Sustainable Ships from Finland
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**Marine Industry in Finland**

- Finnish strengths are the cooperating network, well-trained experts and state-of-the-art technology
- Finnish Marine Industries is the marine industry association
  - ~90 members

- Principal markets:
  - Cruise ships, Ferries, Arctic & Offshore vessels, Specialized vessels
  - Advanced marine systems, interior and equipment for all ship types
  - Cleantech solutions
  - ICT solutions for marine applications

**Finnish marine industry consists of**

- Leading marine equipment manufacturers
- Turnkey suppliers
- Design offices
- Software and system providers
- Material suppliers
- Shipbuilding, ship repair and offshore yards
Megatrends and drivers for sustainability

- Climate change – energy efficiency, carbon neutrality and zero emissions needed to minimize the effect

- Sustainability and circular economy essential customer values

- Regulations, latest IMO Goal: -50% GHG emission by 2050

Finnish Marine Industries Sustainability Vision

Together we create sustainable maritime for the future world:
Our actions result in an economical and sustainable vessel, equipment and systems
Sustainability through the lifecycle

- Ship’s entire lifecycle taken in account from design to production
- Production with as little environmental burden as possible and with fair working conditions
- Maximizing the sustainability of ship’s operation
- Energy use and sustainability during all phases of lifecycle
- Taking in account customers’ requirements and changes in regulation

Made in Finland

Numerous environmental references like..

- Renewable energy utilization with Norsepower Rotor sail
- Wärtsilä hybrid propulsion
- RMC, Protacon: Aranda’s battery solution
- Eniram’s operation optimization and energy efficiency
- Deltamarin’s energy efficient ship concepts
- Fleet Intelligence by NAPA
- Evac’s water treatment solutions
- LNG powered vessels
• United Nations’ sustainable development goals are implemented in The Finnish Society’s Commitment to Sustainable Development
• Prime Minister Sipilä chairs the Finnish National Commission for Sustainable development, coordinating the The Finnish Society’s Commitment
• Finnish Marine Industries has defined, in co-operation with the companies, which goals of sustainable development the industry should emphasize
• ResponSea encourages the companies to define their own commitments for accomplishing the goals
• Results will be published: www.sitoumus2050.fi
FINNISH MARINE INDUSTRIES’ SUSTAINABILITY THEMES

• Reducing the environmental impact of marine transportation
• Continuous improvement as fair employers
• Monitoring the sustainability of the delivery chain
• Enhancing circular economy and lifecycle efficiency

Reducing the environmental impact of marine transportation

• The commitments cover areas like:
  – Reducing the fuel consumption and emissions
  – Reducing the eutrophication of the seas
  – Cleaner marine environment by reducing SOx emissions
  – Minimizing energy consumption by electrification of vessels

• Companies involved now: Evac, Norsepower, Langh Tech, ABB
Continuous improvement as fair employers

• The commitments cover areas like:
  – Recruiting new personnel
  – Transferring tacit knowledge to retain the unique marine knowhow
  – Safer working environment, also in the delivery network - towards 0 accidents, 0 accidents in Ship Recycling work
  – Better welfare at work – welfare index, equal workplace, education
  – More diversity, more thesis workers

• Companies involved: Meyer Turku, Piikkiö Works, Turku Repair Yard, Elomatic, Almaco, NIT

Monitoring the sustainability of the delivery chain

• The commitments cover areas like:
  – Developing the sustainability of the delivery chain by QHSE audits of sustainability and safe working conditions
  – Sustainable material usage of the delivery chain by a list of environmentally harmful materials
  – Reducing the environmentally harmful material usage
  – Cooperation with only sustainable operating suppliers

• Companies Involved: Piikkiö Works, Almaco
Enhancing circular economy and lifecycle efficiency

- The commitments cover areas like:
  - Reducing energy use, GHG emissions and amount of waste in the company
  - Reducing the pollution of the sea near the shipyard
  - Reducing plastic as package material of cabins
  - Increasing recycling of dry waste in cruise ships
  - Responsible ship recycling; increasing the reuse of the waste from ship deconstruction
  - Developing the energy and material efficiency of products
  - Using WWF Green Office environmental monitoring


Check all the commitments and indicators & join!

www.responsea.fi
Future Looks Bright, Specially Today

- The need for maritime transport will grow significantly by 2030
- The most economical way of transport of passengers and goods is by the sea – It’s ecologically sustainable as well
- In addition, there are new business opportunities arising from the Blue Growth area – sustainable use of marine resources
- Finland has the world leading solutions for sustainable maritime
  - Smart, energy efficient and environmentally sound technologies
  - Work done according to the rules and regulations

Members
Thank you!

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