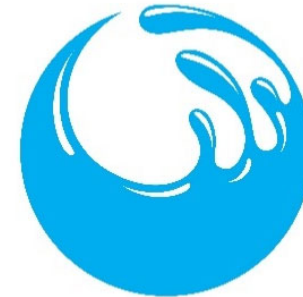


# MARINE ENERGY: SUMMARY



- ❑ Marine energy (Wave & Tidal) represents a significant, as yet untapped source of renewable energy (RE)
- ❑ From a company / investor perspective, everything is still to play for; winning suppliers can serve a global market
- ❑ Marine energy is significantly more expensive (LCOE £140-350/MWh) than mainstream (fossil fuel, nuclear) and most other RE technologies; recent sharp LCOE reductions for offshore wind have further hurt marine energy's medium-term prospects
- ❑ The long-term cost potential remains uncertain, given the lack of commercial-scale installations currently; however, a 10-15% learning curve is generally expected
- ❑ Unlike some other RE sources, the marine sector has yet to (and may never) settle on a standard technology approach, representing both an opportunity and risk for investors
- ❑ Occasional marine technologist fundraisings are successful, though generally involve some form of governmental backing; fundamental challenges remain (technology immaturity, lack of bankability, supplier size etc.)



- ❑ The GW market inflection point for marine energy devices (likely led by the UK), continues to be pushed out, currently to 2025-2030
- ❑ Tidal has generally achieved greater traction than Wave – funding, electricity generation, OEM involvement, turbine design homogeneity
- ❑ The involvement of large OEMs would be key to overcoming technical challenges (including foundation design and supply chain organisation), boosting bankability and footing significant scale-up & deployment bills