

Integrated Assessment Modelling

- A. 47th TFIAM meeting, Brescia, 8-9 May
- B. TFIAM-FAIRMODE workshop, Tallinn, 28-29 June

WGSR (22-25 May) advised to broaden mandate of TFIAM:
Multi-scale/Multi-objective assessment modelling aimed at cost-effective policy strategies that combine international, national and local actions as well as the links between air quality policy and other policy processes (e.g. SDGs, climate, biodiversity, food)

Stefan Åström & Rob Maas, co-chairs TFIAM
(Geneva – 14-15 September 2018)

A. 47th TFIAM meeting in Brescia, 8-9 May

Taking stock of modelling progress in supporting national air quality plans

- Implementation of emission standards is in many countries sufficient to meet national reduction obligations; exception = ammonia
- National optimization gives different results from European wide optimization
- Risks of episodes due to transboundary (secondary) PM remain
- Wood burning remains a burning issue in air-climate policy

Work Plan items 2018-2019

1. Review/update cost-data (*with TFTEI*)
2. Report on “cost of inaction” (*with TFTEI*)
3. Assessment report on Ammonia
4. Local air quality management (expert panel)
5. Global sectoral strategies (*with HTAP*)

1. Cost data

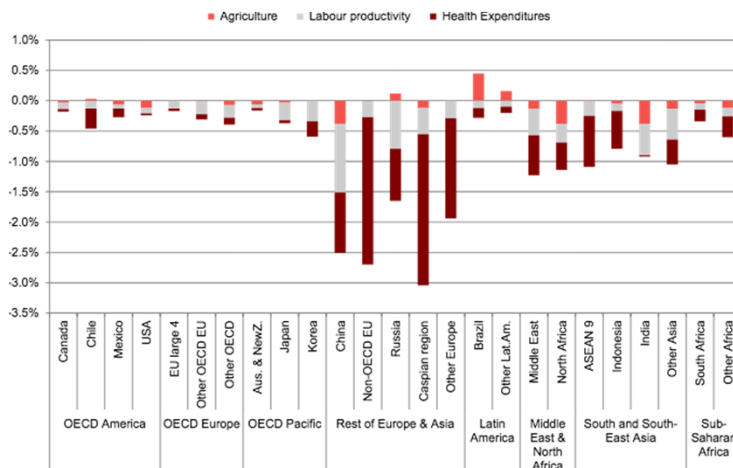
- Priority on updating control costs for sources not yet controlled in existing legislation
- Focus on regions that have yet to implement advanced control, i.e. countries in the eastern region of the Air Convention
- Update of GAINS cost data depends on ongoing research by national experts that is communicated to CIAM

2. Options for “cost of inaction” report

- Inaction defined as no additional action than current policy
- Focus on eastern region of the Air Convention and on ammonia

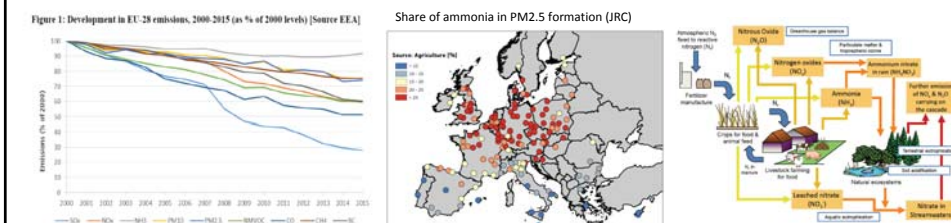
Cost of Inaction study OECD: high costs in eastern countries of EU and EMEP-region

Change in regional GDP from market impacts, central projection: *Percentage change w.r.t. no-feedback projection, 2060*

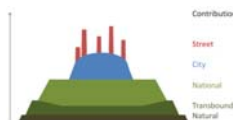


3. Assessment report on Ammonia

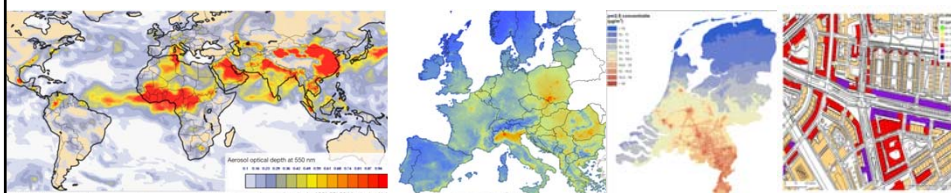
- What can be the value added compared to existing TFRN/ENA reports?
- Explicitly address the cost of inaction to ammonia policy. Link with agricultural subsidies?



4. Expert panel on local air quality management



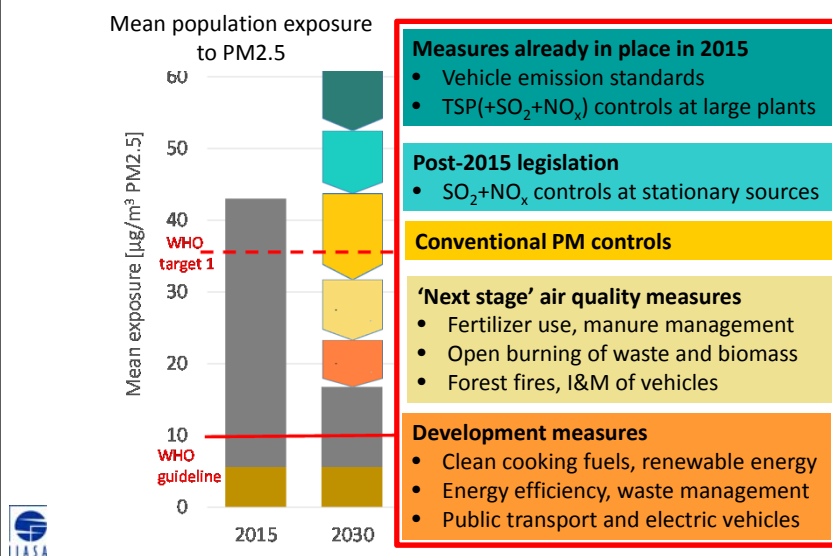
- Need for information sharing with local experts and focus on cost-effective strategies aimed at reduced health risks
- Kick off meeting in Oct/Nov 2018 with in-depth discussion on the purpose and value added of an expert panel on clean air in cities as suggested during the Saltsjöbaden-6 meeting
- Parties can nominate experts, TFIAM can invite additional experts, Funding remains an issue

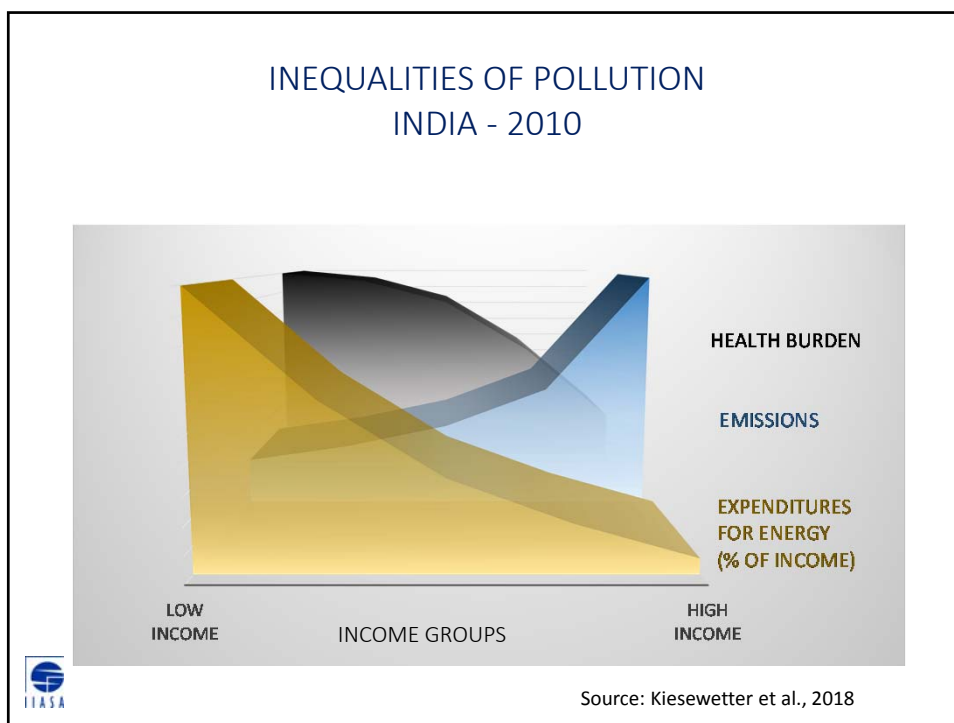
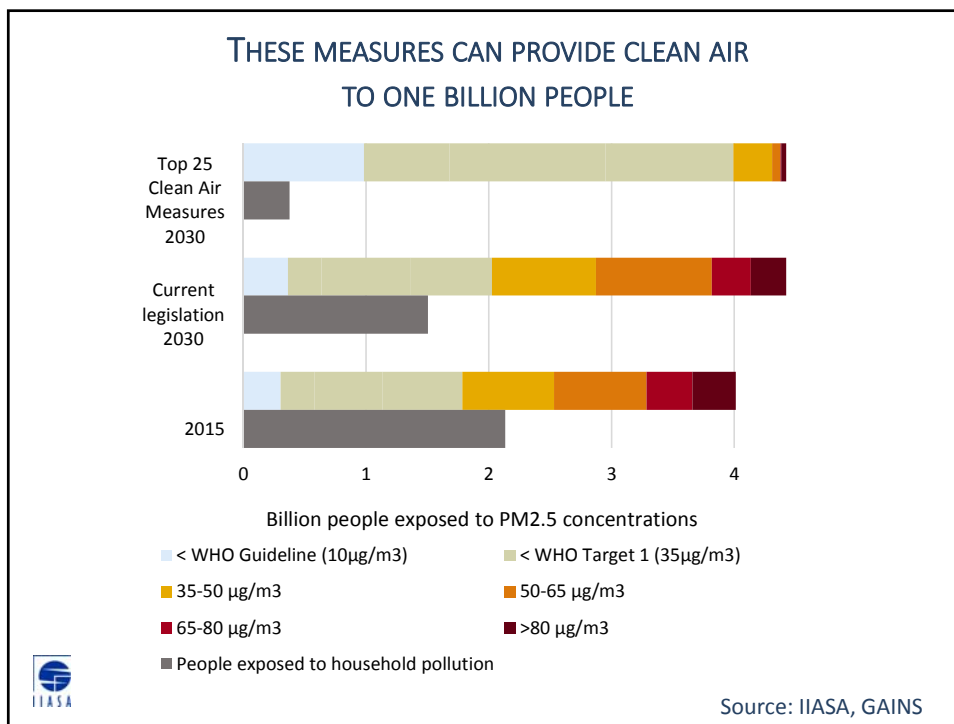


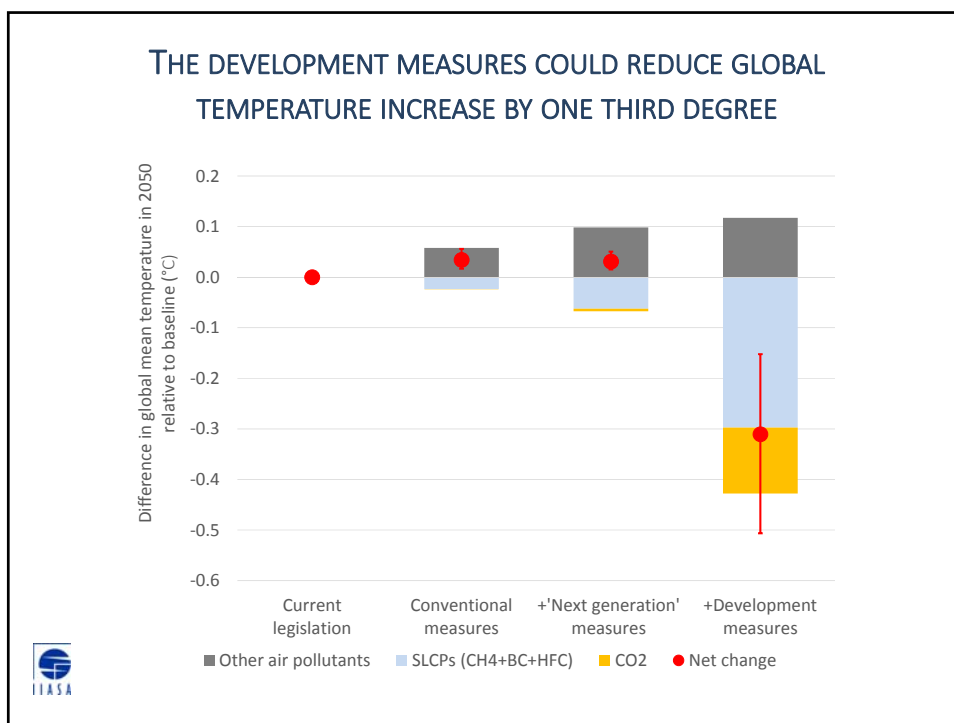
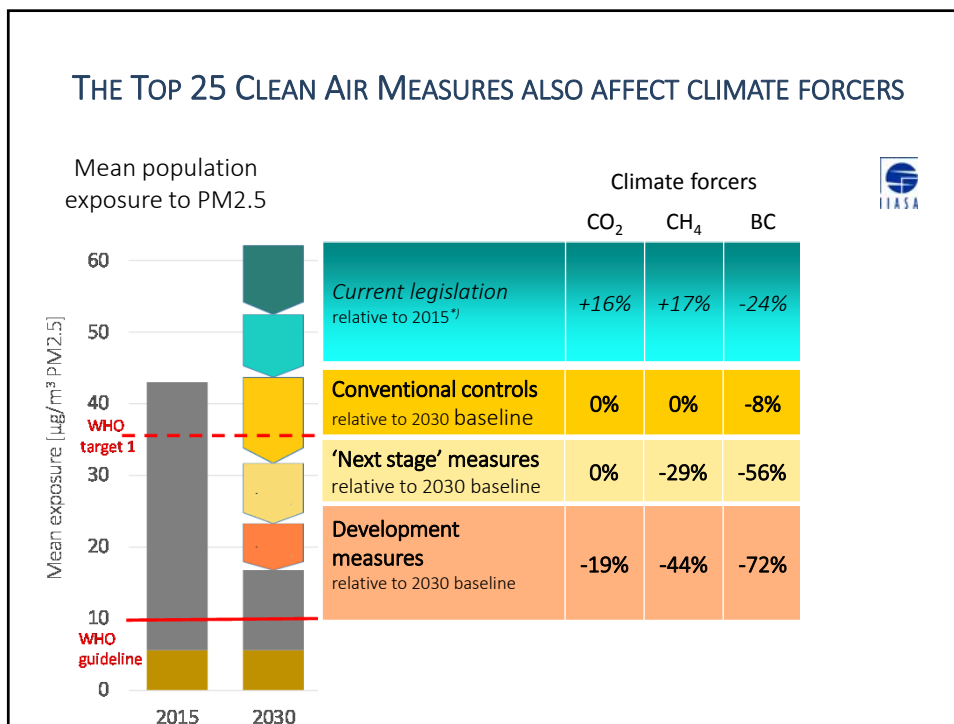
5. Global sectoral strategies

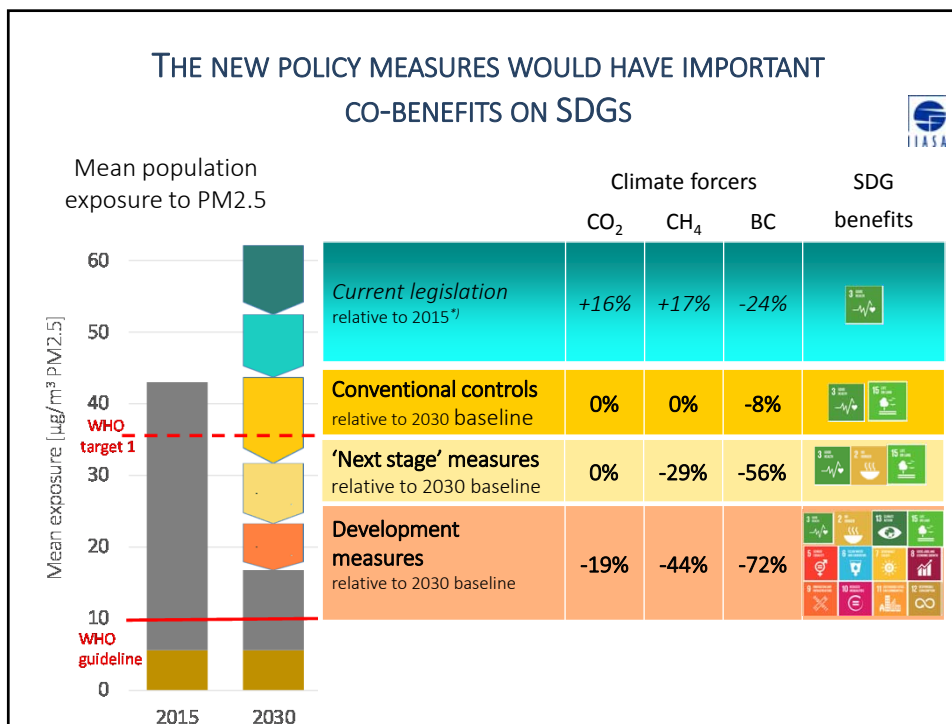
- CIAM is involved in designing global sectoral strategies
- A wider perspective on air pollution control (considering more than end-of-pipe measures) would be needed to reach WHO air quality targets
- This strengthens the need for an integrated approach to air pollution, taking into account other sustainable development goals
- Currently only a very limited number of TFIAM experts have the means to contribute to hemispheric/global issues

FURTHER AIR QUALITY IMPROVEMENTS IN ASIA REQUIRE A RE-ORIENTATION OF CURRENT POLICIES









B. TFIAM-FAIRMODE workshop Tallinn, 28-29 June

Focus on the health benefits of local air quality measures

1. IIASA, INERIS, JRC and NILU are working on fine resolution air quality modelling
2. Local contributions to PM_{2.5} exposure are much lower than local contributions to NO₂-exposure. Relative risks from NO₂ are lower
3. Local energy saving measures can offer ~5% additional health benefits (compared to current policy)
4. Active mobility can offer ~1% additional health benefits and reduces abatement costs
5. There are no significant health benefits from using catalytic paint, planting shrubs or trees or changing traffic circulation patterns
6. Only joint actions will significantly reduce urban PM-exposure: coordination between local, national and international authorities is needed

Expert panel for assessment of local air quality measures

Potential Tasks:

- Review and classify local measures, disseminate knowledge
- Updated guidelines to support health analyses and help in cost-benefits analyses
- Assess co-benefits of combined strategies (air pollution and climate, energy, mobility, health, SDGs ...) – focus on sectors

Value added to: FAIRMODE, Urban Partnership on Air Quality, Eurocities, Covenant of Mayors, ..., ?

..... *Linkage between scales*

Summary

Will EMEP/WGE support:

1. an update of the mandate of TFIAM in order to include work on multi-scale multi-objective integrated assessment modelling?
2. local experts to participate in an expert panel for the assessment of local air quality policies?
3. national experts to participate in hemispheric assessments?
4. national experts to contribute to a thematic 'ammonia' report?
5. national experts from the eastern region to contribute to a 'cost-of-inaction' report?
6. national experts to communicate new cost data to CIAM?