

An aerial photograph of a yellow offshore supply vessel on the ocean at sunset. The vessel is positioned in the lower center of the frame, moving towards the right. The water is a deep blue-grey, and the sky is filled with dramatic, layered clouds in shades of orange, yellow, and grey. In the distance, a range of low mountains or hills is visible on the horizon. The overall mood is serene and industrial.

ORBITAL

MARINE POWER



Positively predictable

Vision



The case for investing in clean energy **has never been stronger**

Tackling climate change. Improving air quality.
Delivering Net Zero transition.

Driven by these global imperatives, over
\$11 trillion is projected to be spent on new
renewable power between now and 2050.

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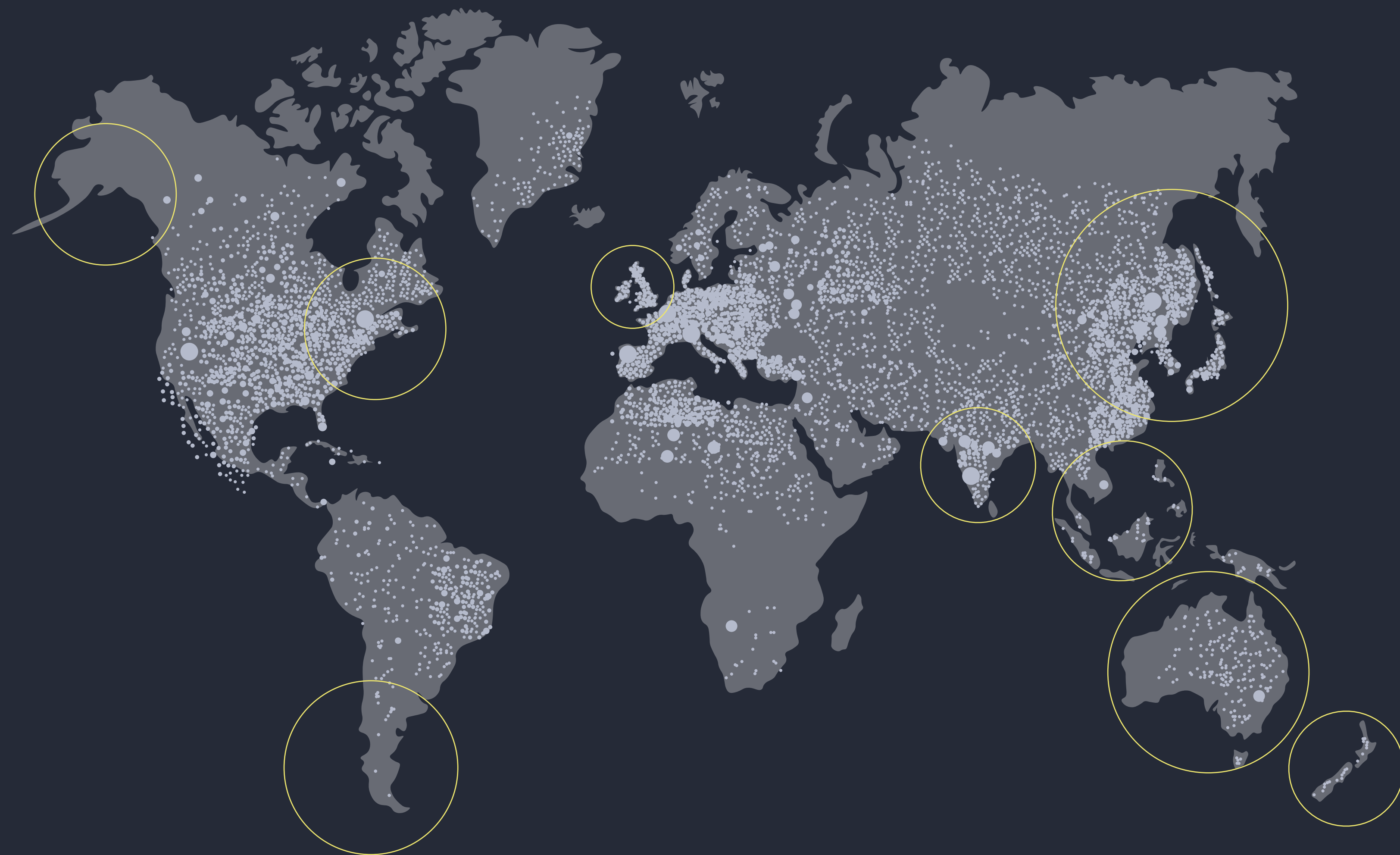


Everyday, vast but untapped **tidal energy flows through sea channels and passes coastlines, like clockwork.**

Our turbines can capture this power where it is focused to produce a reliable supply of electricity. Night and day - 365 days a year. Whatever the weather. Every MW contracted delivers value through equipment supply, servicing and power sales

365

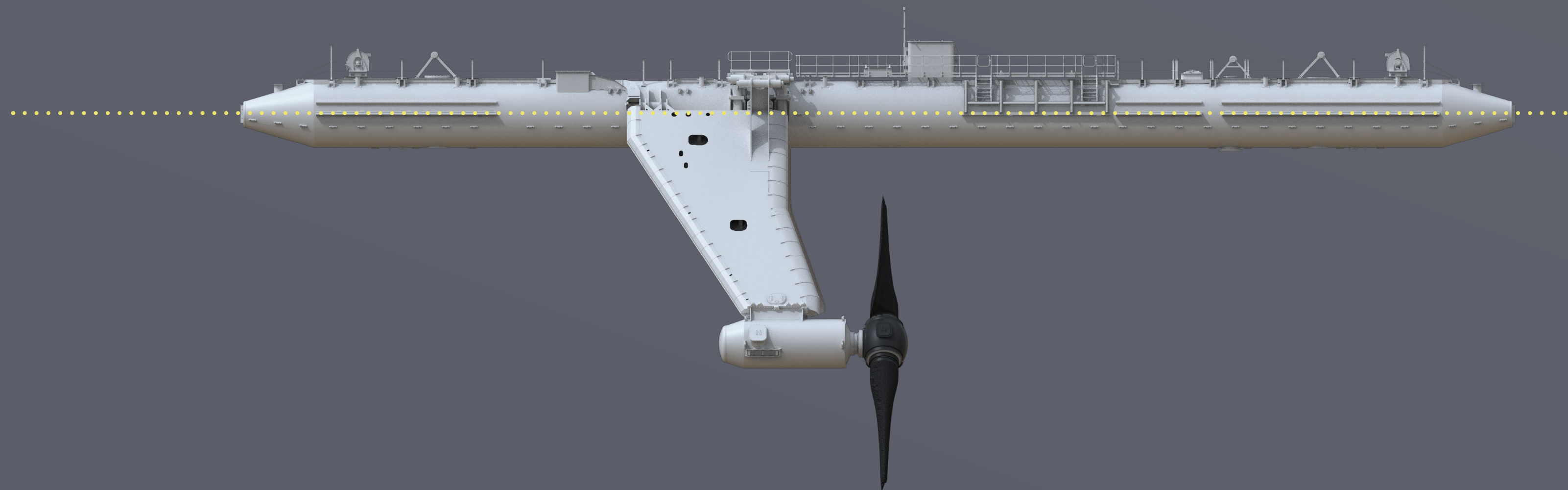
Days a year, our turbines capture low carbon clean predictable power.





A new renewable energy class

Orbital have developed a pioneering technology that can cost effectively harness flowing currents positioning the business to give high level of control and ownership over a multi billion dollar value chain for a new, global renewable energy sector.

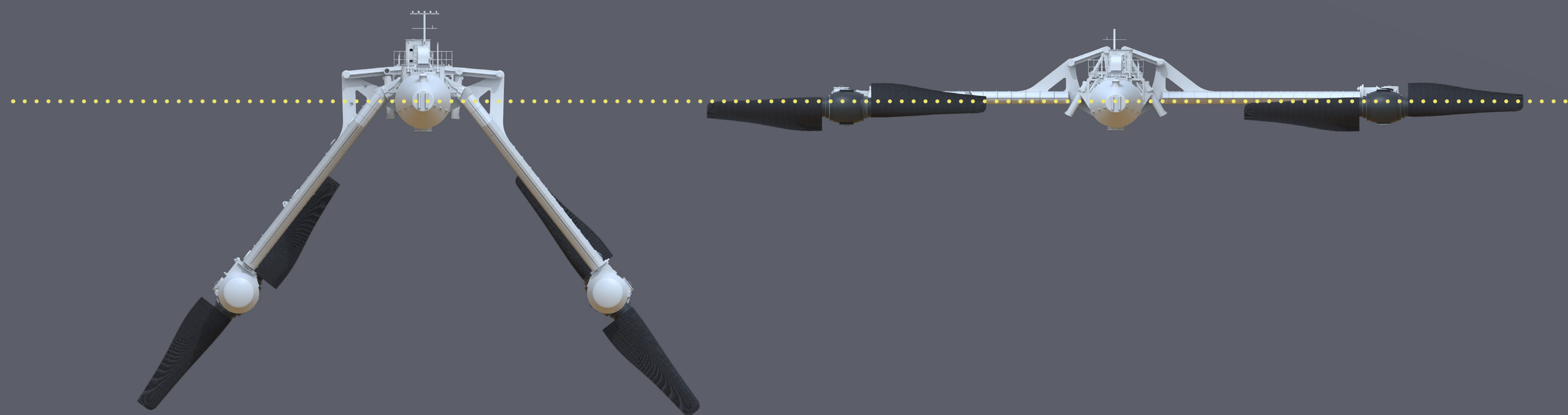


£60m+

Invested developing Orbital's world leading technology

100GW

Tidal energy has the potential to power over 80 million homes





Utility **scale**

Harvesting untapped predictable power from global tidal streams. Our contribution to tomorrow's clean energy mix.

\$20bn

Estimated annual market for tidal equipment sales and servicing





Trailblazing Innovation

Technology



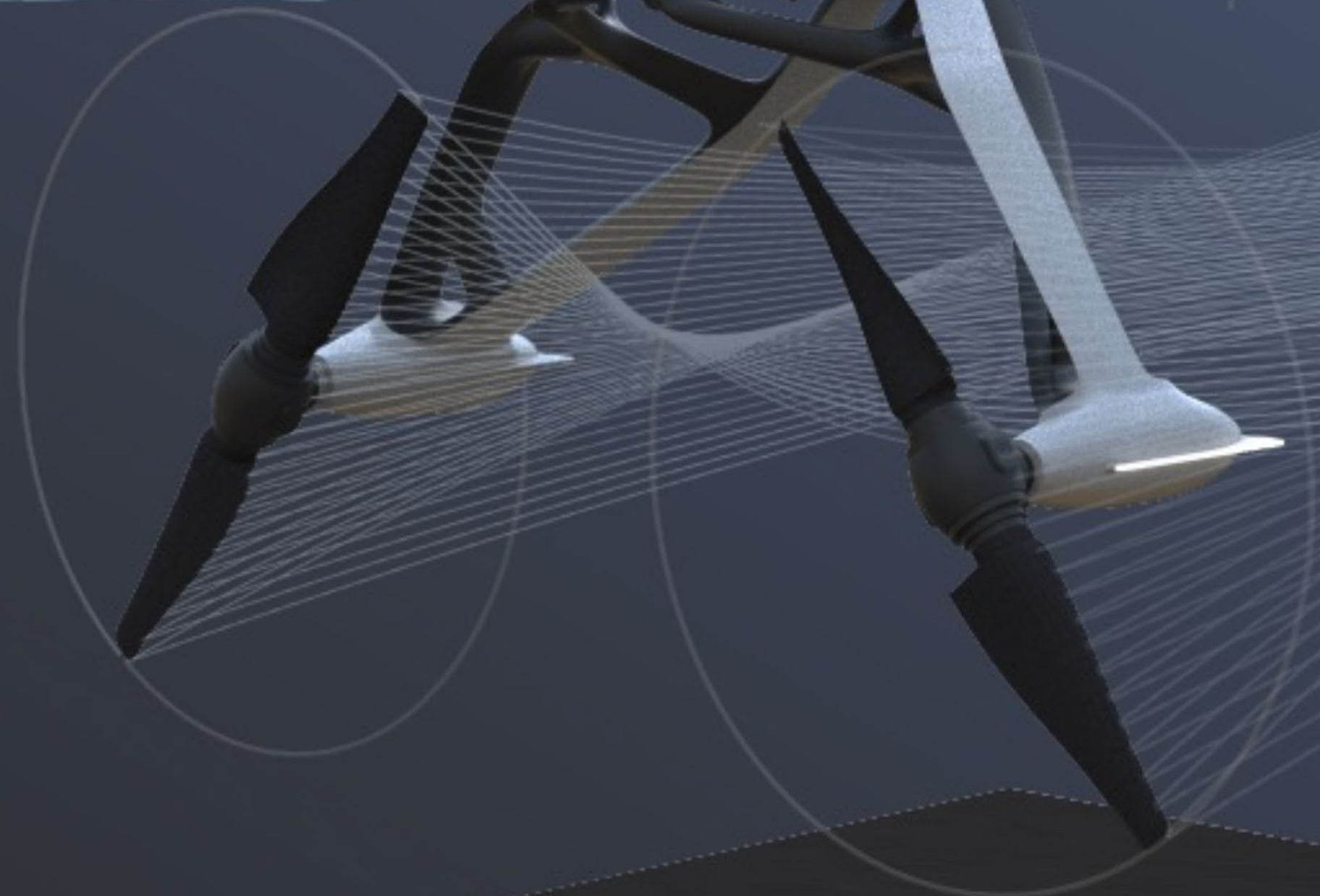
How it works

Orbital's unique floating platform is moored via anchors in powerful currents to capture the dense, clean energy and presents a breakthrough in technology cost and risk.

With water being 800x the density of air, water currents are concentrated forms of kinetic energy that can be harnesses with conventional engineering set in a totally new application.

IP

High level of lock-out protection on enabling technology





2018

First 2MW test machine completes 12-month test-period. At times meeting up to 25% of Orkney Islands' electricity demand.

Two awards from the UK Institution of Engineering and Technology (IET).



2019

Successful crowd-funding - £7m construction bond to build the next generation 2MW O2 turbine.

Awarded £3.4m Saltire Funding by Scottish Government 2020.

2020

Construction of the O2 turbine.

Engineered to capture more power and present commercially attractive cost and risk profile.

New patent filings.



2021

Orbital O2 commercial demonstrator unit installed and operational.

Validation of commercial performance parameters.

2021+

Grow a global energy pipeline of new commercial projects.

Commercial readiness, further IP refinements and cost engineering.

2025+

Global electricity capacity is predicted to triple by 2050.

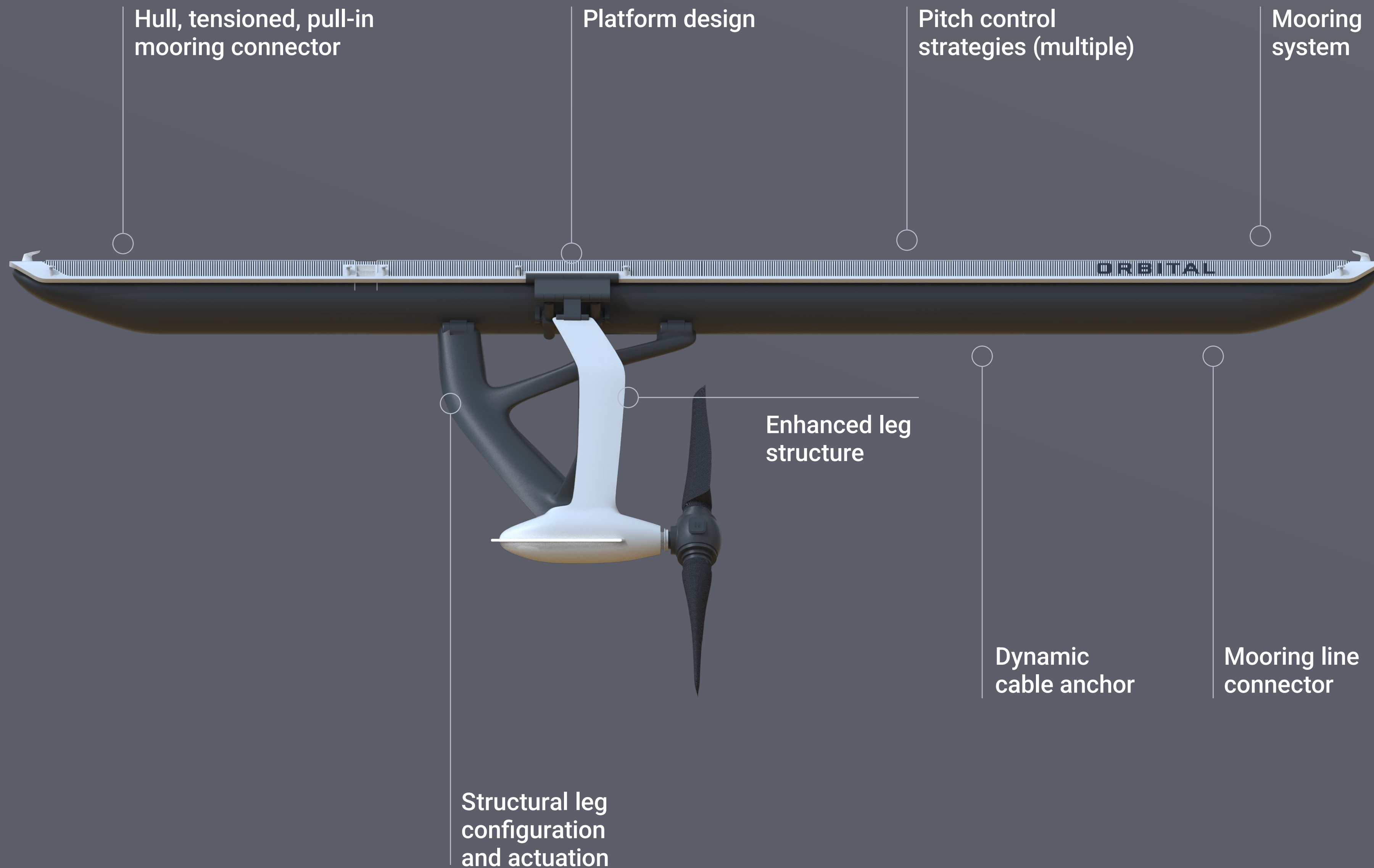
International deployment of future generation Autonomy arrays and Riverkinetic technologies.





Industry controlling intellectual property

Orbital's world leading technology programme has developed a powerful suite of IP from concept controlling protection through to enabling components and solutions.



€5.2m

Ongoing funded R&D programme



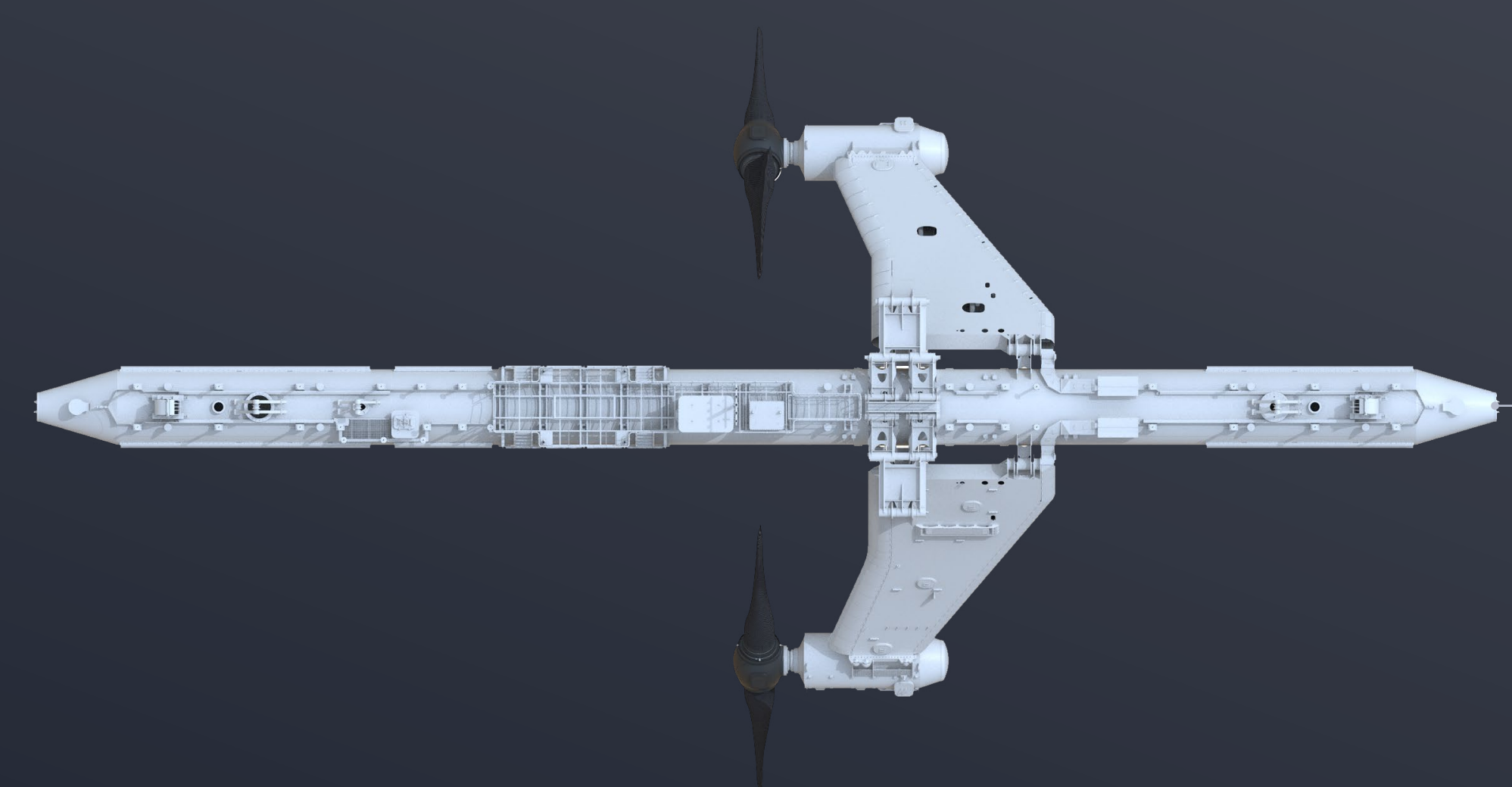
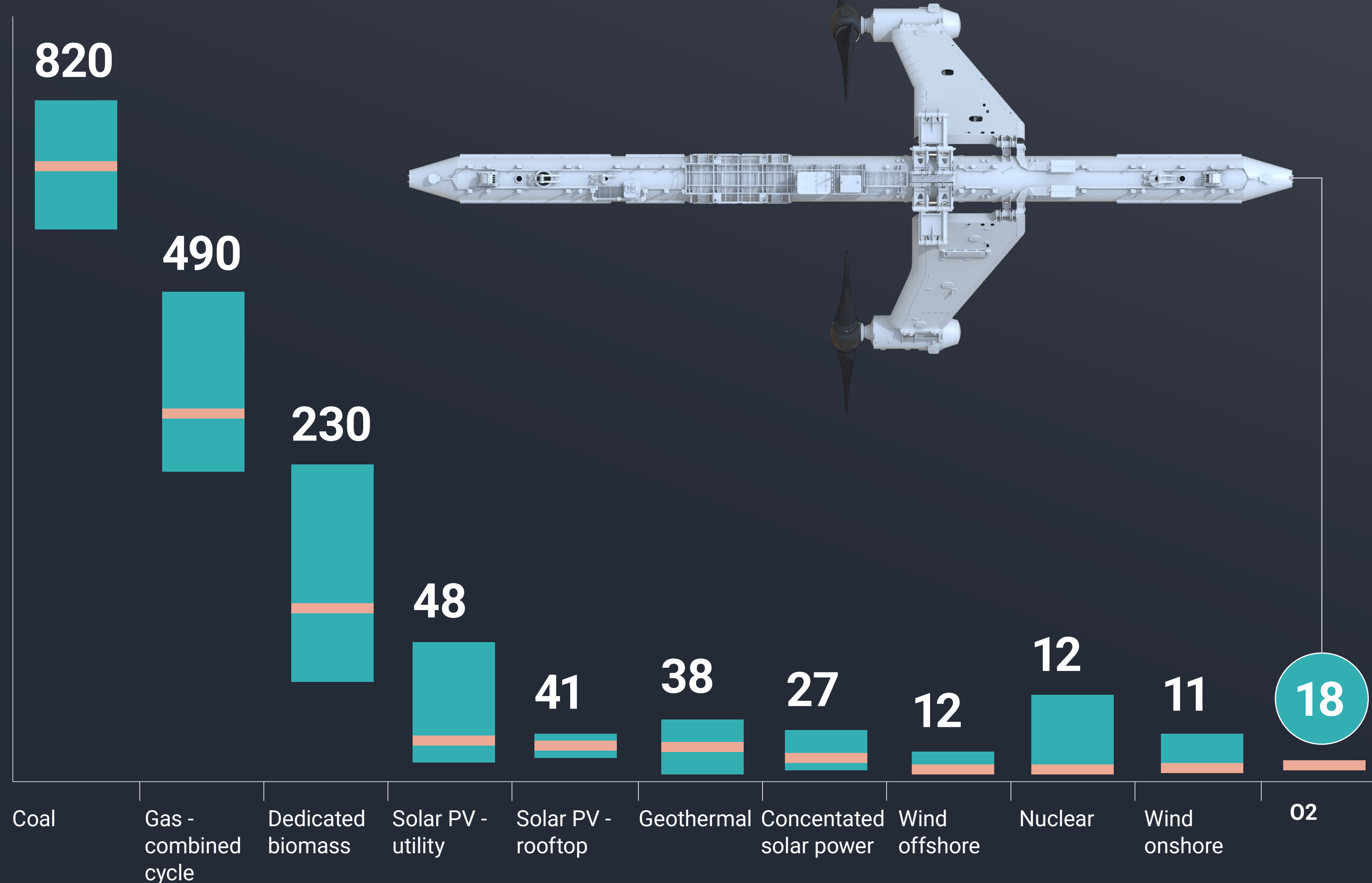
Environment and sustainability

- Whole lifecycle carbon footprint of O2 technology independently verified as already in line with mature renewables technologies (18 g CO₂/KWh) and lower than Solar PV.
- Carbon payment period of just 1 year and 4 months against UK grid mix (or 11 months if it is assumed that the electricity is offsetting gas power generation).
- Aim to reduce technology carbon footprint by a further 25% within 2 years.
- Company environmental policies for supply selection, waste management, carbon reduction and minimising overall environmental impact.
- 5 year company CO₂ reduction plan under development

2,200+

Tonnes of CO₂ capable of being offset annually by an O2 in the UK

gCO₂eq / kWh



Environment and sustainability

- No environmental blockers identified towards the large scale deployment of tidal stream energy.
- Arrays designed, environmental impacts mitigated and consented in accordance with standard Environmental Impact Assessment processes and regulations.
- Funding secured for ongoing monitoring programme to refine environmental knowledge.

✓ No observations of marine mammals, seabirds or fish colliding with a turbine. It is expected that collisions, if they occur, will be very rare events.

✓ Underwater noise from operational devices concluded as unlikely to significantly alter behaviour or cause physical harm to marine animals.

✓ Evidence to date suggests marine animals living in the vicinity of marine devices and export cables are not likely to be harmed by emitted electromagnetic fields.

✓ Floating tidal cables and lines do not have loose ends or sufficient slack to create an entangling loop, in the way fishing gear does.

Oes-Environmental 2020 State of the Science Report





Orbital People

Corporate



Health & safety

Extensive consideration of health and safety is at the core of Orbital's engineering and operational processes to ensure the safety of staff and contractors is paramount.

The company's Health and Safety Management System, following HSG65 guidelines and the framework of ISO45001, is built on an unrivalled experience of building and operating tidal turbines in the hostile environments required. The System reflects a cultural awareness and ownership of risks across our workplaces and activities engaging all employees.

From Executive Management downwards Orbital upholds a no blame culture and continual improvement is embraced positively across the organisation.





PR & media

Orbital Marine Power recognises the value a strong brand can bring to a business. Orbital has invested time and attention to develop and protect a powerful brand, that is carefully crafted to align with the company's inspiring future vision, its dedicated staff, its innovative technology and its pioneering mission. Orbital's brand and messaging is projected through a rounded media plan; effectively engaging across stakeholder groups and beyond the renewable energy sector.

Visit:

-  Website
-  LinkedIn
-  Twitter
-  Instagram
-  Facebook

20,000+

Social media followers across platforms



Executive team



Andrew Scott,
CEO & Director

Since taking the helm at Orbital Andrew has overseen a design process to generate a strikingly innovative technology that can enable a new renewable energy sector. Andrew is the driving force behind the Orbital vision and works closely with financial and commercial members of the team to deliver an inspiring breakthrough business focused on helping turn the tide on climate change. Andrew has a degree in Mechanical Engineering.



Chris Milne,
Chief Finance Officer

Orbital CFO since 2016. Previously Vice President of energy focused private equity fund and Finance Director of Generation at UK utility, SSE plc. Before joining SSE, Chris spent 7 years with KPMG, including Private Equity M&A, in London. Board member of Scottish Renewables, Fellow of Institute of Chartered Accountants in England and Wales and holds the CFA UK Level 4 Certificate in Investment Management.



Oliver Wragg,
Commercial Director

Oliver has been Commercial Director at Orbital since 2020. With 15 years' experience in clean energy and science, he has facilitated the raise of over £195m of funding to back the development of innovative technology to enable the energy transition. As a leader in the ocean energy industry, he holds key board positions on both the UK Marine Energy Council and European trade body Ocean Energy Europe.

Board of Directors

Dr. Sian George, Chair

Sian has led the board since 2016. Previously CEO of Ocean Energy Europe, she has 15 years' experience in renewables. She has served on several Government advisory boards and has a PhD in environmental policy.

Matt McGrath, Director / lead investor

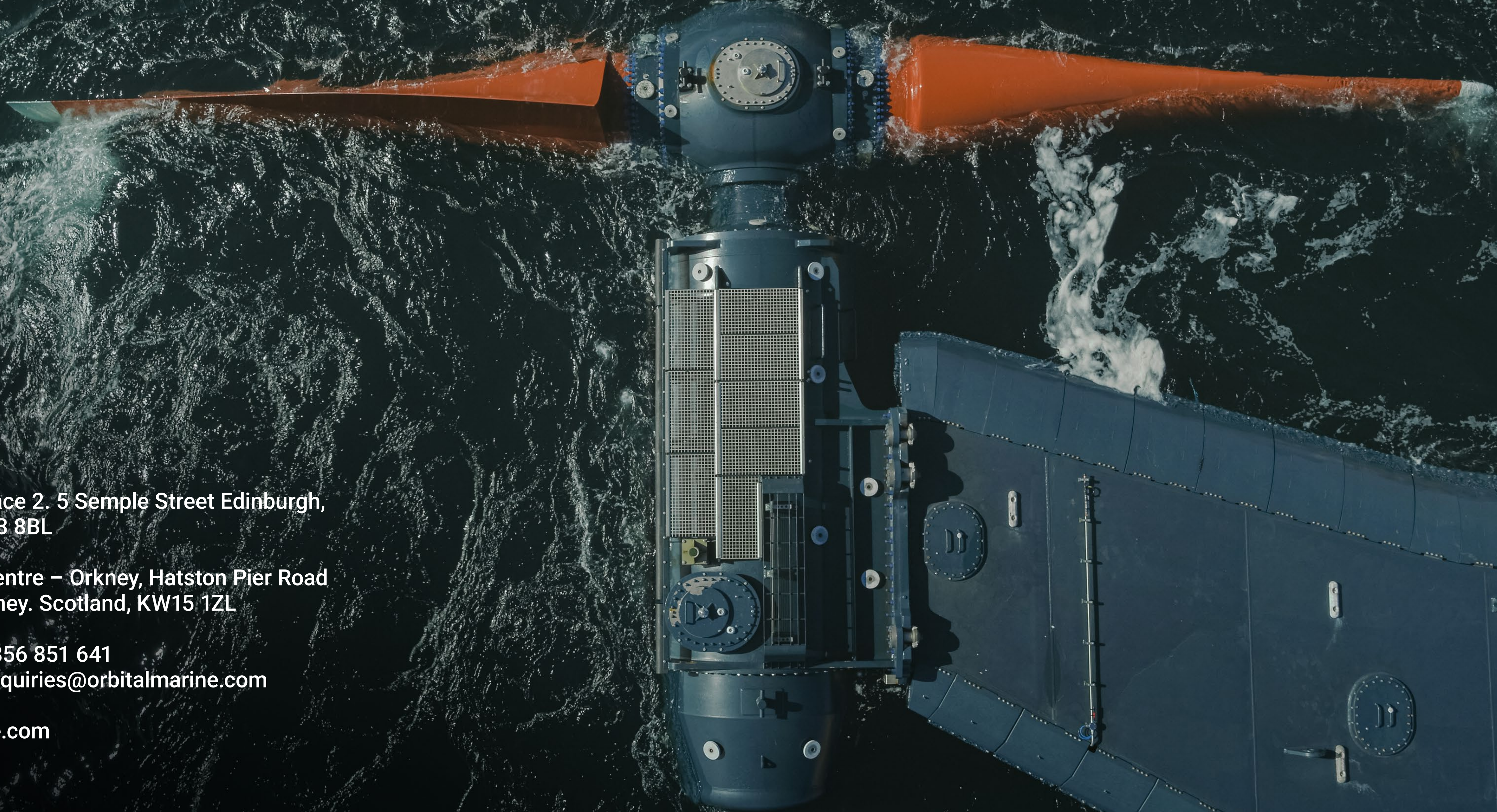
Technology investor, Matt built a global equipment manufacturing business operating in over 50 countries before its US\$110m sale. With an emphasis on design strategy, Matt is the recipient of a number of entrepreneurship, business and innovation awards.

Matthias Haag, Director

As previous CEO of the 600MW Gemini Wind Park, Matthias successfully delivered one of the world's largest renewable energy projects. Currently directing the build of EDF Renewables' NNG offshore 450MW windfarm, he brings significant industry experience.

Paul Smith, Director

Non-Executive Director of businesses in the Energy, Infrastructure and Utility sectors. Paul was previously Managing Director of Generation at SSE Plc. Paul is a Fellow of both the IChemE and the Energy Institute.



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