



# Strategic and technology roadmapping

World-class expertise supporting you in decision making process

The marine industry is facing one of the most dynamic and decisive periods in its recent history. The disruptive emergence and fast pace of new technology implementation combined with stringent and demanding operational requirements necessitate a review of future outlook.

In conjunction the marine industry is complex, covering a wide range of technologies and application, and is strongly influenced by other parts of the supply chain and social environment. In this context, marine stakeholders must maintain day to day operations without the opportunity to consider 'What is next for the marine industry? Where do the new challenges lie? Are we ready for them? What do we need?'

These are simple questions to ask but less straightforward to answer. Strategic analysis of the current situation and evaluation of up-coming scenarios is essential in investment strategy to mitigate the uncertainty in the future landscape. Whilst opportunities in disruptive and niche technologies are increasing so does the complexity for investment, not only associated to engines, fuels, lube oils or transmission, but also associated with new directions including electrification, power distribution, energy saving analysis or propulsion right sizing.



## Ricardo approach

Ricardo's strategic consultancy practice offers an extensive portfolio of corporate advisory services to help senior executive teams address high-impact issues and resolve operational problems at every stage of the value chain.

The power of roadmapping lies in its flexibility, which can provide clarity and alignment of specific needs at all levels, including functional, organisation-wide and even collaboration between organisations. The Integration of strategic and technology planning is essential for competitiveness.

Our consultants are qualified engineers with executive-level experience within the transport sector, whilst our environmental and energy advisers are at the forefront of policy creation and programme delivery for a range of governments and multinational organisations.

## Independent support

Ricardo is independent of OEM and regulator drivers, applying our long term expertise and knowledge across different industries to assist companies in the decision making process.

Ricardo knows the marine industry, your needs together with market requirements and the technologies that realistically could be applied to your asset. Ricardo offers a strategic consultancy service to take informed decisions for engines, fuels, lube oils, maintenance integration and technology implementation on board your vessel across short, medium and long term scenarios.

## Connecting the dots and transferring knowledge

The marine industry is a key part of the supply chain. Ricardo activities span automotive, industrial, transport and rail sectors to offer an overarching view of the entire supply chain and interactions, enabling application of sector know-how and transfer of knowledge to the marine industry.

## Structured support

Ricardo facilitates a one-day roadmapping workshop at the client premises. The workshop explores market drivers, and uses an established roadmapping approach to brainstorm roadmap components. Raw workshop data is processed, and delivered in a strategic roadmap.

Ricardo conducts a follow up session to guide the client through the construction of a roadmap from workshop outputs, so the client has the option to develop its own internal roadmapping capabilities and future strategies.

## Benefits and savings opportunities

The strategic roadmapping can successfully harness Ricardo's diverse collective experience and knowledge from different industrial fields. Ricardo helps to identify not only trends in the industry but also to address other aspects including team-member profiles, facilitation, project management, and senior-management support.

- Investment risk vs engineering risk vs technology risk
- Economic impact assessments
- Helping to design your step change
- Managing risks and removing uncertainty
- Low carbon technology assessments modelling of future transport trends
- First-hand knowledge of technology and reputation for creating step change



## For further information please contact:

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