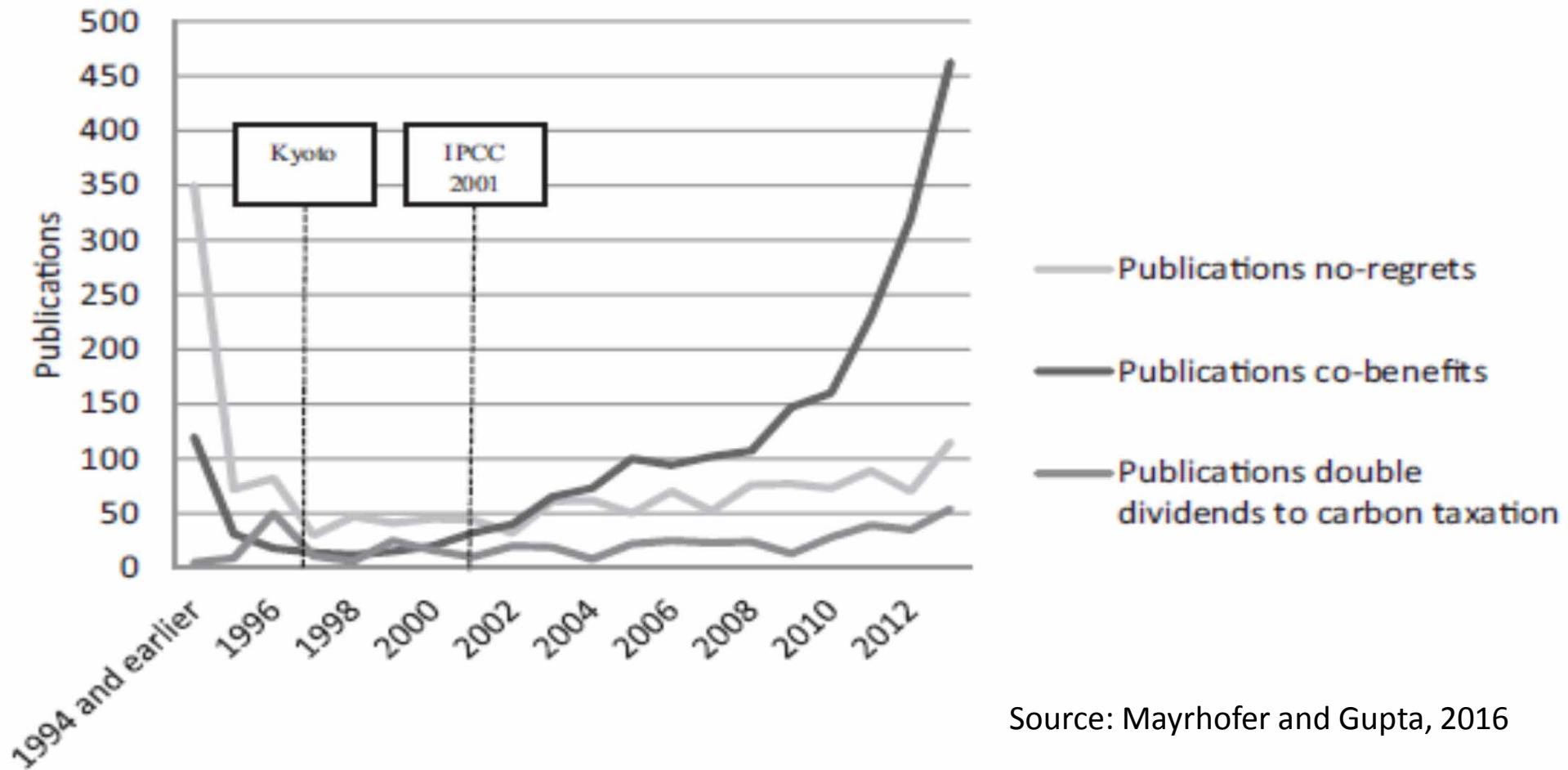**The Co-benefits from Mitigating Climate Change and Air Pollution in Asia: From Quantification to Demonstration**

Eric Zusman
Institute for Global Environmental Strategies(IGES)/
Asian Co-benefits Partnership

Growing interest in co-benefits over past decade

Source: Mayrhofer and Gupta, 2016

Starting point

- Early research on co-benefits: emphasized quantification

- Growing efforts to integrate that research into governance processes; this is critical for Asia

- Also seeing efforts to bring governance processes into research on co-benefits; this is also critical for Asia

- Bringing co-benefits into governance and vice versa can also help achieve achieve SDGs

Asian Co-benefits Partnership (ACP)

Launched in 2010

- to enable a variety of stakeholders to work together on co-benefits
- to support the mainstreaming of co-benefits into decision-making processes in Asia

Major Functions

- Information sharing and knowledge management
- Enhanced communication among ACP members
- Awareness raising on co-benefits in policies and projects
- Strengthening of regional cooperation to promote co-benefits

www.cobenefit.org

ACP White Paper I: Unifying Different Views on Co-benefits

- **Governments in Asia should make co-benefits a core element of**
  - low carbon strategies;
  - air pollution policies; and
  - sector-specific plans.

- **to maximize cost-effectiveness.**

- **Development agencies should make co-benefits part of the evaluation criteria for financing low carbon, air pollution, and sector-specific projects in Asia.**

Asian Co-benefits Partnership
White Paper
2014

Bringing Development and Climate Together in Asia

http://www.cobenefit.org/publications/images/ACPwhitepaper_FY2013.pdf
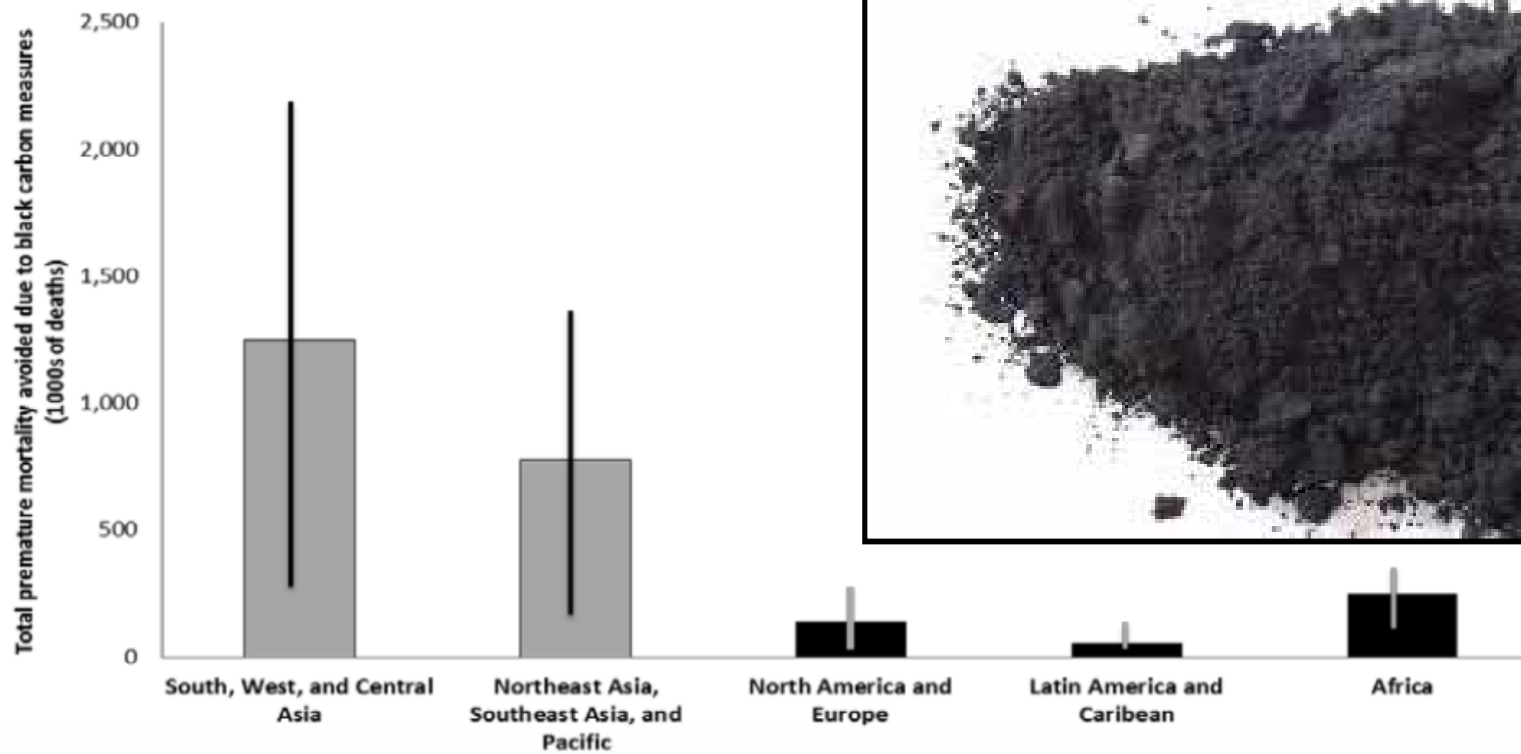
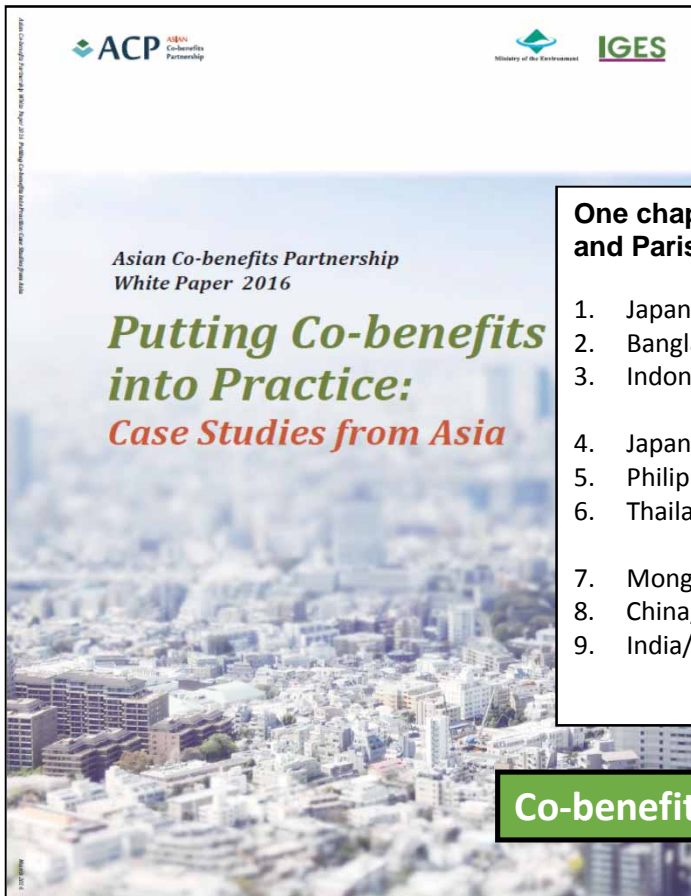Figure 1: Estimated Benefits in Avoided Premature Mortality for Black Carbon Measures by Region

Source: Based on data from UNEP 2011

Note: The black lines represent the range of uncertainty around the estimated benefits.

ACP White Paper II: Case Studies from Asia

Co-benefits White Paper

One chapter on links between co-benefits and Paris Agreement/SDGs.

1. Japan/Waste Management in Kawasaki
2. Bangladesh/Waste Management in Dhaka
3. Indonesia/Palm Industry

4. Japan/Compact City in Toyama
5. Philippines/Bike Sharing Manila
6. Thailand/Transport NAMA

7. Mongolia/Industrial Boilers
8. China/Heat to Energy in Chongqing
9. India/Urban Energy Delhi
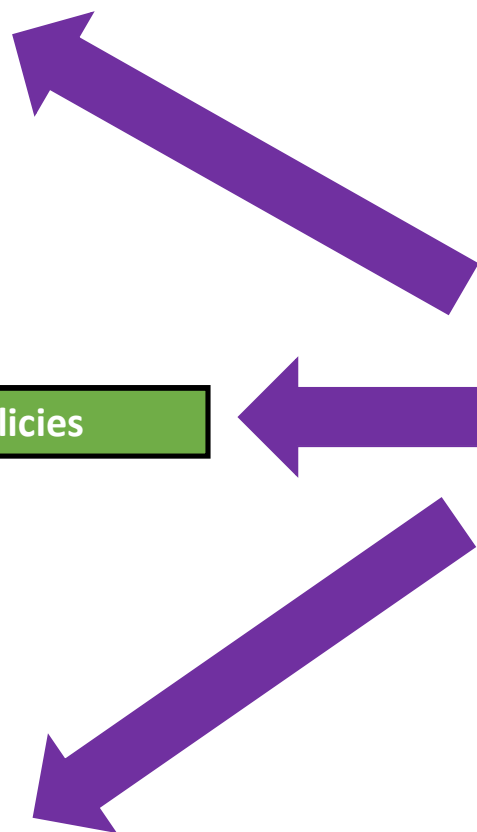

Co-benefits Map

Air pollution big problem in Bandung

Working with significant change in multiple pollutants

Species	Base case	Eco-driving		Scenario 2		Scenario 3	
	Emission (Gg/yr)	Emission (Gg/yr)	Reduction (%)	Emission (Gg/yr)	Reduction (%)	Emission (Gg/yr)	Reduction (%)
CO	173.14	145.33	16.06%	171.02	1.22%	168.68	2.58%
VOC	34.00	32.87	3.31%	33.57	1.25%	33.49	1.48%
NO_x	20.59	16.30	20.85%	20.42	0.81%	20.10	2.35%
SO_2	0.33	0.30	10.71%	0.33	1.62%	0.33	1.57%
PM	2.73	2.40	12.13%	2.73	0.24%	2.73	0.23%
BC	0.88	0.76	12.91%	0.88	0.16%	0.88	0.17%
OC	1.36	1.21	11.06%	1.36	0.34%	1.36	0.32%
CO_2	3315	2966	10.54%	3281	1.04%	3271	1.34%
N_2O	0.07	0.06	11.00%	0.07	0.83%	0.07	0.74%
CH_4	5.02	4.79	4.70%	4.97	1.19%	4.92	1.99%
Air toxics	5.13	5.02	2.06%	5.08	1.00%	5.08	1.04%

Empowering Women to Earn Climate Finance from *Mitigation* Plans in Southeast Asia

Institutions

Policies

Projects

SECOND NATIONAL COMMUNICATION ON CLIMATE CHANGE OF LAO PDR

It often helps to work at multiple levels to scale work on co-benefits

The Case of Diesel in Asia: Governance Challenges Can Delay or Weaken Implementation

Figure 5: Three Core Elements of a Cleaner Diesel Strategy
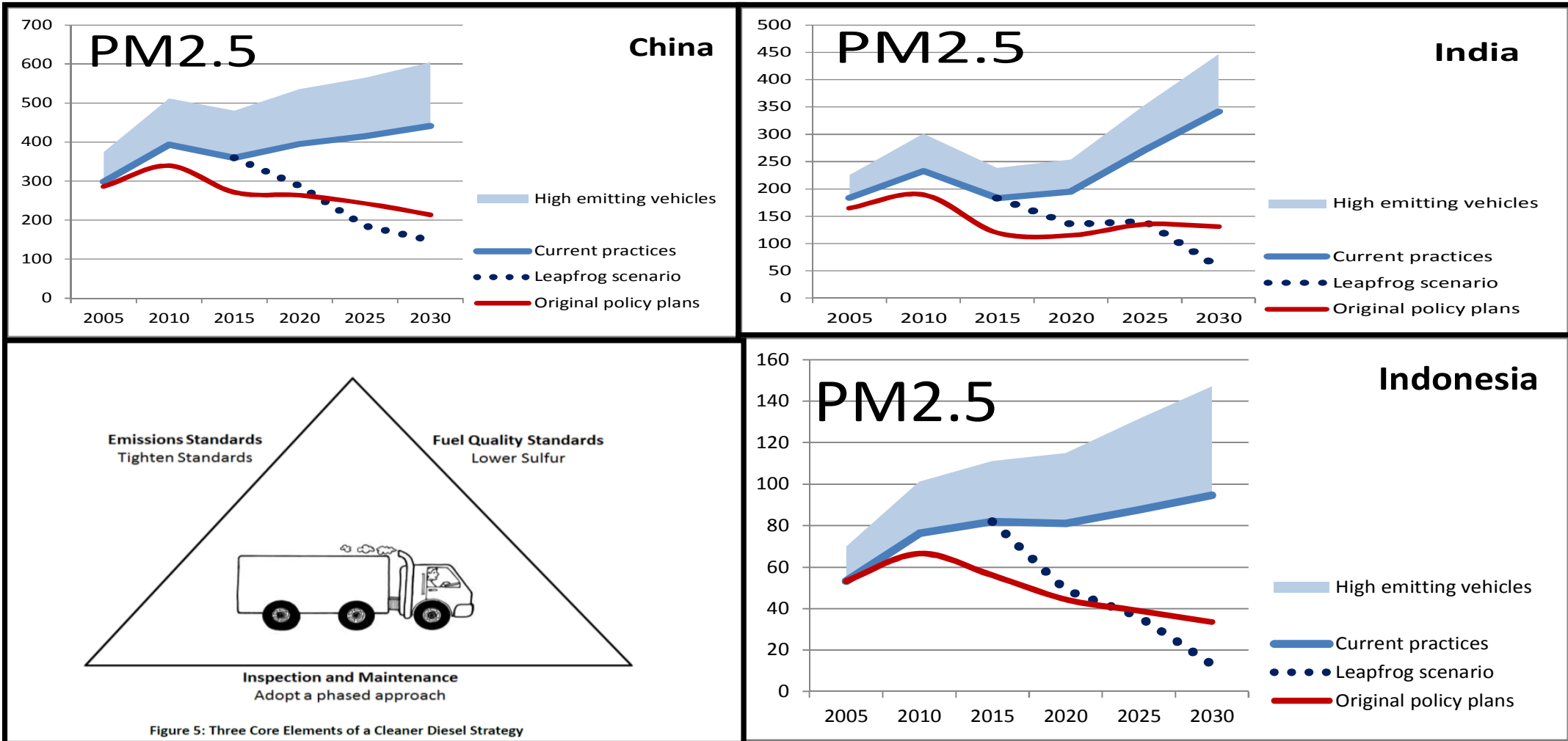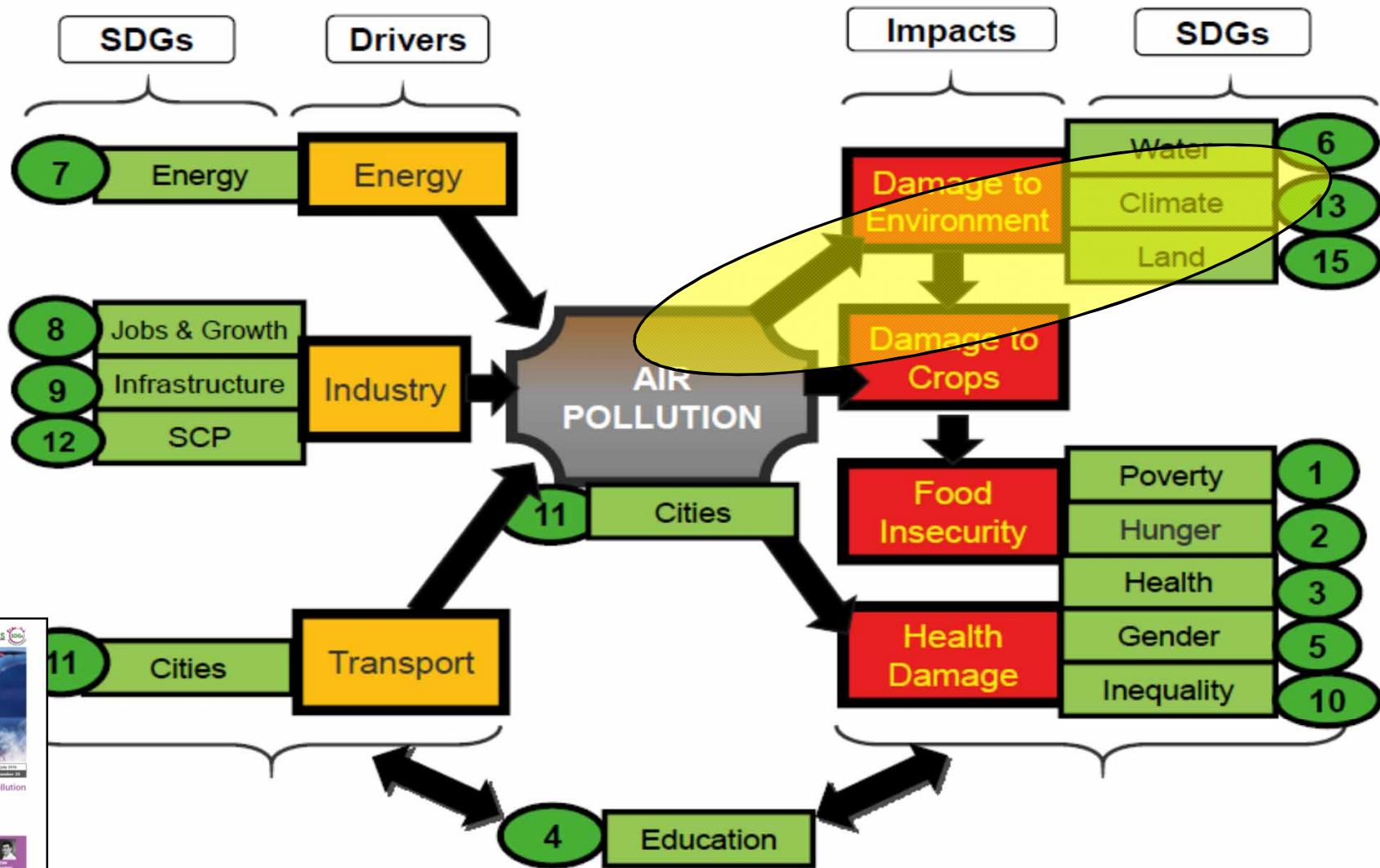
Figure 1 Relation of SDGs to Air Pollution's Drivers and Impacts