

Responding to Environmental Challenges The Role of Education and Research,

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Shipping and offshore industries have gone through many changes in the last decade. A concern about climate change and other environmental issues has increased awareness of industry about the need for environmental protection. This has brought voluntary action as well as an influx of new environmental regulations, some of which with delayed ratification and lack of available technology. This has introduced regulatory and financial uncertainty to the industry.

At the same time, the world economic downturn has had a major impact on the shipping markets while the relatively high oil prices have supported active oil exploration. In weak markets, shipping has been and continues to be challenged by high fuel costs, and high cost of compliance with environmental regulations. On the other hand oil exploration is moving to deeper waters and harsher, often more fragile environments, with increased operating costs.

How do we safeguard the environment and promote sustainability in this ever changing landscape?

It all starts with education. We need highly educated, innovative engineers with a holistic understanding of the impact of technology on the environment. And we need research to provide new technology solutions for further engineering application.

We can reduce the environmental footprint from our industry with the available technology and current practices to a degree. Many of the solutions being implemented today have been around for decades but were not commercially feasible in the past. But the society expects more in the future and for that a step change is needed. Education and research play an important role in facilitating the change.