International Chamber of Shipping
Shaping the Future of Shipping

Leadership Insights

Insights from the global leadership community

Issue no: 31 | June 2024

Driving innovation

Martin Whitmarsh, Former Formula One Team Principal and current Chairman of BAR Technologies, talks technology development, sustainability and creating the right conditions for change

Racing to efficiency

Martin Whitmarsh, chairman and co-founder of BAR Technologies, has a career spanning industries including aerospace, competition sailing and he was a leader of a world championship winning Formula 1 team. He speaks to *ICS Leadership Insights* about the value of innovation and why shipping should embrace it.

Q What drives innovation at a company and industry level?

A The imperative of war drives innovation. In my aerospace career, it was war which brought my first experience of rapid innovation, modifying aircraft to suit operational limitations and accelerating the speed at which we developed technical solutions to orders of magnitude quicker than the usual pace. I found that pace thrilling.

I think warfare can take various forms and that it has been a theme in my career – competition is warfare, racing is warfare.

Aerospace development has become a long process; military aircraft projects are technically interesting, but from idea to delivery is measured in decades. When I moved to a Formula One team, you could invent something on Tuesday, make it on Wednesday and race it that weekend, giving near-instantaneous feedback on innovations.

The second world war created jet engines, turbocharging of engines, fantastic innovations in airframes. Even today in Ukraine we see people with small systems turning bits of Chinese drones into means to fight in Ukraine – disruptors innovating out of necessity.

In motor racing, there was the development of radial tires, fuel injection, variable timing, carbon brakes, ceramic brakes. Motor racing is a powerful influence on the automotive sector, and shipping is missing that innovation platform.

Q What effect does competition have on an industry, and how can it be harnessed for good in shipping?

A The dynamics of competition that exist in automotive and aerospace have made those sectors more willing to accept, adopt, and challenge themselves with new technologies. The marine sector is very conservative for reasons like safety and cost.

Competition creates situations where you have to succeed. As businesses get bigger, you can create internal competition and that's something I welcome. In aerospace, they have Skunk Works – small, slightly renegade crowds where the rules do not apply and if you are lucky enough to get in, you have the freedom to innovate.

> You need… [policy] signals to invest, so that the industry can get moving and be confident in making money with lower risk

As organisations get bigger and more multinational, the necessary process control and governance stifles innovation. Creativity needs stimulus and it needs freedom, so you have to give people power and not micro-manage them; give people accountability, responsibility and empowerment, and they will make things happen.

Without that hotbed of competition like the automotive sector has in racing, there isn't such a stimulus for shipping.

Q How do we create a better understanding of the value of efficiency?

A As a society, I think dynamic energy pricing will bring real change in the way people think about energy and efficiency. If you saw that at 04:00 you would be charged next to nothing for electricity, but at 20:00 it costs a fortune, you would change your behaviour.

We want energy and the comfort it brings, but we need to become more energy conscious in how we decide to use energy. Electric cars are a real opportunity for distributed energy storage, taking up power off-peak and selling it back during peak times while dealing with the intermittency of some green electricity production methods.

By creating the market conditions to buy energy, store energy, and trade energy, we would be incentivised to treat it efficiently.

Q How did your career experience shape your approach to bringing technology to commercial shipping?

A When we entered that maritime market, I remember saying to the team, we are not going to be the solution provider. We will instead develop analysis tools so others can assess the value of technical solutions.

We launched our Ship System Efficiency Analysis Tool (ShipSEAT) to give a thorough analysis of how various technologies and changes to a vessel will impact its performance, but we saw a lack of really good solutions to actually analyse. We identified an opportunity to get into wind propulsion, where there were only inefficient rotors at the time.

Wind power is free and harnessing it is cheap. While it's not the whole solution, we saw potential fuel consumption reductions of 30% and more. In the end, each of our WindWings® typically saves 1.5 tonnes of fuel every single day at sea.

It's not just about being virtuous in terms of carbon emissions and pollution, though. If we look ahead at future fuels, which are three to five times as expensive as HFO, the business case for wind is so much better, and you still have those environmental benefits.

We recently announced our deal with Union Maritime, the largest wind propulsion deal ever, which shows the growing level of acceptance for wind propulsion in shipping.

Q Does shipping need technology or policy in order to decarbonise?

A Policy. When I started in offshore wind in the UK, there was no government policy and we were shouting for a government target of 10 megawatts of wind power. You need those targets, those signals to invest, so that the industry can get moving and be confident in making money with lower risk. Now the UK target for offshore wind is 50 gigawatts by 2030.

What has driven change in the automotive sector is increasing pressure on taxation of carbon. If we tax the carbon emissions of every vehicle in the world, in the air, on the road, on rails, or at sea, that will drive change. Withholding approval for vessel designs unless they meet certain efficiency standards is another means to progress.

I think the imperative will come when people realise we are going to make this planet uninhabitable. That's the final conflict that will drive innovation towards a solution. If we're more intelligent, we can solve it cheaper, more easily and less painfully now than waiting for that ultimate imperative.

G7 coal phase out could support seaborne coal volumes

A G7 decision to end the use of unabated coal by 2035 will decline demand for coal imports in Europe and Japan and see import and export markets shift

The G7 group of nations, comprising Canada, France, Germany, Italy, Japan, the UK and the United States, have agreed to end the use of unabated coal power by 2035. Under the deal, nations will still be able to generate electricity from coal power plants so long as carbon capture systems are installed to mitigate greenhouse gas emissions.

Head of dry bulk freight and commodities research at MSI, Dr Plamen Natzkoff, told *ICS Leadership Insights* that the declaration is unlikely to affect the steep downward trajectory of coal in Europe, but falling Japanese demand will be felt in shipping.

"It is clear that shipping demand from coal consumers in Europe, and now Japan, will be minimal from the mid-2030s onwards. Given Japan's complete reliance on coal imports, the removal of the third largest coal importer will be a significant change for the shipping market, and especially the Capesize market," said Natzkoff.

Europe, comprising the EU and Turkey, imported 72.6m tonnes of coal in 2023, according to data provided to ICS by Clarksons on the seaborne thermal coal trade. Japan imported 113.2m tonnes, the third largest importer behind India at 186.0m tonnes and China at 313.4m tonnes.

As noted in the G7's Comminiqué, coal demand from its member nations reached lows not seen since 1900 as the countries tackle energy-related CO_2 emissions. Clarksons data showed a downward import growth trend forecast for Europe of -7% and -6% for 2024 and 2025, respectively. Turkey was alone in showing positive growth in Europe of 2% and 3% in the forecasts for 2024 and 2025, with combined EU and UK volumes expected to be -10% in 2024 and -11% in 2025.

International Energy Agency's (IEA) market report also predicts coal demand declines to 2026 by 2.3% compared to 2023 levels, but most sharply in advanced economies. The decline is expected "even in the absence of governments announcing and implementing stronger clean energy and climate policies". Rather, it is to be driven by the "major expansion" of renewable energy capacity coming online by 2026. As the report notes, more than half of the renewable energy expansion is set to happen in China, which currently accounts for more than half the world's demand for coal. If market conditions allow for the expansion, it would see a major decline in coal imports to the country. At present, however, demand for coal, and its production, in Asia is accelerating in 2023, according to the IEA. Its report predicts that through 2026, India and Southeast Asia will be the only regions where coal consumption "is poised to grow significantly".

While the G7 looks to cut coal use, global coal-fired power generation capacity rose by 1.6% to over 2.2TW in 2023, with a further 500GW of capacity under development outside of the G7, according to IEA figures.

The shutting of G7 coal plants could have unintended consequences, said Natzkoff. Firstly, the closure of North American coal-fired power plants is likely to support shipping demand as exports rise, particularly in the US. Secondly, coal volumes currently imported by the G7 will be redirected to coal users including China, India, South Korea, Turkey, and fast-growing nations in Southeast Asia.

"The net impact of redirected coal flows will depend on specific trade routes, and it is likely that we will see longer sailing distances. For example, we are likely to have less US and Colombian coal trade into Europe, but more US and Colombian trade into India, South Korea and South East Asia," said Natzkoff. The Capesize and Panamax segments are expected to benefit most.

Demand for bulk coal transport could be further spurred by the removal of price insensitive buyers in Europe and Japan, putting downward pressure on global coal prices. "This could incentivise higher coal-fired load factors to the detriment of gas-fired units in countries not covered by restrictions on coal use and in fact stimulate higher volumes of coal trade," said Natzkoff.

> we are likely to have less US and Colombian coal trade into Europe, but more US and Colombian trade into India, South Korea and South East Asia
>
> **Dr Plamen Natzkoff, MSI**

ICS in Action

A round-up of ICS news and activites over the last month

Industry leaders call on governments to recognise impact of protectionism at Summit in Montreal

The International Chamber of Shipping (ICS) and the Chamber of Marine Commerce, Canada (CMC) convened industry leaders in Montreal, Canada on Thursday 13 June to discuss the challenges and risks to global trade at the flagship Shaping the Future of Shipping Summit.

Top of the agenda were the critical issues impacting maritime sector including increased protectionism, global geopolitical conflicts, decarbonisation and future fuels, and the importance of seafarers.

Prime Minister of Canada Justin Trudeau opened the Summit with a video message stating: "I'm incredibly proud that Canada is known to be a reliable trading partner to the world, and that reputation depends on the stable sustainable operation of our supply chains."

Emanuele Grimaldi, ICS Chairman, concluded the Summit saying "This summit is the start of an important piece of work. As shipowners we cannot find all the answers on our own but through this collaborative forum, with our friends and competitors in the maritime value chain we can find solutions."

Shipping industry calls for action following the attacks on the *MV Tutor* and cargo ship *Verbena*

The shipping community, appalled and deeply saddened by the tragic news that yet another seafarer seems certain to have been killed in the Red Sea, issued a joint statement calling for action.

The industry statement strongly condemns these attacks which directly contravene the fundamental principle of freedom of navigation.

The shipping community's thoughts and condolences go to the family and loved ones of the seafarer who tragically lost their life after a drone boat strike on Wednesday 12 June on the *MV Tutor*. It is deplorable that innocent seafarers are being attacked while simply performing their jobs, vital jobs which keep the world warm, fed, and clothed.

The statement calls for States with influence in the region to safeguard our innocent seafarers and for the swift de-escalation of the situation.

The full joint statement and list of co-signatories is available here.

ICS Chairman, Emanuele Grimaldi, re-elected unanimously

ICS Board of Directors unanimously re-elected Emanuele Grimaldi, President and Managing Director of Grimaldi Euromed SpA, as Chairman of the Board. Mr Grimaldi will continue as Chairman for another term of two years.

Emanuele Grimaldi said "I am deeply honoured to have been re-elected as Chairman of the ICS for another two years. It is a privilege to be part of this important association and the great work and progress being made for our industry. We have made good stead with our proposals to help meet the International Maritime Organization's (IMO) net zero targets by or around 2050 and continue to work with UN bodies on the biggest issues impacting the maritime sector".

During Mr Grimaldi's first term as ICS Chairman there has been significant focus on the industry's decarbonisation journey and was integral in the formation of the Clean Energy Marine Hubs (CEM Hubs) initiative. Significantly, Mr Grimaldi has also focused his attentions on some of the biggest challenges in the industry including increased protectionism, digitalisation, seafarer recruitment and retention, and seafarer safety during the global geopolitical conflicts including the conflict in Ukraine and the current Red Sea crisis.

International Chamber of Shipping

ICS is the principal international trade association for merchant shipowners and operators, representing all sectors and trades and over 80% of the world merchant fleet.

For more ICS contacts:
www.ics-shipping.org/contact-us/

Contact us
International Chamber of Shipping
7th Floor, Walsingham House,
35 Seething Lane, London
EC3N 4AH
+44 (0) 20 7090 1460
info@ics-shipping.org
www.ics-shipping.org

Editorial
Intent Communications

Tanya Blake
+44 (0) 7598 025 513
tanya@intentcommunications.co.uk

Namrata Nadkarni
+44 (0) 7598 025 513
namrata@intentcommunications.co.uk

Samira Nadkarni
samira@intentcommunications.co.uk

Gary Howard
gary@garyhoward.co.uk

Paul Levey
paul@intentcommunications.co.uk

Design and layout
Phil McAllister
phil@philmcallisterdesign.com
+44 (0) 1273 737481

Press and Communications
Katerina Dimitropoulos
+44 (0) 7497 363434

Sales
Richard Emsley
richard.emsley@ics-shipping.org
+44 (0) 7730 289459