Philippines: A Ship Recycling Nation?
Cash Buyers – Who are they?

- Cash Buyers are not brokers.
- Cash Buyers are PRINCIPALS/TRADERS. They buy vessels on cash basis from ship owners and resell to ship recycling yards on Letters of Credit.
- Cash Buyers take delivery of vessels on both “delivered” and “as is where is” terms.
- IMO’s Hong Kong Convention on Ship Recycling will consider Cash Buyers as OWNERS of vessels.
   a. Where it is done
   b. Supply, Capacity and Prices
2. How ship recycling started in countries where it is well established?
   a. Established as a ‘substitute industry’ in the Far East to replace downfall in ship building industry.
   b. Started in the Indian subcontinent by accident (literally) and has taken over previously well established ship recycling countries.
3. What are the basic ingredients / building blocks for establishing ship recycling industry?
   a) Supply and Demand and its interplay in determining choice of country where ship recycling industry located.
   b) Contribution to Socio economic development.
4. What model should Philippines follow?
   a. Indian sub-continent vs. China
   b. Beaching vs. Non beaching
1. Global Ship Recycling Industry – Where it is done

- Indian subcontinent
  - India (200)
  - Bangladesh (35)
  - Pakistan (50 of 125)
- China (20)
- Turkey (25)

Note: all figures are approximates

- These 5 countries recycle more than 90% of the world’s fleet.
1. The Global Ship Recycling Industry: INDIA

Coastal Location | Arabian Sea, Gulf of Khambat, West Coast, India
Latitude         | 21 29.5’ N
Longitude        | 72 21.3’ E
Number of Plots  | 200

- Continues to lead the Ship Recycling industry in both numbers and green capacity.
- Greater focus on green ship recycling. **About 70 yards (37%) are fully ISO Certified.**
- Most ship recycling capacity/yards in the world

**KEY ELEMENTS:**
- Market Maker / Leader.
- Experienced Recyclers.
- Top price levels for Specialized Vessels.
- Premium for Bunkers, Non-Ferrous Items, certain Machinery Items Such as Main Engine, Generators, etc.
- Wide Variety of Buyers. Buyers range from ULCC buyers to the smallest fishing trawlers. Everything goes!

**BEST MARKET FOR:**
Specialized High Value Vessels such as ROROS, Reefers, Passenger Ships, Dry Vessels.
1. The Global Ship Recycling Industry: Bangladesh

<table>
<thead>
<tr>
<th>Coastal Location</th>
<th>Bay of Bengal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latitude</td>
<td>22 26’ N</td>
</tr>
<tr>
<td>Longitude</td>
<td>91 44’ E</td>
</tr>
<tr>
<td>Number of Plots</td>
<td>35</td>
</tr>
</tbody>
</table>

✓ Embroiled in a legal battle between Environmental Lawyers (BELA) and local ship recyclers (BSBA).
✓ Steel from ships critical for domestic growth and consumption.

**KEY ELEMENTS**
- (Was) Leading Recycler of Tankers
- Beginning to focus on green ship recycling issues
- Several yards now ISO Certified
- Norwegian grant and IMO pushing for training and improvements.
- Increasing number of regulations
- On and off market
- **Financial (USD) crisis**
  - Loans to recyclers
  - International credits
- Difficult market to deliver ships promptly

**BEST MARKET FOR:**
Large LDT tonnage.
1. The Global Ship Recycling Industry: **PAKISTAN**

<table>
<thead>
<tr>
<th>Coastal Location</th>
<th>Arabian Sea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latitude</td>
<td>24 48' N</td>
</tr>
<tr>
<td>Longitude</td>
<td>66 59' E</td>
</tr>
<tr>
<td>Number of Plots</td>
<td>127 (50 active)</td>
</tr>
</tbody>
</table>

- 2010 was the best year for the recycling industry.
- Increase in Capacity
- Push for improvements.. “partnering” with Turkey

**KEY ELEMENTS:**
- Prompt delivery due to no beaching tides.
- Low D/A
- Good option for owners in the UAE

**BEST MARKET FOR...**
- Tankers
- Small LDT Under Tow Vessels
1. The Global Ship Recycling Industry: CHINA

<table>
<thead>
<tr>
<th>Latitude</th>
<th>113 4’ E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Longitude</td>
<td>22 19’ N</td>
</tr>
</tbody>
</table>

- 2010 has seen a significant decline in volume of vessels recycled.
- Leading destination for owners wanting green recycling, CAPES and other vessels discharging in China

**KEY ELEMENTS:**
- Advanced ship recycling market
- Large and emerging Capacity
- Volatility

**DISADVANTAGES:**
- High D/A Costs.
- Lower than Indian Sub-Continent prices.
- Not a keen buyer of Specialized Ships.

**BEST MARKET FOR:**
- Local vessels
1. The Global Ship Recycling Industry: TURKEY

- Turkey is the ONLY ship recycling nation that has ratified the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships.

- A sizeable rise in volume of vessels in 2010
- Turkey is a logical choice for Naval, State and EU flag vessels in the EU region that by law require recycling only in the OECD region

**KEY ELEMENTS:**
- Member of OECD
- Small LDT and under tow vessels
- Key market for Green ship recycling

**DISADVANTAGES:**
- Low prices

**BEST MARKET FOR...**
- Small and/or naval vessels located in Europe/Med

Source: Clarkson Research Services Limited

November 8, 2011
1. The Global Ship Recycling Industry: Fleet Supply

• Next 3 years will be busy:
  - Massive Order books
  - Poor freight rates
  - Legislation
  - Selective charterers
  - High Scrap Prices
# 1. The Global Ship Recycling Industry: What’s being recycled (Supply)?

<table>
<thead>
<tr>
<th>VESSEL TYPES</th>
<th>2008</th>
<th>2009</th>
<th>CHANGE (%)</th>
<th>2010</th>
<th>CHANGE (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MPP/GC</td>
<td>29</td>
<td>176</td>
<td>507%</td>
<td>128</td>
<td>-27%</td>
</tr>
<tr>
<td>Asp+Bitu</td>
<td>3</td>
<td>2</td>
<td>-53%</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Bulkers</td>
<td>103</td>
<td>262</td>
<td>154%</td>
<td>123</td>
<td>-53%</td>
</tr>
<tr>
<td>Chem&amp;Oil</td>
<td>41</td>
<td>71</td>
<td>73%</td>
<td>117</td>
<td>65%</td>
</tr>
<tr>
<td>Containers</td>
<td>60</td>
<td>198</td>
<td>230%</td>
<td>82</td>
<td>-59%</td>
</tr>
<tr>
<td>Cruise</td>
<td>5</td>
<td>6</td>
<td>20%</td>
<td>3</td>
<td>-50%</td>
</tr>
<tr>
<td>FSO/FPSO</td>
<td>5</td>
<td>6</td>
<td>83%</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>LNG</td>
<td>4</td>
<td>2</td>
<td>-14%</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>LPG</td>
<td>20</td>
<td>28</td>
<td>40%</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>OBO</td>
<td>3</td>
<td>10</td>
<td>233%</td>
<td>0</td>
<td>-100%</td>
</tr>
<tr>
<td>Other</td>
<td>23</td>
<td>22</td>
<td>-4%</td>
<td>53</td>
<td>141%</td>
</tr>
<tr>
<td>Pax (Ferries)</td>
<td>2</td>
<td>24</td>
<td>1100%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PCC</td>
<td>24</td>
<td>112</td>
<td>367%</td>
<td>32</td>
<td>-71%</td>
</tr>
<tr>
<td>Products</td>
<td>21</td>
<td>34</td>
<td>62%</td>
<td>62</td>
<td>82%</td>
</tr>
<tr>
<td>Reefers</td>
<td>31</td>
<td>33</td>
<td>6%</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>RORO</td>
<td>9</td>
<td>52</td>
<td>478%</td>
<td>66</td>
<td>27%</td>
</tr>
<tr>
<td>Tankers</td>
<td>35</td>
<td>59</td>
<td>69%</td>
<td>75</td>
<td>27%</td>
</tr>
<tr>
<td>Total</td>
<td>416</td>
<td>1071</td>
<td>157%</td>
<td>839</td>
<td></td>
</tr>
<tr>
<td>Dry (Bulk + GC)</td>
<td>64</td>
<td>235</td>
<td>267%</td>
<td>546</td>
<td>132%</td>
</tr>
<tr>
<td>Wet (Chem+Product+Dirty)</td>
<td>130</td>
<td>384</td>
<td>195%</td>
<td>293</td>
<td>-24%</td>
</tr>
</tbody>
</table>
1. The Global Ship Recycling Industry: Supply - Cape Fleet

Capes: In 2009 less than 1% of the fleet capacity was recycled. In 2010 about 1.5%. In 2011, we expect this figure to be in excess 3.5%...... Future scrapping candidates based on age of 23 years.

### Profile of World Capesize Fleet

<table>
<thead>
<tr>
<th>NO. OF VESSELS (end)</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>JUN-11</th>
<th>ORDER BOOK DELIVERY SCHEDULE</th>
<th>EXPECTED SCRAPPING (23 yrs or &gt;23)</th>
<th>NET ADDITION/DELETION TO FLEET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fleet Totals</td>
<td>862</td>
<td>965</td>
<td>1158</td>
<td>1236</td>
<td>2011 210 38% 111</td>
<td>99</td>
<td></td>
</tr>
<tr>
<td>Deliveries</td>
<td>44</td>
<td>111</td>
<td>211</td>
<td>111</td>
<td>2012 233 42% 19</td>
<td>214</td>
<td></td>
</tr>
<tr>
<td>Scrapings</td>
<td>14</td>
<td>8</td>
<td>18</td>
<td>44</td>
<td>2013+ 114 20% 46</td>
<td>68</td>
<td></td>
</tr>
<tr>
<td>Contracting</td>
<td>212</td>
<td>77</td>
<td>123</td>
<td>19</td>
<td>Total 557 100% 176</td>
<td>381</td>
<td></td>
</tr>
<tr>
<td>Order book</td>
<td>781</td>
<td>747</td>
<td>659</td>
<td>557</td>
<td>% Fleet 45.06%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DWT (M) TONS (end)</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>JUN-11</th>
<th>ORDER BOOK DELIVERY SCHEDULE</th>
<th>EXPECTED SCRAPPING (23 yrs or &gt;23)</th>
<th>NET ADDITION/DELETION TO FLEET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fleet Totals</td>
<td>153,322,646</td>
<td>172,866,381</td>
<td>208,366,186</td>
<td>223,932,494</td>
<td>2011 56,835,224.00 46% 19,222,786.00</td>
<td>37,612,438</td>
<td></td>
</tr>
<tr>
<td>Deliveries</td>
<td>8,624,578.00</td>
<td>20,987,005</td>
<td>38,082,105</td>
<td>20,138,866</td>
<td>2012 46,073,810.00 37% 3,695,668.00</td>
<td>42,378,142</td>
<td></td>
</tr>
<tr>
<td>Scrapings</td>
<td>2,157,823</td>
<td>1,443,270</td>
<td>2,582,300</td>
<td>6,889,980</td>
<td>2013+ 20,264,600.00 16% 8,053,272.00</td>
<td>12,211,328</td>
<td></td>
</tr>
<tr>
<td>Contracting</td>
<td>41,348,696</td>
<td>17,294,407</td>
<td>23,003,958</td>
<td>3,684,000</td>
<td>Total 123,173,634.00 100% 30,971,726.00</td>
<td>92,201,908</td>
<td></td>
</tr>
<tr>
<td>Order book</td>
<td>146,811,940</td>
<td>143,119,342</td>
<td>128,041,195</td>
<td>108,575,256</td>
<td>% Fleet 57.68%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1. CAPACITY

- Demand exceeds Supply……But some markets reaching saturation levels

- Capacity

  2010: 26.6/6.88 mill DWT/LDT
  2009: 28.2/8.1 mill DWT/LDT
  1985: 42.6/9.0 mill DWT/LDT (HISTORICAL HIGH)
  1983: 33.3/7.1 mill DWT/LDT
1. The Global Ship Recycling Industry: POTENTIAL SUPPLY

- Number of ships: Categories destined for recycling

<table>
<thead>
<tr>
<th>Category</th>
<th>Number of Ships</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tankers</td>
<td></td>
</tr>
<tr>
<td>S / Skin – D/Bottom</td>
<td>= 999</td>
</tr>
<tr>
<td>Over 25 years old and other than S / Skin – D/Bottom</td>
<td>= 181</td>
</tr>
<tr>
<td></td>
<td>1,180 (13% of Fleet)</td>
</tr>
<tr>
<td>Bulkers (30 or &gt; 30 years old)</td>
<td>= 541</td>
</tr>
<tr>
<td>Containers (28 or &gt;28 years old)</td>
<td>= 228</td>
</tr>
<tr>
<td>Ro-Ro &amp; Passenger (31 or &gt;31 years old)</td>
<td>= 682</td>
</tr>
<tr>
<td><strong>TOTAL NO OF SHIPS</strong></td>
<td>= 2,631</td>
</tr>
<tr>
<td></td>
<td>(Excl. other types)</td>
</tr>
</tbody>
</table>

November 8, 2011
1. PRICES

Baltic Demolition Assessments (BDA)

November 8, 2011
1. PRICES

**BANGLADESH DEMOLITION RATES**

$ price per ldt

<table>
<thead>
<tr>
<th></th>
<th>Nov 10</th>
<th>Jan 11</th>
<th>Mar 11</th>
<th>May 11</th>
<th>Jul 11</th>
<th>Sep 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>300</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>600</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- General cargo $490/ldt
- Tankers $525/ldt

*Source: Global Marketing Systems*
1. PRICES

INDIA DEMOLITION RATES

$ price per ldt

600

500

400

Nov 10  Jan 11  Mar 11  May 11  Jul 11  Sep 11

- General cargo $495/ldt
- Tankers $525/ldt

Source: Global Marketing Systems
1. PRICES

**PAKISTAN DEMOLITION RATES**

$ price per ldt

<table>
<thead>
<tr>
<th></th>
<th>Nov 10</th>
<th>Jan 11</th>
<th>Mar 11</th>
<th>May 11</th>
<th>Jul 11</th>
<th>Sep 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>General cargo</td>
<td>$485/lrdt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tankers</td>
<td>$515/lrdt</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Global Marketing Systems*
1. PRICES

CHINA DEMOLITION RATES

Source: Global Marketing Systems
1. Financial condition of the owner (Cash flow of the company)
2. Age and size of vessel
3. Market expectations
4. Operating costs
5. Scrap prices
6. State of second hand market
7. Book value of vessel in relation to its scrap or resale price
8. Alignment of management policies/attitudes with market expectations
3. What are the basic ingredients / building blocks for establishing ship recycling industry?

Supply and Demand and its interplay in determining choice of country where ship recycling industry located.

**Diagram:**

- **Global Shipping Markets determine when a ship is to be recycled**
  - Freight Rates
  - Operating Cost of Vessel
  - Regulations (e.g. ban on single hull tankers)

- **Supply of Ships for Recycling**

- **Ship Recycling**

- **Demand for Ships for Recycling**
  - Local Steel Prices, Market Demand for Mild steel (MS) scrap, and other items
  - Ship recycling yard’s Operating Costs
  - Local regulations regarding environmental impact of the industry.

**Country specific factors determine where to scarp**

November 8, 2011
Ship recycling forms part of the socioeconomic structure of the economies in the Indian subcontinent. It is responsible for creating jobs ranging from about 50,000 jobs directly on the yard to over 300,000 in the supply chain, shops and re-rolling mills, with dependents in extended families estimated to reach over 500,000.

Ship recycling provides more than half of Bangladesh’s steel supply, making it a strategic industry in that country.

### National steel production
- **Bangladesh**: 2.2–2.5 m tons
- **Pakistan**: 3 m tons

### Scrap steel from ship breaking
- **Bangladesh**: Up to 1.5 m tons
- **Pakistan**: Up to 800,000 tons

### Ship breaking steel’s contribution to production
- **Bangladesh**: 50%
- **Pakistan**: 15%

### No. of re-rolling mills
- **Bangladesh**: 250 to 350
- **Pakistan**: 330

### Scrap yards (total no.)
- **Bangladesh**: 40 active
- **Pakistan**: 30 active (132)

### Estimated no. of workers in yards
- **Bangladesh**: 22,000
- **Pakistan**: 6,000–8,000

Source: World Bank report of Dec 2010 titled "SHIP BREAKING AND RECYCLING INDUSTRY IN BANGLADESH AND PAKISTAN"

Ship recycling generates large amounts of revenue for various Government authorities through the payment of taxes.

**Every year the Government of Bangladesh collects almost 9000 million taka (~ USD 119 M) in revenue from the ship recycling industry through import duty, yards tax and other taxes.**
Properly handled, ship recycling is, without question, a Green industry!

November 8, 2011
SHIP RECYCLING – Environmental

• Scrap steel reduces related water pollution, air pollution, and mining wastes by about 70%.

• It takes four times as much energy to make steel from virgin ore.

• Benefits of using Iron and Steel (ferrous metals) instead of virgin ore to make new steel:
  • Savings in energy 74%
  • Savings in virgin materials 90%
  • Reduction in water use 40%
  • Reduction in water pollution 76%
  • Reduction in air pollution 86%
  • Reduction in mining wastes 97%
  • Reduction in consumer waste generated 105%
## Profitability (competitiveness) of the industry in Bangladesh and Pakistan (based on a “sample” ship—a Panamax oil tanker of 14,800 LDT (80,000 DWT))

<table>
<thead>
<tr>
<th></th>
<th>Bangladesh</th>
<th>Pakistan*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenues</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total costs</td>
<td>4,692,200</td>
<td>5,340,900</td>
</tr>
<tr>
<td>- Purchase of ship</td>
<td>3,848,000</td>
<td>3,848,000</td>
</tr>
<tr>
<td>- Labor costs</td>
<td>92,700</td>
<td>233,400</td>
</tr>
<tr>
<td>- Consumables</td>
<td>302,200</td>
<td>230,000*</td>
</tr>
<tr>
<td>- Financial costs</td>
<td>147,900</td>
<td>265,700</td>
</tr>
<tr>
<td>- Taxes, tariffs, and duties</td>
<td>263,000</td>
<td>693,600</td>
</tr>
<tr>
<td>- Other costs (including rents, investment costs, etc.)</td>
<td>38,400</td>
<td>70,200</td>
</tr>
<tr>
<td><strong>Profit</strong></td>
<td>921,400</td>
<td>164,600</td>
</tr>
</tbody>
</table>

### Profit Percentage

- **Bangladesh**: 16.5%
- **Pakistan**: 3%

### Revenue Categories

<table>
<thead>
<tr>
<th>Category</th>
<th>Element</th>
<th>Bangladesh</th>
<th>Pakistan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>Steel</td>
<td>4,771,500</td>
<td>4,992,800</td>
</tr>
<tr>
<td></td>
<td>Other recyclable items</td>
<td>842,000</td>
<td>512,700</td>
</tr>
<tr>
<td></td>
<td>Total revenue</td>
<td>5,613,600</td>
<td>5,505,500</td>
</tr>
</tbody>
</table>

### Cost Categories

<table>
<thead>
<tr>
<th>Category</th>
<th>Element</th>
<th>Bangladesh</th>
<th>Pakistan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs</td>
<td>Purchase of ship</td>
<td>3,848,000</td>
<td>3,848,000</td>
</tr>
<tr>
<td></td>
<td>Investment costs</td>
<td>21,900</td>
<td>18,300</td>
</tr>
<tr>
<td></td>
<td>Financial costs</td>
<td>147,900</td>
<td>265,700</td>
</tr>
<tr>
<td></td>
<td>Labor costs</td>
<td>92,700</td>
<td>233,400</td>
</tr>
<tr>
<td></td>
<td>Consumables</td>
<td>302,200</td>
<td>230,000*</td>
</tr>
<tr>
<td></td>
<td>Taxes, tariffs and duties</td>
<td>263,000</td>
<td>693,600</td>
</tr>
<tr>
<td></td>
<td>Rents, levy and permits</td>
<td>2,700</td>
<td>500</td>
</tr>
<tr>
<td></td>
<td>Other costs</td>
<td>13,800</td>
<td>51,300</td>
</tr>
<tr>
<td></td>
<td>Total costs</td>
<td>4,692,200</td>
<td>5,340,800</td>
</tr>
<tr>
<td>Profit</td>
<td>Total</td>
<td>921,400</td>
<td>164,600</td>
</tr>
<tr>
<td></td>
<td>$/LDT</td>
<td>62</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Total, local currency</td>
<td>62,231,800</td>
<td>13,307,700</td>
</tr>
<tr>
<td></td>
<td>Rs./LDT</td>
<td>4,200</td>
<td>900</td>
</tr>
</tbody>
</table>
1. Infrastructural Costs
2. Ship Prices
3. Cost of Capital
4. Labor Costs
5. Consumables
6. Exchange Rate
Revenue

1. **Re-rollable Scrap**
   1. 50% of the revenue…….90% of the LDT.
   2. Used by re-rolling mills to make Mild Steel (MS) rods and bars which are used by the construction industry in India

2. **Melting Scrap (10%)**

3. **Reusable items**
   1. Machinery: Generators, Motors, Pumps, etc
   2. Spare Parts, Furniture, etc

4. **Non-ferrous items**
   1. Propeller, Cables, Condensers, etc

5. **Fuel**
1. Economic growth in Philippines
2. Employment (50-500,000 in India)
3. Environmentally friendly
4. Foreign Exchange
5. Gaps
   1. China vs. India
   2. Current image
6. Increase in Chinese/Far Eastern tonnage
Threats

1. Price Competitive
2. Mature Industry (Pressure on profit margins)
3. Existing Capacity in the market (Demand exceeds Supply)
4. CSR in infancy
5. Growth of ancillary industries
6. Continued supply of ships
7. Downstream industries
   1. Rolling mills
   2. 2nd-hand markets
SHIP RECYCLING - Image

- The 4th pillar of shipping… is it really shipping?
- Popular but most misunderstood
- Negative image….. Headline risk

**But remember, the 3 E’s of Ship recycling.**
- Ship recycling is good for the:
  - ENVIRONMENT
  - ECONOMIC viability of the world trade and shipping
  - EMPLOYMENT opportunities internationally and locally
Why

1. High Demand for steel
   1. Induction furnaces for scrap steel vs. Ingots/Billets.
   2. Gap between Imports vs. Domestic demand
2. Cost advantage?
3. Supply
4. Competitive advantage
   1. Image building from scratch
Ship Recycling: Challenge & Opportunity

• CHALLENGE:
• Where will the world’s ageing fleet go?
• OPPORTUNITY:

• Developing cost effective, environmentally safe & responsible Ship Recycling Program.
The days are not too far when Green Ship Recycling will become the norm of the ship recycling industry and will contribute evenly more greatly to the health of the environment and safety of worker.

This will be achieved with a unity of purpose between the shipping industry, IMO, ship recycling industry and all environment advocates.
THE FUTURE: WORLD SHIP RECYCLING TRIANGLE
Thank you!