



Climate Policy Forum Cum Workshops

GHG Reduction Solutions for a Low Carbon Hong Kong

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Disclaimer: This powerpoint presentation for this forum only reflects the opinion of our guest speakers and do not represent the stance of WWF-Hong Kong.

‘Lies, Damned Lies and Statistics’: Hong Kong’s GHG Inventory Calculation

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Key problems

Hong Kong's reported greenhouse gas (GHG) emissions massively understate our real impact on climate change.

Hong Kong's *reported* per capita GHG emissions are approximately 6 tonnes. This figure does not reflect the emissions associated with consumption of imported products or travel outside the territory by Hong Kong people.

Hong Kong's *reported* emissions do not provide a useful basis for consistent comparison with other cities or with sovereign states.

As a special administrative region Hong Kong uses a reporting methodology which differs from that used by states. Some emissions associated with Hong Kong are included in China's reporting to avoid double counting.

Hong Kong's Reported Emissions Inventory does not provide useful information for policy makers.

Because Hong Kong's emissions inventory does not capture the majority of our climate impact, policy measures that seek only to reduce *reported* emissions are not well suited to reducing our total contribution to climate change.

Methodological Considerations

The Government’s *Hong Kong’s Climate Change Strategy and Agenda Consultation Document* made the following comparison (p. 16) :

“The global GHG emissions in 2004 were about 49 billion tonnes, or about 7.7 tonnes per capita. Per capita GHG emission in Hong Kong (6 tonnes) was lower than most developed economies, e.g. Australia (26 tonnes), USA (23 tonnes), UK (10 tonnes), Japan (10 tonnes) and Singapore (9 tonnes).”

However, ranked against emissions reported by many other cities and municipal areas, Hong Kong’s reported emissions are less impressive:

- London’s emissions (6.2 tonnes CO₂ equivalent per capita)
- New York’s emissions (8.1 tonnes CO₂ equivalent per capita)
- Tokyo, Seoul, Barcelona and many other cities are lower than Hong Kong’s (Dodman, 2009, p. 189).

Emissions sources Included in Hong Kong’s Inventory

- Energy (electricity generation, transport, other end uses of fuel)
- Waste
- Industrial processes and product use
- Agriculture, forestry and other land use

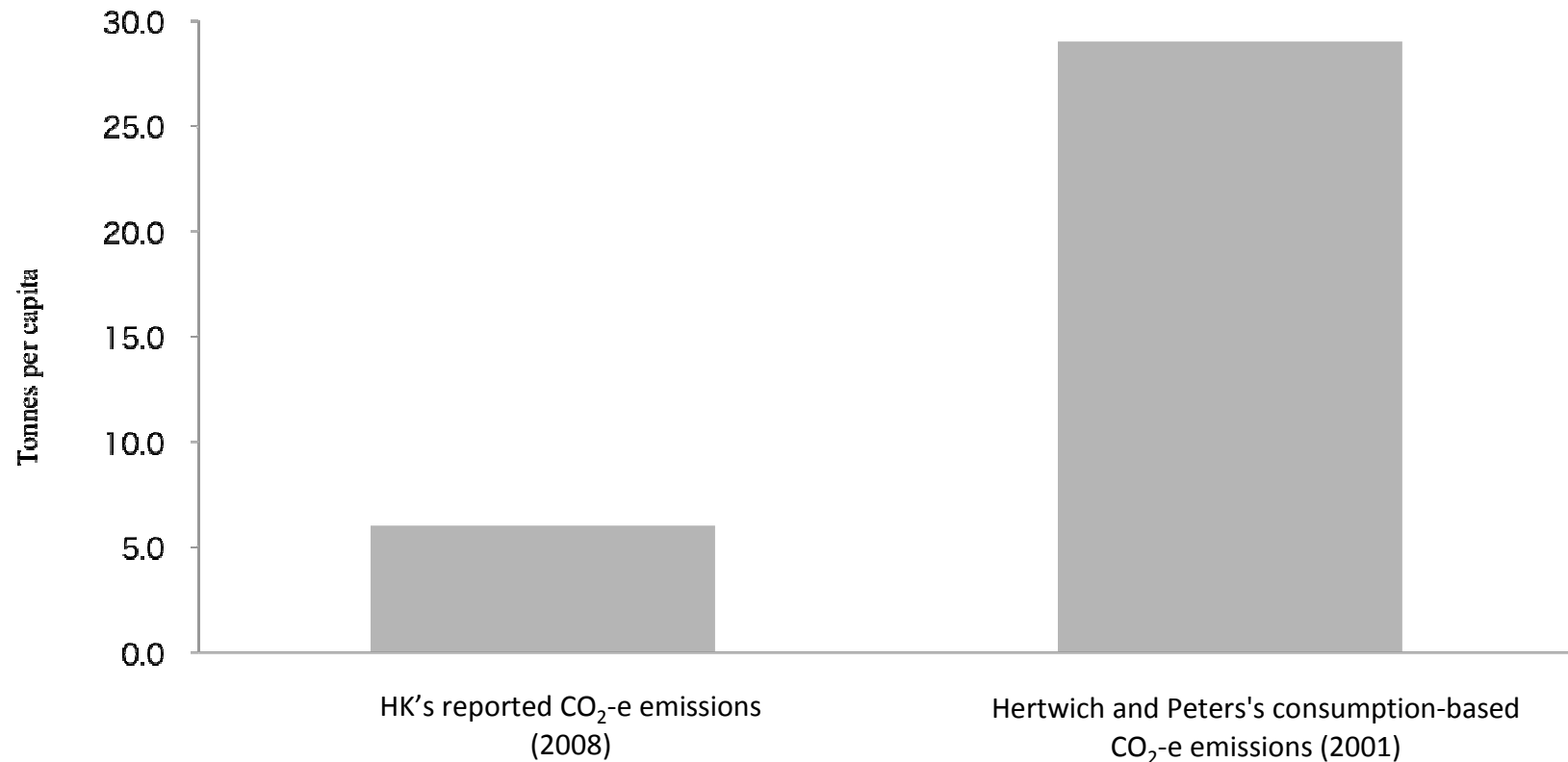
Emissions Sources Excluded from Hong Kong’s Inventory:

- Emissions from aviation (to/from China and internationally)
- Emissions embodied in imported goods (from China and internationally)
- Imported electricity (negligible impact)

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Consumption Accounting versus Production Accounting

Hong Kong's inventory captures those GHG emissions linked to local production but does not report on emissions embodied in imports.



Comparison of Hong Kong's production- and consumption-based emissions

Source: Hertwich, E., and G. Peters (2009), 'Carbon footprint of nations: A global, trade-linked analysis', *Environmental Science Technology*, 43, 6414-20 .

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Comparison of Hong Kong and International Inventory Methodologies

<i>Emissions by category:</i> <i>Methodologies:</i>	Emissions from Energy, Industrial Processes, Waste Agriculture, Forestry and Other Land Use	Domestic Aviation (e.g., Hong Kong to Beijing or New York to Chicago)	International Aviation (e.g., Hong Kong to Bangkok or London to Brussels)	Marine Emissions from International Transportation of People and Goods	Emissions Embodied in Imports	Out-of-Boundary Emissions from Waste Processing
Hong Kong’s Emissions Inventory	✓	✗ These figures are included in China’s total but excluded from Hong Kong’s inventory.	✗ Hong Kong is a major aviation hub, but these emissions are not reported.	✗ Hong Kong is a global shipping port, but these emissions are not reported.	✗ Hong Kong imports most agricultural and manufactured goods.	✗ Probably not of great significance to Hong Kong’s inventory as most waste is managed locally.
IPCC Inventory Guideline for Countries	✓	✓	✓ ✗ Developed countries report international aviation emissions separately from national accounts.	✗	✗ Most countries have a rough balance between embodied emissions in imports and exports.	✗ Not recorded, but this situation rarely arises for countries.
International Standard <small>World Bank et al. (2010), Draft International Standard for Determining Greenhouse Gas Emissions for Cities</small>	✓	✓ Records emissions from aviation carrying passengers or freight away from cities.	✓ Records emissions from aviation carrying passengers or freight away from cities.	✓ Records emissions from marine vessels carrying passengers or freight away from cities.	✓ Requires separate reporting of embodied emissions.	✓