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# Findings from regional UNEP/CCAC assessments in Asia and Latin America

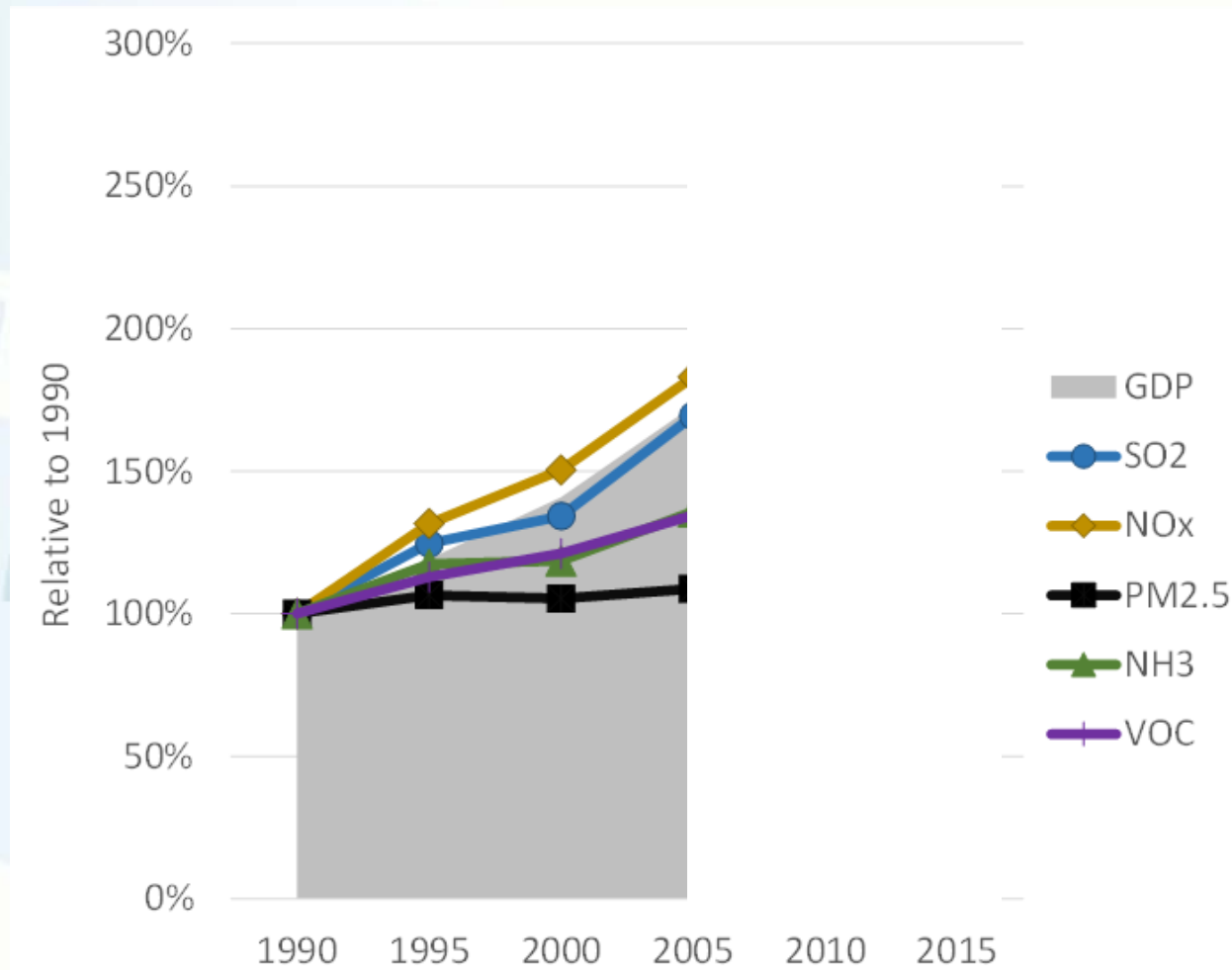
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Saltsjobaden VI Workshop  
Gothenburg, March 19-21, 2018



IIASA, International Institute for Applied Systems Analysis

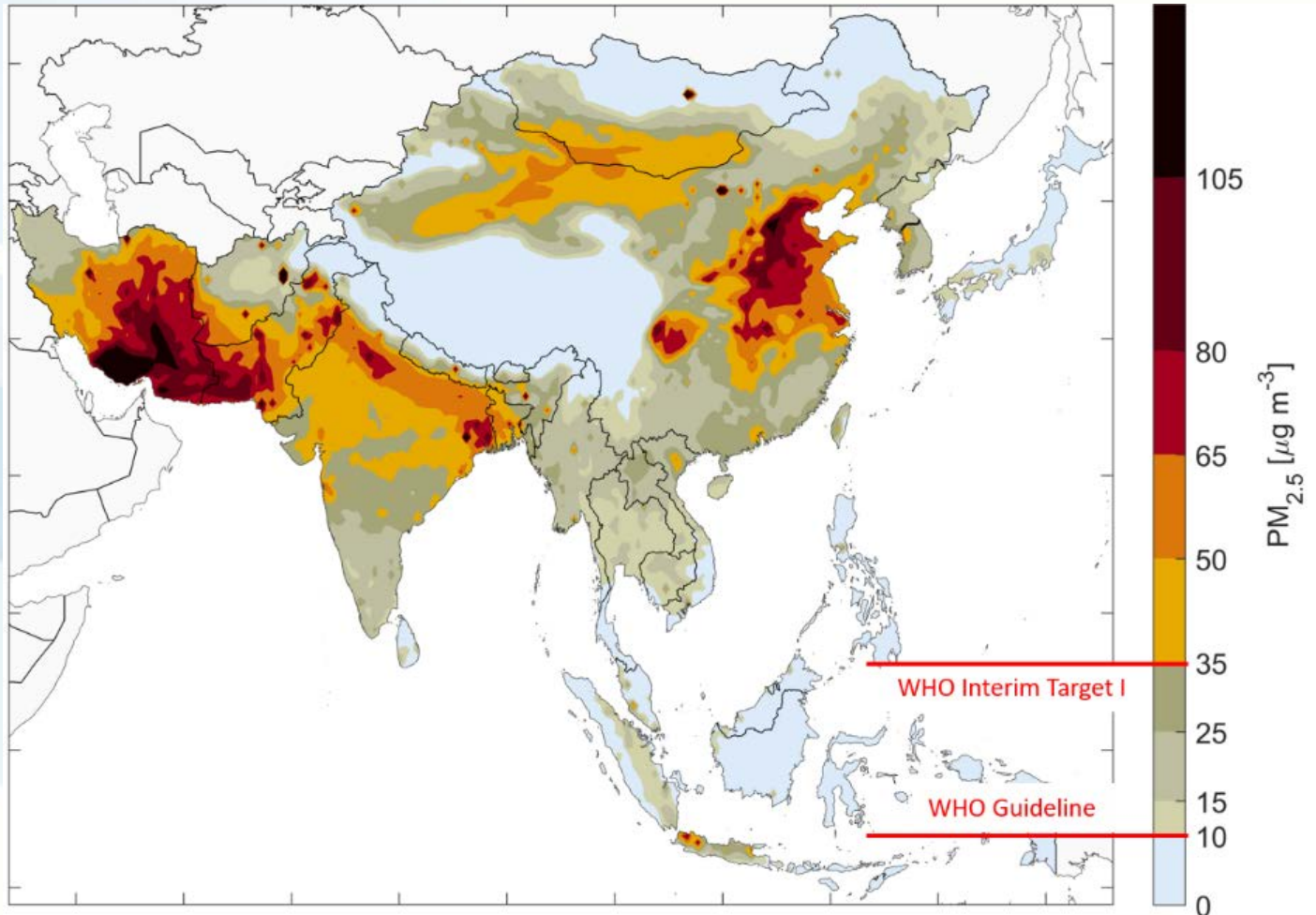
# POLICY INTERVENTIONS HELPED TO BREAK THE HISTORIC LINKAGE BETWEEN ECONOMIC GROWTH AND EMISSIONS IN ASIA



Source: IIASA, GAINS

# IN 2015, AIR QUALITY STANDARDS WERE EXCEEDED OVER LARGE AREAS IN ASIA

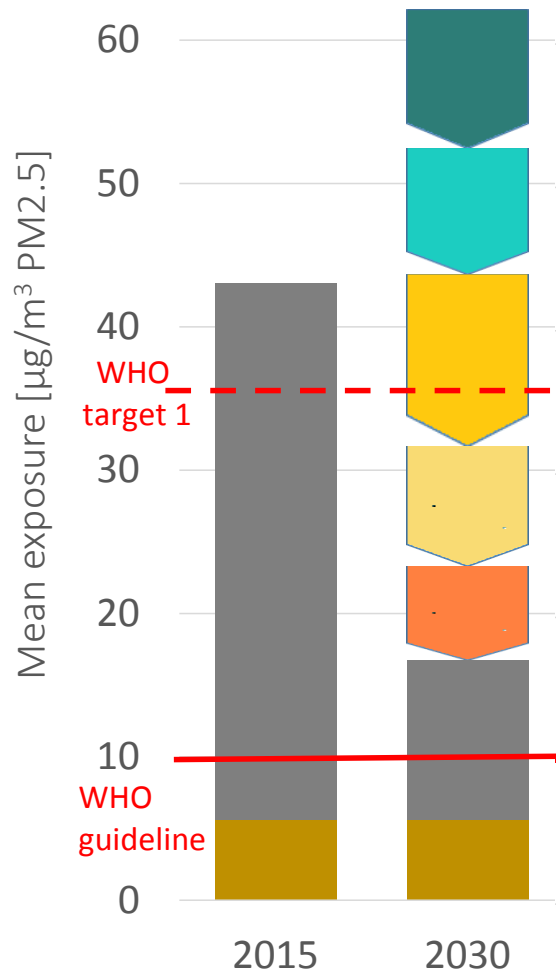
AMBIENT PM<sub>2.5</sub> IN 2015



Source: IIASA, GAINS

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

Mean population exposure  
to PM<sub>2.5</sub>



## Measures already in place in 2015

- Vehicle emission standards
- TSP controls at large plants

## Post-2015 legislation

- SO<sub>2</sub>+NO<sub>x</sub> controls at stationary sources

## Other 'conventional' PM controls

## 'Next stage' air quality measures

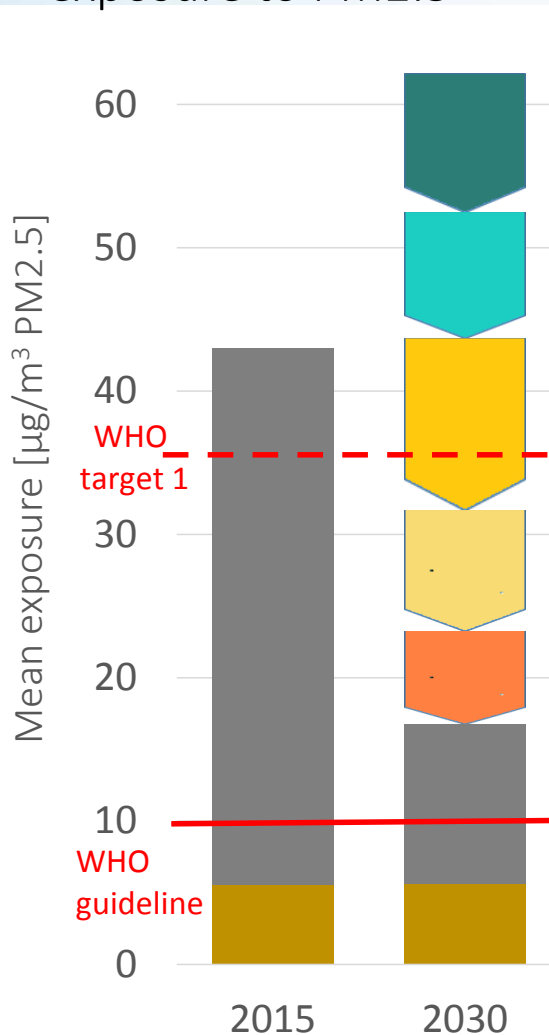
- Fertilizer use, manure management, open biomass burning, residential waste burning, I&M of vehicles

## SDG measures

- Clean cooking fuels, renewable energy
- Energy efficiency, waste management
- Public transport and electric vehicles

# THE NEW POLICY MEASURES WOULD HAVE IMPORTANT CO-BENEFITS ON SDGs

Mean population exposure to PM2.5

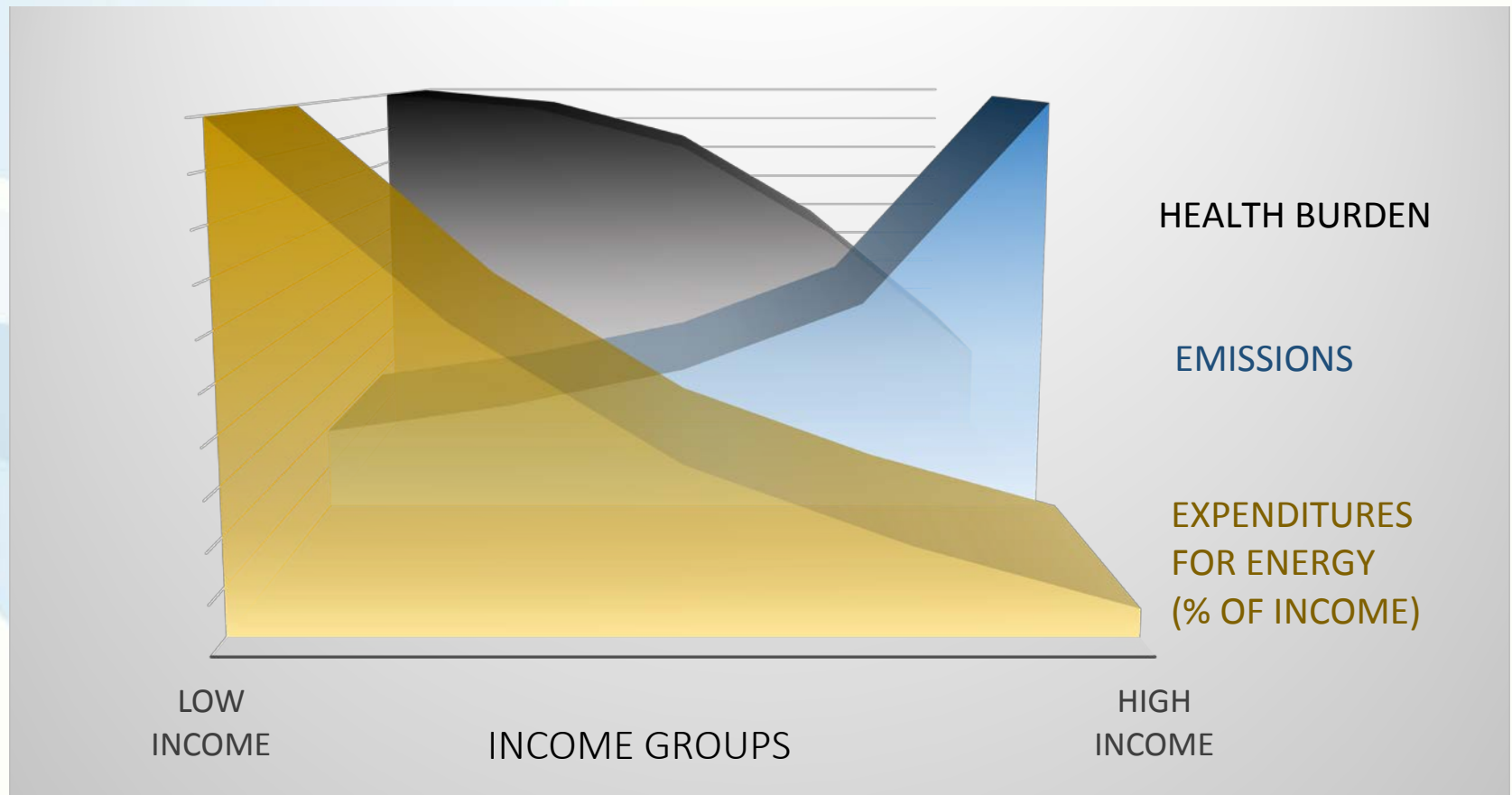


	Greenhouse gases		
	CO <sub>2</sub>	CH <sub>4</sub>	BC
Post-2015 legislation <sup>*)</sup>	+16%	+17%	-24%
Other PM controls <sup>**)</sup>	0%	0%	-8%
Next stage measures <sup>**)</sup>	0%	-29%	-56%
SDG measures <sup>**)</sup>	-19%	-44%	-72%

<sup>\*)</sup> relative to 2015  
<sup>\*\*)</sup> relative to 2030 baseline



# INEQUALITIES OF POLLUTION INDIA - 2010



Source: Kieseewetter et al., 2018

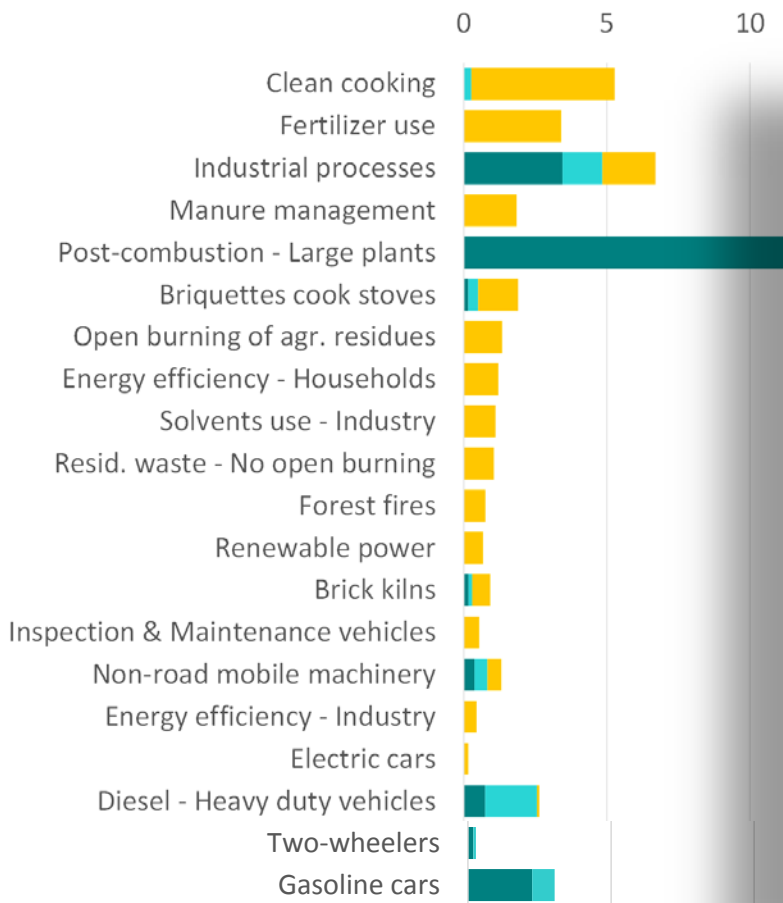
# Key messages

- While current policies limit a further increase of emissions in Asia, they will not be sufficient to significantly improve air quality.
- To move towards the Air Quality Standards, measures that involve other sectors (agriculture, energy, waste management, etc.) will be indispensable.
- These measures will deliver a wide range of health- and other development benefits and reduce pollutants that influence temperature increase and climate.
- Integrated multi-approaches (such as in the LRTAP Convention) could embed air quality measures in the development agendas, and offer powerful incentives for measures that serve the global goods.

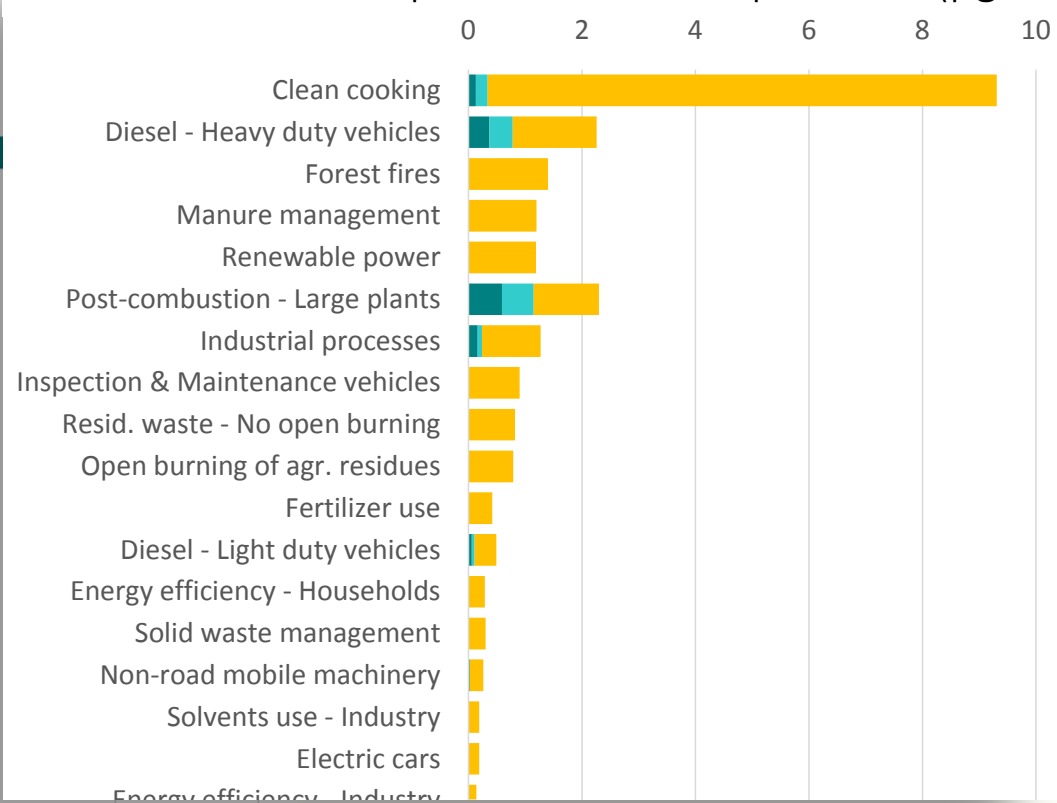


# THE PRIORITY MEASURES DIFFER ACROSS REGIONS, DUE TO DIFFERENCES IN ECONOMIC STRUCTURES AND GEO-PHYSICAL CONDITIONS

East Asia - Exposure reduction potential ( $\mu\text{g}/\text{m}^3$ )



South-East Asia - Exposure reduction potential ( $\mu\text{g}/\text{m}^3$ )



■ 2015 measures   ■ CLE measures   ■ Further potential