



LEEPP

北京大学能源环境经济与政策研究室  
Laboratory of Energy & Environmental Economics and Policy, PKU

Research collaboration within AIM  
**Climate change and other environmental issues  
including health**

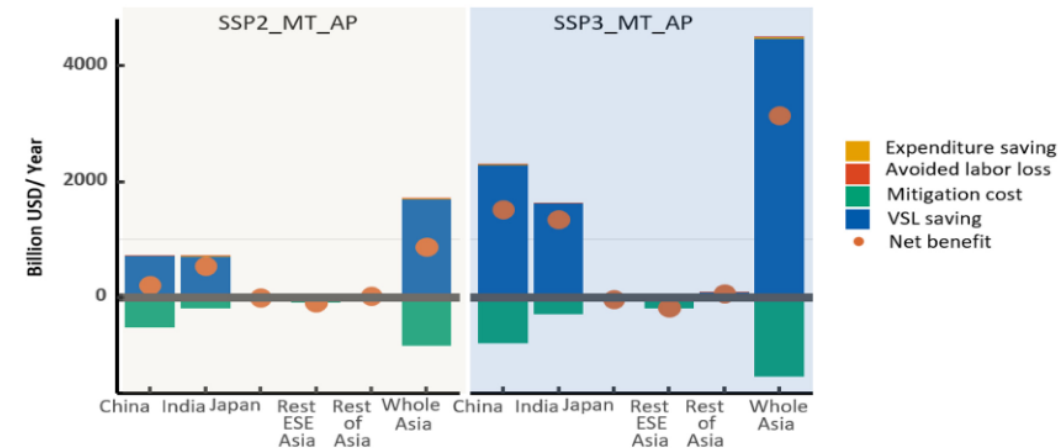
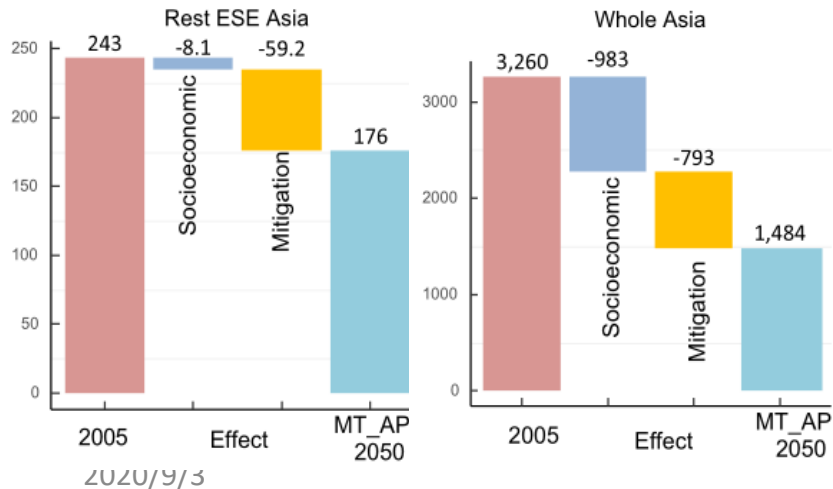
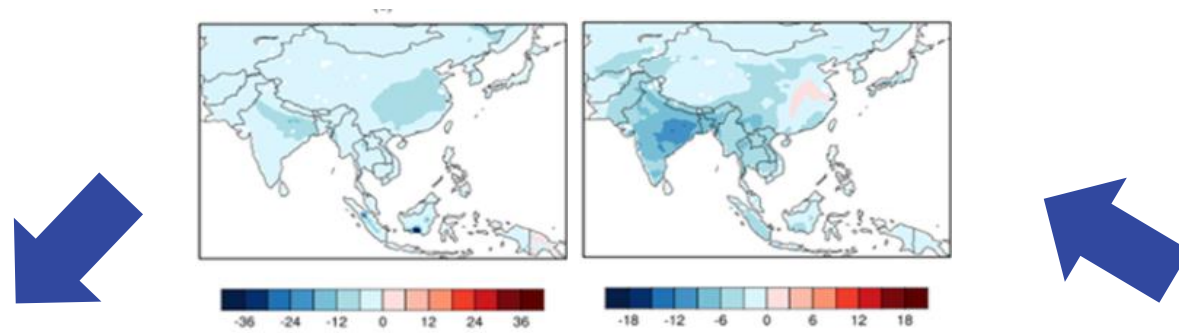
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**2020/09/04**

- Main questions

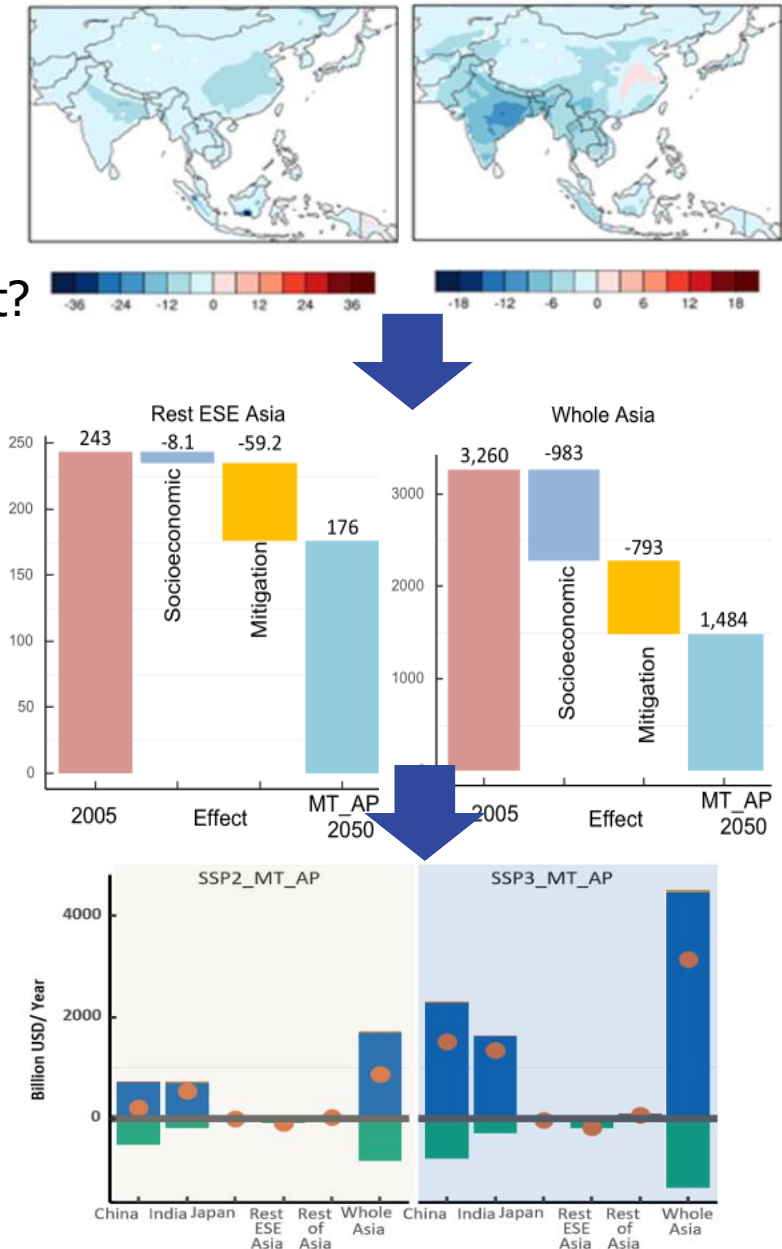
1. Co-benefits of low-carbon Asia in Air quality?
2. Co-benefits of low-carbon Asia in Health improvement?
3. Cost-benefit of low-carbon transition through lens of health benefit?



# Climate change and other environmental issues including health

- Main questions
  1. Co-benefits of low-carbon Asia in Air quality?
  2. Co-benefits of low-carbon Asia in Health improvement?
  3. Cost-benefit of low-carbon transition through lens of health benefit?
- Scope
  - Long-term: 2030, 2050 and beyond
  - Region/countries: China, India, Japan, Thailand, Southeast Asia
  - Sectors: economy-wide, energy, residential
  - Target & measures: NDC, 2-degree; Tax, cap, sectoral measures
- Approaches
  - CGE, AIM/Enduse + Air quality model + health assessment tool
- Expected outcomes
  - Scenario assessment and database, country-specific outlook
  - Academic papers

Note: Similar work has been done for China, South Korea, and Asia, global level study is ongoing.



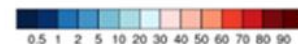
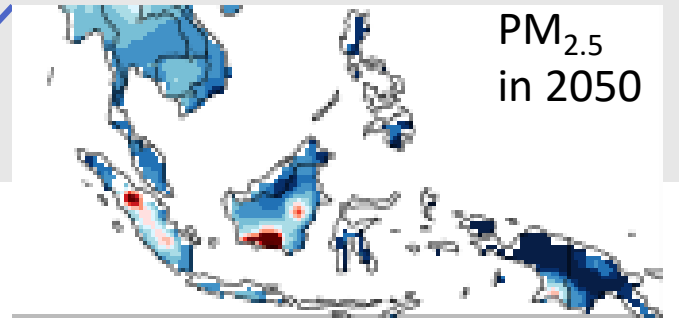
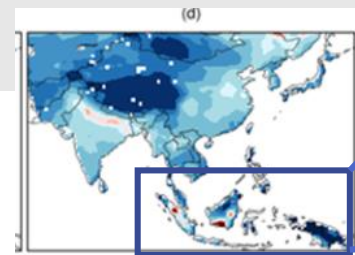
# Climate change and other environmental issues including health

Title	Goal	Keywords
India <sup>1</sup>	Health and climate benefits from India's Clean Electricity Transition and Electric Vehicles	Assessing health, Air Quality and Climate Benefits from India's key low-carbon strategies including Clean Electricity Transition and EVs.
China <sup>2,3</sup> , South Korea <sup>4</sup> , Global	Health co-benefit of climate change mitigation at the national and global levels	Distinguishing the costs and benefits of China's and global climate mitigation
China/ Greater Bay	Addressing Triple Challenges of Economic Growth, Environmental Pollution and Climate Change	Assessing technology roadmap and policy recommendations to see the synergy or tradeoffs of climate and environmental policies and their impacts on economic growth.
South & Southeast Asian countries		

Air quality model, Health Assessment, electrification, renewable energy target

Air quality model, Health Assessment, cost-benefit

CGE model, multi-objective analysis, nexus



## Reference

1. **Peng, Dai** et al. The Central Role of Policy Enforcement in Achieving Health, Air Quality and Climate Benefits from India's Clean Electricity Transition. *Environmental Science Technology*, In press.
2. **Xie, Dai** et al. Co-benefit of climate mitigation on air quality and human health in Asian countries. *Environment International*, 2018.
3. **Xie, Wu** et al. Health and economic benefit of China's greenhouse gas mitigation by 2050. *Environmental Research Letters*, 2020.
4. **Kim, Xie** et al. Air quality co-benefits from climate mitigation for human health in South Korea. *Environment International*, 2020.