Progress report
Integrated Assessment Modelling

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Work Plan items 2020-2021

a) 1.1.3.3 Improve understanding of expected benefit of ammonia mitigation
   a) Draft assessment report on Ammonia delivered August 2019
   b) Revisions and co-ordination with TFRN still ongoing

b) 2.1.6 Undertake review of control costs currently used in GANIS
   a) TFTEI have collected sector specific cost updates – a consorted action needed to compare these with GAINS and update GAINS if necessary
   b) *Input needed from Parties*

c) 2.1.7 Produce a report on Costs of Inaction
   a) *Experts from EU-JRC, Cyprus, UK, have notified interest*
   b) *Norway has kindly co-funded,*
   c) *TFIAM has gathered data and is summarizing into draft guidance document*
   d) *Drafting of report ready during autumn 2020*

d) *2.2.1 Guidance on prioritizing PM-measures that are also BC-effective*
   a) *Funding kindly received from the EU-funded EUABCA project*
   b) *TFIAM has compared GAINS model scenarios with CEP_post2014_CLE_v.Dec.2018*
   c) *Communication with TFTEI*
   d) *Early draft guidance document made available by 21st of September 2020*
   e) *Continued work on guidance document based on EU Clean Air Outlook II is to be expected during late autumn 2020*

Some of the activities 2019-2020

1. First EPCAC meeting in Bratislava (Nov 2019)

2. Presenting EECCA-perspectives at Nordic Council of Ministers Research strategy days (Nov 2020)

3. IAM-consultation with Health Canada & Environment and Climate Change Canada (Feb 2020)

4. Participation at MSC-W Condensables workshop (March 2020)

5. TFIAM 49 virtual meeting (April 2020)
   www.iiasa.ac.at/TFIAM/past-meetings.html

6. Establishing a working group in preparation of a re-launch of the National IAM network (May – September 2020).

7. Second EPCAC-meeting (29 Sept 2020, Virtual)

Main messages 49th TFIAM meeting

1. For most countries, emissions in the current decade would become much lower than the emission targets set in the Protocol, assuming that the emission limit values in the Protocol's annexes, as well as stated climate policies, were fully implemented.

2. This suggests that any future revision of emission targets can easily be more ambitious than the targets contained in the amended Gothenburg Protocol. Additional reductions will occur when the use of fossil fuels is further reduced.

3. The exception is ammonia, where the conclusion is that more measures will be needed to reach existing targets. Due to limited reduction of ammonia emissions, nitrogen depositions will remain higher than critical loads in 50 per cent of ecosystems.

4. In 2030, $PM_{2.5}$ concentrations will exceed the WHO guideline value for $PM_{2.5}$ in wide areas of northern Italy and parts of Poland due to the high share of secondary ammonium-nitrate aerosols and primary emissions from solid fuel domestic heating.

5. Health risks and crop damage due to ozone will also remain a problem, with increasing emissions of nitrogen oxides (NO_x) and methane in the northern hemisphere. Around Europe, NO_x emissions from ships will exceed NO_x emissions on land before 2030.

6. Trade-offs between policy areas call for an integrated approach comprised of air quality management, climate and energy policy, as well as agriculture and food policy.

Draft questions from the Gothenburg Protocol Review Group

Main questions for TFIAM/CIAM:

3.1 a. What are the latest emission projections by the Parties, compared with the latest GAINS-scenarios, taking into account recent climate, energy and agricultural policies, new source legislations and latest updated emission inventories by the Parties? Will emission projections meet the Protocol obligations?

3.1 b. Are emission reduction obligations adequate for meeting long term environmental and health protection targets of the protocol? E.g. what will be the outcomes for ozone, PM-health risks and nitrogen deposition in 2030 and 2050?

Thank you for your attention

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