

# KEYNOTE INTERVIEW

## Voyage to net zero



*After rail and EV infrastructure led the first wave of transport decarbonisation, the shipping sector is bracing for the second, say Infracapital's*

*Tom Crawley and Paulo Almeida*

Maritime infrastructure represents a compelling opportunity for institutional investors. Shipping is a \$1.8 trillion global market – comparable in scale to aviation – but remains less understood and less institutionalised. Ongoing trends such as consolidation, scaling and decarbonisation are reshaping the sector too, driving demand for long-term, stable capital and creating attractive opportunities for investors able to navigate its complexity.

As an active investor across the transport-energy transition landscape, from rail electrification and EV infrastructure to battery storage, Infracapital believes the maritime sector is exceptionally well-positioned for institutional investment. With decades of experience across energy and transport, the firm applies a

SPONSOR  
**INFRACAPITAL**

system-wide approach that considers assets alongside power grids, regulatory frameworks and broader infrastructure to deliver meaningful decarbonisation, say managing directors Tom Crawley and Paulo Almeida, a transport veteran in the firm and new senior hire to lead on shipping.

### **Q How do you think about transport decarbonisation opportunities broadly?**

**Tom Crawley:** At Infracapital, we've been investing across the transport landscape for over 20 years. Our transport portfolio has spanned sectors including rail, roads, ports, ferries,

electrification of mobility and inland waterway transportation, with a consistent emphasis on transitioning to low-carbon alternatives.

Transport is a major source of greenhouse gas emissions globally – around 25 percent in Europe and up to almost 30 percent in the UK. As public finances come under increasing strain, we see private capital as essential to closing infrastructure gaps, unlocking value and driving the energy transition across the transport ecosystem. We're now expanding into low-carbon maritime logistics, for example, replacing diesel-powered barges with battery and hybrid solutions through our investment in Inland Terminals Group. This experience is generating insights that can be applied more broadly across short-haul shipping.

We're also spending significant time on the implications for long-haul shipping, where decarbonisation extends beyond the assets themselves to include shore power, alternative fuel storage and distribution. With the right contractual structures, potentially even the production of those fuels.

One near-term opportunity is shore power – using port electricity instead of onboard engines – a simple, low-emission solution. We can leverage our deep experience gathered from our other businesses in the electrification of transport ecosystem like Zenobe Energy, a specialist in bus electrification and battery storage. We can then apply their expertise in electrification and batteries to inland terminals, waterways and future shipping initiatives. We're also able to draw on the expertise built through our market leading EV charging businesses, such as Recharge in the Nordics and GRIDSERVE in the high-power UK charging market.

### **Q Rail and EV infrastructure represented the 'first wave' of transport decarbonisation. How would you describe the 'second wave'?**

**TC:** We see rail and road decarbonisation as firmly part of the first wave of infrastructure decarbonisation investment, largely because the technologies and market frameworks are well advanced. In rail, for example, electric and battery-electric trains are well proven, supported by blue-chip manufacturers, standardised contractual structures and established financing models. Policy support is also clearer and more consistent, particularly in advanced and liberalised markets such as Germany, where we're building our 'Marble' rail leasing platform, financing the procurement of new build passenger rolling stock.

This maturity has allowed us to deploy capital at scale with lower technology and execution risk. By contrast,

*“It's important to take a collaborative, system-wide view – investing not just in individual businesses, but in the supporting infrastructure around them, from grid capacity to renewable generation”*

**TOM CRAWLEY**

later waves of decarbonisation will typically involve sectors that are earlier in their life cycle in terms of maturity and potentially more nascent in terms of policy support. There's a significant opportunity to decarbonise sectors such as maritime and aviation, so it's no surprise that investors are turning their minds to them and considering the next phase of opportunities.

Many of our transport investments sit at the intersection of transport and energy, such as electrification of mobility. We engage early with promising businesses to understand their models and provide input and guidance as they develop, but typically invest later, providing capital to scale proven solutions and decarbonise the transport value chain.

### **Q Why does shipping now represent a logical next step?**

**Paulo Almeida:** Shipping builds on our deep expertise across land transport and energy infrastructure. The sector is undergoing a transformation, adapting mature, heavy-duty diesel

engine technology to use lower-carbon fuels such as methanol, ammonia, liquid natural gas and liquid petroleum gas. This reduces carbon emissions and other pollutants to help eventually transition to fully green fuels. With the International Maritime Organization targeting net-zero carbon emissions by 2050 – and leading operators aiming to do so by 2040 – there's a clear long-term decarbonisation pathway.

Container shipping, which primarily moves consumer goods, has been at the forefront of decarbonisation, driven by clients sensitive to emissions. The covid-19 pandemic highlighted supply chain vulnerabilities and temporarily lowered emissions, while high freight rates emphasised the value of reliable, low-emission shipping. Combined with the expectations of major customers like Amazon, Zara and Nike for sustainable supply chains, shipping offers a strategically aligned opportunity to extend our system-wide, low-carbon investment approach from rail, roads and ports into shipping.

### **Q Where do you see the best opportunities in the maritime sector?**

**PA:** Shipping is a huge market, and opportunities exist across all major shipping segments. Many container shipping leaders are focused on decarbonisation and securing long-term contracts.

We plan often to partner with experienced shipping families who bring operational expertise and shipyard relationships. While the industry is global, European counterparties with stricter net-zero targets offer particularly attractive opportunities. By focusing on vessels serving these clients, we can align our expansion with the industry's decarbonisation trajectory and build a resilient, future-ready portfolio.

The sector is currently dominated by small private owners, but regulatory complexity and decarbonisation requirements make scale essential. We plan to acquire and operate larger,

fuel-efficient and alternative-fuel vessels, leveraging institutional capital to build reliable, consolidated portfolios. Capital is critical, but relationships matter just as much. Through trusted networks – insurers, lawyers and industry partners – and strong service agreements, we manage operational risks and ensure vessels deliver dependable, long-term performance.

### **Q Are there parallels between shipping and sectors like rail or toll-road infrastructure in terms of consolidation, operational patterns and investment models?**

**PA:** There are analogies, but none are perfect. Intercontinental shipping competes mostly with air freight, which is 30-50 times more carbon-intensive, so the efficiency gains are even greater than rail versus trucks. Some modal shifts are already happening, especially for higher-value goods. Container lines resemble infrastructure in certain ways: ports are capital-intensive and clients demand reliability, low-carbon solutions and predictable costs.

We plan to provide vessels on seven to 15-year leases with fixed availability, while clients control operations and fuel. Over time, they're moving towards longer-term fuel contracts, including greener fuels. This creates a de-risked, institutional-quality model, allowing shipping – despite being cyclical – to support long-term, reliable investment portfolios, similar to real estate or aviation.

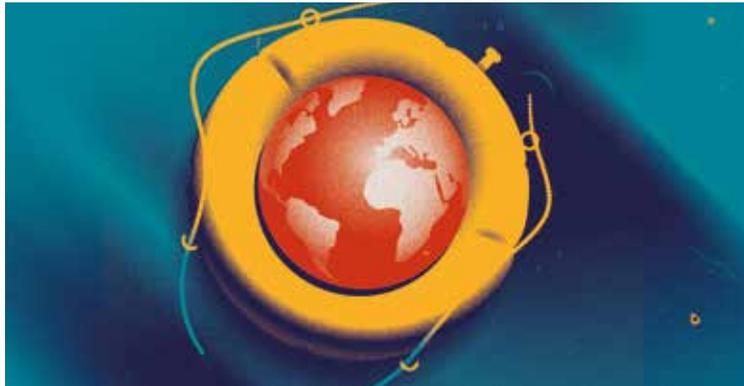
### **Q How does sustainable shipping infrastructure act as a hedge against inflation and high interest rates compared to traditional maritime assets?**

**PA:** Transport real assets, including shipping, generally perform well in inflationary environments. During and after periods of rising costs, lease rates tend to increase, providing a natural hedge. Shipping has unique advantages:

### **Q What lessons from wider transport electrification and modal shifts can help accelerate decarbonisation in maritime transport?**

**PA:** Two key factors drive decarbonisation: regulation and proximity to the consumer. Just as cars and last-mile delivery vehicles decarbonised before heavy goods, container shipping, which serves consumer goods, tends to decarbonise faster than bulk shipping of products like iron ore. Regulation also plays a major role. The EU has a carbon tax on half of emissions on voyages into and out of Europe, and efficiency standards are tightening globally. Being an early mover allows us to invest in low-carbon shipping with less competition, positioning our fleet for the market's inevitable transition.

**TC:** A key lesson for us has also been the importance of maintaining conviction and a strict focus in business plans and strategy, amid any potential shifting market sentiment and evolving policy timelines. While the direction of travel is clear, target policy dates can move. That makes it essential to allocate capital to premium assets in advanced markets and to strengthen the underlying customer proposition. It's also important to take a collaborative, system-wide view – investing not just in individual businesses, but in the supporting infrastructure around them, from grid capacity to renewable generation.



ships are mostly built in Asia, so weaker dollars or stronger Asian currencies can increase asset values. Inflation also raises the replacement cost of new builds, giving existing assets a pricing buffer. While not as explicit as toll-road indexation, sustainable shipping infrastructure offers predictable, inflation-linked returns that appeal to insurers, pension funds and sovereign wealth investors.

### **Q What are the main risks likely to affect the transition to sustainable**

### **shipping, and how can they be mitigated?**

**PA:** Technological risks are minimal – even the newest fuel ammonia is developing quickly and will be in use soon. The real risk is regulatory. While the EU's Emission Trading System provides clear rules for much of global shipping, a global carbon tax hasn't yet been implemented. We expect it will come, and the current uncertainty actually gives early movers like us a competitive edge, allowing us to advance in sustainable shipping ahead of broader competition. ■