“Update on the Panama Canal Expansion”

AAPA’s SHIFTING INTERNATIONAL TRADE ROUTES
TAMPA - FLORIDA
Oscar Bazán
Vice President of Planning and Business Development
January 23, 2014
Panama at a Glance

<table>
<thead>
<tr>
<th>GDP growth rate – last 10 years</th>
<th>7.5%</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP estimated- 2013 (millions of dollars)</td>
<td>38,633</td>
</tr>
<tr>
<td>GDP per capita - 2013 estimated (in dollars)</td>
<td>13,032</td>
</tr>
<tr>
<td>Population (millions of persons)</td>
<td>3.5</td>
</tr>
<tr>
<td>Unemployment rate (in %)</td>
<td>4.0</td>
</tr>
<tr>
<td>Inflation rate - 2013 (in %)</td>
<td>4.08</td>
</tr>
</tbody>
</table>

*Source: INEC (Contraloría General de la República) 2013*
Panama Canal Facts

Drivers of Canal Expansion

Components of Canal Expansion Program

Progress Report of the Expansion

Potential Impact on International Commerce
100 years serving the World Trade
The Panama Canal

1915 - 2013
Total Number of Transits: 1,043,200
Amount of Cargo: 9,028,495,549 LT
Main Cargoes in Long Tons
FY 2012 - 2013

Approximately 37 vessels daily for an annual total of 13,660 transits per year
Panama Canal Customer Ranking
FY 2013

<table>
<thead>
<tr>
<th>Rank</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>NIPPON YUSEN KAISHA (NYK LINE)</td>
</tr>
<tr>
<td>2</td>
<td>MEDITERRANEAN SHIPPING CO.</td>
</tr>
<tr>
<td>3</td>
<td>MAERSK LINE</td>
</tr>
<tr>
<td>4</td>
<td>COSCO</td>
</tr>
<tr>
<td>5</td>
<td>HAPAG LLOYD</td>
</tr>
<tr>
<td>6</td>
<td>EVERGREEN MARINE</td>
</tr>
<tr>
<td>7</td>
<td>MITSUI O.S.K.</td>
</tr>
<tr>
<td>8</td>
<td>CMA CGM</td>
</tr>
<tr>
<td>9</td>
<td>WALLENIUS - WILHELMSSEN</td>
</tr>
<tr>
<td>10</td>
<td>HAMBURG - SUD</td>
</tr>
<tr>
<td>11</td>
<td>SEA TRADE REEFER CHARTERING NV.</td>
</tr>
<tr>
<td>12</td>
<td>SONAP</td>
</tr>
<tr>
<td>13</td>
<td>DAMPSKIBSSELSKABET NORDEN AS</td>
</tr>
<tr>
<td>14</td>
<td>HANJIN SHIPPING CO.</td>
</tr>
<tr>
<td>15</td>
<td>CSAV – COMPAÑÍA SURAMERICANA DE VAPORES</td>
</tr>
<tr>
<td>16</td>
<td>ZIM AMERICAN INTEGRATED SHIPPING SERVICES CO. INC.</td>
</tr>
<tr>
<td>17</td>
<td>KAWASAKI KISEN K LINE</td>
</tr>
<tr>
<td>18</td>
<td>HYUNDAI MERCHANT MARINE</td>
</tr>
<tr>
<td>19</td>
<td>ARCHER DANIELS MIDLAND COMPANY</td>
</tr>
<tr>
<td>20</td>
<td>TRAFIGURA BEHEER B.V.</td>
</tr>
</tbody>
</table>

These customers are accountable for 65% of tolls revenue in FY 2013
65% of Canal cargo traffic originates in or is destined to the United States

<table>
<thead>
<tr>
<th>User Nation</th>
<th>FY 2012</th>
<th>FY 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States</td>
<td>142.0</td>
<td>134.8</td>
</tr>
<tr>
<td>China</td>
<td>52.7</td>
<td>46.4</td>
</tr>
<tr>
<td>Chile</td>
<td>28.0</td>
<td>29.0</td>
</tr>
<tr>
<td>Japan</td>
<td>22.4</td>
<td>20.0</td>
</tr>
<tr>
<td>Colombia</td>
<td>15.0</td>
<td>17.5</td>
</tr>
<tr>
<td>South Corea</td>
<td>17.0</td>
<td>16.8</td>
</tr>
</tbody>
</table>
PCRCAM

Panama Canal Route Competitiveness Analysis Model

Influence Diagram

- Route Generator
- Input Database
- Panama Canal Potential
- Panama Canal Demand
- Pricing
- Route Costing
- Price indexes
- Output Reports
- Revenues

Control Panel

Variable Inputs

- Time Horizon: 2011.
- Fuel Variation Scenario
- Inflation Forecast
- Exchange Rates Forecast
- Panama Canal Tolls Adjustment

Main Outputs

- FY Revenue Vessel Group and New Market Segments
- Generalized Cost per Weight Average TEU (USD)
- FY Revenue by Customer
- Competitiveness Index for Route
Estimated Unit Cost per TEU for Full Container Vessel from Asia to Gulf - DC in Houston

Source: ACP-MEMN Service analysis and PCIFORM Model Ver. 85.
Estimated Unit Cost per TEU for Full Container Vessel from Asia to Gulf - DC in Dallas

Source: ACP-MEMN Service analysis and PCIFORM Model Ver. 85.
Impact of the Expansion of the Canal, due to economies of scale derived from the use of larger container carriers through the Panama Canal
Panama Canal Expansion Program Objectives

- Maintain Canal competitiveness as well as the value of the route
- Increase capacity and allow the transit of larger ships
- Reduce water consumption
- Improve safety and efficiency
- Sustain tonnage and profitability growth
Canal Expansion Program Components
$5.25 billion investment

- Deepening of Pacific and Atlantic entrance channels
- Deepening and widening of the Gatun Lake navigation channel
- Construction of new access channel for Pacific Locks
- Construction of new Post Panamax Locks and water saving basins in the Atlantic and the Pacific
- Increase the maximum operating level of Gatun Lake
New Locks
Third Set of Locks – Pacific Side

2013
Third Set of Locks – Atlantic Side

2013
Transportation of Gates
Panama Canal Expansion Update

Locks Design and Construction
38.8 M m³ excavated / 46.5 M m³
Award: 15-Jul-2009
Estimated contract completion date: 20-Apr-2015

Dredging – Pacific Entrance
8.6 M m³ dredged
Award: 1-Apr-2008
Contract completion date: 31-Jul-2013

Dredging Areas in Gatun lake and Gaillard Cut
22.3 M m³ dredged / 26 M m³
Estimated contract completion date: 26-Apr-2015

Dredging – Atlantic Entrance
17.6 M m³ dredged
Award: 25-Sep-2009
Contract completion date: 21-May-2013

Raising the Maximum Operating Level of Gatun Lake
Estimated completion date: 30-Sep-2014

Expansion Program
Removed Material:
130.2 M m³ / 148 M m³

31 dec 2013
Summary Schedule of Main Projects with Baseline and Contingency
As of 31 October 2013

<table>
<thead>
<tr>
<th>Activity by quarter (Q)</th>
<th>% Progress</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
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</thead>
<tbody>
<tr>
<td><strong>Locks</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Specifications and locks models</td>
<td>100%</td>
<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Design and build post-Panamax locks</td>
<td>62%</td>
<td></td>
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<td></td>
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<tr>
<td><strong>Access channel</strong></td>
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<tr>
<td>Pacific access channel - phase 1</td>
<td>100%</td>
<td></td>
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<tr>
<td>Pacific access channel - phase 2</td>
<td>100%</td>
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<tr>
<td>Pacific access channel - phase 3</td>
<td>100%</td>
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<td></td>
</tr>
<tr>
<td>Pacific access channel - phase 4</td>
<td>74%</td>
<td></td>
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<tr>
<td><strong>Dredging</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Dredging of the Pacific entrance</td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deepening and widening of Gatun Lake and deepening of Culebra Cut</td>
<td>84%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Dredging of the Atlantic entrance</td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Increase operating level of Gatun Lake</strong></td>
<td>56%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td><strong>Expanded Canal begins operations</strong></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Expansion Program progress</strong></td>
<td>69%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

* Baseline from 31 December 2006 including contingency
### Impact of Canal expansion

- Reduces transport cost per TEU
- Improves productivity and flexibility of carrier
- Reduces CO₂ emissions per TEU
- Improves the competitiveness of the Panama route
- Improves carrier’s network performance-T/S
- Impacts development of US ports and land infrastructure
### Liner Services Connectivity
### Panama Canal

**Source:** ACP MEMN, Compair Data, November 2013

#### Commercial Route

<table>
<thead>
<tr>
<th>Commercial Route</th>
<th>Number of Services</th>
<th>Annual Capacity</th>
<th>Number of Vessels</th>
<th>Average Vessel Size</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Feeder Services Atlantic</strong></td>
<td>24</td>
<td>2,019,094</td>
<td>74</td>
<td>1,904</td>
</tr>
<tr>
<td><strong>Feeder Services Pacific</strong></td>
<td>9</td>
<td>2,287,197</td>
<td>66</td>
<td>6,072</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>33</td>
<td>4,306,291</td>
<td>140</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Commercial Route</th>
<th>Number of Services</th>
<th>Annual Capacity</th>
<th>Number of Vessels</th>
<th>Average Vessel Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asia - USEC / Gulf</td>
<td>11</td>
<td>2,540,082</td>
<td>109</td>
<td>4,439</td>
</tr>
<tr>
<td>WCUS - Europe</td>
<td>7</td>
<td>1,204,679</td>
<td>56</td>
<td>3,496</td>
</tr>
<tr>
<td>Pendulum</td>
<td>2</td>
<td>493,012</td>
<td>28</td>
<td>4,726</td>
</tr>
<tr>
<td>WCUS - ECUS</td>
<td>2</td>
<td>405,620</td>
<td>12</td>
<td>4,087</td>
</tr>
<tr>
<td>Asia - Caribbean</td>
<td>1</td>
<td>246,428</td>
<td>12</td>
<td>4,726</td>
</tr>
<tr>
<td>Australia - Europe</td>
<td>1</td>
<td>90,572</td>
<td>13</td>
<td>1,737</td>
</tr>
<tr>
<td>Australia - ECUS</td>
<td>1</td>
<td>178,642</td>
<td>10</td>
<td>3,426</td>
</tr>
<tr>
<td>WCSA - Caribbean</td>
<td>1</td>
<td>49,010</td>
<td>3</td>
<td>1,477</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>28</td>
<td>5,638,380</td>
<td>264</td>
<td>4,027</td>
</tr>
</tbody>
</table>

**Source:** ACP MEMN, Compair Data, November 2013
PEX-3/Everglades/TP-15 Service
P3 Alliance
Maersk Line, CMA CGM, MSC

<table>
<thead>
<tr>
<th>Start Port</th>
<th>End Port</th>
<th>Frequency days</th>
<th>Number of vessels</th>
<th>Average vessel size in TEU</th>
<th>TEU size range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shanghai</td>
<td>Miami</td>
<td>7</td>
<td>11</td>
<td>4,952</td>
<td>4,367 – 5,095</td>
</tr>
<tr>
<td>Qingdao</td>
<td>Mobile</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Busan</td>
<td>Houston</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ningbo</td>
<td>Yantian</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Fleet Capacity and Vessel Size Composition

## Existing Fleet as of December 2013

<table>
<thead>
<tr>
<th>Vessel size</th>
<th>No. of vessels</th>
<th>Capacity (thousands of TEUs)</th>
<th>%</th>
<th>No. of vessels</th>
<th>Capacity (thousands of TEUs)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feeders 100-499</td>
<td>355</td>
<td>108</td>
<td>0.6%</td>
<td>0</td>
<td>0</td>
<td>0.0%</td>
</tr>
<tr>
<td>Feedermax 500-999</td>
<td>793</td>
<td>594</td>
<td>3.5%</td>
<td>7</td>
<td>5</td>
<td>0.1%</td>
</tr>
<tr>
<td>Handy 1000-1999</td>
<td>1,226</td>
<td>1,724</td>
<td>10.1%</td>
<td>66</td>
<td>95</td>
<td>2.6%</td>
</tr>
<tr>
<td>Sub-Panamax 2000-2999</td>
<td>661</td>
<td>1,678</td>
<td>9.8%</td>
<td>43</td>
<td>101</td>
<td>2.7%</td>
</tr>
<tr>
<td>Panamax 3000-5000</td>
<td>899</td>
<td>3,761</td>
<td>22.0%</td>
<td>10</td>
<td>35</td>
<td>0.9%</td>
</tr>
<tr>
<td>Neo Panamax* 3500-13,200</td>
<td>1,107</td>
<td>8,208</td>
<td>47.9%</td>
<td>261</td>
<td>2,081</td>
<td>56.4%</td>
</tr>
<tr>
<td>Post Panamax* 13,200+</td>
<td>74</td>
<td>1,056</td>
<td>6.2%</td>
<td>87</td>
<td>1,375</td>
<td>37.2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>5,115</td>
<td>17,129</td>
<td>6.2%</td>
<td>474</td>
<td>3,692</td>
<td>5.4%</td>
</tr>
</tbody>
</table>

## Orderbook 2014-2018

<table>
<thead>
<tr>
<th>Vessel size</th>
<th>No. of vessels</th>
<th>Capacity (thousands of TEUs)</th>
<th>%</th>
<th>No. of vessels</th>
<th>Capacity (thousands of TEUs)</th>
<th>%</th>
</tr>
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<tbody>
<tr>
<td>Feeders 100-499</td>
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<td>35</td>
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<tr>
<td>Neo Panamax* 3500-13,200</td>
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<td>2,081</td>
<td>18.4%</td>
<td>2,081</td>
<td>56.4%</td>
<td>56.4%</td>
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<td>Post Panamax* 13,200+</td>
<td>87</td>
<td>1,375</td>
<td>47.9%</td>
<td>1,375</td>
<td>37.2%</td>
<td>37.2%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>474</td>
<td>3,692</td>
<td>5.4%</td>
<td>3,692</td>
<td>56.4%</td>
<td>56.4%</td>
</tr>
</tbody>
</table>

## Estimated Fleet in 2018

<table>
<thead>
<tr>
<th>Vessel size</th>
<th>No. of vessels</th>
<th>Capacity (thousands of TEUs)</th>
<th>%</th>
<th>No. of vessels</th>
<th>Capacity (thousands of TEUs)</th>
<th>%</th>
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</thead>
<tbody>
<tr>
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<td>108</td>
<td>0.6%</td>
<td>355</td>
<td>108</td>
<td>0.5%</td>
</tr>
<tr>
<td>Feedermax 500-999</td>
<td>793</td>
<td>594</td>
<td>3.5%</td>
<td>800</td>
<td>599</td>
<td>2.9%</td>
</tr>
<tr>
<td>Handy 1000-1999</td>
<td>1,226</td>
<td>1,724</td>
<td>10.1%</td>
<td>1,292</td>
<td>1,819</td>
<td>8.7%</td>
</tr>
<tr>
<td>Sub-Panamax 2000-2999</td>
<td>661</td>
<td>1,678</td>
<td>9.8%</td>
<td>704</td>
<td>1,779</td>
<td>8.5%</td>
</tr>
<tr>
<td>Panamax 3000-5000</td>
<td>899</td>
<td>3,761</td>
<td>22.0%</td>
<td>909</td>
<td>3,796</td>
<td>18.2%</td>
</tr>
<tr>
<td>Neo Panamax* 3500-13,200</td>
<td>1,107</td>
<td>8,208</td>
<td>47.9%</td>
<td>1,368</td>
<td>10,289</td>
<td>49.4%</td>
</tr>
<tr>
<td>Post Panamax* 13,200+</td>
<td>74</td>
<td>1,056</td>
<td>6.2%</td>
<td>161</td>
<td>2,431</td>
<td>11.7%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>5,589</td>
<td>20,821</td>
<td>11.7%</td>
<td>5,589</td>
<td>20,821</td>
<td>11.7%</td>
</tr>
</tbody>
</table>

*Neopanamax estimated at a maximum range of 13,200 TEU based on information provided by Samsung H.I.

## Diagrams

### 2013

- **Panamax or Less**: 46%
- **Neo Panamax**: 48%
- **Post Panamax**: 6%

### 2018

- **Panamax or Less**: 49%
- **Neo Panamax**: 39%
- **Post Panamax**: 12%

Source: ACP/MEMN, December 2013.
1. The USG-Asia grain trade will become more competitive through the use of larger vessels.

2. Potential for increased trade of coal to Asia/China.
**Dry Bulk Fleet Capacity**  
(Millions DWT)

<table>
<thead>
<tr>
<th>Size Range</th>
<th>Capacity 2011</th>
<th>New Orders 2011-13</th>
<th>2015 E*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2011</td>
<td>Orders (2011-13)</td>
<td>2015 E*</td>
</tr>
<tr>
<td>Up to Panamax (&lt;106)</td>
<td>326.6</td>
<td>125.0</td>
<td>451.6</td>
</tr>
<tr>
<td>Capesize (&gt;106)</td>
<td>237.5</td>
<td>124.4</td>
<td>361.9</td>
</tr>
<tr>
<td>Total</td>
<td>564.1</td>
<td>249.4</td>
<td>813.5</td>
</tr>
</tbody>
</table>

* Total 2015 estimated, not including scrapping
Source: Clarkson's Research Studies, June 2011
The Impact of Canal Expansion on Liquid Bulks

1. Canal expansion will make Ecuador – USG crude shipments more competitive vs alternative sources (e.g., ex Nigeria).

2. The expanded Canal will be the first route choice for LNG trades between Trinidad-Chile and Peru-USG and for Shale Gas exports coming out of the U.S. destined to Asia.
North American LNG Import/Export Terminals

Proposed/Potential

Import Terminal

PROPOSED TO FERC
1. Robbinston, ME: 0.5 Bcf/d (Kestrel Energy - Downeast LNG)
2. Astoria, OR: 0.5 Bcf/d (Oregon LNG)
3. Corpus Christi, TX: 0.4 Bcf/d (Cheniere – Corpus Christi LNG)

POTENTIAL U.S. SITES IDENTIFIED BY PROJECT SPONSORS
4. Offshore New York: 0.4 Bcf/d (Liberty Natural – Port Ambrose)

Export Terminal

PROPOSED TO FERC
5. Freeport, TX: 1.8 Bcf/d (Freeport LNG Dev/Freeport LNG Expansion/FLNG Liquefaction)*
6. Corpus Christi, TX: 2.1 Bcf/d (Cheniere – Corpus Christi LNG)*
7. Coos Bay, OR: 0.9 Bcf/d (Jordan Cove Energy Project)*
8. Lake Charles, LA: 2.4 Bcf/d (Southern Union - Trunkline LNG)
9. Hackberry, LA: 1.7 Bcf/d (Sempra – Cameron LNG)*
10. Cove Point, MD: 0.82 Bcf/d (Dominion – Cove Point LNG)*
11. Astoria, OR: 1.25 Bcf/d (Oregon LNG)
12. Lavaca Bay, TX: 1.38 Bcf/d (Excelerate Liquefaction)
13. Elba Island, GA: 0.35 Bcf/d (Southern LNG Company)
14. Sabine Pass, LA: 1.3 Bcf/d (Sabine Pass Liquefaction)
15. Lake Charles, LA: 1.07 Bcf/d (Magnolia LNG)
16. Plaquemines Parish, LA: 1.07 Bcf/d (CE FLNG)
17. Sabine Pass, TX: 2.1 Bcf/d (ExxonMobil – Golden Pass)

PROPOSED CANADIAN SITES IDENTIFIED BY PROJECT SPONSORS
18. Kitimat, BC: 0.7 Bcf/d (Apache Canada Ltd.)
19. Douglas Island, BC: 0.25 Bcf/d (BC LNG Export Cooperative)
20. Kitimat, BC: 3.23 Bcf/d (LNG Canada)

POTENTIAL U.S. SITES IDENTIFIED BY PROJECT SPONSORS
21. Brownsville, TX: 2.8 Bcf/d (Gulf Coast LNG Export)
22. Pascagoula, MS: 1.5 Bcf/d (Gulf LNG Liquefaction)
23. Cameron Parish, LA: 0.16 Bcf/d (Waller LNG Services)
24. Ingleside, TX: 1.09 Bcf/d (Pangea LNG (North America))
25. Cameron Parish, LA: 0.20 Bcf/d (Gasfin Development)
26. Cameron Parish, LA: 0.67 Bcf/d (Venture Global)

U.S. – MARAD/COAST GUARD
27. Gulf of Mexico: 3.22 Bcf/d (Main Pass - Freeport-McMoRan)

PROPOSED CANADIAN SITES IDENTIFIED BY PROJECT SPONSORS
28. Goldboro, NS: 0.67 Bcf/d (Pieridae Energy Canada)
29. Prince Rupert Island, BC: 4.2 Bcf/d (BG Group)
30. Melford, NS: 1.8 Bcf/d (H-Energy)
31. Prince Rupert Island, BC: 2.5 Bcf/d (Pacific Northwest LNG)
32. Prince Rupert Island, BC: 3.8 Bcf/d (ExxonMobil – Imperial)
33. Squamish, BC: 0.27 Bcf/d (Woodfibre LNG Export)

As of July 25, 2013

Office of Energy Projects
LPG Trade – U.S. Gulf to South Korea

Panama Canal: 9,733 nm
Approx. 15 days less

Savings of 5,660 nm

Cape of Good Hope: 15,393 nm

25 Days Shipping Cost
LGC $148/MT
VLGC $90/MT

40 Days Shipping Cost
LGC $228/MT
VLGC $140/MT
LNG Trade – U.S. Gulf to Fukuoka, Japan

22 Days Shipping Cost
LNG 155,000 m³:
$33.7/m³

Panama Canal: 9,623 nm
Savings of 4,494 nm
Approx. 10 days less

Suez Canal: 14,117 nm
32 Days Shipping Cost
LNG 155,000 m³:
$47.56/m³
## Tanker Fleet Capacity (Millions DWT)

### Capacity 2013

<table>
<thead>
<tr>
<th>Vessel Size Range</th>
<th>2013 Capacity</th>
<th>Orderbook (2014-16)</th>
<th>2017 E * Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to Panamax (&lt;106')</td>
<td>153.0</td>
<td>5.3</td>
<td>158.3</td>
</tr>
<tr>
<td>Aframax (106' - 140')</td>
<td>96.9</td>
<td>3.1</td>
<td>100.0</td>
</tr>
<tr>
<td>Suezmax (140' - 160')</td>
<td>76.3</td>
<td>2.6</td>
<td>78.9</td>
</tr>
<tr>
<td>VLCC (&gt; 160')</td>
<td>190.5</td>
<td>6.9</td>
<td>197.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>516.6</strong></td>
<td><strong>17.9</strong></td>
<td><strong>534.6</strong></td>
</tr>
</tbody>
</table>

*Total 2017 estimate does not include demolitions

Source: Clarkson Research Ltd, 2014
Source: «US CENSUS: International Database»

**Latin America Population / Growth Projection 2010-2030**

- **Mexico**
  - +18.9%
  - Pop: 135M

- **Guatemala, El Salvador, Belice, Honduras, Nicaragua**
  - +28.0%
  - Pop: 39M

- **Costa Rica, Panama**
  - +23.0%
  - Pop: 11M

- **Colombia, Venezuela**
  - +22.0%
  - Pop: 88M

- **Ecuador, Peru, Bolivia, Chile**
  - +20.0%
  - Pop: 85M

- **Uruguay, Paraguay, Brazil**
  - +18.0%
  - Pop: 251M

- **Argentina**
  - +17.0%
  - Pop: 48M

- **Caribe, Cuba, Puerto Rico, Dominican Republic, Jamaica, Haití**
  - +11.0%
  - Pop: 42M

- **Caribe, Cuba, Puerto Rico, Dominican Republic, Jamaica, Haití**
  - +11.0%
  - Pop: 42M

- **Caribe, Cuba, Puerto Rico, Dominican Republic, Jamaica, Haití**
  - +11.0%
  - Pop: 42M

- **Caribe, Cuba, Puerto Rico, Dominican Republic, Jamaica, Haití**
  - +11.0%
  - Pop: 42M

- **Caribe, Cuba, Puerto Rico, Dominican Republic, Jamaica, Haití**
  - +11.0%
  - Pop: 42M

- **Caribe, Cuba, Puerto Rico, Dominican Republic, Jamaica, Haití**
  - +11.0%
  - Pop: 42M
Our Approach to Business

Value Network Business Model

- Shipping
  - Fuel Efficiencies
  - Vessel Design Flexibility
    - Lead Time Efficiencies
      - Economies of Scale
Impact on maritime transportation by the “Second Wave of Globalization in the Maritime Industry”

This approach will provide solutions with competitive advantages

- Economies of Scale
- Lead Time Efficiencies
- Vessel Design Flexibility
- Fuel Efficiencies
- Shipping
Panama Ports Company

- Balboa: 3,600,000 TEUs
- Manzanillo International Terminal (MIT): 2,200,000 TEUs
- Colon Container Terminal: 1,600,000 TEUs
- Panama Ports Company – Cristobal: 1,500,000 TEUs
- Panama Canal Colon Port, Inc.: 2,000,000 TEUs
- Corozal Port: 5,200,000 TEUs
- PSA: 450,000 TEUs

Total Port Capacity: 16,550,000 TEUs
Ancillary Activities Under Analysis

- Corozal Container Terminal
- RoRo Terminal
- Logistics Parks Services
- Container Barge Services
- Bunkering
- LNG Terminal
- Top-Off Operations
- Vessel Repairs
Third set of locks

Future Fourth set of locks (estimated)

La Ensenada

Logistics Parks

Industrial plant

Third set of locks

Future Fourth set of locks

Ro/Ro Terminal

Potential area

Ro/Ro Terminal

88.9 has

115 has

34 has

142 has
# Location and Development

1. **Phase I:** 69 hectares

2. **Phase II:** 52 hectares

<table>
<thead>
<tr>
<th>Concept</th>
<th>Phase I</th>
<th>Phase II</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Area</td>
<td>69 ha</td>
<td>52 ha</td>
<td>121 ha</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>98 for CY</td>
</tr>
<tr>
<td>Estimated Capacity</td>
<td>3.2</td>
<td>2.1</td>
<td>5.3</td>
</tr>
<tr>
<td>(in millions of TEUs)</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Gantry Cranes</td>
<td>32</td>
<td></td>
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</tr>
<tr>
<td>Dock (m)</td>
<td>1,350</td>
<td>731</td>
<td>2,081</td>
</tr>
<tr>
<td>Draft (m)</td>
<td></td>
<td>16.3</td>
<td>18</td>
</tr>
</tbody>
</table>
Where two triangles merge…
Thank you...!