

Greater cooperation across the marine industries and maritime services sector could see their value to the UK economy rise from the current £17 billion a year to £25 billion a year by 2020.

Value to the UK of Marine Industries, page 6.

#### Foreword - 04

By Council co-chairmen Richard Sadler, CEO. Lloyds Register and Mark Prisk, MP, Minister for Business & Enterprise

#### **Executive summary - 06**

Introducing our strategy for growth and its key themes.

#### The UK industry today

#### The UK's Marine Industries - 12

The industry today, including recent trends and key strengths and opportunities.

#### Marine market sectors - 20

Describing the four main sectors in the UK: Naval Leisure Commercial Offshore Renewables.

#### Our strategy for the future

#### Our delivery plan for strategic change - 28

The key themes in detail and how they will be delivered.

#### Making it happen - 36

The role of the Marine Industries Leadership Council.

**FAQs - 37** 

### **Foreword**

The UK Marine Industries have a strength and vibrancy built on a global outlook, an expertise in advanced engineering and the ability to adapt and innovate. We should all be justly proud of their positive reputation and strong heritage.

Our breadth of experience and capability means that the UK is well placed to exploit future opportunities in domestic and international markets.

To underpin this work we created the Marine Industries Leadership Council. It acts as a forum for industry and Government to join forces on common issues. This will ensure that our collective efforts are greater than the sum of our individual targets and goals.

This is the first ever integrated UK strategy for the growth of the marine industries and it establishes a foundation for sustainable long-term cooperation and growth. The vision we share is that:

By 2020 the UK marine industries will be renowned for the quality and value for money of their high technology products, systems and services globally, and for their overall and substantial contribution to the UK's economic, environmental and social well being.

The strategy identifies key themes that can:

- help the marine industries deliver against market opportunities
- enable companies to grow their market share
- and help to rebalance the UK economy.

The UK is not the only country chasing the global opportunities in the marine sector. To remain truly competitive we need not only to provide innovative market leading products but ensure that we continue to develop the skills and technology needed for the longer term.

The Government has an important role working with the sector to remove barriers to growth and help stimulate the investment needed to enhance productivity. It has already laid the foundations for this in the "Plan for Growth and Investment", "the Business Growth Fund", R&D Grant Scheme for SMEs and measures to reduce regulation, boost manufacturing and reduce Corporation Tax. The Government is also creating 50,000 apprenticeships, establishing Technology Innovation Centres and has contributed £10 million towards the creation of a Maritime Centre of Excellence within the University of Southampton.

Since we published the UK Marine Industries Strategic Framework last year, we have made real progress in integrating collaboration by industry, Government and academia.

- Trade associations, companies, academics and public bodies have provided resources, expertise and leadership to working groups which have contributed to the development of this strategy.
- The Technology Strategy Board is funding work to mature our future technology and innovation through roadmapping and shared investments.
- Scottish Enterprise has supported the development of a coherent UK brand and website for the industries in the form of the UK Marine Industries Alliance.
- UK Trade & Investment has affirmed the status of marine in its strategy "Britain Open for Business".

The strategy aims to make the most of the opportunities. It does this by building on key strengths, and taking account of global threats. We will work together over the coming decade to realise our vision.

Finally, we wish to pay tribute to Alan Johnston, the Council's recently retired industry co-chairman. His independence and vision were vital to the development of this strategy. We will build on his legacy to deliver success.

#### Council co-chairmen:



Richard Sadler, CEO, Lloyds Register

Jan Francis

Mark Prisk, MP, Minister for Business

### **Executive summary**

The Marine Industries Leadership Council has aligned Government, companies and trade associations to enable the effective dialogue that is essential for a successful strategy for growth. Now the Council will lead the process to deliver that strategy.

Export opportunities are key to success. These range from the requirements for naval platforms, systems and advice to the leisure marine sector opportunities of the growing middle classes in Brazil, Russia, India, China and other countries.

The domestic offshore renewable energy industry is also poised for huge expansion, and the UK has an early mover and geographic advantage. Together, the offshore wind, wave & tidal sectors could generate over 80,000 jobs by 2020.

The UK has a number of strengths in a range of marine and maritime sectors, including those associated with shipping, ports and financial and business services (represented by Maritime UK).

#### The value of marine industries to the UK

The 'marine industries' manufacture and provide support services in the Leisure, Naval, Commercial, Offshore Renewable Energy and other smaller sectors. They:

- Include over **5,000 companies** across the UK, not just on our coasts (see map)
- Employ nearly 90,000 people,
- · Generate over £10bn turnover, and
- Contribute nearly £3.5bn Gross Value Added to the nation's GDP.

These marine industries, led by the UK Marine Industries Alliance, together with the maritime services sector led by Maritime UK (shipping, ports and business services) directly contribute Gross Value Added (GVA) pa of over £17bn.

Cooperation could produce 4% Compound Annual Growth Rate (CAGR), leading to a GVA around £25bn by 2020.

#### Each of the main sectors offers growth opportunities:

**Commercial** – exports to the global marine market (estimated at £3 trillion), especially with high value opportunities in Brazil and Russia.

Offshore Renewables – manufacturing in high technology areas that will secure our energy supply and reduce  $CO_2$  emissions.

**Naval** – export of high tech systems and class-leading capability.

**Leisure** – the rapid growth of middle classes in other countries, where the UK's reputation for quality can be appreciated.



#### Working together is key

Achieving success requires positive action, and the diverse marine industries will need to work together to take full advantage of the opportunities.

This strategy has been formed to identify areas of commonality and show how to exploit opportunities that exist across some of the sectors.

The figure on page 8 shows the organisations that are collaborating under the Council, along with others that may align their interests if the strategy is shown to succeed.

A more coherent joined up partnership approach between Government and industry offers an opportunity to deliver:

- **1**. Export growth, broader business and jobs growth and a stronger industrial supply network.
- **2**. A coherent voice and discussion forum for marine industries issues.
- **3.** Long-term stability for investors, and a framework to compare future investment decisions in business support, R&D, etc.
- **4**. Increased confidence for important industrial sectors, and related stakeholders.

#### The benefits for Government

- Increased employment and stronger businesses;
   SME growth; advances in innovation and technology;
   better learning and skills development for graduates and apprentices; and an effective contribution to exports aligned to UK Trade & Investment's "Open for Business" strategy.
- Improved efficiency of the development and implementation of regulations for ship design and operation.

- Energy security, diversity of supply and CO<sub>2</sub> reductions.
- Continued naval construction, systems and maintenance capability and a more able naval supply chain and research base.
- Enhanced communication with marine industries to deliver productive, clean and safe seas, and better coordination with industry on marine spatial planning.
- Improved relationships with business on planning for inland waterways and coastal infrastructure.

#### The benefits for industry

- This joint strategy will deliver the best opportunity in a generation to optimise the relationship between industry and Government. It will create a coherent partnership with Government across all sectors of the marine industries.
- Companies will gain greater visibility in Government circles, helping to clarify the case for public and private investment. Direct advantages will include better informed regulation, more appropriate skills development and a stronger, more cohesive image for the industries.
- The consistent story and long-term vision of the strategy will provide the confidence existing and potential employees need to choose marine as a long-term career.

# Executive summary continued

# UK Marine Industries Alliance, led by the Council.

Marine Industries trade associations, public bodies, regional networks and other stakeholders.

#### The strategic change delivery plan

To take advantage of these opportunities, the Council will take strategic action around six themes:

- 1. Development of a unified voice and supporting image for the Marine Industries with Maritime UK (underpinned by common statistics and data).
- **2**. Delivery of the Marine Industries export trade contribution to sustainable UK growth.
- **3.** Identification of the priorities for marine technology and innovation investments by Government and industry, building on the roadmap.
- **4.** Development of a skills roadmap focused on delivering long-term skills which will be required by industry.
- **5**. Exploitation of the potential for offshore renewables based industries, and share knowledge on opportunities.
- **6**. Identification of risks and opportunities from existing and emerging regulations.

Future development will include a supply chain theme, aimed at improving viability and delivery by the supply chain and ensuring continuity of supply and opportunities for SMEs.

#### **Measuring our success**

By working collaboratively to deliver against each of these themes, the Council aims to achieve:

- An increase of at least 4% Compound Annual Growth Rate (CAGR) in Revenue and Gross Value (GVA).
- An increase in labour productivity of at least 1% per annum.
- Reduced costs or improved quality reported annually as arising from collaborative activities (R&D, overseas marketing, training, etc).
- At least 50% of senior clients, Cabinet and Government officials, recognising the importance of the marine industries to the UK economy, when surveyed annually.
- Evidence of partnership across the sector, between Government departments, and between industry and Government.

The Council secretariat will collate progress on these measures every two and a half years. BIS will provide the Council secretariat, and industry and BIS will provide the funds for a Strategy Manager sourced from industry.







The UK industry today

# The UK's Marine Industries

The UK marine industries include companies ranging from SMEs up to globally recognised names. Among the 5,000 companies across the UK, many serve a range of marine markets and share common technologies, skills and marine experience. Some of these companies are discussed in this strategy.

The UK industries have competitive strengths that will allow them to address some significant potential growth opportunities in coming years. This could make a major contribution towards the Government achieving its policy objectives of re-balancing the UK economy by activity and geographically.

The following pages discuss our place in the marine markets, and four principal sectors, in more depth.

#### **Global trends**

A number of trends in global demand and supply will provide substantial growth opportunities for the marine industries. These include renewable energy, global trade (driving the merchant ship market), increasing middle classes and increasing demand from coastal economies for naval platforms and equipment. The following notes set some of these trends into a wider context.

- Growth in emerging markets will lead to rising demand as well as supply of capital, talent and innovation. UK companies must target these countries. Increasing global GDP will also lead to greater commercial shipping (good for UK equipment and service providers) and growing middle classes (good for the UK leisure marine sector).
- Emerging markets have more productive workforces compared to the 'greying' workforces in developed markets. The UK will need to promote the marine industries as a long term career opportunity.

  Developing senior talent will require thoughtful longer-term investment.

- Globalisation of information, products and resource. This will require more cooperation and customer-oriented innovation. It will also offer more opportunities for the commercial shipping supply chain.
- The climate change challenge, and natural resource economics are driving up prices for manufacturing materials (including steel, rare earth metals and composite materials) and energy. For Offshore Renewables, this is creating opportunities as major utilities and Government increase their energy diversification.
- The role of Government is changing as economies emerge and mature. Increasingly, governments are supportive of industry as an enabler of positive social change, and this will create opportunities.
- Uncertainty will increase where international organisations are unable to reach agreement on issues, such as climate change. This would also tend to increase security concerns, driving increased investment in the naval sector.



#### **Technology trends**

Technology will continue to materially reshape customer awareness, choice and interactions, and offer companies ways to improve their competitive advantage. Technology trends identified by the UK's Government Office for Science point to generically important technical advances, including some which generate new marine opportunities:

- Ambient intelligence.
- Bespoke material design and metamaterials.
- · Desirable sustainability and user-centric design.
- Energy scavenging (including self-powered and low-powered devices).

- · Low-impact materials.
- · Multisensory input and sensing.
- · Organic solar cells.
- · Plastic electronics.
- · Sensor networks and speckled computing.

The marine industries should position for new opportunities provided by these trends – such as demand for renewable energy, leisure products and naval platforms. They should be ready to respond to global flows and instabilities.



#### **Global priority markets**

Renewed expansion of global trade will generate massive new global markets for maritime goods and services (including the Pacific Rim, South America, Middle East and Russia). These, and international markets where domestic expertise is not well established, are rich hunting grounds for commercial marine and naval business.

The following national markets have been rated as providing the best opportunity across the main sectors:

| Country     | Naval | Commercial | Leisure | Offshore<br>Renewables |
|-------------|-------|------------|---------|------------------------|
| South Korea | Н     | Н          | Н       | Н                      |
| Spain       | Н     | M          | Н       | Н                      |
| Brazil      | Н     | Н          | Н       | M                      |
| France      | М     | M          | Н       | Н                      |
| Canada      | Н     |            | Н       | Н                      |
| Turkey      | Н     | Н          | Н       |                        |
| USA         | Н     |            | Н       | Н                      |
| Australia   | Н     |            | Н       | M                      |
| China       |       | Н          | Н       | М                      |

Many other national markets are rated highly by one or more sectors. For example, Russia and Germany are very important to the Commercial and Leisure sectors; India to the Naval sector; and Ireland to the Renewables and Leisure sectors.

This list of priority countries recognises the importance of future economic wealth in Brazil, Russia, India and China ('BRIC' – the four fastest growing economies with large potential middle classes) and the 'Next 11' countries. Eurozone and English speaking countries remain important as more mature and accessible markets.





#### **Connecting with the customers**

As well as national markets, almost every marine product or service requires a global distribution network to increase market awareness and to physically take the product to consumers.

Although it cannot replace direct contact between seller and customer, a network allows the seller to build contacts and understand customer needs, and supports an ongoing local presence. Reputable distributors are essential to introduce the product to retailers, reviewers, other influencers, and key customers – who include the world's largest shipbuilders, boatbuilders and (in the case of offshore renewable energy) major utility providers.

These distribution networks often bring large numbers of buyers and sellers together at marine trade shows, making them essential hubs for conducting business. Well-established examples include METS, IBEX, Euronaval, NAVDEX, INMEX, CIMPS, Nor-shipping, Kormarine, APM and SMM.

The UK hosts some large retail and trade shows, at which UK Trade & Investment supports networking events for buyers and sellers:

- Seawork commercial boatbuilders exhibition and conference.
- · London and Southampton Boat Shows.
- · All Energy conference and exhibition, Aberdeen.
- RenewableUK annual "Offshore Wind" and "Wave & Tidal" conferences and exhibitions.
- DSEi defence and security exhibition and conference.

In a recent move, the UK now also hosts the annual European marine research project brokerage conference, supported by the European Commission and the UK Government.

Many UK companies and trade associations are represented at trade shows, and there may be major commercial advantage to a significant and coordinated UK national presence.





#### **UK strengths and opportunities**

Our marine industries benefit enormously from competitive strengths that have been built over many years:

- A world leading research, development and academic base.
- A large volume of technical knowledge and skills (including marine engineering, naval architecture, shipbuilding and complex systems integration).
- A very strong international reputation for quality (especially in naval platforms and equipment, marine leisure, and emerging marine renewables offerings).

This provides access to a wide range of opportunities.

A significant UK and global opportunity is opening for offshore renewables, stemming from the UK Government's leadership in licensing offshore wind, wave and tidal energy generation, academia's research leadership, and entrepreneurial activity.

In the marine leisure sector, the growth of new middle classes in rapidly developing countries creates new export markets, and increases the UK market share.

Future UK and international regulations (e.g. safety enhancements, emissions reduction and electricity market reform) can be seen by most as opportunities, rather than threats – so long as they are anticipated and prepared for in good time. This is a significant strand, which is being pursued as part of this strategy. UK reductions in "red tape" may also provide opportunities.



# The UK's Marine Industries

### UK supply chain innovation to support UK Government

Following competition, the Environment Agency has awarded a 15-year contract for marine services to a UK operator (Briggs Marine Contractors). Briggs Marine won this work with a UK supply chain. Amgram Ltd of Shoreham designed this innovative workboat to act as the Rye pilot boat and to be used for survey, surveillance, pushing, towing, as a rescue launch and as a multi-purpose workboat. Goodchild Marine Services in Norfolk built the vessel on behalf of Lochin Marine International Ltd.



#### **Government support**

The Technology Strategy Board is supporting 2 partnerships: between A&P Group and Ocean Power Technologies and between A&P Group and Offshore Wave Energy Ltd, both to develop wave energy technology. The three companies will develop wave energy device prototypes, based at A&P Group's shipyard in Falmouth. Cornwall.



#### **Award winners**

Halyard Marine Ltd won The Queen's Award for Enterprise for Innovation in 2006 and for Continuous Innovation in 2010. The award reflects Halyard's continuous innovation with design and development of silencing for larger marine engines and generators. These include the world's lowest cost exhaust water separators, and a patented water-cooled Helmholtz resonator silencer designed with the University of Southampton.



#### Skills development

A new accelerated Modern Apprentice training scheme has been designed by Babcock Marine and Carnegie College in conjunction with the sector skills council SEMTA, and the awarding body EAL (EMTA Awards Ltd). The scheme uses point-based progress and monitoring so that candidates with previous work experience are rewarded for achieving the required skills at a faster rate than the traditional model. City College Plymouth and Babcock have a long history of working together, especially in apprenticeships, engineering and higher education. The successful working relationship between them shows how training providers and employers can work together to achieve mutually beneficial results. Their investment in skills enhances retention and recruitment.



The four main market sectors are described in the next few pages. Other smaller sectors, such as Maritime Consulting, Maritime security and Marine Science and Technology (MST), also have a place in the market.

For example, the direct UK MST market size is around £650m per annum. UK MST businesses support renewable energy, offshore oil & gas, environmental monitoring and climate change research. They generate important export business for the UK, with Asia-Pacific considered the most promising area of growth for exports. The recession has had minimal effect, and the business outlook is positive.



#### **Naval sector**

While the Royal Navy is the principal end customer for this sector, supported by the Ministry of Defence (MoD), UK companies also look to the export market for growth opportunities, based on the strong foundation of domestic success.

Where the UK's own military capability is not put at risk, equipment and services are also offered to other navies, with great success. Export expansion is a priority for the naval sector with support from UK Trade & Investment Defence & Security Organisation and the MoD. Key initiatives include the Global Combat Ship export drive and the 'Exportable naval technologies' innovation theme.

UK NEST provides a forum for common developments, such as developing the next generation of engineers.



UK-based companies include:

- Babcock Marine
- BAE Systems Maritime
- BMT
- Converteam
- · James Fisher Defence
- QinetiQ
- · Rolls-Royce
- SEA
- SELEX
- Thales
- Ultra Electronics

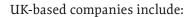




#### Leisure sector

The leisure marine sector is comprised mostly of SMEs – the nine largest companies representing 25% of the market. The UK leads the world in quality powerboat production, and produces a range of high value sailing yachts. The UK's growing superyacht industry, with a turnover of around £420m a year and over 3,600 employees, is globally recognised and a significant-sector.

The leisure sector mixes service and manufacturing, from surveyors and charterers to specialist equipment manufacturers and three world leading marine leisure clothing brands. Many leading international yacht designers are based in the UK.



- Avon Inflatables
- · CJR Propulsion
- Fairline
- · Halyard Marine
- Northshore/Southerly Yachts
- Oyster
- Pendennis
- Princess
- Raymarine
- Sealine
- Sunseeker
- Williams Performance Tenders





#### **Commercial sector**

Part of the strength of the UK derives from its legacy position in merchant shipbuilding; UK companies retain strong intellectual capabilities and physical infrastructure. The expertise and facilities are now being used for new markets such as offshore renewable energy, and being adapted to new client needs.

Marine systems and equipment form a major element of the UK's exports. While the naval equipment sector is important, the global merchant shipping industry provides a massive market for commercial systems and equipment.





UK-based companies include:

- · A&P Group
- Alicat
- Babcock Marine
- · Cammell Laird
- Chemring Marine
- Hamworthy
- Kelvin Hughes
- · Lloyds Register
- · Rolls-Royce
- SELEX
- · South Boats

#### Offshore renewables sector

Demand for secure, sustainable low carbon energy sources is providing a new market in offshore renewable energy. The primary customers are electricity providers such as Scottish and Southern Energy and Scottish Power Renewables. The UK leads the world in licensing offshore wind energy sites, and developing wave and tidal energy devices. It is home to world class testing centres such as EMEC, NAREC and Qinetiq. Important opportunities lie in optimisation for manufacture and installation, and in through-life operation of offshore energy farms.

The Carbon Trust foresees that "Marine energy could be a major 'made in Britain' success. By cementing our early mover advantage, the UK could develop a significant export market, generate thousands of jobs and meet our own demand for clean, home-grown electricity". The UK must "turn our competitive advantage in constructing and operating marine technology into sustained green growth".

#### UK-based companies include:

- Aquamarine Power
- BiFab
- · GL Garrad Hassan
- Marine Current Turbines
- · Pelamis Wave Power
- · Royal Haskoning
- Tidal Generation Limited (owned by Rolls-Royce)
- Xodus







# Our strategy for the future



# Strategic change delivery plan

The delivery plan identifies six themes (described below) for implementing the strategy. The Marine Industries Leadership Council will oversee the delivery of the themes. These cut across all of the sectors, integrating actions and enabling coordinated assessment of progress. They will be delivered by the Working Groups, against objectives and the measures of success defined in this section.

Each Working Group is resourced by volunteers, taking coordinated actions to deliver the objectives. Working Group chairs coordinate their action by participation in other relevant groups, and through the Council.

Much of the growth anticipated by the strategy will take place within the marine supply chains, including a multitude of smaller businesses, and extending into the wider advanced engineering sector. The UK's regional marine and maritime clusters will help to achieve this leverage, maximising the economic impact of the strategy at a local level. These clusters are located in regions of recognised marine and maritime strength, and have a detailed knowledge of facilities, institutions, public bodies and companies. They will also engage Local Enterprise Partnerships and the Devolved Administrations in the implementation of the strategy, and support collaborative relationships with leading overseas clusters.

Further details, including objectives for each theme can be found in the Annex to this document which can be downloaded at www.ukmarinealliance.com

#### Theme 1.

Development of a unified voice and supporting image for the Marine Industries with Maritime UK (underpinned by common statistics and data).

A clear voice and image can raise the profile of the marine industries and make them more widely understood. By working with the maritime services sector, through Maritime UK, we can more clearly communicate the large scale and potential of the UK marine and maritime industries. This should encourage public and private investors to engage in the sector and make access to finance easier.

A unified and widely understood UK proposition will also enhance the marine industries' presence in the global market – opening up new opportunities.

We will use the unified UK Marine Industries Alliance brand, which the group has already developed with public sector support from Scottish Enterprise.

#### Measures of success:

- Regular use of UK Marine Industries Alliance brand by at least 50 trade association members and Government departments within the first year.
- Delivery of a unified set of 'Marine' and 'Maritime' statistics using an agreed methodology.
- Government use of the Marine Industries Leadership Council as a principal route to communicate with the UK marine industries.
- Joint messages delivered annually by Council and Maritime UK.
- Cabinet Ministers promoting the UK marine industries domestically and internationally.



Global excellence and innovation

#### Theme 2.

## Deliver the Marine Industries export trade contribution to sustainable UK growth.

After establishing a broadly positive image, industry growth depends on making sure that customers around the globe understand the UK's product and service offerings – and that the UK industry understands what those customers need and desire. We will take "a proactive approach to bringing opportunities home", and to focus on the "markets that provide the best opportunities for growth". Industry and UK Trade & Investment will work through the new UKTI strategy to deliver both increased exports and additional inward investment.

This theme is directly supportive of the "Trade and Investment for Growth" White Paper and "The Plan for Growth", which set out the Government's clear ambitions for trade and investment – "we need to increase exports, especially to the high growth and emerging markets of the new global marketplace. Succeeding in international markets is central to our aim of rebuilding the economy at home in a balanced and sustainable way".

Most of the themes depend on achieving actual growth, and exports are a vital source for this. In particular, findings under this theme will inform the maturing Technology & Innovation roadmap. The theme will be supported by the Image Change Plan and branding work. Resources are provided by interested parties, which contribute time and initiative to make the various sub groups deliver their desired outcomes. UKTI provides financial support for trade show participation each year.



- Cohesive and well-coordinated UK presence in promotion to overseas markets, using the UK Marine Industries Alliance brand.
- Minister announces "Another huge increase in marine exports this year" measured jointly by Government and Trade Associations.
- An annual strategy endorsed by UK Trade & Investment outlining the export priorities for Marine.

#### Theme 3.

#### Identify the priorities for marine technology and innovation investments by Government and industry, building on the roadmap.

Developing the Technology and Innovation roadmap has led to analysis and consensus building that will contribute to growth. It combines industry, academic and Government perspectives and will stimulate momentum for investment.

Decisions on investment will be simplified by the existence of the roadmap. The Technology & Innovation Group (TIG) aims to make it easier for the UK marine industries to participate in identifying innovation and technology needs.

With Technology Strategy Board support, the TIG will establish a number of themed workshops. These will help the industry understand how they can develop research projects that will identify the most important global market opportunities. They will then be able to develop technology and innovation that will be relevant to the most profitable products and services.



Coordination across Government research funding bodies (e.g. Carbon Trust, Technology Strategy Board, Research Councils, Department for Transport and Ministry of Defence) will enable more research to be undertaken for the same budget. European Research planning may also be positively influenced by the roadmap, providing further opportunities for investment and UK leadership on EU research projects. On completion, the results of the roadmap and the workshops will be available to help promote UK marine industries' innovation and technology.

The strands for development cover the lifecycle and major systems – hull, machinery, systems, materials, environment and fundamental research.

- Achievement of at least 80% of annual goals in the technology roadmap.
- Industry, government and academia recognise the long term benefits of investing in marine technology and innovation, and by 2016 have had the confidence to invest £10m.
- Independent assessment shows world-class levels of innovation in products and services by 2020.

#### Theme 4.

#### Development of a skills roadmap focused on delivering the long-term skills which will be required by industry.

When companies win new work, they need enough quality staff available to deliver it. So growth will only be possible with effective and timely delivery of skills.

The Skills roadmap will provide an accurate resourcing plan, identifying the real skills required by industry, and focusing academics on what the industry needs (e.g. production efficiency or leadership). It will ensure that the future leaders of industry are optimally educated to minimise future risk. It will also make it possible to introduce mechanisms to measure the effectiveness of learning.

This theme will incorporate market intelligence from the international trade and export theme, and match priorities with the Technology & Innovation roadmap. It will support Government policy for manufacturing skills development, and employment goals.

- Achievement of at least 80% of annual goals in the skills roadmap.
- Increase employer engagement by 10% year on year.
- A positive Return on Investment for all employers who fully engage with the Business to Skills process.
- Increase the number of apprentices entering the sector by 5% year on year.



#### Theme 5.

# Exploit the potential for offshore renewables based industries, and share knowledge on opportunities.

One of the key emerging sectors in the UK is the offshore renewable industry including wind and wave energy. The UK marine industries – including the yards, suppliers and commercial boat builders – are ideally placed to provide the infrastructure and the supply-chain required for this sector.

With major announcements by key energy organisations, the UK is poised to be the powerhouse of offshore wind, wave and tidal manufacturing. The UK marine industry with its vast knowledge of platforms, design capabilities and boat building will be a key component in supporting delivery of both offshore wind and marine energy devices.

Our aim is to establish a clear understanding of the offshore renewable sector's supply chain needs, and the areas in which these offer higher value. This will clarify priorities to maximise return on Government and industry investments and identify where potential policy and industry actions are required.

This will determine what is needed to maintain and enhance the UK's lead in this area and open opportunities across the whole marine and maritime industries. It will strengthen UK marine company balance sheets and a growing reputation for UK strength will also produce export opportunities. Perhaps most importantly, the marine industries will help the UK meet CO<sub>2</sub> reduction goals and secure energy supply.

This will form more of an industrial guide than a policy instrument, but it will help to determine where Government support is targeted. It will require cooperation to share experiences and knowledge, and to maximise opportunities in a competitive market.



- UK marine industry is identified, by the majority of stakeholders, as the home of wave/tidal energy device suppliers.
- The offshore manufacturing hubs, and the marine support requirements, identified and published to the UK boat building and equipment companies.

#### Theme 6.

### Identification of risks and opportunities from existing and emerging regulations.

A clear understanding of future regulations will enable growth by stimulating innovation or mitigating the impacts through advice to regulators.

Where emerging regulations are identified as posing a problem, solutions will be sought from the Technology & Innovation Group. Anticipated future regulations will be built into the Technology roadmap. The Red Tape Challenge will allow the Sustainability, Environmental & Regulatory Group to put forward suggestions to Government for reducing the regulatory burden on marine companies. Building an overview of UK marine policies will develop further linkages.

More generally, the UK has a vision for clean, healthy, productive and biologically diverse oceans and seas. This includes having safe, profitable and efficient marine businesses, acting in ways which respect environmental limits, are socially responsible, and are rewarded in the market place. In taking forward this strategy, we should consider how UK industry can benefit from opportunities for 'green growth' in the future. Strengthening links with UK marine science, via the industry liaison group of the Marine Science Coordination Committee, will be one means of helping to achieve this.

- The process for reviewing regulations is agreed and supported by the Department for Business, Innovation & Skills, Department for Transport, Defra, Marine Management Organisation, Maritime & Coastguard Agency, Department of Energy & Climate Change and the trade associations representing the participating industries, is established.
- Regulatory changes are reported to the Council.



#### **Future development theme**

## The Council will also develop a theme to improve the Marine supply chain.

A viable and outward looking supply chain is essential and provides a wide and diverse range of goods and services. It is a primary source of innovation and employment that is geographically and technically diverse. Much like the automotive industry the supply chain of small and medium enterprises (SMEs) for the marine sector is a multiplier in terms of employment and growth. It employs several times those directly employed by the major companies who deliver the medium to large capital projects.

The supply chain is extremely diverse ranging from the artisan small boat builder, through bespoke, complex and technically challenging equipment manufacturers, to large capital projects such as ports, ships and offshore installations for wave, wind and tidal power. It also includes the intellectual capital embodied in design, classification and regulation.

The base is so wide and extensive it has proved difficult to articulate its importance in terms of shape, size and contribution to GDP and exports. This needs to be more clearly communicated to local and national policy makers and to the public at large in order to provide growth opportunities. The lack of a coherent voice severely limits the ability of the sector to influence maritime policy such as legislation, competition policy, and regulation, and to attract funding at the European and national levels.

With this background the Council will form a working group to work with trade associations and key suppliers to input on how growth opportunities can be improved.



#### Making it happen

The Marine Industries Leadership Council is responsible for overseeing delivery against the strategic themes. It exists to:

- Develop strategies which will lead to creating or sustaining world-class marine industries through leading-edge innovation and improved productivity and competitiveness;
- Facilitate discussion of issues affecting the well-being of the shipbuilding, boat-building and related marine engineering and supply chain;
- Enable stakeholders to make an input to the development of Government policy towards the sector.

The Council's aim is to represent the whole marine industries, through consultation and communication, as well as by encouraging companies to take part in working groups and to adopt the UK Marine Industries Alliance brand.

The Council is chaired jointly by the Minister for Business & Enterprise and a leading industry representative. The industry Co-Chair is nominated by members and shall hold office for two years, with an option to extend for a further two years. The Council considers that the Co-Chair should be a leading person from one of the constituent industries; he or she should command the respect of all members and commit sufficient time to play an active role in leading, managing and monitoring any activities agreed to be undertaken.

The Council delivers through its secretariat (provided by BIS), its Strategy Manager (provided by industry) and its Working Groups. These mechanisms are described in the Annex.

Both Government and industry are committed to working together to deliver success. The Council calls on all stakeholders to take an active part in growing the UK's marine industries.



#### **FAOs**

#### What are the UK marine industries?

UK vessels, marine systems and equipment, skills and expertise are recognised throughout the world. The UK marine industries are diverse, providing a wide range of capabilities in key market sectors, including leisure, naval, commercial and offshore renewable energy. They produce for, and provide supporting services in, the markets shown below.

All UK companies, trade associations and public sector agencies operating in the sector are offered free membership of the UK Marine Industries Alliance, and use of its brand identity. For the first time, this Alliance will bring together all aspects of this diverse, vibrant and growing sector with a common declared goal of working together to secure the maximum opportunity for the industry to flourish.

| Directly in scope ( the 'Marine Industries')  |  |  |  |  |
|---|--|--|--|--|
| Products  | Services   |  |  |  |
| Ships & boats (incl submarines, yachts, superyachts, RIBs, PWC, unmanned); Marine renewable devices (wind, wave, current); Equipment and accessories (navigation, communication, engine, propulsion, safety & chandlery, naval, HVAC/hotel & waste); Marinas; Maritime Security and Marine Science equipment. | Research, develop, innovate, design, build, equip, install, test, assess, regulate, maintain, refit, convert, repair, recycle, consult, integrate, sell – and education/training for all the above; yacht charter and operation. |  |  |  |
| Indirectly connected (the wider Marine Industries)  |  |  |  |  |
| Shipping operation & charter; Ports & terminals; Business services (Insurance, finance, law, marine planning, etc); Offshore & coastal infrastructure and services; Abstraction (aggregates, fisheries, aqualculture, etc).   |  |  |  |  |

Who produced this strategy and what is it? The Marine Industries Leadership Council produced this strategy on behalf of the whole Alliance. Following extensive consultations with a wide range of stakeholders, it sets out joint activities to support economic growth and development of the companies that make up the industry. The strategy addresses agreed key issues and opportunities facing the sector. It helps to ensure that industry and Government, working together, put in place a series of appropriate measures to achieve the shared goal of making the UK marine industries amongst the strongest and fastest growing in the world.

#### Do the marine industries matter?

The marine industries are important to the UK, employing nearly 90,000 people. The UK is the fourth largest shipbuilder in Europe in terms of Gross Value Added (GVA), and the third largest in boat-building. It leads the world in offshore renewable power development. The marine industries also have real opportunities for growth; for example, in naval and leisure export markets, and in offshore renewables. This strategy highlights the importance of collaboration - and of thinking and acting like a globally-competitive and world-class industry - if we are to make the most of these business opportunities.

#### **FAQs** continued

#### What are the issues?

The inherent strengths of the UK marine industries have been dissipated by:

- Lack of a united approach amongst the industry and Government departments.
- Skills availability (including management and leadership).
- Relatively low historic levels of investment and access to finance.
- Strong and growing international competition.

#### What will be achieved?

#### The Council's vision is that:

By 2020 the UK marine industries will be renowned for the quality and value for money of their high technology products, systems, and services globally and for their overall and substantial contribution to the UK's economic, environmental and social well-being.

In pursuit of this ambitious goal, the industries are taking accountability for a plan covering:

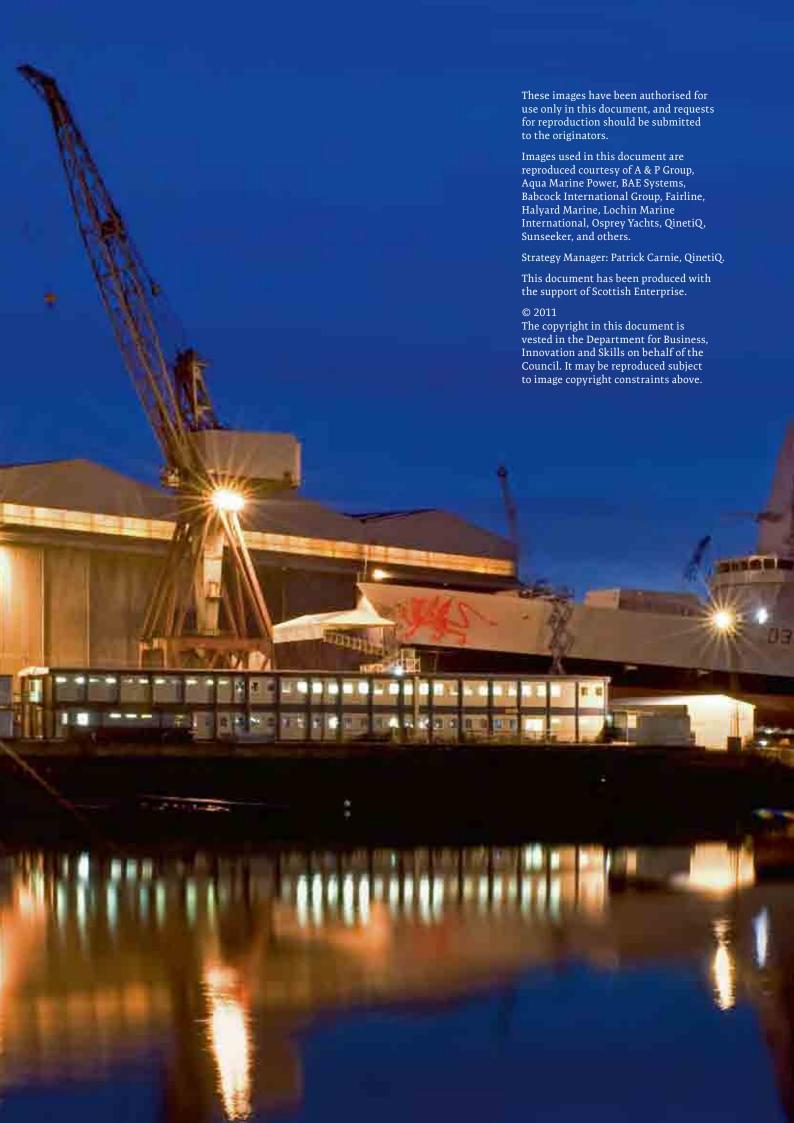
- Creation of a unified voice for the marine industries.
- The industries' contribution to sustainable UK economic growth through enhanced trade and exports.
- Technology and innovation investments.
- Development of a coherent skills roadmap.
- Development of a strong UK offshore renewables sector.
- Identification of risks and opportunities from future regulations.
- Improvement of the supply chain.

The Council will monitor progress and adapt the strategy as required for success.

#### What about shipping, oil & gas

There are strong connections between the marine industries as suppliers, and customers in the shipping and energy sectors. Personnel often move between these sectors, with the sea as the common theme. Many trade associations representing these sectors are tracking development of this strategy, with a view to becoming involved. In particular, the maritime service sector, led by Maritime UK, is developing its relationship with the marine industries. The Council sees greater integration with these sectors as advantageous, and is taking initial steps towards this.

To find out more, register as a user of the Alliance brand, or get involved, go to www.ukmarinealliance.com







This strategy has been developed and published by the Marine Industries Leadership Council, thanks to the generous financial support of the following organisations.

A&P Group Ltd.

Babcock Marine

**BAE Systems** 

BMT Group

British Marine Federation

Cammell Laird

Chemring Marine

Department for Business,

Innovation and Skills

Fairline Boats

Kelvin Hughes

Lloyds Register

QinetiQ

RenewableUK

Rolls-Royce Marine

Scottish Enterprise

Shipbuilders & Shiprepairers

Association

Society of Maritime Industries

Thales Naval UK

UK NEST

These and many other companies, Government departments, universities and stakeholders have also contributed to the development of the strategic ideas, and continue to work for the benefit of each other.