



International Institute for
Applied Systems Analysis
www.iiasa.ac.at

science for global insight

Modelling air pollution co-benefits

Markus Amann
Program Director
Air Quality and Greenhouse Gases

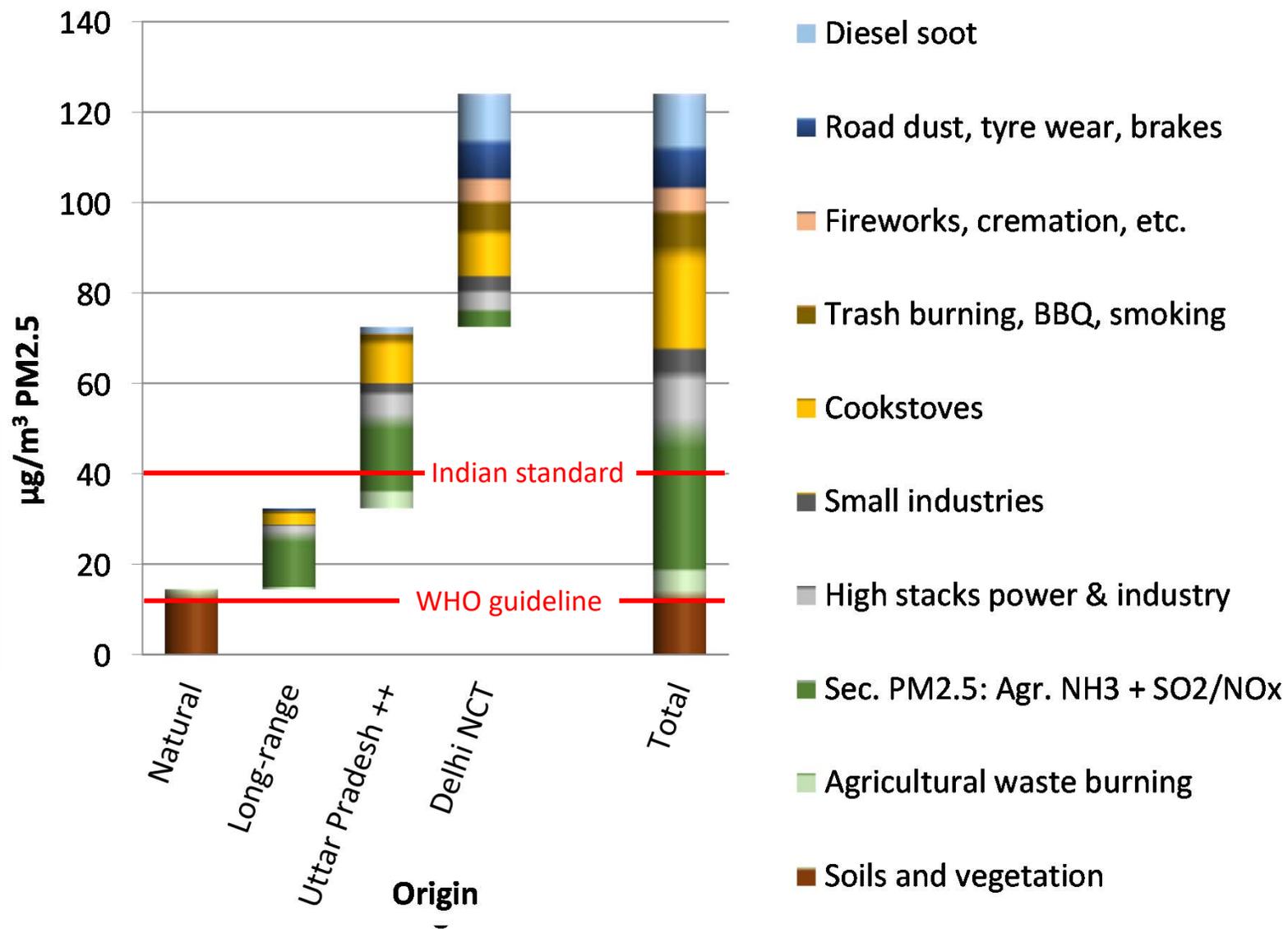


IIASA, International Institute for Applied Systems Analysis

Context

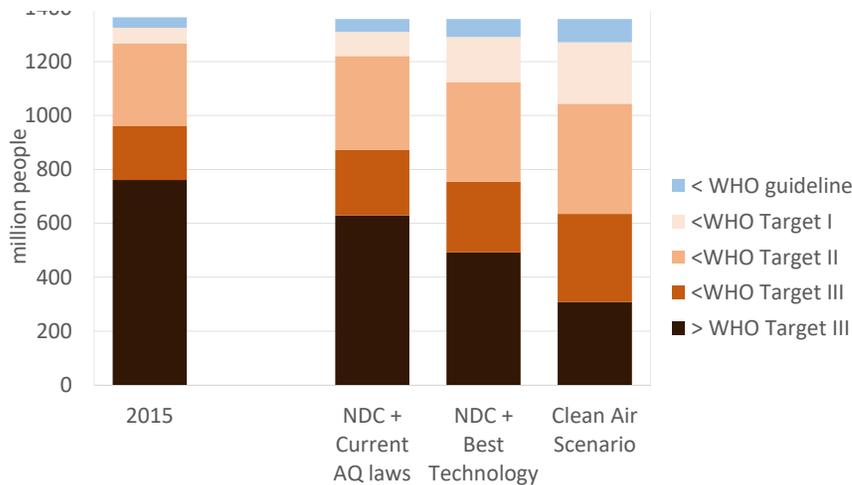
- Much of IIASA's work on SDG's addresses the global context – definition of targets (UN), interactions among targets, feasibility, etc.
- However, many policy interventions must be taken at the local level, where decision makers often
 - lack expertise and understanding of the linkages, and
 - face pressure from politically powerful stakeholders that have little interest in long-term solutions.
- Air pollution is one of the areas where measures that are required for achieving long-term and global targets deliver immediate and tangible co-benefits for the societies that are taking action today.
- IIASA AIR program focuses on
 - Revealing the near-term co-benefits of policies that are required to achieve longer-term SDGs,
 - making this knowledge accessible to the relevant decision makers.

Source contributions to PM2.5 in Delhi 2015

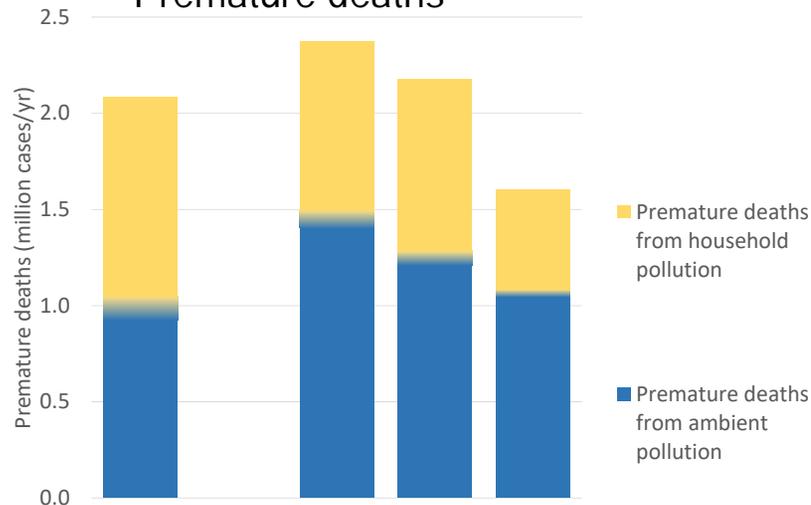


Demographic trends will counteract policy efforts to reduce the health burden from air pollution

Exposure of China's population to WHO levels for PM2.5



Premature deaths



Three scenarios for 2040:

- NDCs + current Chinese air pollution legislation
- NDCs + most advanced controls
- Clean Air scenario:
 - No fossil fuel subsidies
 - Access to clean energy
 - Waste management, etc.

Conclusions

- Well-designed clean air policies can deliver a wide range of co-benefits on multiple development goals, and motivate action that also benefits global commons
- IIASA's systems perspective is widely applied for policy analyses around the world, most recently in the context of the World Bank's 'Pollution Management and Environmental Health' (PMEH) program
- An improved understanding and quantification of the social and environmental drivers of health impacts could provide important and tangible linkages between different sectoral models and allow a better appreciation of win-win policy options