

*“A Clean Air 2030 Vision for India”*  
Transition to a Green Economy

Air Quality Asia India Strategy Session 2021

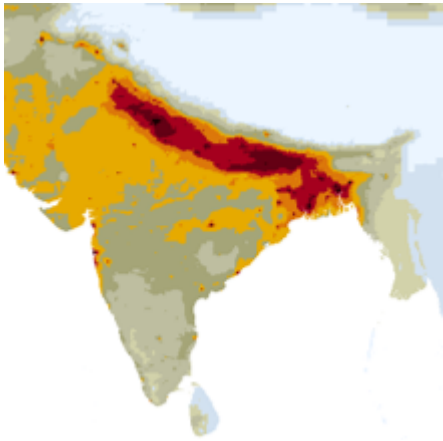
September 17, 2021

6-8:30 PM IST

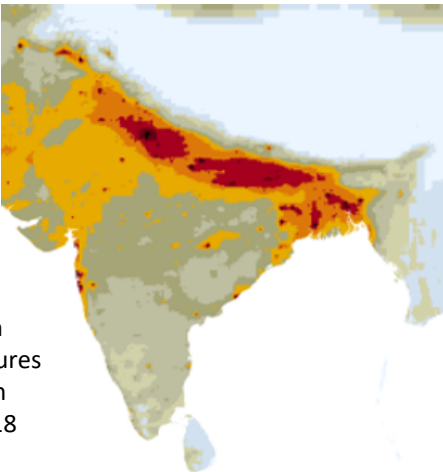
# Towards a Clean Air 2030 Vision for India

Determining a cost-effective path to substantively improve air quality.

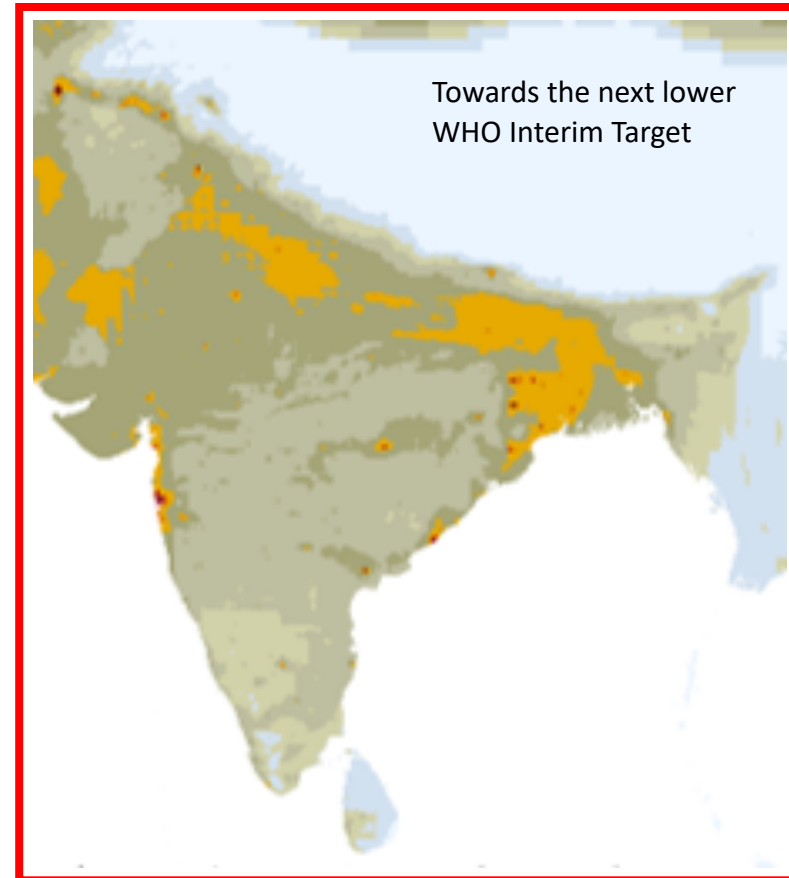
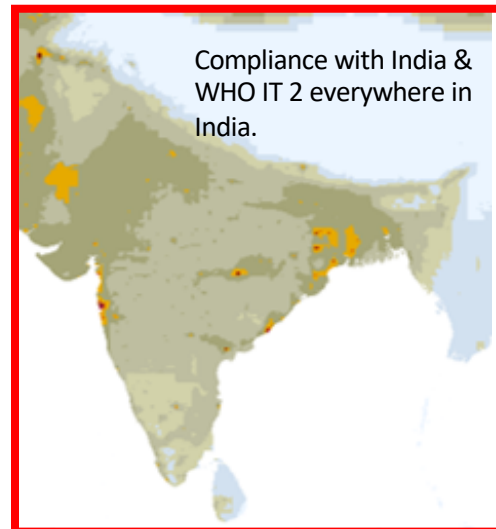
Year 2018



Year 2030



Year 2030 with new AQM policies  
(towards a greener economy) :

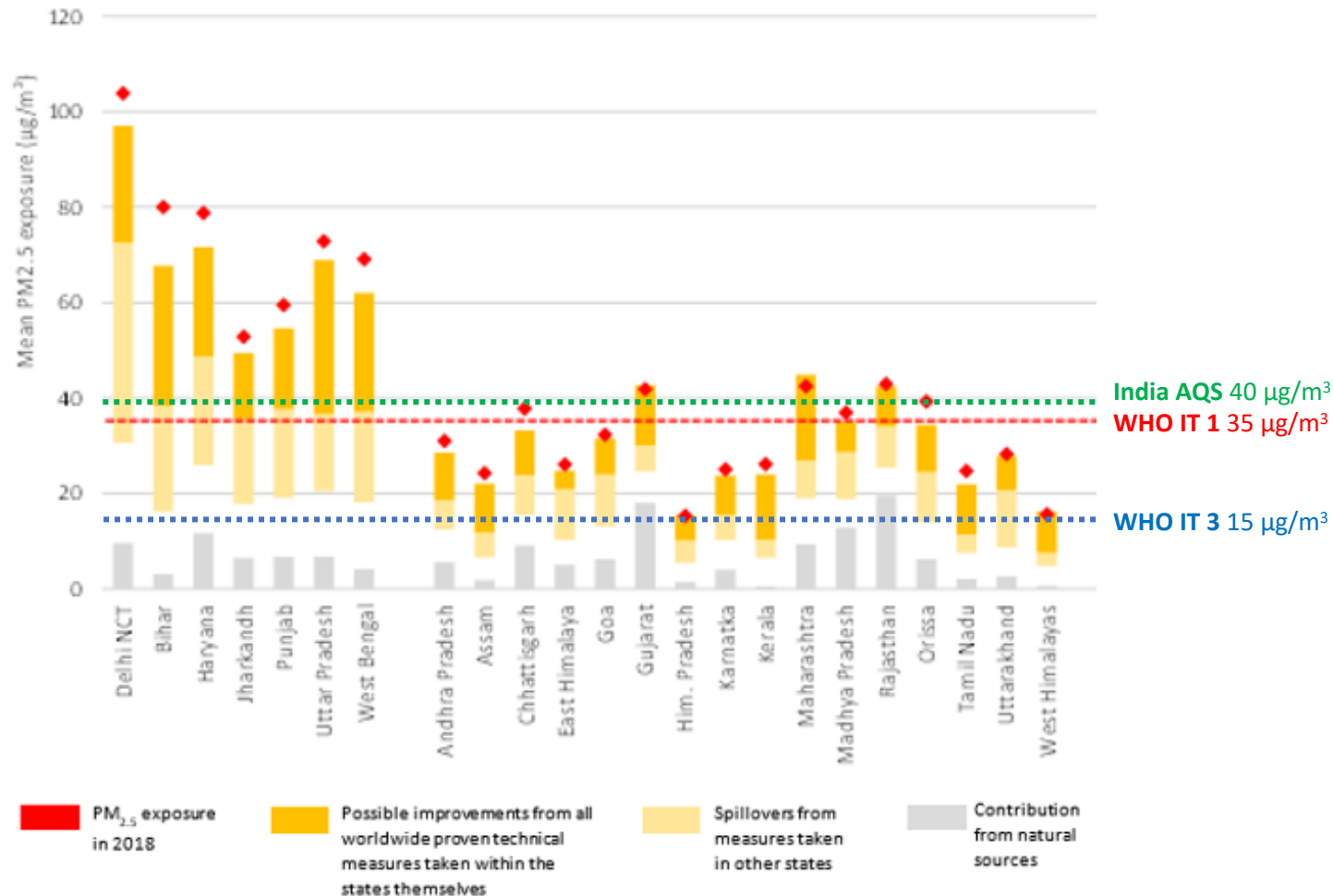


2030 with  
the measures  
decided in  
2015-2018

Compliance with India &  
WHO IT 2 everywhere in  
India.

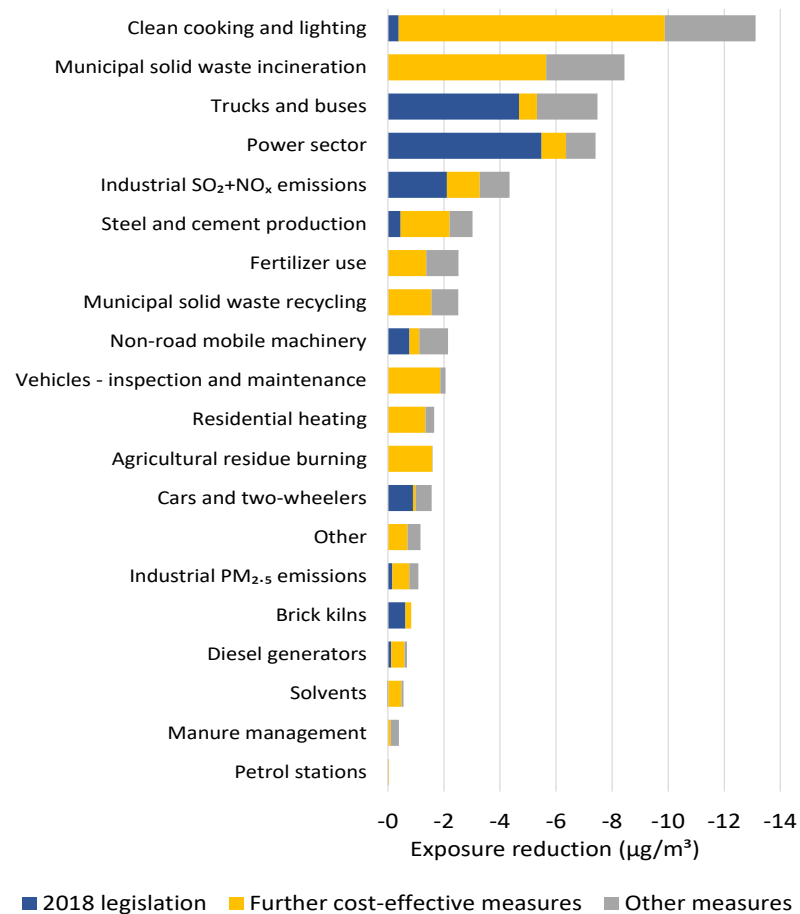
Towards the next lower  
WHO Interim Target

# States strongly dependent upon each other for substantive air quality improvements by 2030



- States with highest air pollution concentrations (e.g. Delhi, Haryana) heavily dependent upon interstate coordination to reach India’s AQS & WHO IT 1.
- Almost all other states (both w/o Indo-Gangetic Plain) largely dependent on inter-state coordination to harvest “positive spillovers” and achieve further air quality improvements.
- Requires both federal coordination and direct coordination between the states.

# Cost-effective measures in the Indo-Gangetic Plain towards achieving a clean air vision and greener economy by 2030



Sector	Examples of policies/measures
<b>Power plants</b>	Increased introduction/use of renewable energy
	High efficiency PM controls
	Co-firing of biomass pellets in coal thermal power plants
	Selective catalytic reduction (SCR) at existing and new oil and gas power plants
<b>Transport</b>	Increased introduction/use of electric vehicles
<b>Industry</b>	High efficiency PM controls for boilers
	More stringent PM controls for furnaces
	Low NO <sub>x</sub> burners and selective catalytic reduction (SCR) for oil and gas boilers and furnaces
	Stringent emission controls for industrial processes, including ferrous and non-ferrous industry, refineries, coke plants, carbon black production, fertilizer plants and brick kilns (increasing capacity of tunnel kilns)
	Improved control of flaring in refineries
<b>Households</b>	Increased access to clean fuels (for example, continuation of the Pradhan Mantri Ujjwala Yojana scheme)
	Replacement of wick kerosine lamps with hurricane lanterns
	Nation-wide ban of open burning of solid household waste
<b>Agriculture</b>	Improved enforcement of bans on burning agricultural residue
	Improved manure management in livestock production
	Efficient use of urea-based fertilizers
	Suppressing dust emissions from storage and handling of agricultural crops
	Low-till farming, alternative cereal harvesting

# Some suggested actions to move priority measures over the next 10 years

- Mobilize ***finance at scale***, including **innovative finance** such as performance-based incentives and rewards (e.g. expansion of the 15<sup>th</sup> Finance Commission scheme beyond million + cities), to ensure sufficient financial resources for AQM both in air quality targeted programmes and programmes with air quality benefits (both urban and rural areas).
- Develop and apply ***economic policies and restructuring*** in addition to environmental policies.
- Apply ***cost-effective*** measures in the development and implementation AQM programmes to ensure optimal use of scarce economic resources.
- Develop **nationwide and cross-border regional AQM collaboration** and apply **airshed management** to facilitate the suggested environmental, economic and financial actions.

## Examples of economic considerations of most critical air quality source sectors :

- Primary Particulate Matter management: Household sectors.
- Secondary Particulate Matter management: Urea Fertilizer management