LeanShips

What is this European Innovation project all about ?

The project has received funding from the European’s Horizon 2020 research and innovation programme (Contract No.: 636146)
**LeanShips** ...  

... aims to demonstrate the effectiveness and reliability of energy saving and emission reduction technologies at real scale.

<table>
<thead>
<tr>
<th>Target markets ...</th>
<th>Seven demonstrators will be carried out ...</th>
<th>Major objectives ...</th>
</tr>
</thead>
</table>
| ... are the small to midsized ships for intra-European waterborne transport, vessels for offshore operations and the leisure and cruise market. | ... combining technologies for improved efficiency and pollution reduction, in line with end-users’ needs and requirements. | ✓ CO₂ reduction of at least 25%  
✓ Estimated fuel saving of up to 25%  
✓ Expected decrease of SOₓ/NOₓ/PM air pollutants by up to 100% |

Coordinated by [Damen](#)
Parallel development of demonstrators and their contribution to the project objectives, following the same harmonised innovation process.
LeanShips covers the entire energy chain

<table>
<thead>
<tr>
<th>Demonstrator platforms</th>
<th>Technology cluster 1: Engines, fuels, drive trains</th>
<th>Technology cluster 2: Hull, propulsors</th>
<th>Technology cluster 3: Energy systems and emissions abatement technologies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Internal combustion engines</td>
<td>Fuels</td>
<td>Generator</td>
</tr>
<tr>
<td>WP04: Tug</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
</tr>
<tr>
<td>WP05: SWATH/dredge</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
</tr>
<tr>
<td>WP06: LNG carrier</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
</tr>
<tr>
<td>WP07: General cargo ship</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
</tr>
<tr>
<td>WP08: Inland ship</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>WP09: Ice going cargo ship</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>WP10: Cruise/Leisure</td>
<td>x</td>
<td>XX</td>
<td>XX</td>
</tr>
<tr>
<td>WP11: Cruise/Leisure</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
</tr>
</tbody>
</table>
LeanShips’ mission:

Prove that:

a) green technology can be installed onboard (new and old - retrofit);

b) green technology works in maritime and is reliable

c) green technology can be economically viable

And can significantly contribute to the EU energy and emission policies by collaborating with:

a) ship equipment manufacturers;

b) ship builders;

c) ship operators;

d) classification societies;

e) research centres and universities
LeanShips partnership with 80% industry involvement

- System integrators/Shipyards
- Technology providers
- Ship owners/Ship operators

41 partners
13 countries

Budget: € 20.7 M
Funding: € 15.8 M
LeanShips has a layered project structure and integrates the experiences from the Demo Cases into a web-based “Guide to Innovation”.

“Automated” demonstration follows a technology innovation package.
Contact us at:
Mr. Pieter Huyskens
LeanShips Project Manager
Email: pieter.huyskens@damen.com