TÜRK LOYDU FOUNDATION

TÜRK LOYDU was founded by Chamber of Naval Architects & Marine Engineers with the support of Association of Insurance & Reinsurance Companies in 1962. Turk Loydu General Assembly consists of delegates from;
WE NEED OCEANS NOW MORE THAN EVER:

72% of our world is covered in water, and the ocean’s health directly affects our own.

Over 70% of the world’s oxygen is coming from the oceans.

Oceans control our climate by absorbing half of all man-made CO2.
Coastal wetlands – seagrass meadows, salt marshes and mangroves – provide one of the most effective natural solutions for carbon capture and long-term storage on the planet.

**EVERY YEAR**
Coastal wetlands sequester enough CO₂ to offset the burning of over **1 BILLION BARRELS OF OIL**

**726 TONNES OF COAL EMISSIONS ARE OFFSET BY ONE HECTARE OF MANGROVE**

Coastal wetlands are **THE ONLY HABITAT** that can continuously sequester and store carbon in soil **FOR MILLENNIA**

In some areas **ONE HECTARE OF SEAGRASS CAN STORE 2X THE CARBON** captured by an average terrestrial forest.

Coastal wetlands are **SMALL BUT MIGHTY**

Although they **COVER LESS THAN 1%** of the ocean they **STORE OVER 50% OF THE SEABED’S RICH CARBON RESERVES**

Mapping Ocean Wealth demonstrates what the ocean does for us today so that we maximize what the ocean can do for us tomorrow.

oceanawealth.org  @ocean_wealth

**Türk Loydu**
Some Side Effects of Ballast Water Operations

- Balloon Fish moved from Indian Ocean to Turkish Coasts.
- This fish has high poison effects and threatening other fish types and natural habitat.
- Even cats are not eating it.
Some Results of Oil Spill/Environmental Pollution

On 12 January 2017, we faced in Marmara Sea with an oil pollution from a fuel storage leak from one of the facility.

More than 20 Million people are living around Marmara Sea.
Universities
Classification Societies
Marine Industry
Universities
<table>
<thead>
<tr>
<th>Year</th>
<th>Global CO₂</th>
<th>Total shipping</th>
<th>% of global</th>
<th>International shipping</th>
<th>% of global</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>31,409</td>
<td>1,100</td>
<td>3.5%</td>
<td>885</td>
<td>2.8%</td>
</tr>
<tr>
<td>2008</td>
<td>32,204</td>
<td>1,135</td>
<td>3.5%</td>
<td>921</td>
<td>2.9%</td>
</tr>
<tr>
<td>2009</td>
<td>32,047</td>
<td>978</td>
<td>3.1%</td>
<td>855</td>
<td>2.7%</td>
</tr>
<tr>
<td>2010</td>
<td>33,612</td>
<td>915</td>
<td>2.7%</td>
<td>771</td>
<td>2.3%</td>
</tr>
<tr>
<td>2011</td>
<td>34,723</td>
<td>1,022</td>
<td>2.9%</td>
<td>850</td>
<td>2.4%</td>
</tr>
<tr>
<td>2012</td>
<td>35,640</td>
<td>938</td>
<td>2.6%</td>
<td>796</td>
<td>2.2%</td>
</tr>
<tr>
<td>Average</td>
<td>33,273</td>
<td>1,015</td>
<td>3.1%</td>
<td>846</td>
<td>2.6%</td>
</tr>
</tbody>
</table>
COMPARISON OF TYPICAL CO₂ EMISSIONS BETWEEN MODES OF TRANSPORT

Grms per tonne-km

- 3.9 Very large container vessel (18,000 teu)*
- 5.9 Oil tanker (80,000 – 119,999 dwt)
- 7.9 Bulk carrier (10,000 – 34,999 dwt)
- 80.0 Truck (> 40 tonnes)
- Air freight (747, capacity 113 tonnes, 435.0)

Source: IMO GHG Study, 2009 (AP Moller-Maersk, 2014)
Technological Advancement (cumulative number of significant inventions)

Time

2400 BC 500 BC 0 1000 1400 1600 2000

TÜRK LOYDU
Figure 1: Potential fuel use and CO₂ reductions from various efficiency approaches for ships (International Council on Clean Transportation (ICCT, July 2013). Long-term potential for increased shipping efficiency through the adoption of industry-leading practices.
Thank You