

A satellite-style map of East and Southeast Asia. The top portion shows East Asia with cities like Beijing, Seoul, and Tokyo. The middle portion shows Southeast Asia with cities like Hanoi, Bangkok, and Jakarta. The bottom portion shows the Indian subcontinent with cities like Delhi, Mumbai, and Bangalore. A teal banner is overlaid on the top, and a dark blue banner is overlaid on the bottom.

EAST ASIAN SEAS CONGRESS FORUM ON BLUE ECONOMY
Nov 18, 2015 - Da Nang City, Vietnam

**VIETNAM PORT SYSTEM TO SERVE THE
BLUE ECONOMY**

***OVERVIEW OF POTENTIALS
AND CHALLENGES***

Vietnam Seaports Association (VPA)



Topics of Discussion

1. Prospects of the Port Industry & Blue Economy
2. Int'l Conventions and Industry Initiatives
3. Government Policy and Regulations
4. Areas of Port Business Contribution to Blue Economy
5. Issues/Roadmap towards Greener Port Business



Vietnam Ports System

Population: ~**91** million,
GDP growth: **+6%** (~**2,200**USD pc)
3,200 km of coastlines

Port areas: **6**

Maritime centers: **HCMC, HP, BR-VT**

Cargo throughput (2014):

201 million MTs (excl. crude oil...) **(+5%)**

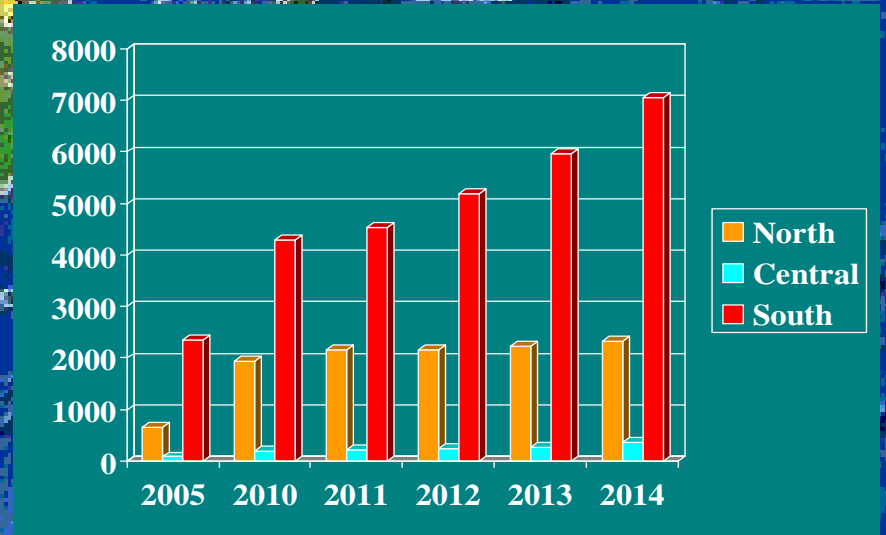
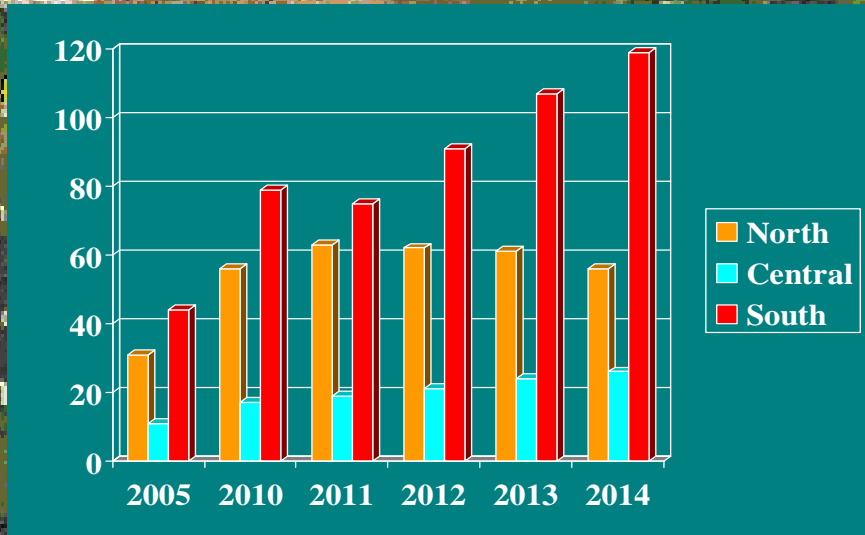
~10 million TEUs **(+15%)**

Area 5 (HCMC+BRVT): **59%** volume
(container **72%**)

Deep water ports capable of handling
container mother vessels (**14,000 TEU**)

VPA: **69** member ports

Volume and Scope of Port Businesses in Vietnam



Average size ~ 3 million Tons / 200,000 TEU/year

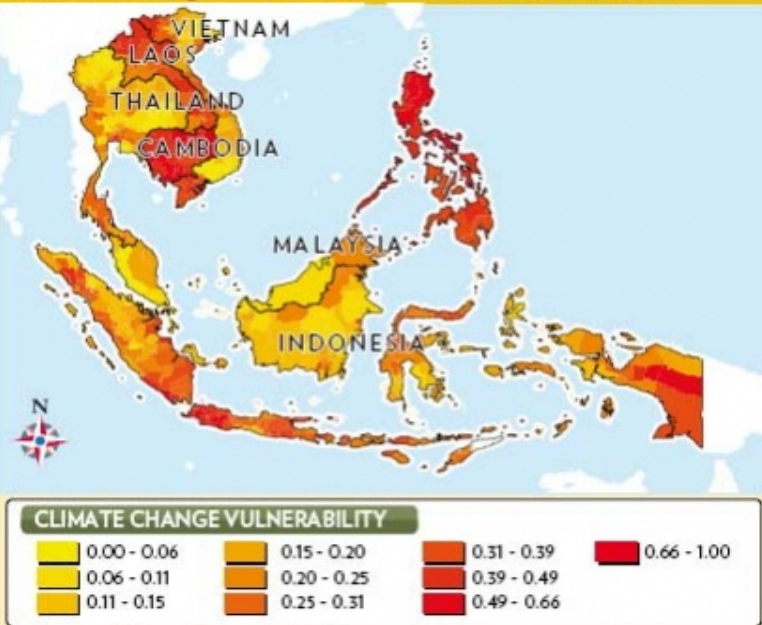


Prospects & Challenges for Blue Economy

- **Prospects:** high potential growth, deep water ports, government policy on green development (IMO, legislation), regional/international integration, cooperation, potential market for consultancy services/products, technology transfer
- **Challenges:** river ports, lack of port authority system, low per capita income, inadequate transport infrastructure, high pollution, inadequate waste treatment & disposal, low elevation, port state control (old ships, waste collection/disposal) with limited power to impose greener shipping activities while local conditions are still far from green economy standards.

Climate Change and Pollution in Ports

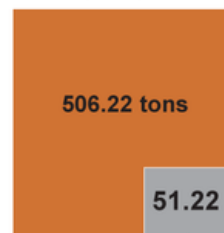
Climate change VULNERABILITY MAP OF SOUTHEAST ASIA



Ports and air pollution

Port-related emissions account for about 10% of the smog-forming emissions in the South Coast air basin. Some of the top pollution sources in the region:

Total daily nitrogen oxide (NOx) emissions



NOx emissions from port-related sources

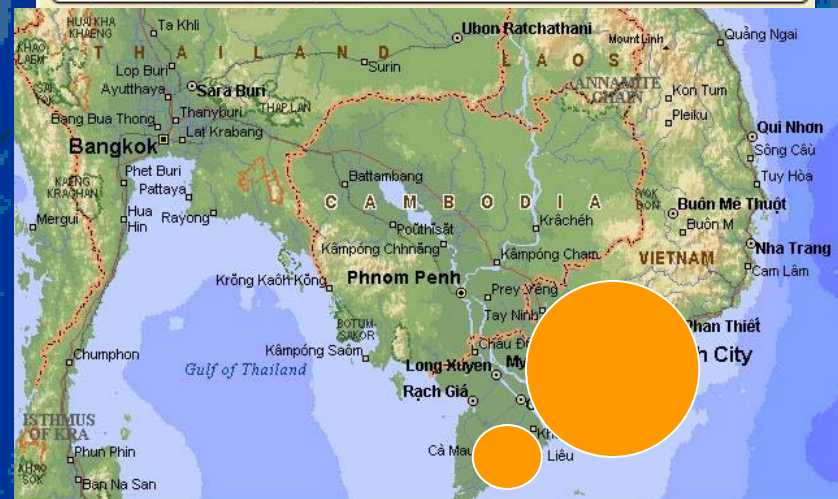
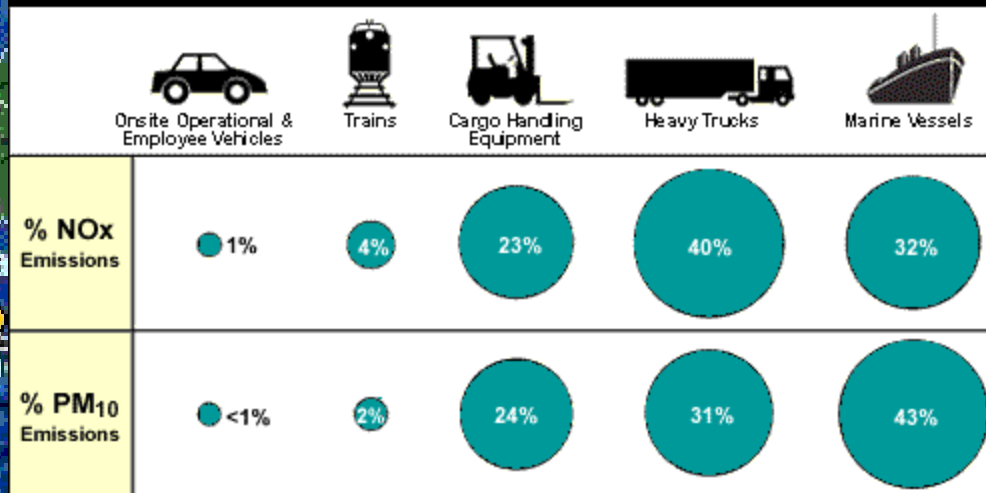
Major sources of nitrogen oxide pollution in 2014 (tons per day)

Diesel trucks	129.37
Off-road equipment	64.03
Large industrial facilities	54.00
Ocean vessels	35.13
Passenger vehicles	34.77
Trains	21.73
Diesel buses	20.07
Home appliances	19.79
Aircraft	13.94

Source: South Coast Air Quality Management District

@latimesgraphics

Average Contributions of Various Port Related Sources to Total Nitrous Oxide (NOx) and Particulate Matter (PM₁₀) Emissions from a Container Port





Contribution to reducing Climate Change and Pollution

Int'l Conventions & Industry Initiatives

- IMO Conventions
- ISO 14001 on Environmental Management Certification
- IAPH **IAPH TOOL BOX FOR PORT CLEAN AIR PROGRAMS**
Improving Air Quality While Promoting Business Development
- WPCI (Carbon footprinting, Onshore power supply, Environmental ship index, Sharing world port community, etc.)
- APA's PSHEMS project with GIZ, PEMSEA Partnership ...



Jakarta

Bandung



Government Policy and Regulations

- Legislation (sea borne economic development strategy) [[Link](#)]
- IMO Conventions [[Link](#)]
- Government Incentives, Action Plans
- Role of MoT & Vinamarine
- Other relevant Authorities/Parties

Areas of Port Business Contribution to Blue Economy

- **Collaboration/cooperation** in oil spill preparedness, emergency response [*Port state control*], climate change adaptation etc.
- **Reduction of pollution, green house gas emissions**
 - + **Ship side**: waste, oily ballast water collection/disposal, supply of electricity + *Port state control regulations/enforcement*
 - + **Land side**: Transport (trucks, trains, cars, motorbikes); Sewage...
 - + **Port area**: power, equipment (cranes, STS, RTG, FLT, RS), trucks, reefer, handling activities for containers, bulk cargo; waste collection/disposal, IMO IMDG, reception facilities, security/safety systems, green air promotional activities etc.
- **Port design** (elevation, lighting...) **and construction**: landside, waterside, reclamation, dredging, etc.
- **Procurement**: handling equipment, transport equipment
- **Management systems** (ISPS, MIS), incentive measures ?
- **Human resources**, training
- **CSR** for a greener port community ...

Issues/Roadmap towards Greener Port Business

- **Policy & regulations** for sustainable development (economic, social, environmental), land lord port system reform with port authority model, PPP for greener port development
- **Transport infrastructure development**, seaside ports, greener energy for transport (fuel, engine, refrigeration)
- **Leading role** of Government, local municipality, relevant authorities (port state control, police)
- **Awareness** (...)
- **Capacity building** (investment and support for human resources, equipment, systems, training)
- **Promotion of stakeholders' initiatives** (commercially driven)
- **Incentives** (performance indexes, tax/economic incentives)
- **Collaboration and joint effort** with port users, community, authorities for higher overall efficiency, paying attention also to low cost best practices and subsidized common user facilities (port waste reception/disposal facilities...)
- **Regional/international cooperation** (consultancy, technical assistances, training)



Conclusions

- **Vietnam** is having excellent demographic and market conditions for maritime and port development and operations in the coming era. However, there should be **comprehensive and integrated system and action plans** for sustainable development toward the Blue Economy.
- It is however challenging to effectively regulate and manage the changes to ensure the best development planning and implementation to minimize the adverse effect contributed to climate change and to be on par with developed countries in respect of greener port business where **every stakeholder should take their own initiatives, not to relay to future generations environmental problems** which should be tackled and minimized soonest and to the extent possible.
- **VPA** will play its active part in **promoting awareness, capacity building and cooperation partnership** for greener port business and hence for the Blue Economic development of the country.



Thank you

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