



# Climate Policy Forum Cum Workshops

GHG Reduction Solutions for a Low Carbon Hong Kong

30 September, 2010

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.



CLP

More than light

# Roadmap to a Low-Carbon Power Sector

30 September 2010



Mr. Keith Chan

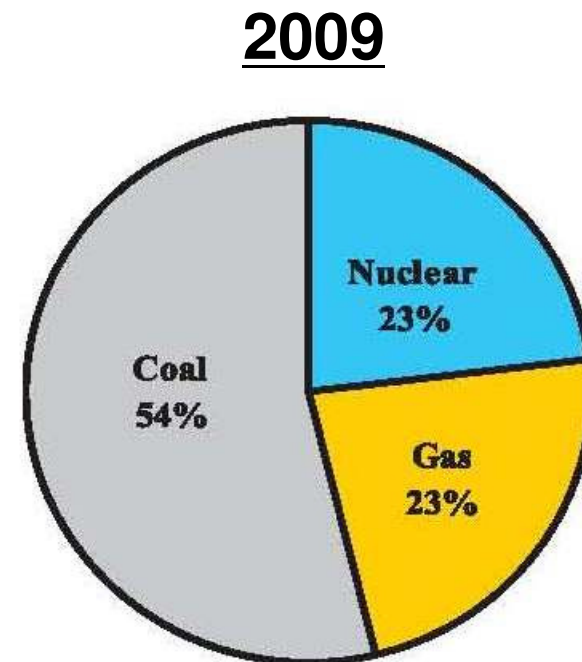
Strategic Planning Manager, CLP Power Hong Kong Ltd.

# Hong Kong Government's Climate Change Strategy and Action Proposal

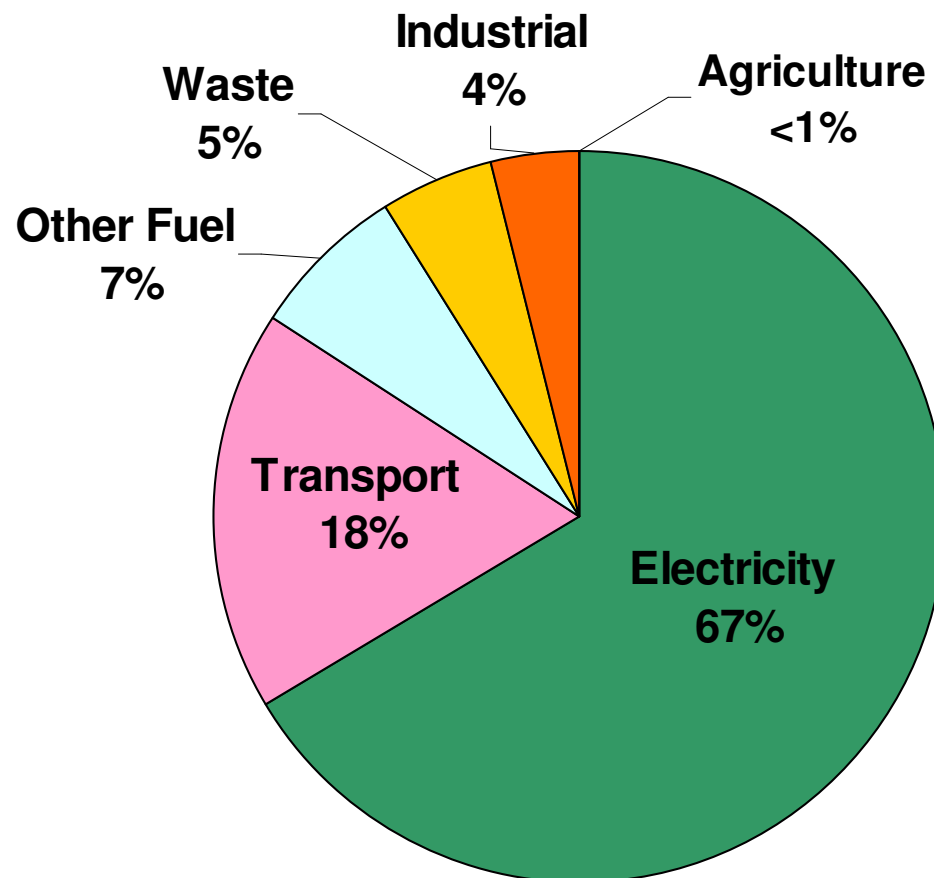
- **Proposed carbon intensity reduction target of 50% to 60% by 2020**
  
- **Proposed GHG reduction measures :**
  - Maximising energy efficiency
  - Greening road transport
  - Promoting use of clean fuels for motor vehicles
  - Turning waste to energy
  - Revamping fuel mix for electricity generation

## Fuel Mix in Hong Kong (2009)

- Hong Kong adopts a diversified fuel mix with a combination of natural gas, coal and nuclear to safeguard fuel security and supply reliability



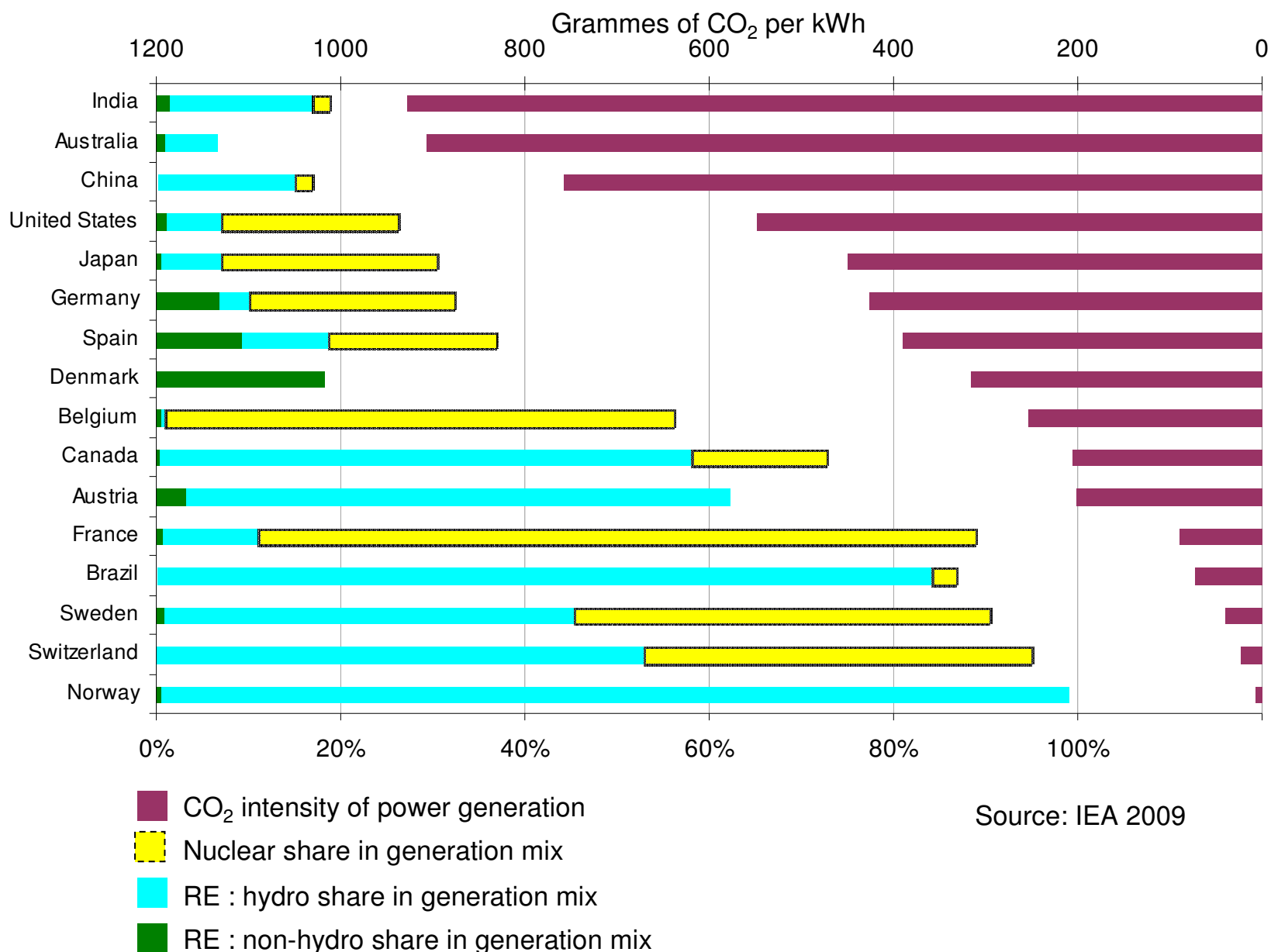
## Greenhouse Gas Emissions in Hong Kong by Sector



*Note:  
Figures do not add up to  
100 due to rounding*

**Total GHG Emissions in 2008 was 42,000 kilotonnes CO<sub>2</sub>-e**

# Carbon Intensity and Fuel Mix

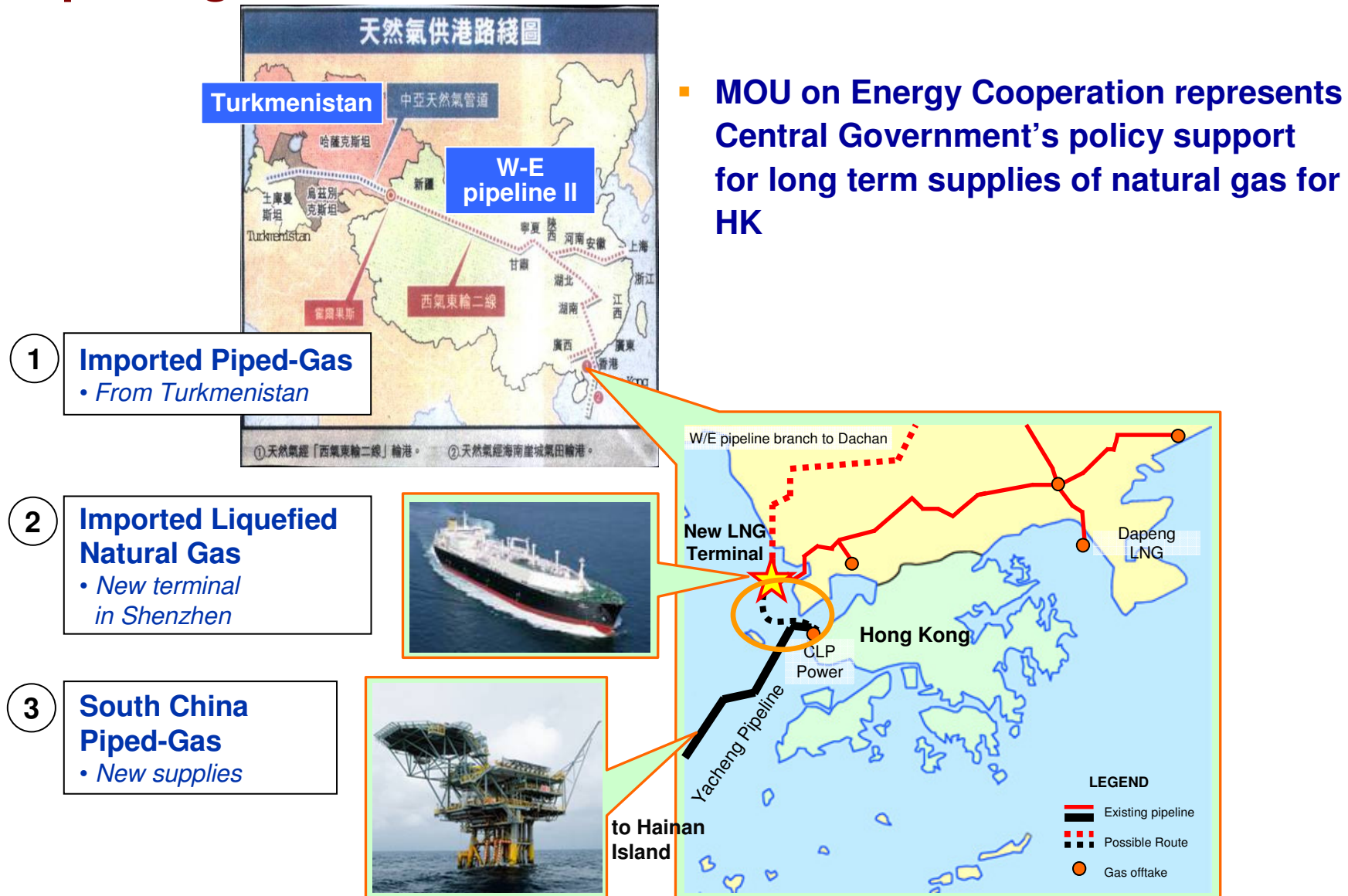


# Low Carbon Roadmap for Hong Kong's Power Sector

- Reducing energy consumption
- Strengthening energy infrastructure links with the PRD
- Using more gas for local power generation
- Importing more nuclear energy into Hong Kong
- Promoting renewable energy sources
- Reducing the role of coal



# Importing More Gas for Local Power Generation



**All 3 sources are required to meet Hong Kong's needs**



# Daya Bay Nuclear Power Station

- **Safe and reliable electricity supply to Hong Kong since 1994**
  - 25% of Hong Kong's total electricity demand
  - Outstanding performance in terms of quality management, safety and operational standards
- **Nuclear power produces almost no emissions**
  - Avoids 7.5 million tonnes of CO<sub>2</sub> emission a year
  - Supports Hong Kong's transition to a low-carbon economy
- **Secure long-term supply of nuclear**
  - CLP and CGNPC extended nuclear power supply from Daya Bay to 2034



## A Diversified Fuel Mix to Power the Future

- CLP's diversified fuel mix strategy enables Hong Kong to achieve an excellent power supply reliability over the years.
- Different fuel sources play a specific role in the overall fuel mix for ensuring power supply reliability.

Natural Gas / Nuclear	High generation efficiency enables a stable power supply to meet base load electricity demand
RE	<ul style="list-style-type: none"><li>* Clean fuel source which helps address climate change concern</li><li>* Constraints of natural resources availability and its intermittent nature, limit RE to play a supplementary role in the fuel mix</li></ul>
Coal	A back-up for contingency situation