

Mobilise non-climate goals to promote energy sector decarbonisation

Takashi Hattori
Head, Environment and Climate Change Unit, IEA
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IEA publication series

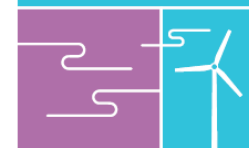


- **Seize the benefits of immediate action to bend the global emissions curve**
- **Focus on electricity decarbonisation**
- **Reshape investment and accelerate innovation now in low-carbon technologies**
- **Mobilise non-climate goals to promote energy sector decarbonisation**
- **Strengthen the resilience of the energy sector to climate change**

THE WAY FORWARD

FIVE KEY ACTIONS TO ACHIEVE A LOW-CARBON ENERGY SECTOR

01 Seize the benefits of immediate action to bend the global emissions curve. To 2020, bridging 80% of the gap to an optimal 2°C path comes at no extra GDP cost.



02 Focus on electricity decarbonisation. Strong policies supporting low-carbon electricity could more than halve electricity emissions in 2030. This would save 9.5 Gt in 2030 - an amount larger than China's total 2012 energy emissions.

03 Reshape investment and accelerate innovation now in low-carbon technologies. Multilateral collaboration is critical to the development and tailoring of nationally appropriate technology solutions.



CO₂



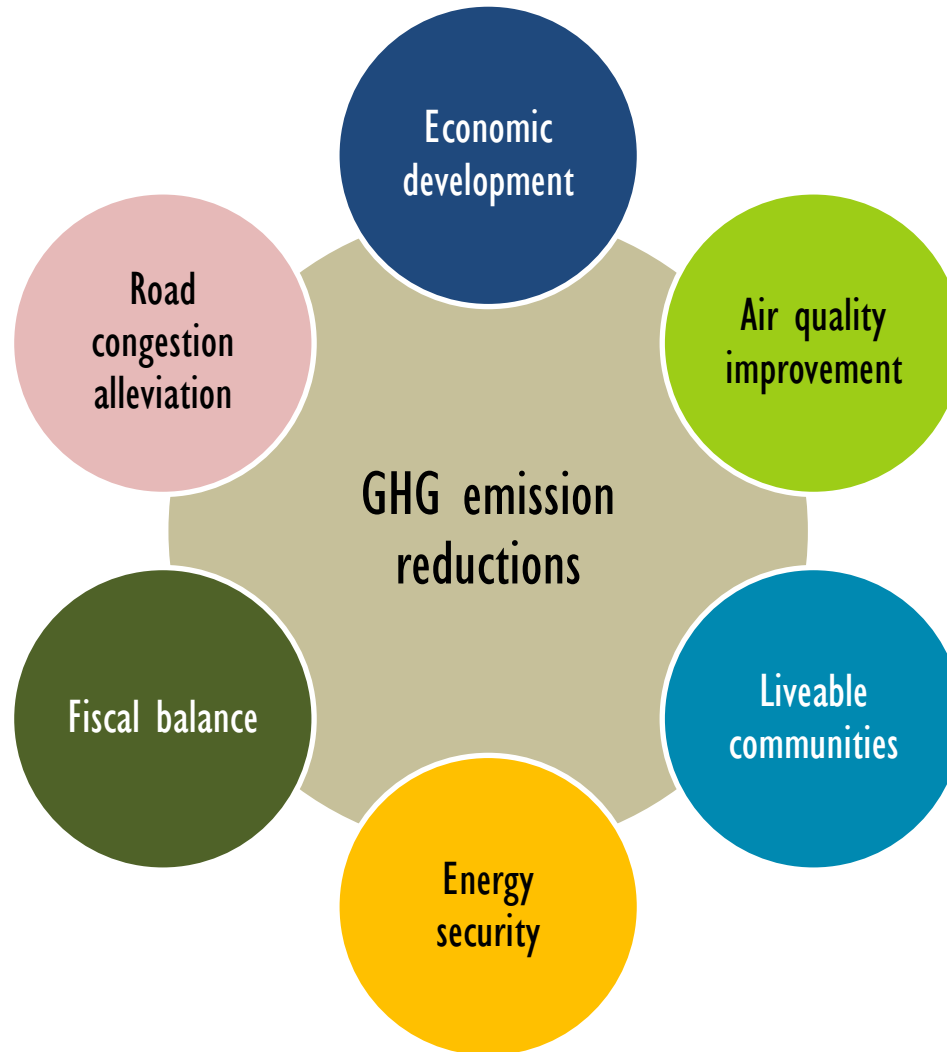
04 Mobilise non-climate goals to promote energy sector decarbonisation. Health, transport, energy security, and other goals can also drive emissions reductions.



05 Strengthen the resilience of the energy sector to climate change. Even in a 2°C world, climate change poses threats to energy security that need to be addressed through policy and commercial actions.

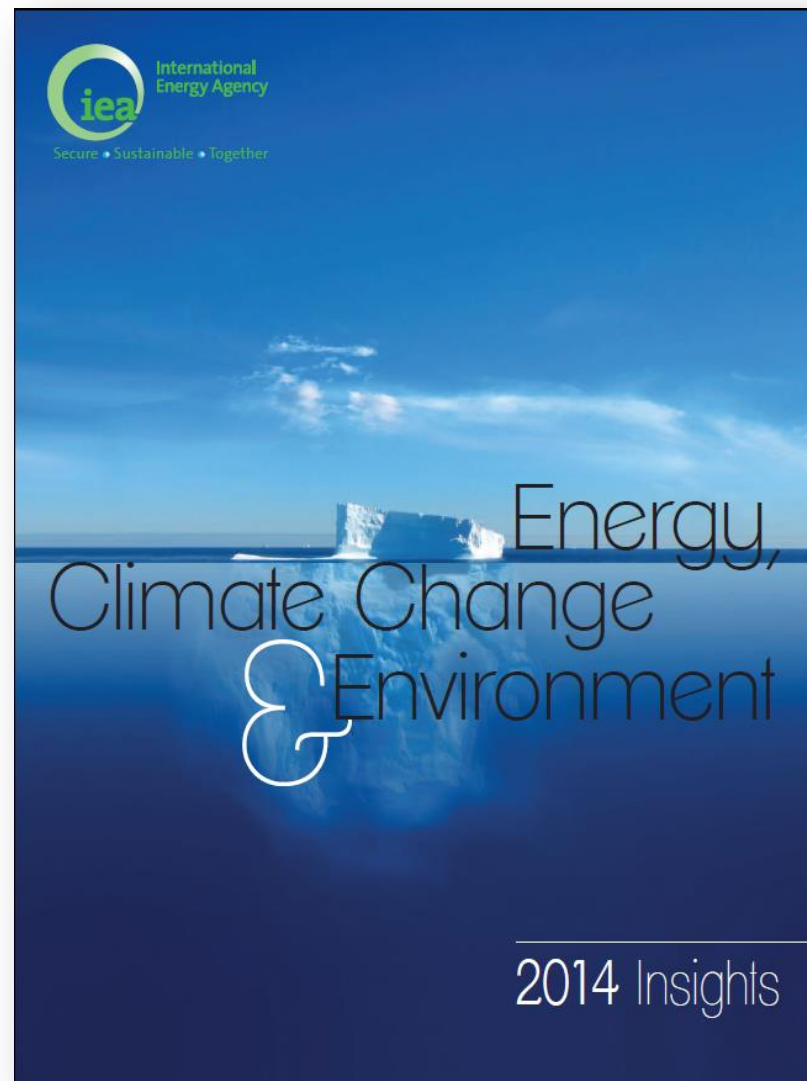


GHG emissions reductions can be co-benefits of other policy objectives



New IEA publication

- **Annual publication**
- **Goes deeper into selected technical issues**
- **Each year chooses a special thematic focus**
- **Presents regional energy and emissions data**



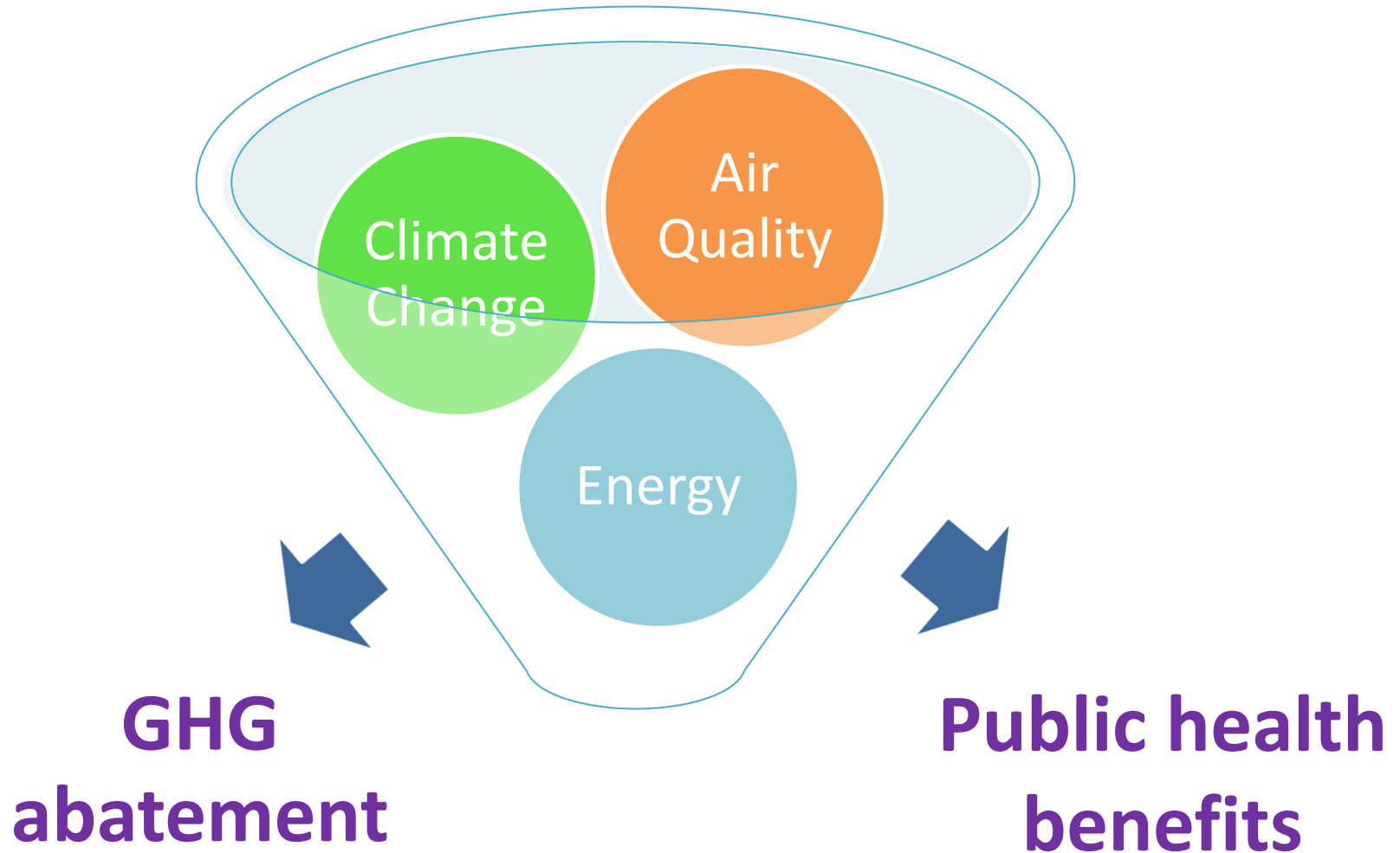
Outline of 2014 edition

- Policies and actions to “unlock” existing high-emissions assets
- The new landscape of emissions trading systems
- Energy metrics: A useful tool for tracking decarbonisation progress
- The air pollution-GHG emissions nexus: Implications for the energy sector (this year’s special focus)
- Trends in energy and emissions data

Concerns about local air quality are rising



Air pollution control and GHG emissions linkages



Individual sections examine:

- GHG co-benefits of air quality controls of large stationary sources
- China's air quality constraints: Implications for GHG mitigation in power and key industry sectors
- The regulatory approach to climate policy in the United States

Plant-level compliance options and impacts on GHG emissions www.iea.org

Air pollutants controlled

- SO₂ • NO_x • Primary PM/black carbon • CO • Hg (mercury)



Plant-level compliance options

- Retrofit for pollution control
- Improve operating efficiency
- Fuel switching
- Plant closure



Impacts on other pollutants

- GHG emissions co-benefits

Importance of multi-pollutant approach

Reduction in pollutant emissions	Ozone	Sulphate	PM2.5	Acid deposition	Mercury	CO ₂ /global warming
SO ₂	↓	↓	↓	↓	↓	↑
NO _x	↓	↓ ↑	↓	↓	↑	↑
Primary PM – black C			↓			↓
CO	↓	↓	↓	↓		
Hg		↓	↓		↓	↓
CO ₂	↓	↓	↓	↓	↓	↓

- GHG emissions reductions can be co-benefits of other policy objectives
- Air pollution control and GHG emissions linkages
- Plant-level compliance options and impacts on GHG emissions
- Importance of multi-pollutant approach

Thank you