

# Air Pollution and Regional Economic Integration in East Asia: Implications and Recommendations

Mark Elder

Institute for Global Environmental Strategies

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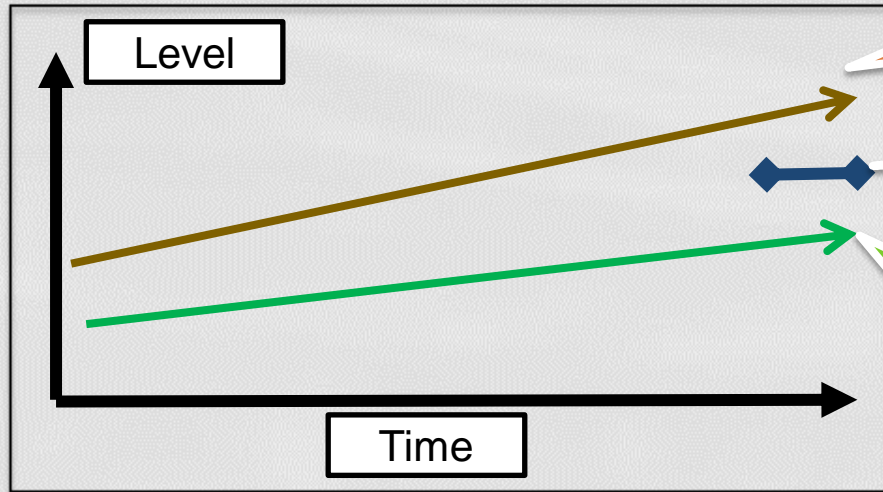


# Traditional Thinking about Economic Integration and the Environment

- There is a tradeoff between environment and economy
- Worries that stronger environmental policies, standards, might raise costs, undermine trade competitiveness
- Strict environmental regulations might cause investment to go elsewhere
- Worries about a race to the bottom



# Economic Integration and Air Pollution



Economic integration increases gradually over time

WHO Guideline Level

Air pollution standards increase gradually over time

- Not as much as economic integration
- Often not to the level of WHO Guidelines

ECONOMIC INTEGRATION

\* Might not prevent stronger standards

\* But may limit stronger standards (less than developed countries, WHO guidelines)

**Air pollution itself may not improve:**

- Economic growth might offset stronger standards



# Race to the Top?

## Higher Standards Help Exports: Case of Autos

- Japan – (1970s)
  - Japan followed stricter auto standards in the US; then US delayed
  - Japanese auto companies also wanted to delay; government refused
  - Big advantage for Japanese auto exports to the US
  - Japanese & US auto companies miscalculated their interests
- China – raised auto standards to develop export potential
- Southeast Asian countries already make advanced auto parts

## High Cost of Air Pollution

- Deaths
- Health costs
- Crop damage, reduced yields
- Difficult to attract skilled workers

Need more cost-benefit analysis



# Main Messages & Recommendations

- Stronger standards do not undermine competitiveness and may increase it.
- Even if you aren't persuaded –
  - China already strengthened its standards (so no reason for lower ones)
- Better for countries to raise standards jointly
  - To ease fears about competitiveness
- Co-benefit approach
  - Development co-benefits (e.g. jobs)
  - Climate co-benefits (increased cost effectiveness by addressing air and climate simultaneously)
- Expanded regional integration should be conditioned on
  - Stronger domestic air pollution standards and regulations
  - Stronger enforcement and implementation
  - Development of implementation capacity.





# For international cooperation consider the European framework

(Convention on Long-range Transboundary Air Pollution - LRTAP)

(For reduction measures, not just standards)

- Countries have differentiated reduction targets
- Cost-optimized reduction measures calculated by modeling
- Capacity building for monitoring & reduction measures, especially for less developed countries
- LRTAP is legally binding, but could be voluntary in Asia
- Could create a new cooperation framework or build on existing frameworks

**Thank You!**



Mark Elder, IGES  
[elder@iges.or.jp](mailto:elder@iges.or.jp)  
[www.iges.or.jp](http://www.iges.or.jp)

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