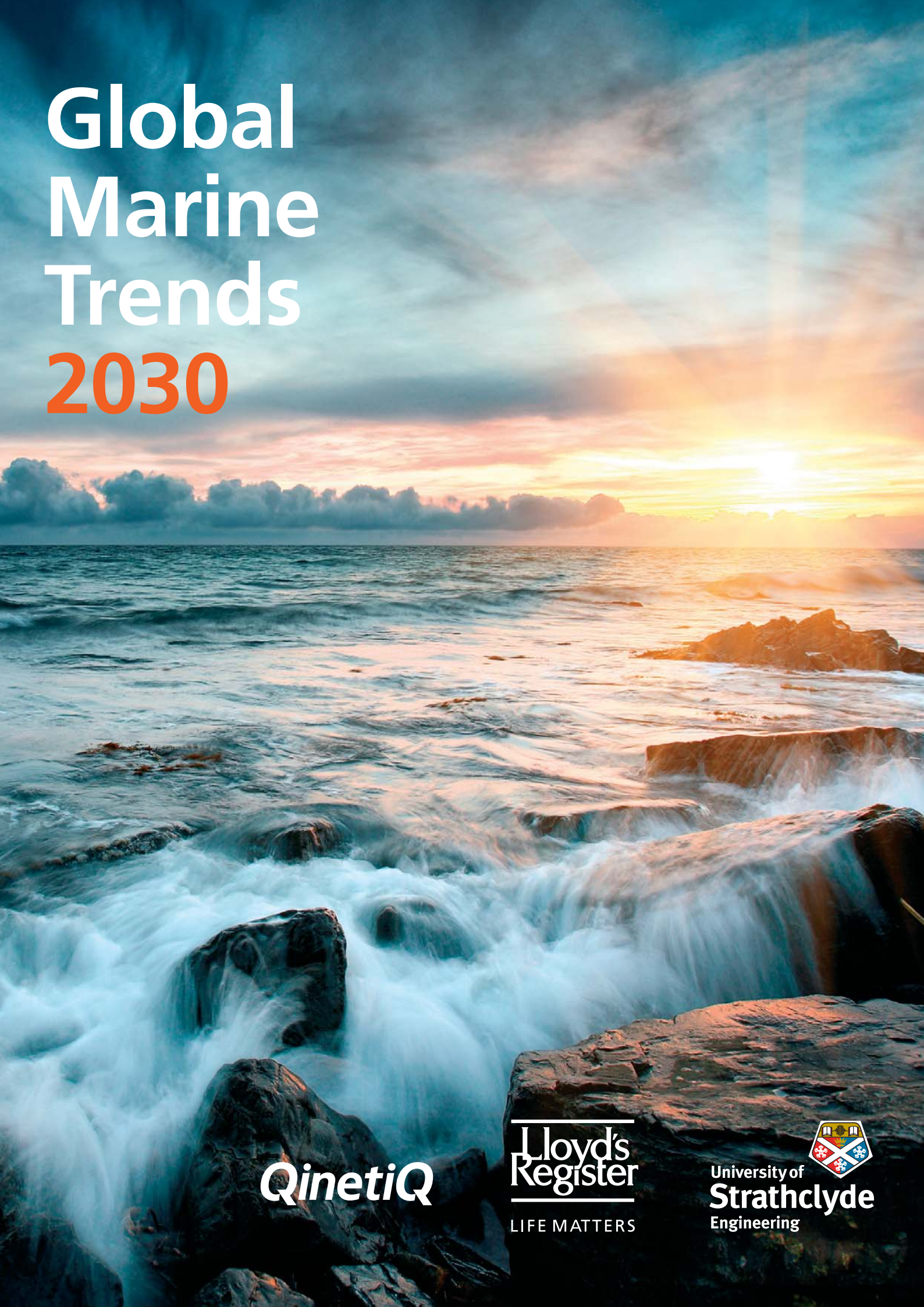
Global Marine Trends 2030



QinetiQ

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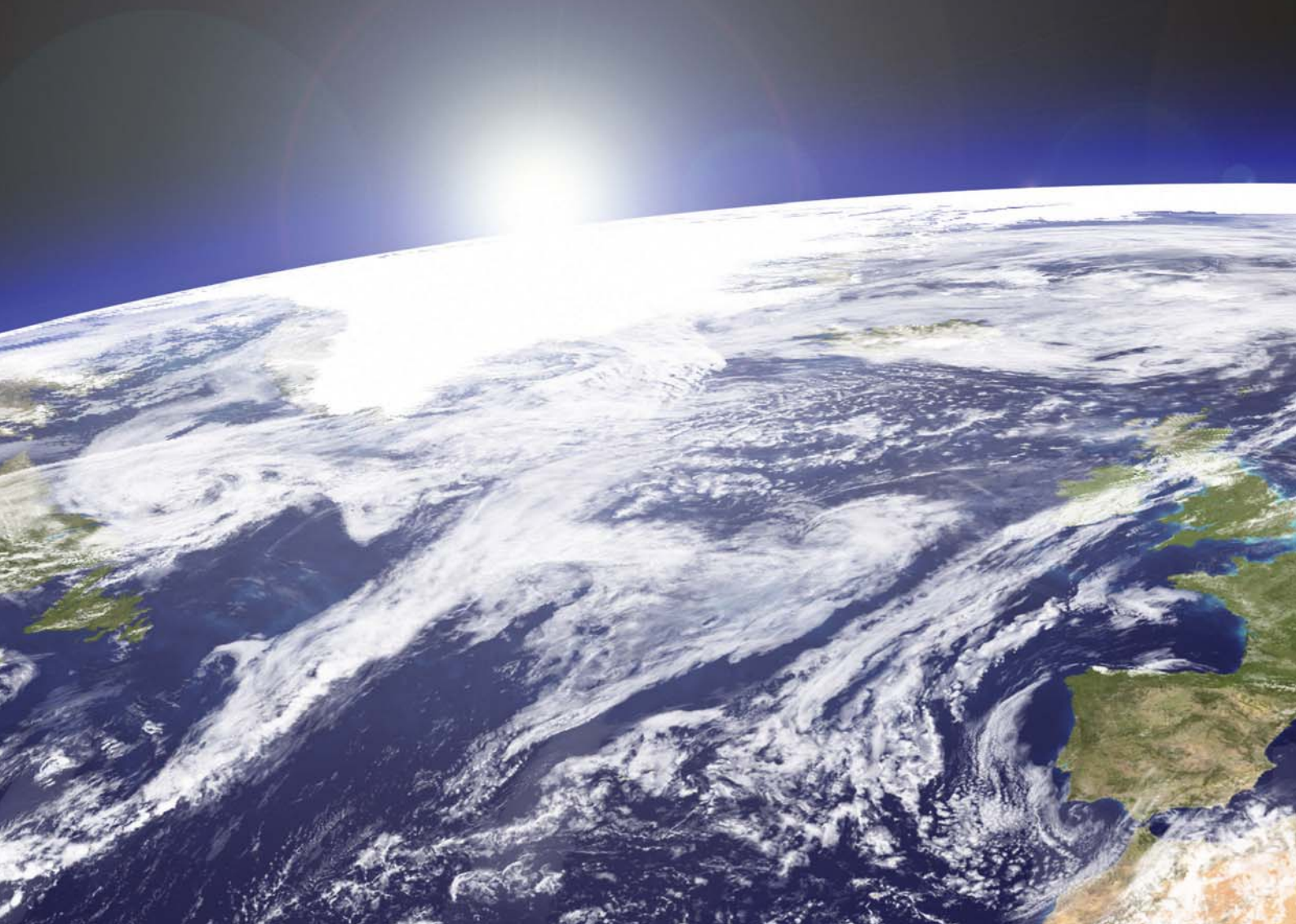
A Positive Marine World in 2030

“Optimism is a strategy for making a better future. Because unless you believe that the future can be better, you are unlikely to step up and take responsibility for making it so.”
Noam Chomsky

In 2030, we could be living in a world where China owns a quarter of the merchant fleet, almost half of offshore oil is extracted from the deepest waters, there are 100 times as many offshore wind platforms, the size of the tanker fleet is expanding slower than all other major ship types and the number of containerships with capacities that exceed 7,600 teu is growing three times faster than those below that threshold.

Despite the volatile nature of commercial shipping, 2030 could well usher in an era during which the prevailing trends and themes are opportunity and growth.

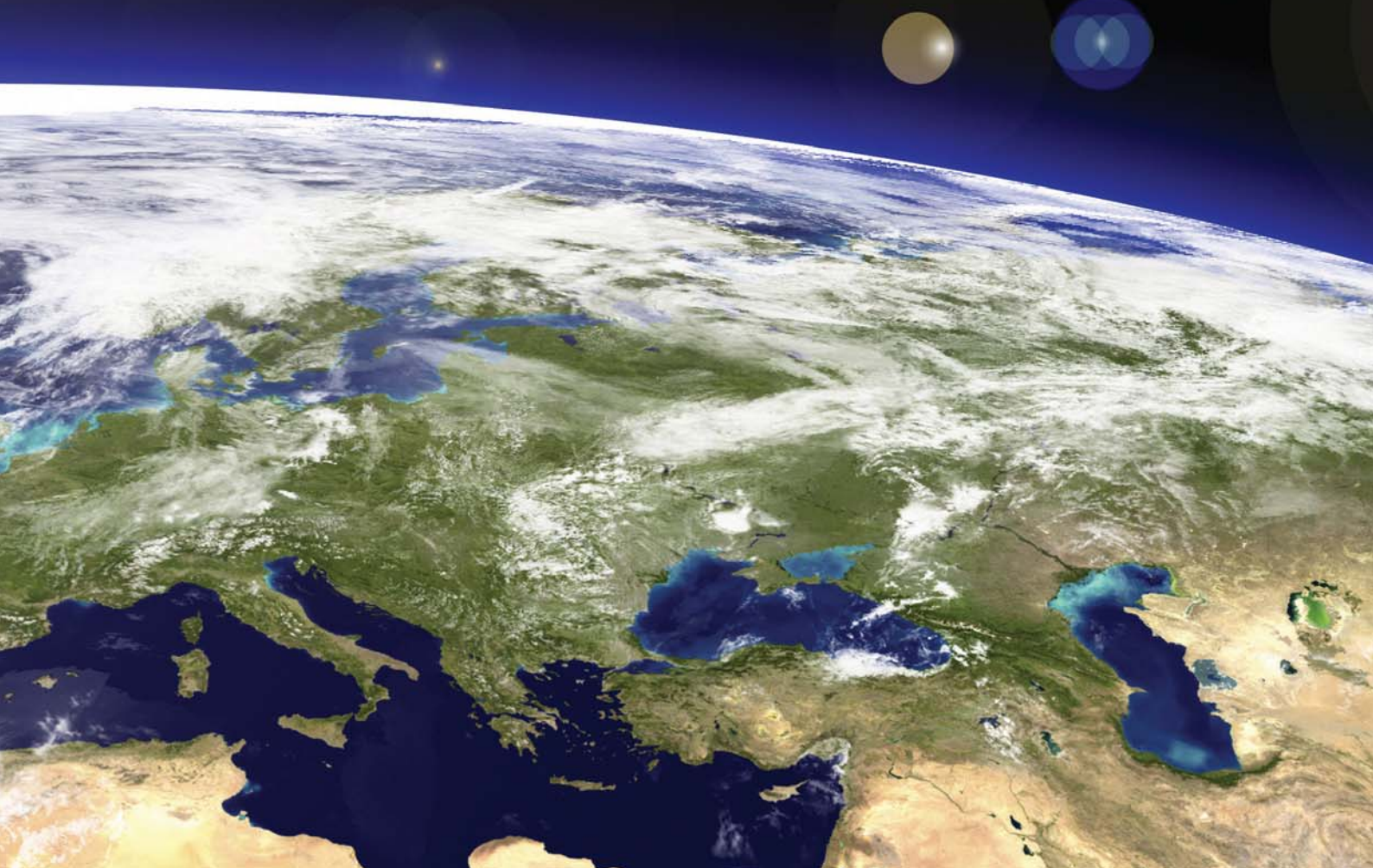


Those are some of the findings of Global Marine Trends 2030, a comprehensive new report issued today in London and Singapore by the team of QinetiQ, Lloyd's Register and Strathclyde University.

Our industries may still be prone to commercial and political cycles where unexpected shocks can destroy profits, disrupt supply chains and upend business models. But the report offers a positive vision of 2030 for the marine industries, with real opportunities for business, investors, employees and stakeholders.

Our work leads us to believe that we can expect growth in all three of sectors we examined – commercial shipping, naval sector and offshore energy. This will mean more demand for shipping, shipbuilding, marine equipment manufacture, and related services – including the knowledge services we provide. This positive view is based on evidence and reasonable scenarios, providing a degree of confidence while acknowledging there are uncertainties. We do not seek to predict the future, but instead provide a framework for thinking about possible futures and their implications. Our thinking is exploratory rather than definitive; our discussion is descriptive rather than predictive. It is not a prediction of the world in 2030, but rather gives impressions of what 2030 could look like.

We hope that the report will help you to think about your future, and provide some reasons for cautious optimism.



Three alternative worlds in 2030

The shape of the marine world in 2030 will depend on the interactions between people, economies and natural resources. These scenarios will have different impacts on individual marine sectors. The commercial sector is influenced by all three forces, while the energy sector is influenced by economy and natural resources.

In the naval sector, we find that the primary driver is economic power. In all cases, the marine industry will see growth and play expanding and positive roles in international seaborne trade and the global economy.

We have elected to focus on three scenarios separated by degrees of global political co-operation. At any level, global or local, the interaction between people is at the heart of business and the economy.

Status quo

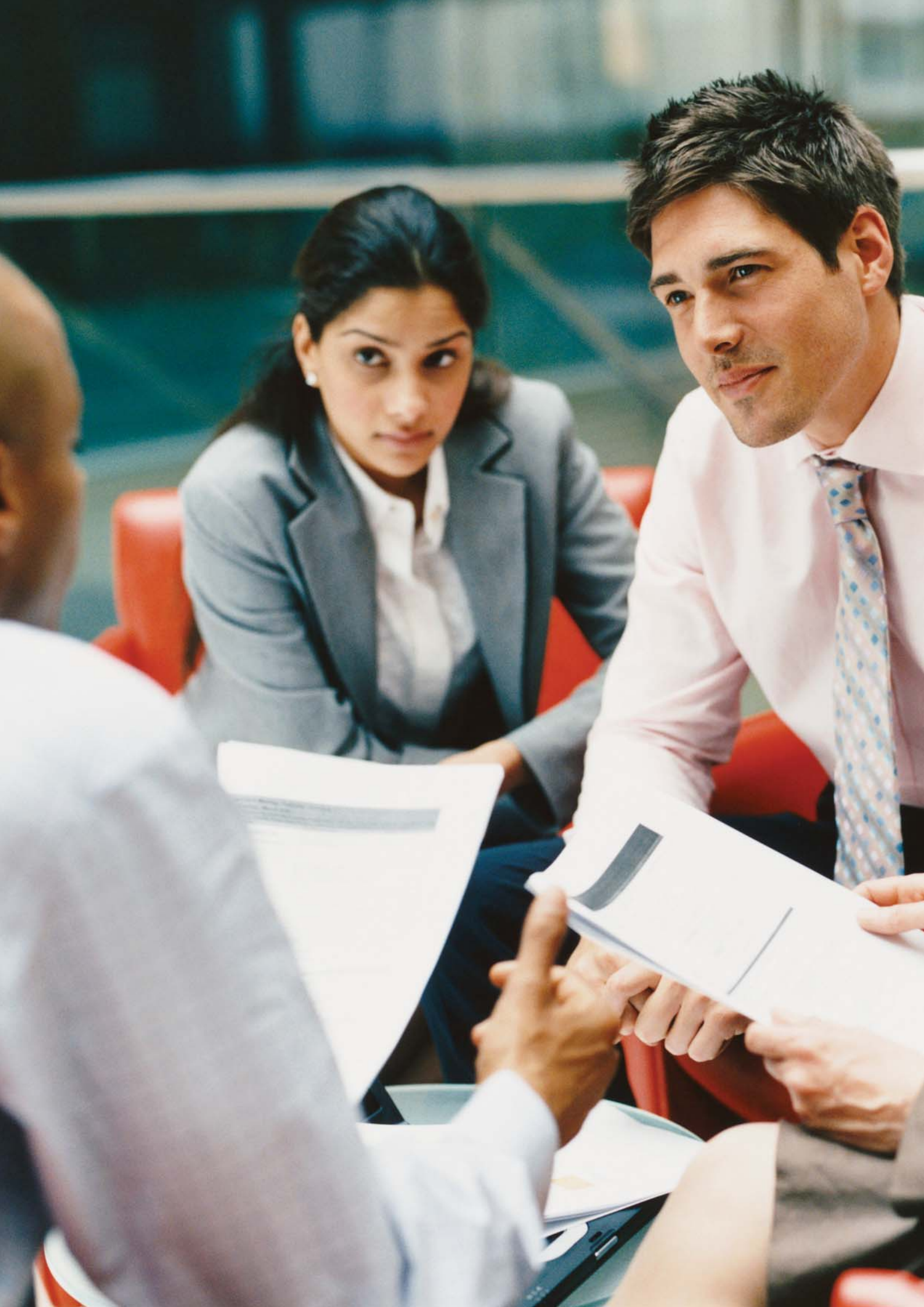
People's primary interest is biased towards social development (especially living standards and jobs); we envisage business as usual with occasional disruptions along the way. Government will strive to satisfy people's needs with short-term fixes. We expect the world to continue its current growth momentum with some booms and busts over the next 20 years.

Global commons

Primary interests of people shift to concern over resource limitation and environmental degradation; we will see a desire for a more sustainable world being developed and fairness in wealth distribution. Governments will act to forge agreement for the common good. Accelerated economic growth within a framework of sustainable development can be expected.

Competing nations

The voice of the people is not heard (or not expressed) and the state will mainly act in its national interests. There will be little effort among governments to forge agreements for sustainable development and international norms. This is a self-interest and zero-sum world. We envisage a rise in protectionism, which results in slower economic growth.



Three mega trends to 2030 and possible disruptive events

Demography

Global population is likely to be 8 billion by 2030, with 96% of growth coming from developing countries. India will overtake China with the largest population and the largest labour force in the world. Most of these people will live in cities: the largest shift towards urbanisation will take place in China, Southeast Asian countries, Bangladesh, Nigeria and Turkey. The world's urbanisation is set to grow to almost 60%. Eight of the world's 10 largest cities will be port cities. "Aging" countries face the possibility of decline in economic growth. Increased migration will spread to emerging powers.

Economy

Global GDP could grow three times within 20 years. In 2030, the largest economies, by a long way, will be China, USA and India. The countries with the largest growth in per capita GDP (an important measure of purchasing power and labour cost) will be China, Vietnam, India and Indonesia. Purchasing power in developing Asia will rise 8 times between 2010 and 2030.

Massive growth in world GDP brings enormous opportunities to the marine industry, the primary driver for which is the global supply and demand for commodities and manufactured goods. Global trade volume is affected by the health of the global economy. International trade continues to rise in line with economic expansion. Seaborne trade could more than double.

Resources

We expect to see a 40% higher energy demand in 2030. China oil consumption could triple, overtaking the USA to become the largest oil consumer. The USA will remain the biggest natural gas consumer, while China will see the largest growth in natural gas consumption. China and India will be the giants in the world's coal consumption, with around 60% of coal consumed in China. India will see the largest growth in steel consumption. China's steel consumption growth will slow, but it will remain the biggest steel consumer in 2030.

Disruptive events

Many possible events could disrupt the flow of change. Here are a few examples.

- Russia joins NATO
- The US dollar loses its reserve currency status
- Major pollution accident in the Arctic
- Rise of the Green Crescent
- Disruptive technologies
- Global collapse

Three sectors in 2030

Commercial shipping, fleet ownership and shipbuilding

The volume of seaborne trade will double from nine billion tonnes per annum to somewhere between 19 and 24bn tonnes by 2030. China will play a key role in 2030 as the emerging maritime superpower in shipping. China will see the largest growth in commercial fleet ownership, rivalling Greece and the rest of the European countries combined. China will become the world's primary maritime market, leading in seaborne trade, shipbuilding and vertically integrated ownership and ship management. The economic development of India follows closely behind China, and it is expected to become a giant driver of global trade in an order of magnitude similar to China.

The total deliveries of bulk carriers, tankers, LNG carriers and container ships across the world will remain at around 2010 levels. China and emerging countries will determine the shipbuilding market landscape in 2030. Japan and South Korea, however, will lose their market share. South Korea's market share will fall and Japan will play a rapidly declining role in shipbuilding when compared with the market leaders. The number of deliveries from the emerging countries will increase: Vietnam, Brazil, India, and Philippines could be the leaders. Brazil and India will see the largest percentage increase, while Vietnam will gain the largest volume.

Naval sector

The difference between the US Navy's power and the next most powerful navy is likely to remain colossal in 2030, both in scale and technology. Naval power will double in 2030, although navies will only maintain and refresh the numbers of platforms and personnel, rather than expanding them. This escalation in naval capability suggests that there are growth opportunities for the naval sector in systems capability rather than platforms or people. The growth of automation, sensor integration, cyber security and related technologies will help to determine the nature of naval power in 2030.

Offshore Energy

Oil and natural gas is expected to account for 60% of global demand for energy in 2030. Advances in technology, underpinned by innovation, research and development will be the keys to meeting the growing demand for energy from more diverse sources. The number of offshore platforms and renewable energy devices required to meet global demand will grow significantly. This indicates growing challenges and opportunities to produce offshore oil and gas, and offshore renewable energy. There will be tremendous growth opportunities for participants in the offshore oil and gas and renewable industries.

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