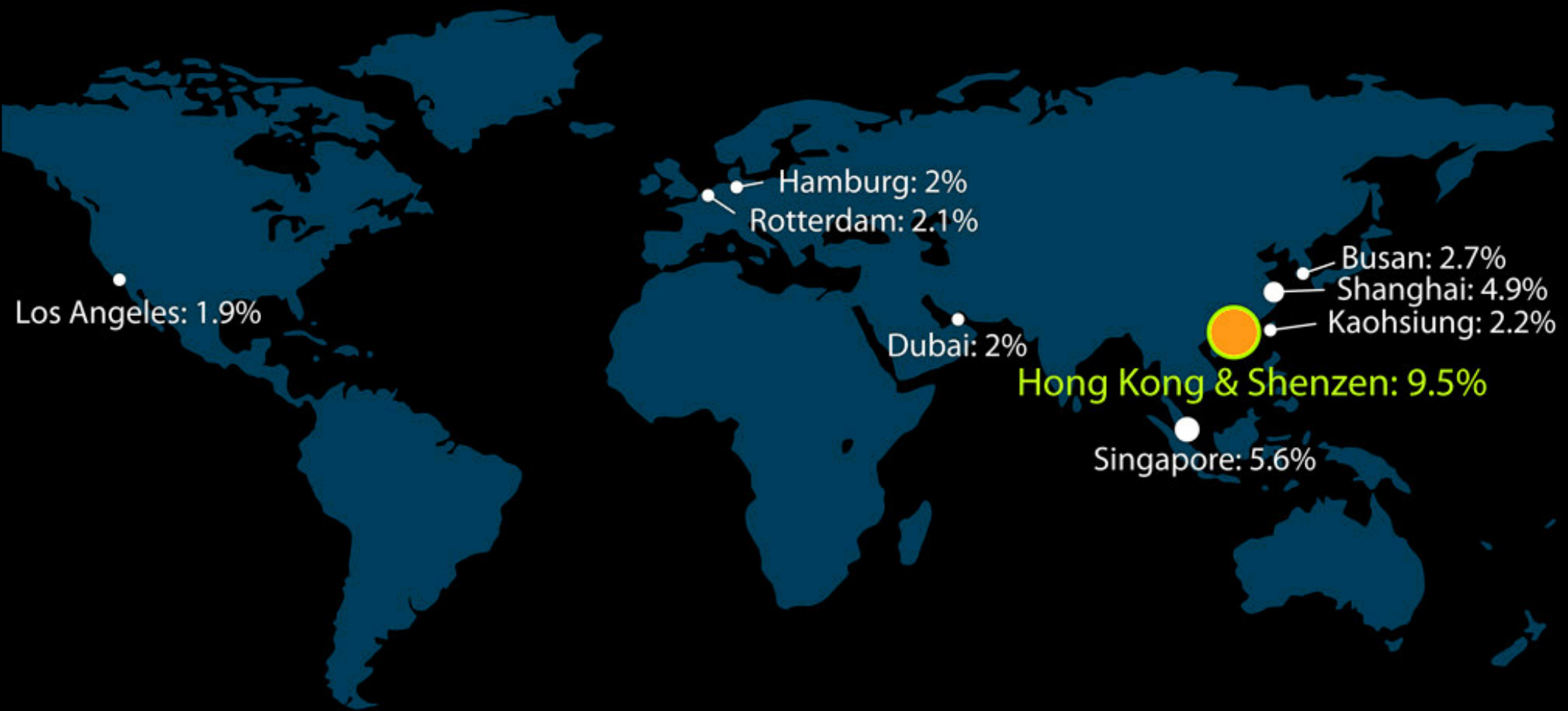


Green Harbours: Hong Kong & Shenzhen

Reducing Marine and Port Related Air Emissions

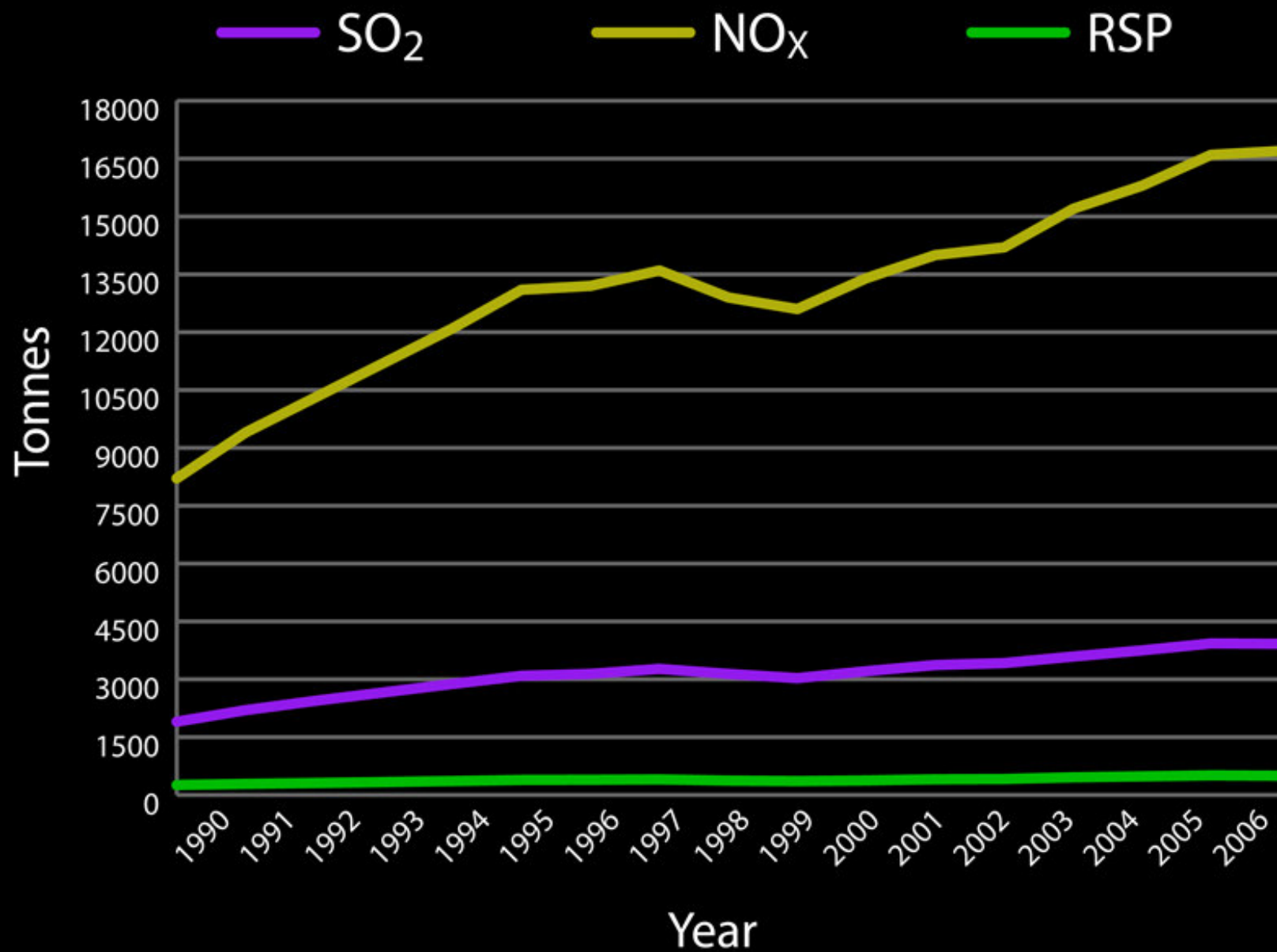


June 2008



In 2006, Hong Kong and Shenzhen ports together handled 9.5% of the world's container throughput.

EPD figures of tonnes of SO₂, NO_x and RSP emitted from navigation sources, 1990-2006



Annual Health Impacts of Air Pollution for Southern China

10,000

Deaths

440,000

hospital bed-days

11 million

out-patient visits

Rising Health Costs

HK\$ 18 million

in Macao

HK\$ 1.1 Billion

in Hong Kong

RMB 1.8 Billion

in PRD

Adjusted for per capita income:

RMB 6.7 Billion

for PRD



Proximity of Hong Kong terminals to residents poses serious public health risk

International Best Practice

- Northern Europe & US West Coast Ports: forefront of emissions reduction initiatives
- Community participation: important part of deciding appropriate measures for each port
- Rotterdam: Provides shoreside power to its inland barges
- Vancouver, Seattle & Tacoma: cross-border, voluntary emissions inventory to identify pollutants and sources

Lessons from California

Serious Public Health Problem

- **2,900**: At worst, **2900 in one million** people living close to ports are at risk of cancer during their lifetimes
- **25**: Lifetime cancer rates for people living close to stationary pollution sources is **25 in one million**
- **15%**: Green port initiatives have already contributed in decreasing this risk by 15%

Lessons from California Tackling the Problem

- Adjacent ports of Long Beach and Los Angeles are competitors, but collaborate closely on green initiatives including:
 - Incentives for ocean-going vessels to reduce fuel consumption and use cleaner fuels
 - Clean Trucks Programs to replace old trucks
 - US\$200million investment per port planned to supply shoreside power to vessels

Green Harbours Recommendations

- Collaboration: cross-border, cross-sector & cross-port
- A comprehensive strategy with a Green Port policy
- Clean fuels: availability and incentives
- Green Training
- Research: emissions inventory & health effects



Next Step:

Continuing Stakeholder Engagement

An aerial photograph of a river delta, showing a large body of water at the bottom that branches out into a complex network of smaller channels and tributaries as it moves towards the top of the frame. The surrounding land is a mix of green and brown, indicating a natural, possibly agricultural or forested, landscape. The text "Thank You" is centered in the middle of the image in a white, sans-serif font.

Thank You