DRAFTING GREEN PORT CONCEPT PROPOSAL FOR SUSTAINABLE PORT DEVELOPMENT

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MARITIME ADMINISTRATION OF HOCHIMINH CITY
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Vietnam – ESCAP’s member state

Area: 331.699 km²
EEZ: 1million km²
Population: 96,566,780
GDP: 240.779 billion USD
Income: 2,546 USD
Coastline with more than 3,260 kilometers
(Stats 2018)

Vietnam joined to become a ESCAP member state on 23 August 1954
Contents of presentation

1. Cargo throughput
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Vietnam’s cargo throughput and forecast

Source: Vinamarine

Group 1: 36%
Group 2+3+4: 17%
Group 5: 43%
Group 6: 4%

Source: Vinamarine
Vietnam’s container throughput and forecast

Source: Vinamarine
## Challenges of Sea Ports in Vietnam

### Top 10 environment priorities of the European port sector over time

<table>
<thead>
<tr>
<th></th>
<th>2004</th>
<th>2009</th>
<th>2014</th>
<th>2019</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Garbage/Port waste</td>
<td>Noise</td>
<td>Air quality</td>
<td>Air quality</td>
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<tr>
<td>2</td>
<td>Dredging: operation</td>
<td>Air quality</td>
<td>Port waste</td>
<td>Energy consumption</td>
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<tr>
<td>3</td>
<td>Dredging: disposal</td>
<td>Garbage/Port waste</td>
<td>Energy consumption</td>
<td>Noise</td>
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<td>4</td>
<td>Dust</td>
<td>Dredging: operation</td>
<td>Noise</td>
<td>Water quality</td>
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<tr>
<td>5</td>
<td>Noise</td>
<td>Dredging: disposal</td>
<td>Waste from ship</td>
<td>Dredging: operation</td>
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<td>6</td>
<td>Air quality</td>
<td>Relationship with local community</td>
<td>Relations with local community</td>
<td>Garbage/port waste</td>
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<td>7</td>
<td>Hazardous cargo</td>
<td>Energy consumption</td>
<td>Dredging operation</td>
<td>Port development (land)</td>
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<tr>
<td>8</td>
<td>Bunkering</td>
<td>Dust</td>
<td>Dust</td>
<td>Relationship with local community</td>
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<tr>
<td>9</td>
<td>Port development (land)</td>
<td>Port development (water)</td>
<td>Port development (land)</td>
<td>Ship waste</td>
</tr>
<tr>
<td>10</td>
<td>Ship discharge (bilge)</td>
<td>Port development (land)</td>
<td>Quality of water</td>
<td>Climate change</td>
</tr>
</tbody>
</table>

**Source:** ESPO
Challenges of Sea Ports in Vietnam

Environment concerns to port sector in Vietnam

- Dredging: operation and disposal
- Port development
- Garbage/port waste/Ship waste
- Climate change
DREDGING OPERATIONS & DISPOSAL

- **HAI PHONG**: 3.5 million m³
- **CAI MEP – THI VAI**: 2 million m³
- **VINH TAN – BINH THUAN**: 1.5 million m³
- **SA KY QUANG NGAI**: 1-2 million m³
- **SOAI RAP HIEP PHUOC**: 2.5 million m³
- **DINH AN CAN THO**: 1 million m³
- **SONG HAU RIVER**: 3 million m³

Source: Vinamarine
Amount quantity of dredging disposal

Lack of areas for dredging materials

Environment polluted due to disposal

Formalities for Environment Impacts Assessment

Not maintain the depth of maritime channels

- Decree 40/2016/NĐ-CP regulates the dredging operations & disposal for maritime fairways and channels

- Decree 51/2005/NĐ-CP regulates the finance for dredging
Proposal for green port development

DREDGING

OPERATION & DISPOSAL

- Management
- Environmental protection planning
- Disposal Management Master Plans
- Provision of equipment Relevant for Environmental protection
For Maritime Administration’s Perspectives

- Support marine environment protection
- Modernisation of dredging equipment and waste management system
- Improve the economic, commercial and operational activities; Economic growth in lieu of environmental protection
- Energy efficiency
- Strike a balance between economic interests and environmental impacts in order to achieve sustainable growth and development of port systems and port areas
- Implementation of policies relevant for the reduction of the emissions of harmful substances into the atmosphere
- The landscape design of an appropriate seaport which includes trees that absorb noise and pollution, etc
DREDGING

The process of green port development proposal

- Management and coordination
  - Project Management
  - Communication and Dissemination
  - Strategic Impact Assessment

- Environmental Protection Planning
  - Implementation Guidelines
  - Strategic Impact Assessment

- Disposal Management Master plans
  - Defining dredging waste
  - Management of Situations
  - Dredging waste management
  - Mud & sludge

- Provision of Equipment
  - Support Marine Environment protection
  - Capacity Strengthen
  - Modernisation
  - Dredging materials for reclamation
SOLUTION OUTPUTS

FOR GREEN PORTS

Limitation to the sand exploitation

Finance transparency

Protect the environment and ocean ecosystem

Reclamation for future land

Re-used the dredging disposal for reclamation

Maintain the depth

OUTPUTS
Thanks for your attention!