Innovation & Environmental Stewardship

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Lloyd's Register

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for a safer world

Global stewardship challenges

Climate Change & reducing carbon emissions

Fresh water supply & Droughts

Energy Use & Waste Management

Ocean industry businesses face increasingly complex challenges

Sustainability: Risks for Shipping Sector

Shipping currently accounts for 2.3% of global CO2 emissions

Today make sound commercial decisions based on the best technical insight

Need regulation to drive the incentive to create the change needed

Technology is just one consideration – costs, economic & societal dimensions all need consideration

Need to set a gradual transition to decarbonise and manage the change and any associated risks

From compliance to innovation…

Difficult to navigate because there are so many interacting impacts and commercial complexities.

Regulatory Framework

Commercial / Economics

New Technology

People Challenge – Human Factor

GHG reduction technology roadmap
Other alternative sources of clean energy

Gas as fuel

Methanol

Hybrid technology

Biofuels

Renewables

Nuclear

Technology enabled transition pathway to decarbonise.

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Air Lubricated Hull

Aerodynamic & Hydrodynamic Advances in design

Energy Efficiency

- High-Efficiency Appliances
- Energy saving LED light bulbs
- Optimized voyage planning
- Thermal reflective films
- Energy & Water saving initiatives
- Refrigerated river rocks

Waste Footprint efforts take trucks off the road

SUSTAINABILITY
FROM SHIP TO SHORE

CARNIVAL'S WASTE MINIMIZATION STRATEGY

Water Conservation

- Water conservation technologies
- Steam Desalination
- Reverse Osmosis
- Advanced Wastewater Purification (AWP) systems
- Early adopter of Ballast Water Treatment technology
- Aerator devices installed

HYUNDAI

Where we work

Compliance, assurance, performance

Along supply chains and across business sectors

We offer a joined-up service to companies with international operations and supply chains. On these pages we show some of the critical infrastructure assets we work on over a wide range of business sectors – at sea and on land – from ships to power plants, manufacturing to food processing, from design, through operation to decommissioning and recycling. We are ever improving the way we carry out work, from assurance using real time data and remote audits to surveys using drones.

And at work behind this illustration there are compliance, assurance and performance services to help our clients. Our training services are designed to meet the knowledge and skills development of our clients' workforce; part of our commitment to improving the safety and performance of companies worldwide. On environment and sustainability, and within the climate change arena, our services help clients to both meet regulations and go further, by implementing voluntary improvements which can have significant business and environmental benefits.