-relevant indicators for Materials

**Stefan Doytchinov**, co-chair ICP Materials

*Does the protection of materials and cultural heritage require stricter air pollution targets than the protection of health and ecosystems?*

#### 1.6 Discussion

*What are alternative targets? What are the emission reduction requirements?*

## ***Session 2: Which emission reductions would be required to meet such long-term targets?***

### **2.1 Emission reductions requirements for Nitrogen and Sulphur**

**Max Posch, CCE**

*What is the order of magnitude of the emission reduction requirements? What is the gap compared to the current 2010-emission ceilings and indicative ceilings for 2020? In what parts of Europe more or less reduction is required?*

## ***Session 3: Which reductions in air pollution emissions can be expected as a co-benefit from aspirational climate and energy policy targets for 2050?***

### **3.1 Long term Climate Targets**

**Eduard Dame, EC**

*What are the targets for 2020 and beyond? What visions circulate in European Commission, European Parliament, European Council and G8? What would they mean for air pollution policy in Europe?*

### **3.2 Long-term Scenarios for Climate Change-Implications for Energy, GHG Emissions and Air Quality, **Shilpa Rao, IIASA****

*Global long term visions to reduce green house gases, to what extent will they reduce fossil energy use and air pollution*

### **3.3. Driving forces of air pollution emissions in long-term GHG mitigation scenarios**

**Peter Rafaj, IIASA**

*What are the driving forces for abatement of air pollution emissions in the long-term scenarios?*

### **3.4 New climate scenarios and possible consequences for air pollution control**

**Detlef van Vuuren, NL/PBL**

*What are the most promising technological developments in energy and transport? To what extent will they reduce the use of fossil fuels and related air pollution?*

### **3.5 Impacts of global Climate and Air Quality policies for 2050 on PM, health and climate**

**Rita Van Dingenen, JRC**

*The work is based on POLES scenarios from which consistent GHG and air pollutant emissions have been constructed and applied in TM5 model*

### **3.6 Synergies between greenhouse gas and air pollution reduction from a cost-benefit perspective (OECD/PBL-study), **Hans Eerens, NL/PBL****

*What are the benefits of a joint strategy? What reductions of greenhouse gasses, SO<sub>2</sub>, NO<sub>x</sub> and PM would be cost-effective?*

### **3.7 Discussion**

*What is the order of magnitude of long term emission reduction of air pollutants that can be derived from climate policy strategies?*

**Session 4: Backcasting: how far can we reduce greenhouse gasses and air pollution and when? What intermediate targets can be derived?**

*Presentation of national modelling studies aiming at maximum feasible reductions for greenhouse gasses and air pollutants, including structural and behavioral changes in energy and transport*

4.1 Low Emission Energy Scenarios for the UK

**Mark Barrett**, UK/UCL

4.2 Effect of non-technical measures to reduce emissions from road transport in Spain

**Mark Barrett/Julio Lumbreras**, ETSII/UPM

4.3 Factor 4 GHG emissions in 2050: main recommendations of the expert group «factor 4»

**Nadine Allemand**, FR/Citepa

4.4 Scenarios for 2050 – assumptions for the transport sector

**Simone Schucht**, FR/INERIS

4.5 Transition to a carbon-free society

**Jan Ros**, NL/PBL

*What is possible? What new technologies are required? What choices are to be made? What are the lessons learned on the timing of measures? What intermediate targets for 2020 can be derived?*

4.6 Promising measures to reduce NH<sub>3</sub> and GHG emissions from Agriculture in EU-27

**Oene Oenema**, NL/WRU

*What are promising measures that decrease NH<sub>3</sub> and GHG emissions simultaneously and that do not have antagonistic effects?*

4.7 Other ad hoc national presentations

4.8 Discussion

*Are technological and non-technological options sufficient to meet long term effect-based targets?*

**Session 5: Conclusions and recommendations**

5.1 How to incorporate long term ambitions in a new protocol?

Panel discussion with Jan Wijnnga, Eduard Dame, Markus Amann, Tor Johannesen  
*Should 2050-aspirational targets be part of a new protocol and if so, in what form? E.g. should there be general targets for the protection of ecosystems and health, should there be emission targets for the whole region or should this be specified for each party? Can/should we deduct intermediate emission and protection targets for 2020 based on long term (technological) transition scenarios?*