

Hong Kong's efforts in Tackling Climate Change

Environmental Protection Department
Hong Kong SAR Government

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Greenhouse Gas Emissions in Hong Kong Emission Levels

Greenhouse Gas (GHG) emission levels (2005 data):

- Total emissions at some 45 million tonnes CO₂ equivalent
- Per capita emission at approx. 6.5 tonnes CO₂ equivalent
- Carbon intensity at 27.6kg CO₂ equivalent per HKD1,000 GDP (2005)

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Greenhouse Gas Emissions in Hong Kong Emission Sources

Emission Source	% Contribution
Energy Industries	62.5%
Transport	16.1%
Other Energy Uses	7.2%
Industrial Process	2.0%
Agriculture	0.1%
Waste	12.1%

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Greenhouse Gas Emissions in Hong Kong Emission Trend

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Greenhouse Gas Emissions in Hong Kong Hong Kong vs other developed economies

Country/Region	Per capita emissions / tonne CO ₂ -e
Australia	27
Canada	24
USA	24
Uk	11
Japan	11
EU	9
Singapore	9
Hk	6.5

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GHG Emissions Reduction Constraints & Opportunities

- Hong Kong is a service economy
- No energy intensive industries
- Public mass transport system is very efficient
- Low car ownership rate
- Low per-capita electricity consumption

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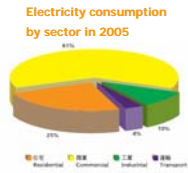
GHG Emissions Reduction Constraints & Opportunities

- Dominant share of energy sector emissions suggests:
 - significant lowering of GHG emissions at production end may require major changes in fuel mix for electricity generation
 - energy security and tariff implications are important consideration
- Topography and physical constraints limit the potential for large-scale development of renewable energy

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GHG Emissions Reduction Constraints & Opportunities

- There is scope for Hong Kong to do more in end-use energy conservation and efficiency:
 - Energy efficiency: better building design and wider use of energy efficient appliances
 - Energy saving: raising public awareness and education
 - The business sector has a critical role to play



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Tackling Climate Change Existing Efforts

- Using cleaner fuels for power generation
 - New coal-fired generation units were not allowed since 1997
 - Maximum use of natural gas
- Pursuing a new Scheme of Control Agreement that cover the following features
 - Higher return for renewable energy (RE) facilities
 - Facilitate access of 3rd party local RE sources to grids of power companies

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Tackling Climate Change Existing Efforts

- Promoting energy conservation & efficiency
- Promoting use of water-cooled A/C systems and other energy efficient installations
- Enhancing building efficiency
 - Building Energy Codes issued by EMSD

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Tackling Climate Change Existing Efforts

- Using cleaner and more efficient land transport
- Utilising Landfill gas as fuel
 - Collecting and utilizing landfill gas from closed and 3 operating landfills as fuel substitutes for on-site use
 - Exporting landfill gas from the Shuen Wan Landfill and NENT Landfill as fuel for the Towngas Production Plant in Tai Po
- Utilising biogas at sewage treatment works

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Tackling Climate Change Existing Efforts

- Tree plantation programme to enhance the carbon sink
 - Over 11 million trees were planted in the past 5 years
 - 1.2 million trees will be planted by end of 2007

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Tackling Climate Change Public Participation

- Promote lifestyle and behavioural changes in the community
- Mobilise community action to adopt energy saving measures
- Continuous public awareness programmes
- Outreaching to schools through talks, web-based education kits and joint activities

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Tackling Climate Change Government taking the lead

- **Reducing electricity consumption**
 - Cut down electricity consumption of the Government by 6% between 2002/03 to 2006/07
 - Pledged further in the 2005-06 Policy Address to reduce 1.5% electricity consumption of all Government office buildings from January 2006
 - Energy audits and re-audits conducted in over 200 major Government venues, with follow up energy savings projects implemented

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Tackling Climate Change Government taking the lead

- **Promoting energy efficiency & use of renewable energy**
 - All new Government buildings and retrofit projects required to fully comply with Building Energy Codes

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Tackling Climate Change Government taking the lead

- **Green initiatives in public housing projects by HD**
 - PV Panels
 - Vertical green panels pilot project at Yau Tong
 - Life cycle assessment/Life cycle costing
 - Micro-climate studies in housing design
 - Participation in HKBEAM assessment
- **Green roofing by ArchSD**
 - More than 50 completed green roof projects
 - 20 projects for retro-fitting green roof in existing government buildings in 2007/08
- **Vegetation cover on government man-made slopes and noise barriers by CEDD/ HyD**

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Tackling Climate Change New measures

- Consulting the public on mandatory compliance with Building Energy Codes
- Rolling out Mandatory Efficiency Labelling Scheme
- Conducting carbon audit on Tamar Government Office Complex & encourage private sector to follow suit
- Promoting use of biodiesel
- Conducting a study on climate change with a view to enhancing the existing mitigation & adaptation measures

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Tackling Climate Change International Co-operation

- UNFCCC and its Kyoto Protocol extended by CPG to HK in May 2003
- HK signed APEC “Sydney Declaration on Climate Change” in Sept. 07
- HK joined C40 Large Cities Climate Leadership Group in Oct. 07

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Tackling Climate Change

***Let's Join Hands to
Save the Earth!***

Thank You!