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SOLUTIONS FOR CLEANER AIR IN PRC TO FIX THE AIR POLLUTION IN THE REGION

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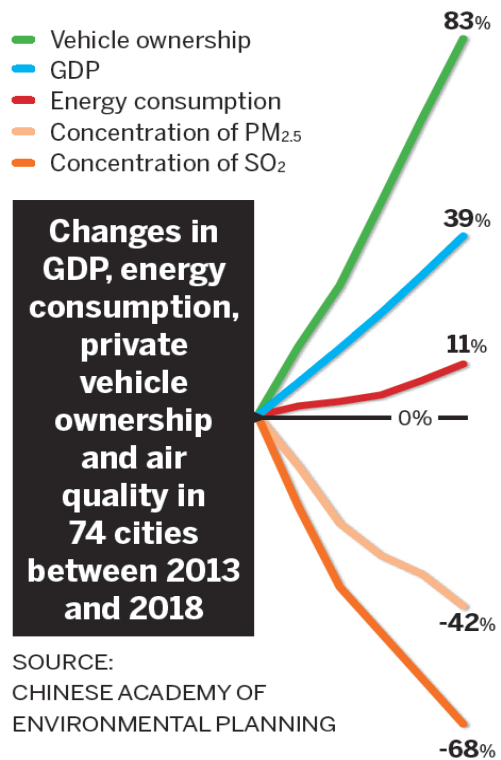


BAOQ
BETTER AIR QUALITY
CONFERENCE

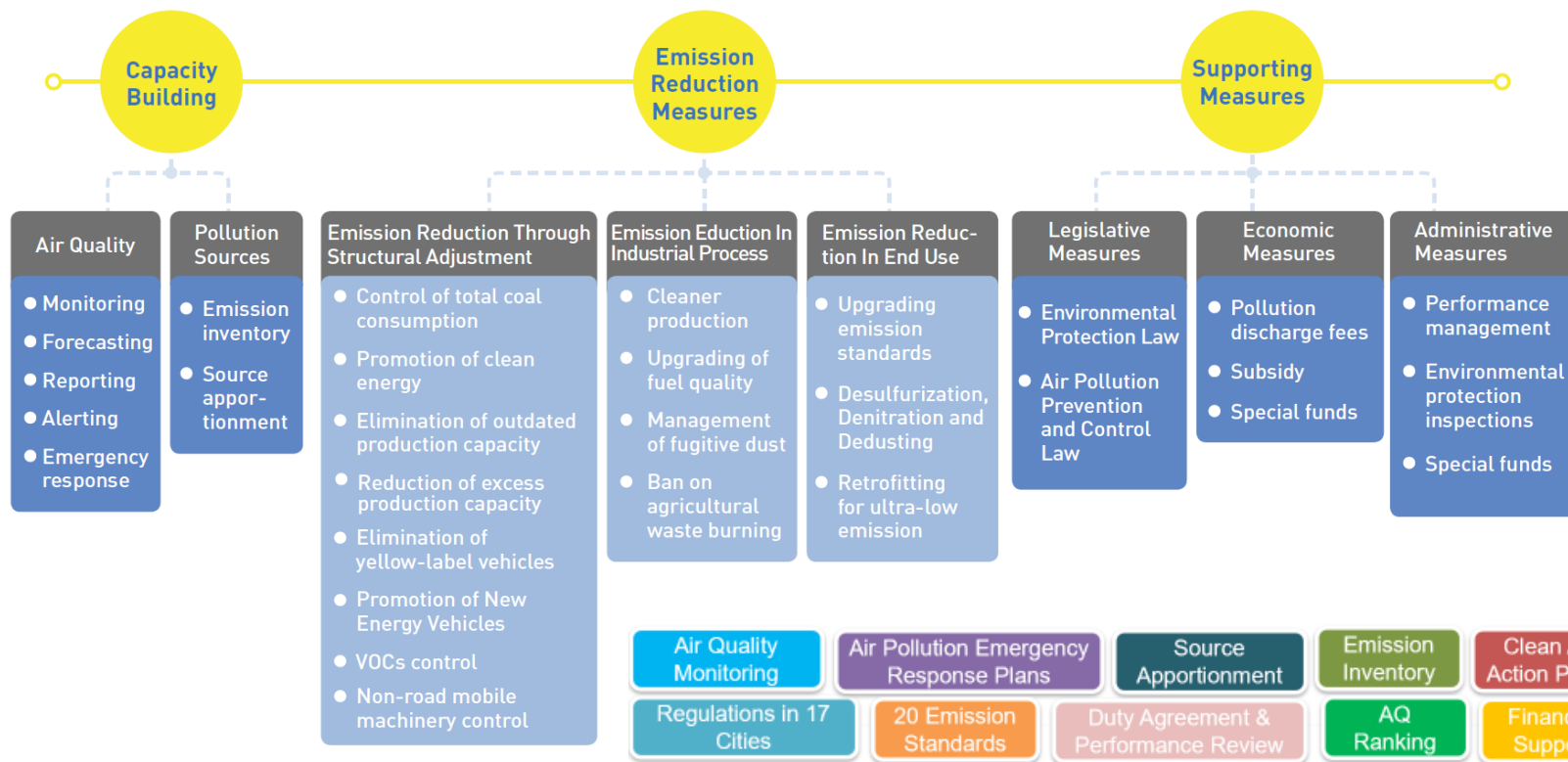


Solutions to Fix the Air Pollution

Upgrade the Air Pollution Control Policy Framework



China's Policy Framework for Air Pollution Prevention and Control



Clean Air Asia, 2018

Key Areas to Focus

Effective Emission Reduction Measures

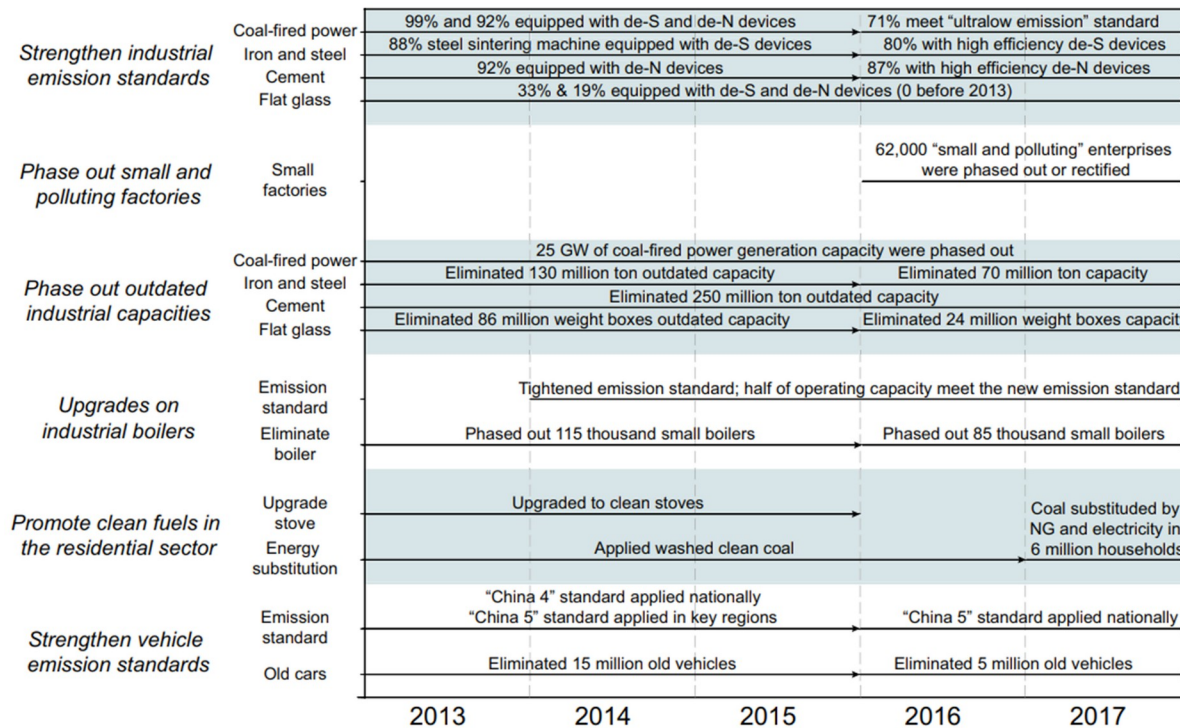
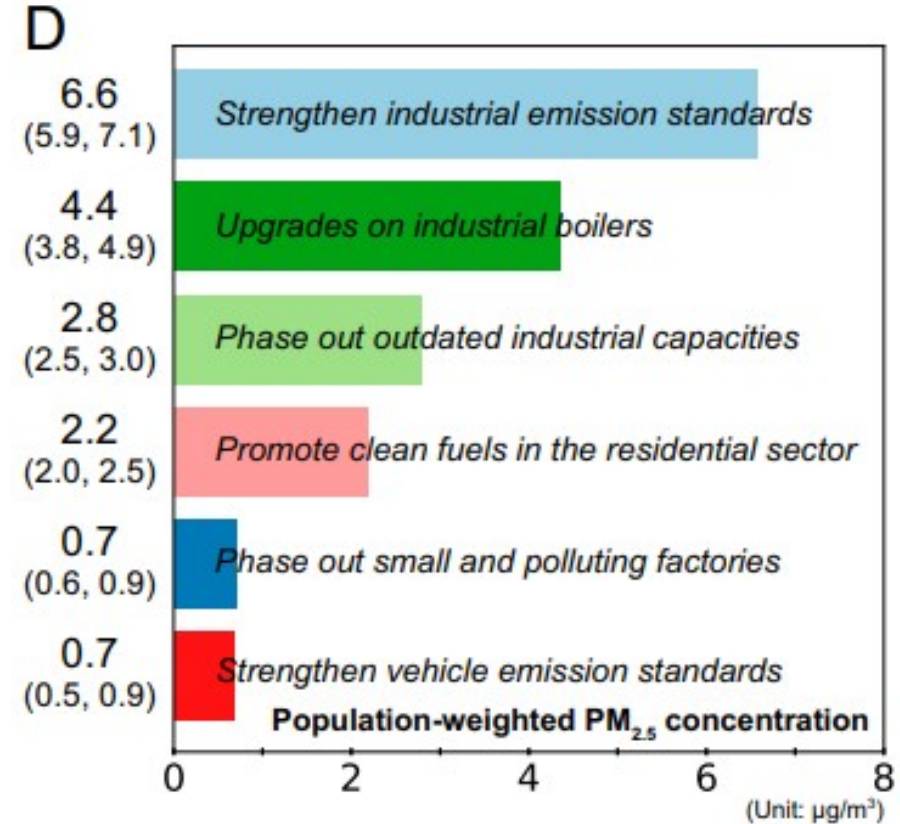


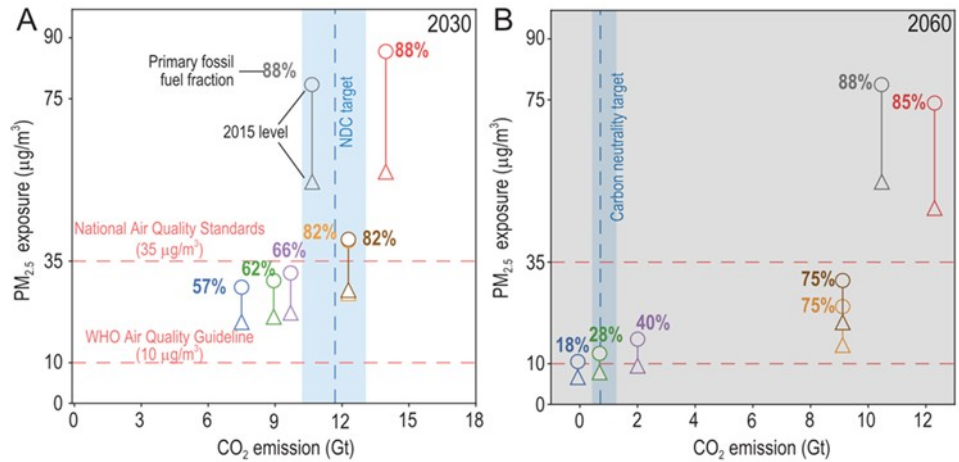
Fig. 1. Summary of major air pollution control measures taken between 2013 and 2017. De-S, desulfurization; De-N, denitrification; NG, natural gas.

Source: Zhang et al. PNAS 2019

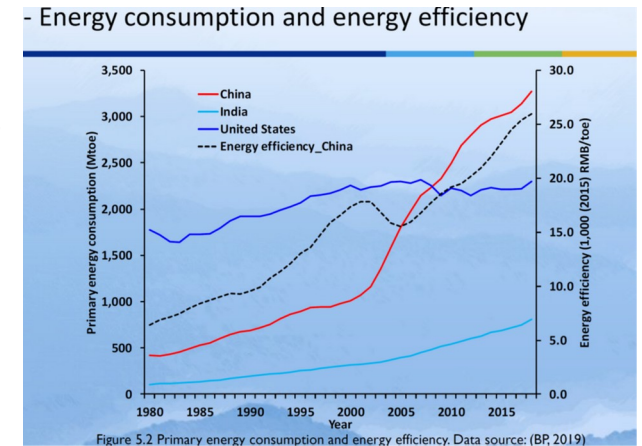
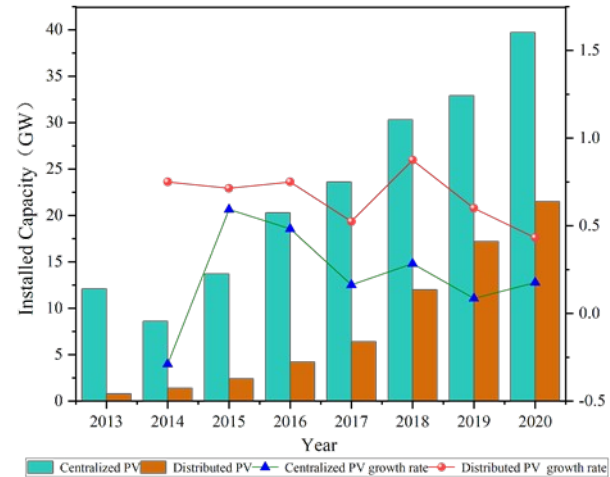


Bring Solutions to Scale

Synergize the Clean Air and Climate Policies



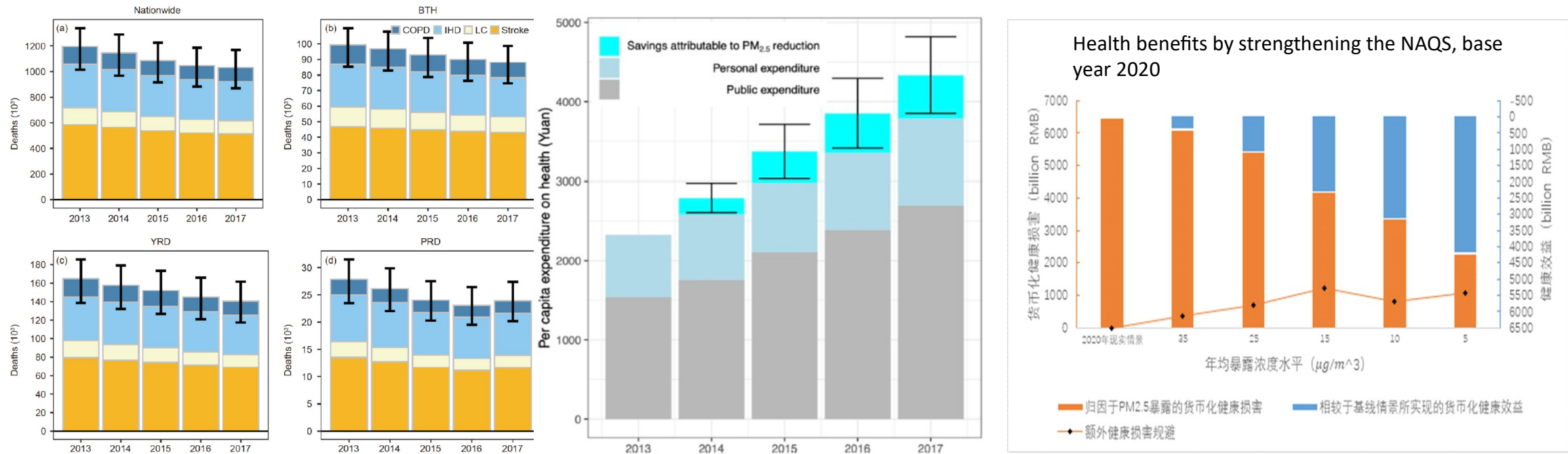
— Ambitious-pollution-1.5°C-goals — Ambitious-pollution-NDC-goals — 2015-level
— Ambitious-pollution-Neutral-goals — Current-goals ○ 90th percentile of PM_{2.5} exposure
— Ambitious-pollution-2°C-goals — Baseline △ Population-weighted PM_{2.5} concentration



1. Cheng et al., Natl. Sci. Rev., 2021
2. Wang and Jin, 2023, Energy Res. Soc. Sci.
3. Yuan Xu, 2021. Environmental Policy and Air Pollution in China: Governance and Strategy, Routledge, London.

Bring Solutions to Scale

Health Matters



1. Xue et al. SCIENCE CHINA Earth Sciences 2019;
2. Xue, Zhu et al. PLoS Med 2021
3. Shiqiu Zhang, Huan Lin et al Economic Health Benefits in China of Strengthening the National Ambient Air Quality Standards. Working paper 2023

Further Discussion

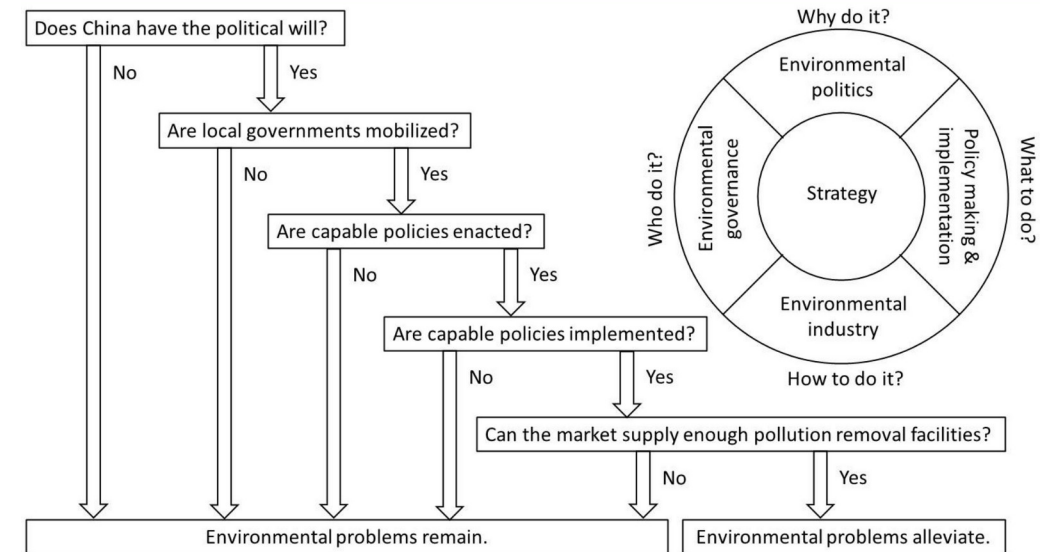
Lessons learned

- **Foundation for Policy Making:**
 - Role of academic studies—provide evidence and information
 - Science-based decision and policy making
- **Strong political will and community willingness:**
 - Top-down and bottom-up
 - Information disclosure and public participation
- **Long term perspective and integration:**
 - Long term expectation: enterprises and consumers
 - Address air pollution under the overall framework of sustainable development
 - Synergistic effect
- **Combination of policy tools and action package:**
 - Command & control-market based instruments-information disclosure-public participation-public Interest Litigation
 - Implementation-enforcement-monitoring-supervision-evaluation

Issues of concern

- Least cost solution, cost burden and distribution effects
- Incentives for action

How to solve a major environmental problem?



Yuan Xu, 2021. Environmental Policy and Air Pollution in China: Governance and Strategy, Routledge, London.