ANNUAL REPORT 17/18

CATAPULT
Offshore Renewable Energy

CONTENTS

CHAIRMAN'S INTRODUCTION

Colin Hood
Chairman,
Offshore Renewable
Energy Catapult

The drive towards a low carbon economy, with world-leading, innovative companies growing to meet both domestic and international demand, lies at the heart of UK Government policy.

Since 2013, the Catapult network has pursued this vision, and I am pleased to be able to report on the Offshore Renewable Energy Catapult's continued progress and impact over the past year. Significant public support, partnerships with world-leading companies and increasing numbers of programmes to drive technology innovation provide extensive evidence of a business that continues to deliver on its early promise. The pace of that delivery is increasing, and future plans set ambitious goals.

In its first five years, ORE Catapult has invested in developing world-leading facilities and expertise, providing essential test and demonstration capabilities for the continued development of the UK's growing offshore renewable energy sector. It has simultaneously forged strong relationships both domestically and internationally with many of the leading companies and institutions at the heart of the low carbon economy.

Over the next five years we will continue to invest to ensure that the UK maintains its advantage and seizes the opportunity to develop a supply chain not only to meet UK demand but also to export products and services globally, creating many more jobs and very significant economic value.

This annual review provides both qualitative and quantitative detail on past delivery and future plans, as well as detailed information around the strict governance in place to ensure that we meet or exceed all requirements and best practice. I trust that it proves informative.

It is five years since ORE Catapult set out to capitalise and build upon the UK's strengths in offshore renewable energy, and to realise the huge economic potential whilst lowering costs. The intervening period has seen considerable success and I am delighted to present this annual review of progress, and to look ahead to the next five years.

During 2017/18, the independent Catapult Review Committee undertook a comprehensive look at both our past business impact and future plans and we were hugely encouraged to receive their strong endorsement.

As our business matures and grows, so we are better able to measure and report on the impact of our activities. Our relationships with stakeholders across the sector and beyond have deepened and are consistently delivering direct impact on costs, on product development, on services and value creation. From working in close partnership with some of the world's leading technology companies to supporting some of the UK's most innovative small businesses, I am pleased to report significant progress and growing influence.

Fundamental to this delivery has been our ability to consistently grow our revenues across all parts of our business, leveraging public investment and enabling us to help more companies to grow.

We have continued to enjoy close and constructive relationships with our core funders, Innovate UK and the UK Government, as well as devolved administrations in both Scotland and Wales. In parallel, we are working closer than ever with major industrial players, sitting at the heart of both the offshore wind and marine energy industries and working in close partnership to develop policy, technology and practise.

Our strong, collaborative partnerships with the likes of GE Renewable Energy, EDF Renewables, Vattenfall and Scottish Power Renewables are not only pushing technology boundaries but are creating opportunities for UK companies to develop their own innovative products and services, to access new markets and grow their businesses.

These activities are directly driving improvements in plant reliability and availability, enhancing productivity levels and continuing the downward trajectory of the cost of generating energy from offshore renewables.

Underpinning much of this activity is our expanding applied research portfolio. Through partnerships with a number of the country's leading academic institutions, we are leveraging our own direct investment and activity to drive real technology innovation and improvement, addressing many of the major challenges facing our industries today.

Alongside consistent growth in our core locations in Glasgow and Blyth, we have developed a far wider presence, with operations in Fife, the Humber, the South West and in Wales, supporting increasing levels of activity across the length and breadth of the country. We have continued to develop relationships and opportunities in major international markets, with particular focus on China and the US.

I am also pleased that we have been able to take a proactive approach to supporting the development of STEM education in the communities in which we operate, not only financially but also through provision of both expertise and mentoring.

Throughout the past year we have continued to pay extremely close attention to health and safety throughout every aspect of our operations. Through increased communications, education and training, we are enhancing our culture to ensure that we 'Think Safe, Talk Safe, Act Safe' in everything that we do, whether in our own facilities or elsewhere.

The past five years have seen an extraordinary rate of progress in offshore wind. Turbine technology advances have driven cost reduction beyond all expectations, and the UK continues to lead the world in deployment and the consequent experience of operating and maintaining next generation offshore wind farms.

The pace of this change is not slowing down and the opportunity for the UK to take economic advantage of its first-mover advantage is huge.

The industry's vision of delivering 30GW by 2030, meeting 30% of the UK's total energy demand whilst continuing to reduce costs and driving a fivefold increase in exports, necessitates development of the UK supply chain to meet both domestic and international demand. Technologies such as robotics and autonomous vehicles, data and digitalisation, are set to have a huge impact, and ORE Catapult is well positioned to support these growing success stories.

We have published an ambitious new delivery plan that will see us leverage more than £70m of core grant to continue to drive innovation and realise this huge economic benefit from offshore renewables. Our refreshed vision and mission reflect these ambitions, and I look forward to continuing on our journey in close partnership with companies large and small, with universities and international partners, with the UK and devolved governments.

Andrew Jamieson,
Chief Executive,
Offshore Renewable
Energy Catapult

As we come to the end of our first five years, ORE Catapult can reflect on the successes we've had to date. We have grown revenue from £1m in FY2013-14 to £7.3m in FY2017-18 and will continue to grow our revenue as we move into the next phase. Underneath these numbers lies a broader picture of how we are driving innovation across the sector and accelerating the success of UK companies in the offshore wind, wave and tidal sectors. We operate £1/4bn of test facilities and have supported 121 companies in their product development. We have supported over 410 SMEs and delivered 196 R&D projects with 100 in delivery over the past year.

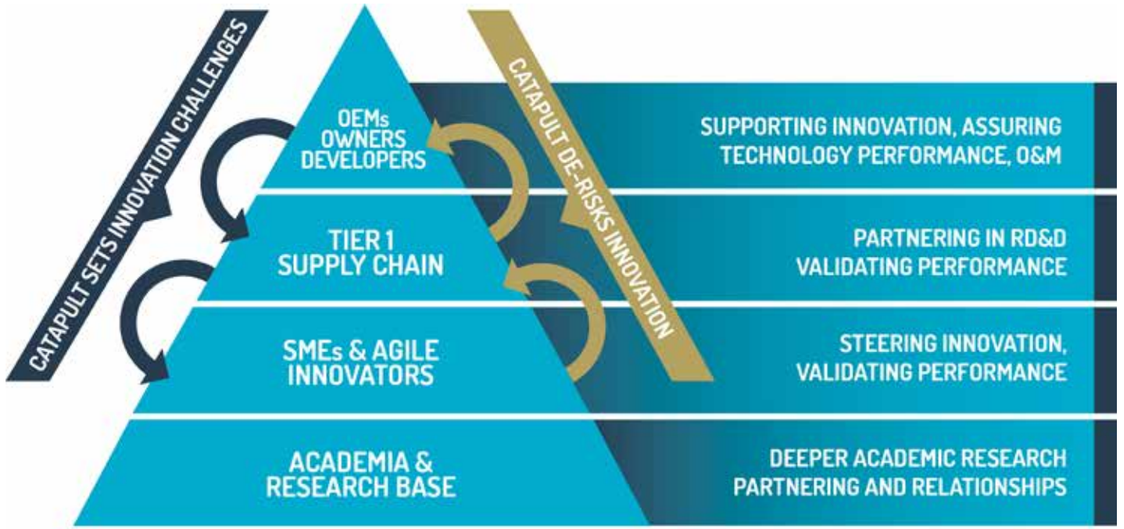
ORE CATAPULT'S BUSINESS MODEL

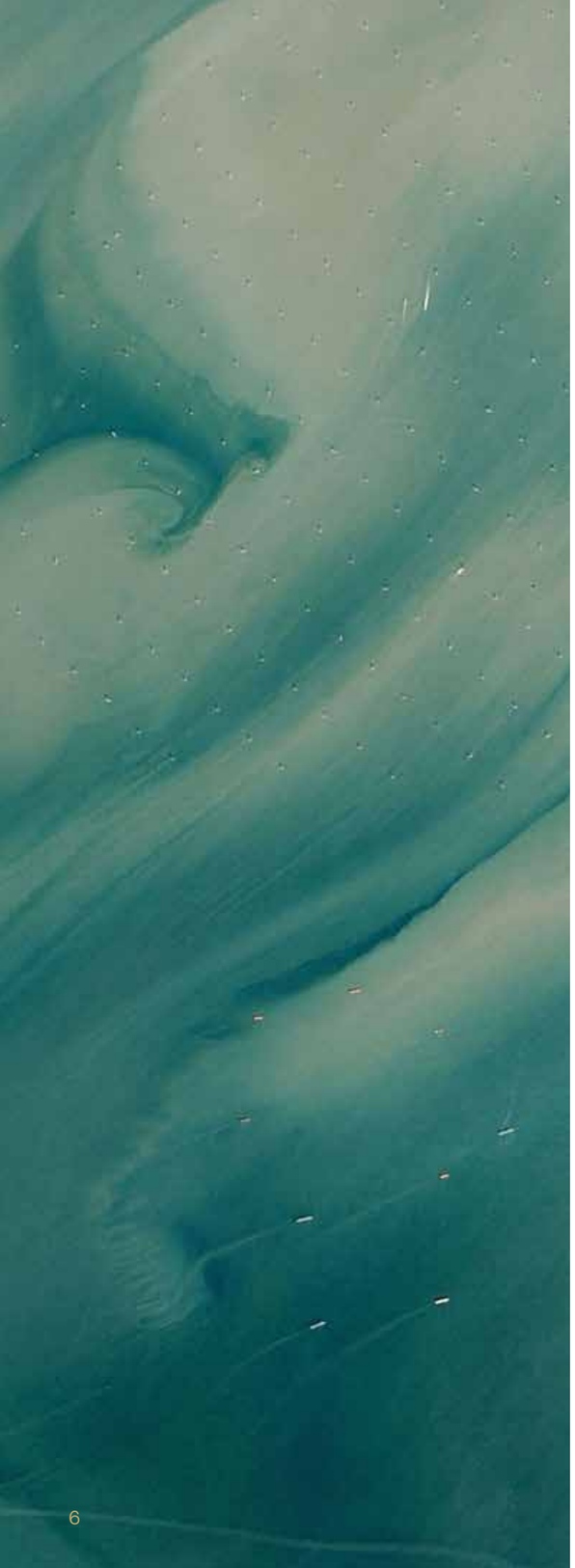
"We work with the largest players in the industry - OEMs and large industrial companies who make turbines and their associated plant, and the project developers - to help to design and deliver ever more efficient offshore renewable energy generation.

In turn, we bring innovation opportunities to other layers in the supply chain, right down to SMEs, all of which is supported by the UK's academic research base.

And we do the reverse: we identify and support applied research and novel innovation all the way to commercialisation."

Andrew Jamieson
CEO, ORE Catapult





DELIVERING ON OUR BUSINESS MODEL

Looking at our business model (page 5), the Catapult has increased it's engagement at each tier over the past year, with significant activity at all levels. Our work with GE and LM to support testing of rotor, bearing and blade tests at our Blyth facility, and collaborations with the likes of ScottishPower Renewables, Vattenfall and EDF, demonstrate our ability to attract the world's leading OEMs and Owner / Operators; this will continue in the form of a strategic partnership with GE over the next 5 years. The Catapult is also in collaboration with Vattenfall and ScottishPower Renewables to demonstrate and test SME innovations at their existing windfarms; this is a major component in our drive to increase our presence in Operations & Maintenance (O&M) and reduce the Levelised Cost of Energy (LCoE).

The Catapult has world-class test and validation assets, utilised by a wide range of customers across the industry and beyond. We are continually investing in our assets, and this year launched Rain Erosion and 1MW Drive Train test services. Driving products to commercialisation and into the supply chain is a critical component of our offering.

Our offering to SMEs has expanded with the development of a specialised service to help accelerate and advance their technologies towards commercialisation; from advice, guidance and assitance with applications for funding through to partnerships for developing, testing and commercialising novel products for the offshore renewables market. This year we've worked with 164 SMEs, including: Rovco and their cutting-edge subsea robotic systems; we've helped GreenSpur to secure funding to develop and test their 75kW prototype generator, and continued our partnership with Limpet Technology and their offshore personnel transfer system.

Unlocking research to develop technologies for the future is vital to the continued success of the offshore renewables sector. In the past year we launched the Wind Blade Research Hub with the University of Bristol to aid the development of larger, more efficient wind turbine blades that harness more energy from the wind. The Catapult has also announced another research hub with the Universities of Strathclyde and Manchester, focussed on electrical infrastructures and launched in early FY18-19. The Catapult plans more hubs in the future which will see up to £5m of targeted research funding for offshore renewables. In addition, the Catapult has commenced numerous projects that bring together industry and academia to solve industry's key innovation challenges and collaborate on research projects such as the EU's flagship tidal energy project EnFAIT with Nova Innovation and the University of Edinburgh, and crew welfare project SPOWTT with the University of Hull.

Regional Growth

The Catapult is committed to ensuring clean growth opportunities from offshore renewables have a strong regional dimension. There are already clusters emerging across the UK: the Catapult has made the North East of England a focus with our National Renewable Energy Centre located in Blyth; we have capitalised on the emerging Operations & Maintenance (O&M) hub in the Humber Region by opening our O&M Centre of Excellence in collaboration with the University of Hull, enhancing the strengths of local companies and coordinating innovation across industry and academia to drive down costs.

The Catapult has also been active in the South West of England, where we've established our first academic research hub in partnership with the University of Bristol. This last year has seen us step up our work with the Welsh Government and Swansea Bay City Deal to pursue opportunities in wave and tidal energy. Our presence in Fife continues to attract SMEs to our 7MW Levenmouth Demonstration Turbine to test and validate new and innovative technologies.

Over the next five years, the Catapult will create regional clusters of activity in offshore O&M, marine energy and supply chain activity to bring business and opportunities to regionally deprived areas; this includes expansion of our activities in the Humber, and creation of opportunities for supply chain participants in Wales, the South West and Lowestoft.

International Opportunities

Internationally, the Catapult is focussed on creating links between the UK supply chain and burgeoning offshore renewable energy markets. This year, the Catapult signed a collaboration agreement with China's TUS Wind and Tus Park, developing the Tus Offshore Wind Science Park in Newcastle. This agreement offers the Catapult a strong footprint in China and allows us to connect UK SMEs with a rapidly expanding Chinese market for offshore wind. To that end, the Catapult led a delegation of 15 UK companies to China, including GreenSpur and Magnomatics.

We continue to pursue opportunities in the US as well as nurturing our close relationships with European companies, RTOs and universities, and key European agencies and funding bodies. We've developed a new International Growth Platform that will create strong bi-lateral partnerships to broaden our network of research collaborations and boost UK SME growth by reducing barriers to entry and coordinating learning between countries to advance the offshore renewable energy sector globally.

Renewing our Vision and Mission

To capitalise on the past five years' success, we've developed a new strategy and delivery plan for the period to FY22-23. We've rearticulated our vision, mission and strategic objectives (page 24) to ensure the Catapult is at the centre of driving UK innovation and economic growth in the offshore renewable energy sector. To meet the challenge of delivering our new strategy, we've realigned our directorates to focus on delivering the key elements of our business. Three functional directorates have been formed to align to our new strategic objectives; this allows clear ownership and effective management of each strategic objective as well as accountability for milestones and key performance indicators. We anticipate our FTE will increase to ca. 210 by 22-23 as we grow our business and offering to industry.

The Catapult has had another successful year, increasing our total revenue by 14.4% with our focus on CR&D revenue resulting in an increase of more than 50% in comparison to FY16-17. This demonstrates the Catapult's commitment to increasing revenue as well as delivering impact for our partners, customers and the UK economy.

The breadth of our engagement with SMEs increased this year and the number of in-depth collaborative projects more than tripled in comparison to last year. Our work with SMEs includes Rovco, GreenSpur and Limpet Technology.

Working with academia is a core objective for ORE Catapult, and we've stepped up this activity considerably in the past year. We've worked with the University of Hull to establish the O&M Centre of Excellence and SPOWTT, and the University of Edinburgh on EnFAIT with Nova Innovation.

The Catapult increased utilisation of its facilities at the National Renewable Energy Centre in Blyth delivering world class testing and validation services to 58 companies companies. At our 7MW Demonstration Turbine in Levenmouth, Fife, the Catapult has supported many innovative companies including Limpet Technology (page 13).

Total Revenue

£7.323m

£7.323m	2017-18
£6.401m	2016-17

CR&D Revenue

£3.987m

£3.987m	2017-18
£2.627m	2016-17

Commercial Revenue

£3.336m

£3.336m	2017-18
£3.774m	2016-17

SME Engagements

125

125	2017-18
109	2016-17

SME Collaborations

39

39	2017-18
11	2016-17

Academic Collaborations

51

51	2017-18
39	2016-17

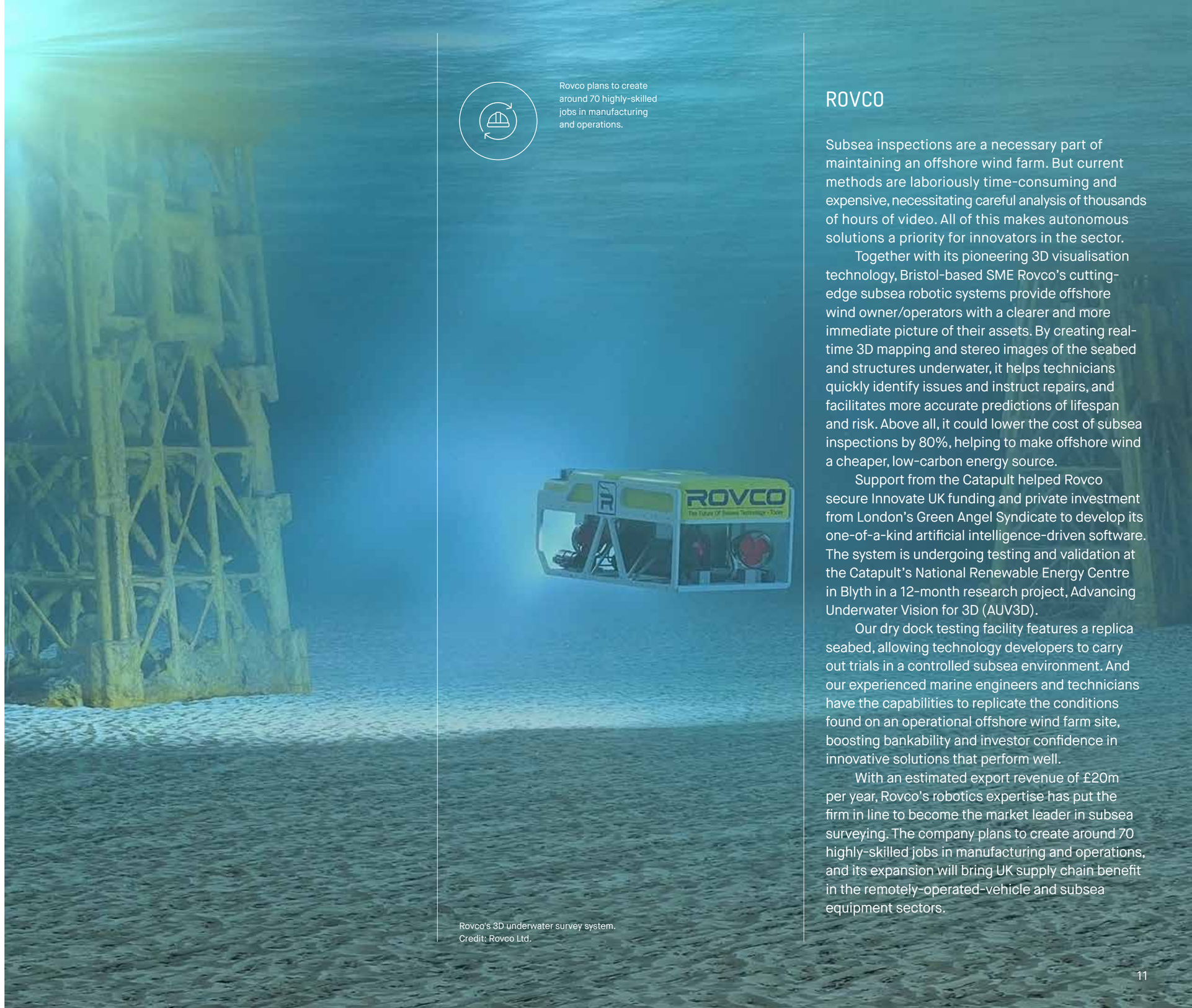
Facility Utilisation

63%

63%	2017-18
53%	2016-17

ORE Catapult is working with leading UK companies on innovative projects that are proving to be game-changing for the offshore renewable energy industry. The following pages profile examples of innovation progress in the sector and are testament to the success of the Catapult's core mission to support high-growth SMEs to drive the UK economy.

View our Innovation Brochure



Rovco plans to create around 70 highly-skilled jobs in manufacturing and operations.

Rovco's 3D underwater survey system.
Credit: Rovco Ltd.

ROVCO

Subsea inspections are a necessary part of maintaining an offshore wind farm. But current methods are laboriously time-consuming and expensive, necessitating careful analysis of thousands of hours of video. All of this makes autonomous solutions a priority for innovators in the sector.

Together with its pioneering 3D visualisation technology, Bristol-based SME Rovco's cutting-edge subsea robotic systems provide offshore wind owner/operators with a clearer and more immediate picture of their assets. By creating real-time 3D mapping and stereo images of the seabed and structures underwater, it helps technicians quickly identify issues and instruct repairs, and facilitates more accurate predictions of lifespan and risk. Above all, it could lower the cost of subsea inspections by 80%, helping to make offshore wind a cheaper, low-carbon energy source.

Support from the Catapult helped Rovco secure Innovate UK funding and private investment from London's Green Angel Syndicate to develop its one-of-a-kind artificial intelligence-driven software. The system is undergoing testing and validation at the Catapult's National Renewable Energy Centre in Blyth in a 12-month research project, Advancing Underwater Vision for 3D (AUV3D).

Our dry dock testing facility features a replica seabed, allowing technology developers to carry out trials in a controlled subsea environment. And our experienced marine engineers and technicians have the capabilities to replicate the conditions found on an operational offshore wind farm site, boosting bankability and investor confidence in innovative solutions that perform well.

With an estimated export revenue of £20m per year, Rovco's robotics expertise has put the firm in line to become the market leader in subsea surveying. The company plans to create around 70 highly-skilled jobs in manufacturing and operations, and its expansion will bring UK supply chain benefit in the remotely-operated-vehicle and subsea equipment sectors.

GreenSpur's technology could lead to the creation of over 3,000 new jobs in the UK.

GREENSPUR

Today's generation of multi-megawatt wind turbines are increasingly using direct drive generators to produce electricity. However, these generators use large volumes of rare earth magnets, which are scarce, expensive and sourced almost exclusively from China.

GreenSpur Renewables was established to develop and commercialise a new direct drive generator that exclusively uses ferrite – an abundant material around forty times cheaper than rare earth – as an alternative. GreenSpur's concept removes the price and supply risks of using rare earth magnets, and presents enormous opportunities for UK-based manufacturing and its associated supply chain.

After helping the company secure Innovate UK funding to scale up its pioneering generator, the Catapult worked with the Essex-based SME to successfully test its 75kW prototype generator at the National Renewable Energy Centre in 2017. If scaled up to the 2-3GW level, the technology could lead to the creation of over 3,000 new jobs in the UK. This is a revolutionary UK technology with the potential to have a global impact.

GreenSpur's generator undergoing testing on our 1MW facility

LIMPET TECHNOLOGY

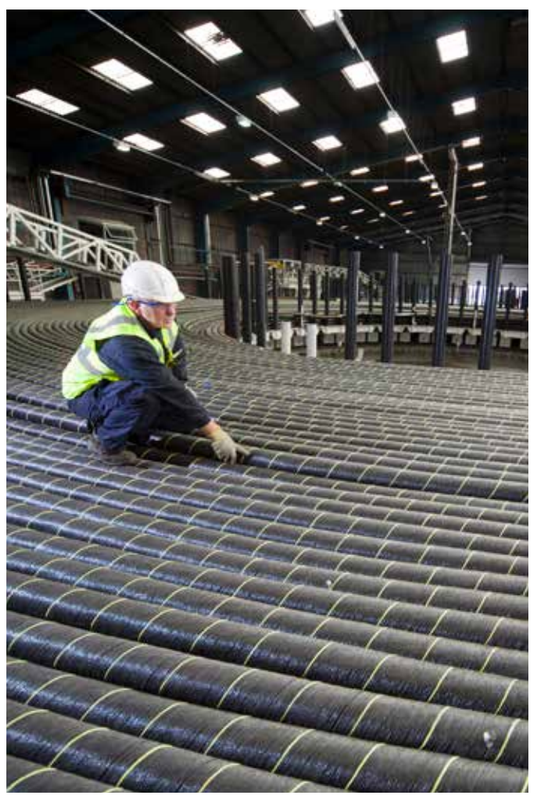
Keeping the blades of an offshore wind farm turning requires regular visits from maintenance technicians. But getting onto and off the turbines from a boat is among the most stressful and dangerous parts of the job and, when waves are higher than 1.5 metres, transfers are considered too risky. Failed transfers and lost energy production are hugely expensive for operators, and this problem is set to become worse as the industry pushes into sites that are further from shore.

The Edinburgh-based SME Limpet Technology is developing a game-changing offshore personnel transfer system aimed at alleviating this problem. This dynamic hoist and fall arrest system uses in-built lasers to track the vessel's deck, adjusting the height of the hoist in real time. This compensates for the motion of the vessel and allows the technician to clip in and transfer onto the turbine more easily. The system aims to increase access to far offshore turbines from 50% of the year to 80%.

Trials at the 7MW Levenmouth Demonstration Turbine have been invaluable to Limpet's research and development programme – so much so that the company has moved its manufacturing base to be closer to the turbine, creating skilled jobs where they are most needed, and the system is now being installed and tested on a real-world wind farm.

The system could potentially increase access to far offshore turbines from 50% of the year to 80%.

An example of Limpet's innovative hoist technology on our Levenmouth Demonstration Turbine



JDR Cables has supplied 155km of 66kV cables to Scottish Power Renewables' €100m East Anglia One wind farm.

JDR CABLES

To bring its pioneering 66kV technology to market, subsea cable manufacturer JDR Cables chose ORE Catapult to provide electrical testing throughout its development, qualification and type testing programme.

As a long-term test partner of JDR, we developed a bespoke facility to validate and de-risk the new cables, giving the Hartlepool-based firm the confidence that its first-of-its-kind technology can withstand the higher loads and harsh conditions offshore.

After the unveiling of the new cables in July 2016, JDR was awarded its first 66 kV array cable contract in December that year, to manufacture over 20km of cable for the 90+MW European Offshore Wind Deployment Centre in Aberdeen Bay. April 2017 saw further success for the cable maker, with a contract to supply 155km of 66kV cables at ScottishPower Renewables' €100m East Anglia One.

The benefits – in reducing costs, in UK supply chain content, and in creating jobs – have already been enormous, and haven't yet been fully realised. This is a UK-forged success story that has the potential to keep getting bigger.

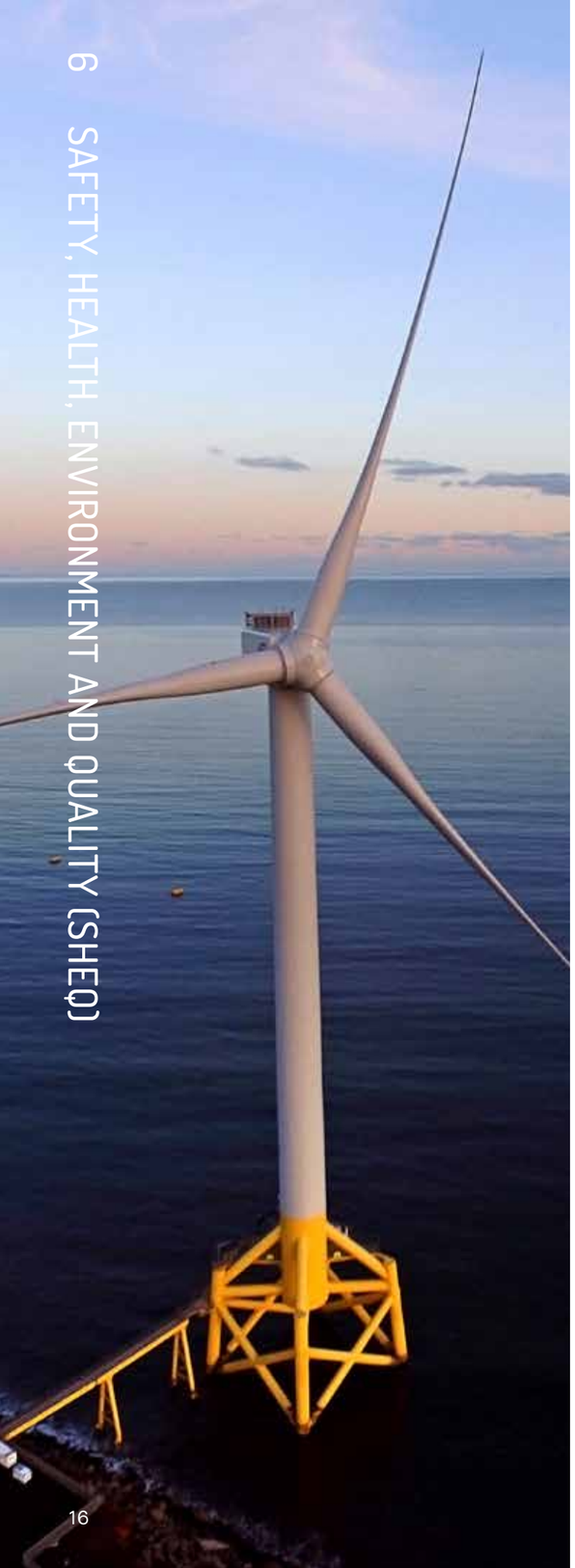
"To bring its pioneering 66kV technology to market, subsea cable manufacturer JDR Cables chose ORE Catapult to provide electrical testing throughout its development, qualification and type testing programme. "
Jeremy Featherstone, Product Development Director, JDR Cable Systems

NOVA INNOVATION

The tidal stream industry has made significant progress in the past decade. Recent research points to its potential to boost the UK's economy by £1.4bn, adding 4000 jobs and supporting coastal communities in need of economic regeneration. But developers are still proving their technology, and there remains work to be done before the sector becomes fully cost-competitive with other forms of renewables generation.

Nova Innovation is one of the firms leading the charge for tidal energy. The game-changing Edinburgh firm scored a world-first in 2016 with its three-turbine Shetland Array, a project delivered with 80% Scottish supply chain content, and is now the lead partner in the £20.2m European project Enabling Future Arrays in Tidal (EnFAIT).

As well as adding another three turbines to the Shetland Array, making it the largest tidal array in the world, EnFAIT will reposition the turbines to explore the optimum layout for the array to operate most efficiently. The Catapult's role involves the use of industry-leading computer modelling software to demonstrate that the project could reduce the cost of tidal energy by 40% – work that paves the way for rapid development in the sector.



ORE Catapult is committed to providing a safe and healthy working environment for its employees, customers and other stakeholders. Our Safety, Health, Environment and Quality (SHEQ) processes are critical to the way we work.

FY17-18 SHEQ PERFORMANCE

The Catapult continues to align itself to best practice and industry standards in SHEQ. In the last year we have been certified to the new Quality and Environmental Management System standards (ISO 9001:2015 and ISO 14001:2015), been recertified to Occupational H&S management system (OHSAS 18001:2007) and retained our accreditation for General Requirements for the competence of testing and calibration laboratories (ISO 17025)

This year saw the Catapult launch a new organisation-wide Culture-Based Safety Programme, 'Each and Everyone'. **Think Safe, Talk Safe, Act Safe**, is our new safety work code that will enable each and every one of our employees to make a contribution to a safer workplace. A critical component of this programme is conducting regular TalkSafe discussions about the safety of the tasks we do, understanding the risks involved and how we could do it safer. This programme will increase awareness of health and safety across ORE Catapult and contribute to an embedded safety culture.

To have a culture where each & everyone always thinks, talks and acts safely

Each&Everyone vision

each&everyone
Think safe • Talk safe • Act safe

LOOKING AHEAD TO FY18-19

Although the Catapult has a mature and embedded process for Health and Safety, we are always striving for continuous improvement and have developed a key set of objectives for FY18-19. These include:

- Further development and implementation of a road map to build upon the successful launch of 'Each and Everyone'.
- Establish a new Supplier Quality Assurance programme for our critical suppliers, to drive quality and assurance in our supply chain.
- Achieve IEC-RETL (Renewable Energy Test Laboratory) status for the rotor blade testing facilities.
- Conduct a review of our KPIs to ensure they remain fit for purpose.
- Align and transition processes and activities to new International Standards: ISO 45001 and ISO/IEC 17025.

Our work with local schools has increased year-on-year, with continued support of Science, Technology, Engineering and Maths (STEM) education across our sites in Blyth, Glasgow and Levenmouth.

The Catapult has developed three programmes for each of its principle operational sites.

STEM Activity

172.5 h

In FY17-18, we undertook 172.5 hours of STEM Activity from primary to further education.

BLYTH STEM HUB

Blyth STEM Hub has been established to deliver STEM activities and support to local schools and businesses in Blyth and the surrounding areas. To date, the Blyth STEM Hub has been successful in establishing itself at the centre of the local STEM network and is growing in support.

- 350 young people engaged in STEM sessions
- 120 teachers engaged, including CPD sessions
- 12 local schools working directly with the STEM hub, including a STEM teacher advisory group with representatives from each school
- 45 Employers/stakeholders engaged with the hub

GLASGOW STEM CLUB

Towards the end of FY17-18, we launched the Glasgow STEM Club. One of our engineers won an Ingenious Award from the Royal Academy of Engineering to launch 'STEM by Stealth' lessons for four local schools in areas of deprivation that have little to no engagement with STEM Learning. We are facilitating the creation of 3 new STEM clubs with 4 local primary schools to sustain this activity and stimulate more interest in STEM subjects.

LEVENMOUTH

ORE Catapult has worked in close partnership with Levenmouth Academy for the past two years, funding a STEM ambassador in the school and supporting a range of activities to increase opportunities for its pupils and promote positive destinations in further and higher education or employment.

FURTHER AND HIGHER EDUCATION

The Catapult supports internships and placements for students in further and higher education. These offer student engineers an opportunity to apply their learning and develop new skills in the workplace. We've supported four industrial placements and eight summer interns in the past year as well as 4 part funded placements at the Catapult. We have also recruited 12 apprentices and interns to work with our technical and engineering teams.

The Catapult will continue to accelerate the success of UK companies in the renewable energy sector, driving clean economic growth. Over the next five years, we will leverage over £70m of core grant to help the sector innovate, creating additional UK GVA of £600m and ca. 16,000 new jobs. To this end the Catapult has reformulated its vision and mission and redefined its objectives to meet this ambition.

VISION:

ORE Catapult will be the world's leading offshore renewable energy technology centre.

ORE Catapult will deliver major programmes for high growth companies, launch new centres of excellence in Hull, Levenmouth in Fife, and South Wales, launch at least four thriving research hubs with leading universities, drive technology frontiers in close partnerships with global OEMs and UK innovators, and expand our existing assets to retain our position as the world's foremost open-access test and validation centre.

MISSION:

To accelerate the creation and growth of UK companies in the offshore renewable energy sector.

The Catapult will play a key role in delivering the UK's clean growth opportunity. We will use our unique facilities, research and engineering capabilities to bring together industry and academia and drive innovation in renewable energy.

STRATEGIC OBJECTIVES

Our new vision and mission will deliver not just success for the Catapult but also for the offshore energy sector and the UK economy. To that end we will deliver impact through pursuit of the following key objectives:

Operational Performance

We will enable the UK to become internationally recognised as a centre of excellence for operating offshore renewable plant, and for UK innovators and solution providers to develop products and services that will build and maintain a UK based supply chain, boosting productivity of UK businesses and driving significant exports.

Accelerated Technology Development

We will be internationally recognised as the go-to testing and validation centre for the large industrials (OEMs), and in doing so act as the access point to UK based high-value supply chains and help develop and validate new innovations ready for the market.

New Frontiers

We will identify and accelerate promising technologies towards commercialisation, seed the next generation of high growth businesses and help them to access the UK's indigenous market and export opportunities.

UK Growth Platforms

We will develop cross-cutting support platforms essential for ensuring economic impact from the other three strategic objectives.

MEASURING OUR SUCCESS

To deliver this activity the Catapult has developed a new strategy and delivery plan for the financial years 18-19 to 22-23, defining key milestones and deliverables for each year of the plan. In addition to the KPIs outlined in our new delivery plan, the Catapult is also committed to measuring the impact we are having in our sector and in the UK economy. We are actively implementing our impact evaluation logic model and demonstrating how we will translate our objectives into outcomes, outputs and impacts. We have realigned our evaluation model to our new objectives and set up mechanisms for the regular reporting of the impact we're having on the industry, our relationship with government and national policy as well as the wider impacts around the commercialisation of new, innovative products and services.

The Catapult has been working with Innovate UK's appointed economists to independently evaluate our impact. The first phase of this activity was undertaken during summer 2017 with positive feedback on the Catapult's impact thus far. This first look assessed the immediate outputs from the Catapult's activities to determine if we were achieving our impact objectives and making a difference to the organisations we work with and how that translates to economic growth.

The Catapult will continue to publish its own case studies detailing the impact we're having on the organisations we work with in addition to coordinating with Innovate UK to independently assess our progress.

ORGANISATION DESIGN

ORE Catapult's organisational structure aligns its strategic objectives to each of its functional directorates: Testing & Validation, Operational Performance and Research & Disruptive Innovation. This allows clear ownership and effective management of each strategic objective as well as accountability for milestones and key performance indicators. Professional Services is an enterprise-wide function that includes corporate reporting, governance, assurance and human resources capabilities. The Catapult also has a Marketing and Communications team, reporting directly to the Chief Executive Officer, dedicated to promoting and growing our business, disseminating key messages to stakeholders, reputation management and brand awareness.

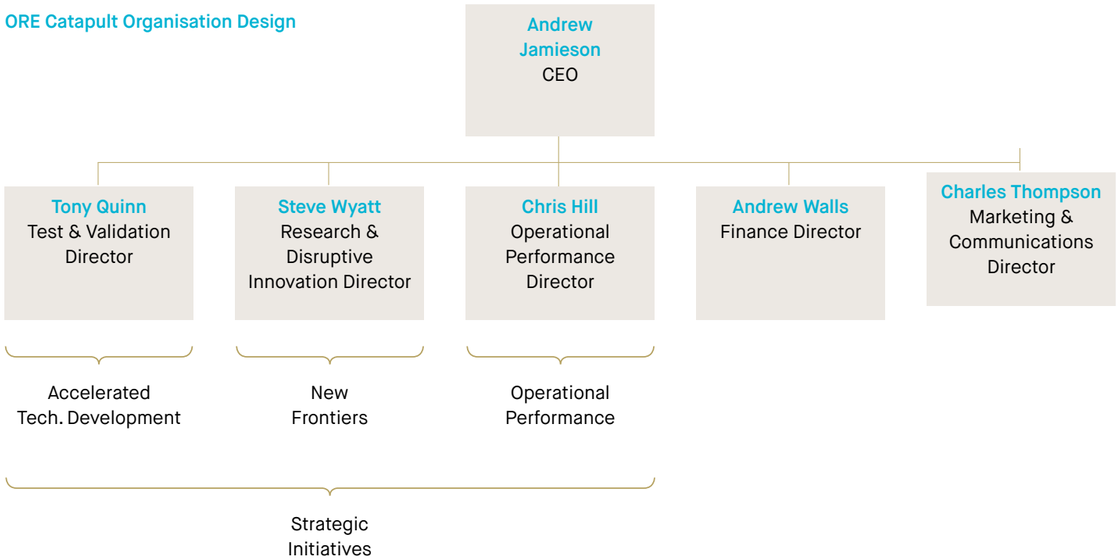
VALUES AND BEHAVIOURS

The way we deliver is just as important as what we deliver and this year our focus has been on identifying what we see as the "ORE Catapult Way". This piece of work has focussed on identifying and articulating the climate and culture that fits our ambition as a business and the people we want to attract.

As we enter the next period of growth, we have recognised that it is important that we empower our senior management team further. The Executive Leadership Team and Senior Management Team have worked together to refresh our values and behavioural indicators.

The roll out of the refreshed values has been and will continue to be an integral part of the cascade of the new strategy and delivery plan. We are also leading by example by ensuring that living the values accounts for 50% of the appraisals of our senior team.

ORE Catapult Organisation Design



OUR VALUES

Innovation

Which means we...
seek out new ideas and ways of working and embrace positive change whilst recognising our limitations, accepting challenge and challenging assumptions

By:
- Having the courage to take calculated risks when creating new and pioneering business solutions, drawing on our own knowledge and experience
- Being inquisitive and forward thinking, looking beyond the boundaries of our industry
- Being open to new ideas, embracing and supporting change, and drawing on experience, knowledge and wide sources of evidence to help decision making
- Being prepared to constructively challenge and be challenged

Excellence

Which means we....
consistently take personal responsibility for delivering successful outcomes, demonstrating resilience and determination to overcome barriers and continually look for ways to improve

By:
- Delivering quality results as effectively as we can and learning from our mistakes to continuously improve
- Taking personal responsibility for the outcomes we're accountable for, reliably doing what we say we are going to do
- Using all the facts available to make sound decisions whilst finding ways to overcome any barriers to progress
- Identifying and sharing best practice for high quality delivery

Integrity

Which means we....
value, recognise and reward every individual's time, commitment, diverse and constructive contribution, treating everyone with equal dignity and respect

By:
- Applying a fair and consistent approach when dealing with people
- Being transparent, honest and open in our interactions and decision making
- Providing effective support to others in difficult and challenging circumstances
- Actively and attentively listening to, and being respectful of, the ideas, views and opinions of others
- Being committed and show professionalism in everything we do

Collaboration

Which means we....
wholeheartedly commit to building enduring, positive working relationships, recognising and supporting the needs of others and working openly and honestly towards mutual success

By:
- Taking the time to build genuinely positive, professional and trusting working relationships
- Collaborating effectively with colleagues and external partners, mutually sharing our skills, knowledge and insights with each other to achieve the best possible results for all
- Working to create an environment which is supportive and where success is recognised and congratulated
- Working to create an environment where people get the job done to the best of their abilities

This year we also adopted our 'Catapult on a page', as an easy reference point for our objectives as a business, ensuring transparency across the business on critical milestones whilst also visually setting this in the context of how we deliver in terms of our values and behaviours.

ORE CATAPULT ON A PAGE

Vision

To be the world's leading offshore renewable energy technology centre

Mission

To accelerate the creation and growth of UK companies in the offshore renewable energy sector

FY18-19 to 22-23 Strategy Integrity

Operational Performance
We will enable the UK to become internationally recognised as a centre of excellence for operating offshore renewable plant, and for UK innovators and solution providers to develop products and services that will build and maintain a UK based supply chain, boosting productivity of UK businesses and creating an exportable commodity.

Accelerated Technology Development
We will be internationally recognised as the go-to testing and validation centre for the large industrials (OEMs) and in doing so act as the access point to UK based high-value supply chains, and help develop and validate new innovations ready for the market.

New Frontiers
We will identify and accelerate promising technologies towards commercialisation, seed the next generation of high growth businesses and help them to access the UK's indigenous market and export opportunities.

UK Growth Platforms
We will develop cross-cutting support platforms essential for ensuring economic impact from the other three strategic objectives.

FY18-19 to 22-23 Strategic Programmes

- Operational Excellence
- Engineering & Automation
- Lifetime Asset Management
- Design for the Lowest Levelised Cost of Energy
- Wind Turbine Bearing Test Facility
- 6-9 MW
- 10MW+
- Disruptive Technology Centre
- Emerging Technologies
- Research Hubs
- Wave & Tidal
- Smart Energy @ Levenmouth
- SME High Growth Platform
- Regional Platform
- International Platform

ORE Catapult Values

Innovation
Seek out new ideas and ways of working and embrace positive change whilst recognising our limitations, accepting challenge and challenging assumptions

Collaboration
Wholeheartedly commit to building enduring, positive working relationships, recognising and supporting the needs of others and working openly and honestly towards mutual success

Excellence
Consistently take personal responsibility for delivering successful outcomes, demonstrating resilience and determination to overcome barriers and continually look for ways to improve

Integrity
Value, recognise and reward every individual's time, commitment, diverse and constructive contribution, treating everyone with equal dignity and respect

ORE Catapult's statement of comprehensive income for FY17–18 is highlighted below.

Consolidated statement of comprehensive income for the year ended 31 March 2018	2018 £'000	As restated 2017 £'000
Turnover	19,093	17,538
Cost of sales	(3,907)	(3,162)
Gross profit	15,186	14,376
Administrative expenses	(18,404)	(17,348)
Other operating income	3,973	3,187
Operating profit	755	215
Share of loss in joint venture	–	(12)
Interest receivable and similar income	4	5
Profit before taxation	759	208
Tax (charge) / credit on profit	(142)	882
Profit for the financial year	617	1,090
Total comprehensive income for the year	617	1,090

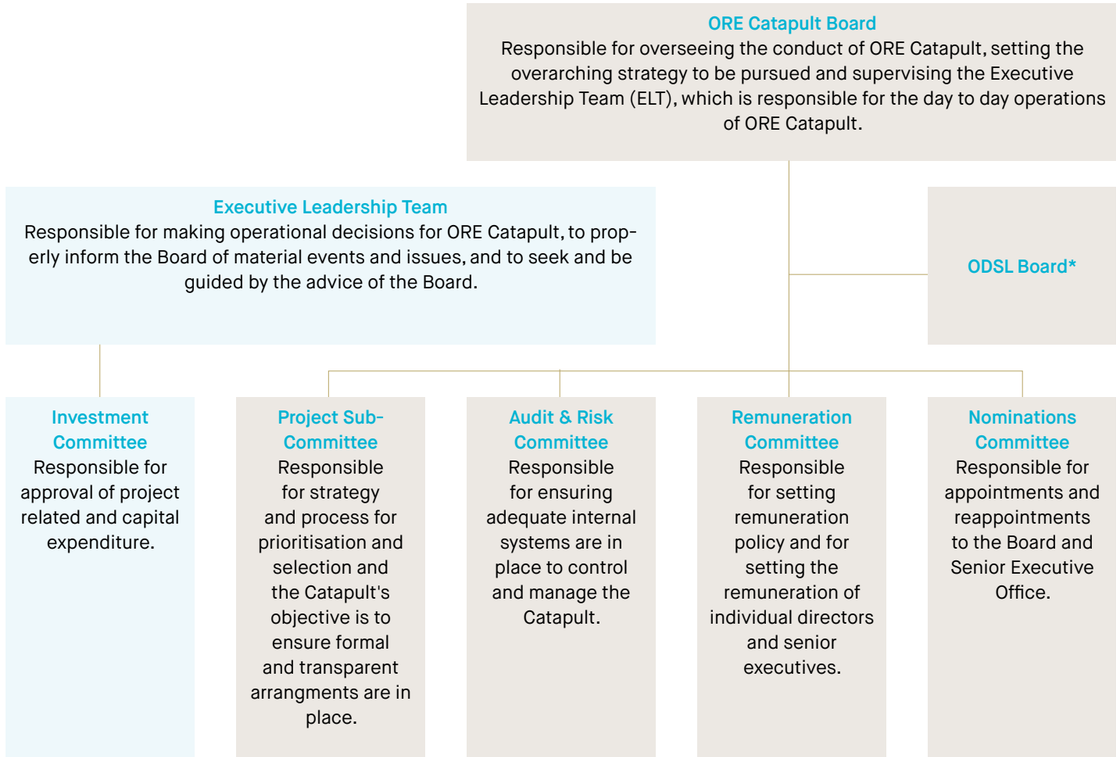
As well as directing the overall strategy, the Board has a fundamental role to implement and oversee rigorous governance to ensure appropriate and effective use of the significant public investment that ORE Catapult receives. We set the tone and culture for the Executive Management Team and the wider business, and are committed to adherence to the Corporate Governance and Stewardship Codes.

This report sets out the work that the Board has undertaken over the past year, and seeks to provide a high degree of transparency on all aspects of ORE Catapult's business and performance.

I am pleased to include gender pay reporting for the first time. Like all other companies in our industries we recognise that there is a gender pay gap and are striving to attract, retain and promote greater diversity at all levels of our business.

Together with the Board, I am committed to continuing to ensure that we adopt best practise in all we do, and will continue to strive for the very highest standards.

Colin Hood
Chairman,
Offshore Renewable
Energy Catapult



*ODSL
ORE Catapult Development Services Limited company number 05636283 (hereinafter referred to as "ODSL is a wholly owned private subsidiary of ORE Catapult (Company Number 04659351). ODSL operates independently from ORE Catapult and undertakes commercial work on behalf of ORE Catapult through a management agreement which governs the trading between the two companies to ensure that it is an open, fair and commercial basis to reflect the arms-length nature of the business relationship.

Colin Hood
Chair

Date of Appointment

31-March-2014

Committee Membership

N

Colin has over 35 years of experience in the Energy sector. At SSE, he joined the board as Power Systems Director and later became Chief Operating Officer. Prior to this, he was Director of Distribution for Southern Electric, having joined the industry with the North of Scotland Hydro Electric Board in 1977.

Professor Sir Jim McDonald
Non-Executive Director

Date of Appointment

31-March-2014

Committee Membership

N

Jim is the Principal and Vice-Chancellor of the University of Strathclyde, Chairman of both the Scottish Research Partnership in Engineering and the Scottish Energy Technology Partnership, and co-Chair with the First Minister of the Energy Advisory Board in Scotland.

Professor Dame Anne Glover CBE FRSE
Non-Executive Director

Date of Appointment

01-April-2016

Committee Membership

R P

Anne has a BSc in Biochemistry from Edinburgh and a PhD in Molecular Microbiology from Cambridge. She has pursued a career in scientific research at Aberdeen University.

In 2008 she was made a Woman of Outstanding Achievement in Science, Engineering and Technology (SET) and has worked hard to raise the profile of women in SET.

Anne was the first Chief Scientific Adviser to the President of the European Commission (2012-2015). Prior to that, she was the first Chief Scientific Adviser for Scotland (2006-2011)

In February 2018 she was appointed Special Adviser to the Principal, University of Strathclyde.

Fred Hallsworth B.Acc, C.A
Non-Executive Director

Date of Appointment

20-March-2015

Committee Membership

N A

Fred had a 30-year career with Andersen, and latterly Deloitte, providing corporate finance and corporate governance services to public and private technology companies in Scotland and Cambridge. For the last 11 years he has worked as an Independent Non-Executive Chairman or Director. Fred is a lay member of the University of Strathclyde's Enterprise and Investment Committee advising spinouts.

Julia Brown DBE, The Baroness Brown of Cambridge
Non-Executive Director

Date of Appointment

20-March-2015

Committee Membership

A R

Baroness Brown is an engineer. An academic career at Cambridge University led to senior business and engineering roles at Rolls-Royce plc. She was Vice-Chancellor of Aston University from 2006 – 2016.

She serves as: Deputy Chair of the Committee on Climate Change and Chair of the Adaptation Sub-Committee of the Committee on Climate Change; Chair of the Carbon Trust, and a Board member of Innovate UK.

A Audit & Risk
N Nominations
R Remuneration
P Projects

Andrew Mill
Non-Executive Director

Date of Appointment

08-September-2005

Committee Membership

P

Andrew is the former CEO of the National Renewable Energy Centre (Narec), which he joined in 2005 from the European Marine Energy Centre (EMEC) where he was Managing Director. Andrew has a wide range of public-private sector experience developed over a long career in the energy industry.

Andrew will retire from the Board on 31-December-2018.

Alan Moore OBE
Non-Executive Director

Date of Appointment

31-March-2014

Committee Membership

R P

Alan is the past Chair of the Renewables Advisory Board and of RenewableUK. He has over 40 years experience in research and power generation across all energy sources including wind, wave and tidal, and was responsible for the investment, development, construction and operation of North Hoyle, the UK's first major offshore wind farm.

Alan will retire from the Board on 30-June-2019.

Hugh McNeal
Non-Executive Director

Date of Appointment

01-July-2016

Committee Membership

A P

Hugh became Chief Executive of RenewableUK in April 2016. Before this, he was Director of Change at the Department of Energy & Climate Change (DECC), improving the Department's efficiency and delivering financial savings. Other roles in the Civil Service included Chief Executive, Office for Renewable Energy Deployment at DECC, and Deputy Director of Low Carbon Business at the Department for Business, Innovation & Skills.

Andrew Jamieson
Chief Executive

Date of Appointment

31-March-2014

Committee Membership

P

Andrew spent 24 years with ScottishPower, where he held key roles in engineering, marketing and financial planning.

In 2004, he moved to ScottishPower Renewables where he was responsible for energy policy and regulation. He is a former Chairman of both RenewableUK and Scottish Renewables, sits on the Scottish Government's Energy Advisory Board and has chaired a number of UK and Scottish working groups into the development of marine and offshore wind energy.

Andrew Walls
Finance Director

Date of Appointment

20-March-2015

Committee Membership

P

Andrew trained with the global firm PricewaterhouseCoopers, working with both private and public sectors delivering audit, financial diligence and consultancy assignments for the firm in the UK and abroad. He then joined the London and Edinburgh-based investment bank Quayle Munro Holdings PLC, initially focusing on infrastructure projects through the private finance initiative before joining their Executive team as Finance Director and Company Secretary.

He is also a Trustee and newly appointed Audit Committee Chairman of Scotland's largest independent charity grant funder, the Glasgow-based Robertson Trust.

Shareen Gault
General Counsel / Company Secretary

Date of Appointment

01-August-2017

Committee Membership

Shareen Gault is the General Counsel and Company Secretary for the ORE Catapult, overseeing all legal and contractual activities as well being responsible for corporate governance, compliance and risk. Previously, she was Legal & Compliance Manager at the Student Loans Company following several years as an Employment and Litigation solicitor in private practice

Shareen sits as a Non-Executive Director and Trustee of Citizens Advice Scotland and the Govan Community Project. She is dual-qualified in Scots and English law.

A Audit & Risk

N Nominations

R Remuneration

P Projects

11.2 ROLE OF THE BOARD

The Board has the primary responsibility of overseeing the conduct of ORE Catapult, setting the overarching strategy to be pursued and supervising the Executive Leadership Team (ELT), which is responsible for the day-to-day operations of ORE Catapult

Role of the Executive Leadership Team

The ELT's primary responsibility is to make operational decisions for ORE Catapult, to properly inform the Board of material events and issues, and to seek and be guided by the advice of the Board. This year the focus has been on ensuring that a solid business case was presented for a second term of the Catapult and approval of a new five-year strategy and delivery plan.

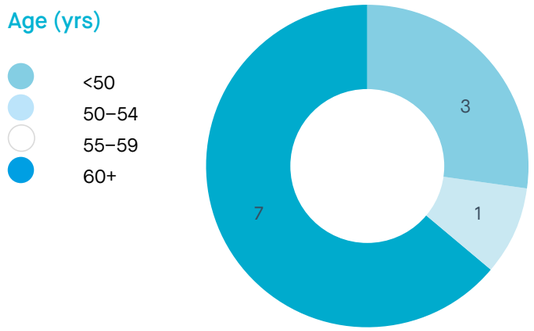
Board Composition, Roles and Responsibilities

The composition of the Board has not changed during the FY, with our primary focus being on securing the approval of the next five years of funding. However, under the retirement by rotation provisions envisaged by our Articles of Associations, we are mindful that some of our longstanding Non-Executive Directors will soon be reaching their maximum term and we are already considering Board succession planning. Appointments to the Board are made on the recommendation of the Nominations Committee (see page 36 for further information).

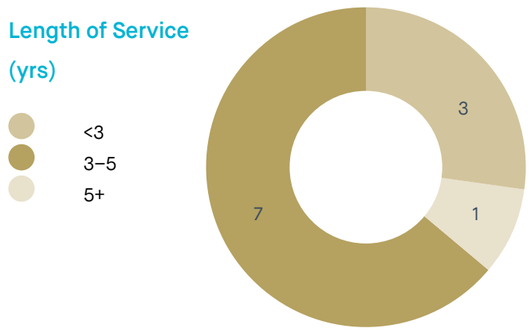
The Catapult's directors have a broad range of skills and insight from a variety of backgrounds to ensure that the required experience and knowledge as well as balanced and diverse views are represented at Board Meetings.

Board Diversity

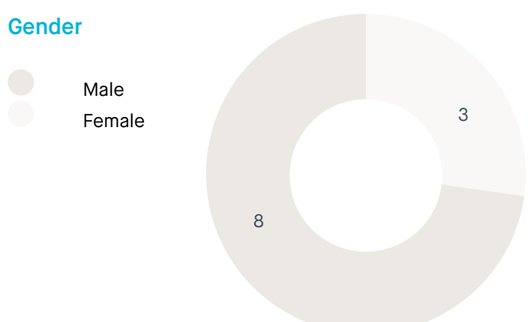
Age (yrs)



Length of Service (yrs)



Gender



11.3 REPORT FROM THE BOARD

During the year, the Chairman supported by the Finance Director and Company Secretary maintained a rolling 12-month agenda for Board and Committee Meetings. Standing items for discussion at each meeting were: Health & Safety, Progress against Revenue and Budget, Risk Management, a CEO operational update report and updates from each of the Board Sub Committees.

The Board has focussed this year on determining a strategy and delivery plan for the next five years of funding, building upon the successes to date and setting ambitious goals for our future impact.

Board evaluation is undertaken annually by the Chair with external facilitation conducted every three years. In February 2017, Board evaluation was undertaken by an external facilitator. The independent conclusion of the Board evaluation was that the Board is operating effectively with the benefit of experienced directors with varied skills, bringing diverse views to the table. Recommendations were made with regard to improvements which could be made. These have been implemented over the course of the last year, with particular improvements made around the development of risk appetite in the business and a particular emphasis on culture over the course of the year.

The Board has a number of sub-committees to assist in discharging its responsibilities. The principal committees are the Nominations Committee, Remuneration Committee, Audit & Risk Committee and Projects Committee. The Board may also set up issue specific Committees when the need arises. The responsibilities of these Committees are set out in individual Terms of Reference which are available on the Company's website: https://ore.catapult.org.uk/about-us/governance/. Reports from each of the Committees are provided on pages 36 to 42. The Company Secretary is the Secretary to the Board Committees and ensures that the Committees adhere to the specific rules applicable to the Catapult under the Innovate UK Grant Funding Agreement ("GFA") and Corporate Governance standards, applying the provisions and principles of the Combined Corporate Code and Board Effectiveness Rules as well as maintaining compliance with the Articles of Association of the Company.

12.1 NOMINATIONS COMMITTEE

Chair: Colin Hood

The Nominations Committee is responsible for appointments and re-appointments to the Board and to senior executive office. The Catapult's objective is to ensure a formal, rigorous and transparent procedure for the appointment of new directors to the Board.

ORE Catapult operates retirement by rotation provisions with Directors subject to a maximum of 2 x three-year terms. The Nominations Committee annually reviews Board composition and expertise with these provisions in mind. This year, the Committee recommended a second term for both Fred Hallsworth and Baroness Brown of Cambridge (effective from March 2018).

In anticipation of two longstanding members of the Board coming to the maximum term in January 2019, and others to follow, the Nominations Committee also commenced an external recruitment process for a new Non-Executive pipeline with Aspen People Limited. It is anticipated that appointments will be made later this year to ensure some handover prior to the departure of those longest serving Directors.

The Nominations Committee considers all candidates on merit and against objective criteria having due regard for the benefits of diversity on the Board (including gender) and ensuring that appointees have sufficient time available to devote to the position.

12.2 AUDIT & RISK COMMITTEE

Chair: Fred Hallsworth B.Acc, C.A

The Audit Committee is responsible for ensuring adequate internal systems are in place to control and manage the Catapult. The Audit & Risk Committee receives regular reports on the Company's finances and risk management arrangements, alongside updates to key governance policies.

In the past year the Audit Committee has overseen the annual statutory accounts and auditing process for recommendation to the Board for approval. It has also reviewed updates to key control policies including Whistleblowing and Bribery and Anti-corruption, as well as receiving assurance on the implementation of the new General Data Protection Regulation (GDPR) across the Catapult.

This year has brought a focus on maturing the risk capabilities of the organisation. The Audit Committee reviewed revised arrangements to the management of risk and was instrumental in the development of a new risk dashboard for reporting to the Board. This has been a key area of development for the Catapult and the start of an increasing focus on risk management. More information on ORE Catapult's Risk Management arrangements can be found on pages 42 to 43.

Another key activity undertaken over the last year was the re-tendering of external audit services. Following a procurement exercise, the Audit Committee selected KPMG to serve as external auditors for an initial three year period.

12.3 PROJECTS SUB COMMITTEE

Chair: Alan Moore OBE

Following the 2017 Board Evaluation exercise, the Projects Subcommittee Terms of Reference ("ToR") were once again reviewed. A new ToR was approved in October 2017, under which the Projects Sub-Committee defined its purpose as being responsible for the strategy and process for project prioritisation and selection. This subcommittee continues to review the project pipeline and contracted projects summary as well as tracking the KPIs and milestones. The Projects Sub Committee also reviews lessons learnt from key projects completed throughout the year to ensure the Catapult is actively improving its project management capabilities.

The Projects Sub-Committee is responsible for ensuring formal and transparent arrangements are in place. Accordingly, the Board has established the terms of reference, including the delegation of authority documentation, for the Project Sub-Committee.

12.4 REMUNERATION COMMITTEE

Chair: Julia Brown DBE, The Baroness Brown of Cambridge

The Remuneration Committee is responsible for establishing remuneration policy and for agreeing the remuneration of individual directors and senior executives. The executive directors play no part in decisions on their own remuneration.

The Remuneration Committee ensures that there is a formal and transparent procedure for developing policy on executive remuneration and for fixing the remuneration packages of individual directors. The Remuneration Committee uses independent evidence of total compensation for executive and management roles, both in similar types of organisation and across the energy sector, to benchmark remuneration packages, ensuring they are appropriate and sufficient to attract, retain and motivate people of the quality required to lead the Catapult.

In FY17-18, the Committee reviewed the objectives and targets of the Executive Team and approved the bonus provision for all staff, in line with current policy. Succession plans for business-critical roles were reviewed by the Committee to provide assurance that continuity of service can be maintained should key members of staff leave the Company.

The Remuneration Committee also reviewed the first gender pay report for ORE Catapult.

12.5 GENDER PAY REPORTING

Chair: Andrew Jamieson CEO

What is Gender Pay Reporting?

The gender pay gap shows the difference in the average pay between all men and women in a workforce expressed as a proportion of men's earnings.

Gender pay gap reporting is a different calculation to equal pay. Equal pay deals with the pay differences between men and women who carry out the same jobs, similar jobs or work of equal value. It is unlawful to pay people unequally because they are a man or a woman.

Having a gender pay gap is not unlawful or discriminatory of itself. Due to the nature of the work undertaken, there may be several reasons why organisations attract more men than women into the organisation. ORE Catapult's gender breakdown, for example, is 120 males:37 females. Females employed by the organisation tend to be primarily in support functions and administrative roles.

Reporting on gender pay gap in engineering industries, the Royal Academy of Engineering has stated, "As a male-dominated profession with relatively few women at all levels, closing the gender pay gap is likely to be a greater challenge for us than for other professions. Experience in other areas suggests that the legal obligation on companies to report that gap will help to focus minds and lead to more action to address it."

Under the current reporting thresholds, we are not obligated to report, having less than 250 employees. However, we feel that it is a critical tenet of our equality and diversity strategy that we demonstrate our willingness to collect and report this information, showing that we are serious about gender equality in the workplace.

What our results tell us

The data gathered is a relatively blunt tool and only tells us the overall gender gap, as well as the bonus pay gap and the proportion of men and women in each quartile of the pay structure of the company. Our median pay gap of 27% is well above the national figure of 9%, but this UK-wide measure is taken across all sectors and it is widely accepted that the sector we operate in is male dominated, leading to a greater differential.

Our action plan to tackle the gender pay gap is centred around three pillars: Attract, Retain and Promote.

(i) Attract

Part of our attempt to tackle the underrepresentation of women in science and engineering roles has been to proactively recruit female engineering internships. However, we recognise that in order to make real impact on a cultural shift on women in engineering, the focus has to be on intervention much earlier by influencing career choices at primary school level. Our schools STEM campaign is therefore an integral feature of our CSR strategy. In Levenmouth in particular, our community support programme has included funding a STEM ambassador in the local school.

Our gender pay gap results indicate that the majority of women we employ are in lower-paid jobs within the organisation. As a result, we are evaluating our recruitment processes and analysing the gender split of applications received to those interviewed to understand whether the language used in advertising our roles and advertising placement itself is having any impact on our gender composition. This year, we also intend to roll out a programme of internal unconscious bias training to address any underlying bias or preconceptions about gender and specific roles that may be impacting on recruitment.

(ii) Retain

We have relatively few females in senior roles; our Executive team is almost exclusively male. Good practice suggests we need to monitor how women are progressing through the organisation and the means in which we support them. We have in recent years developed our approach to flexible working in a bid to allow greater flexibility to rigid working times which has been positively received across the organisation. Retention strategies has also fed into the development of a more formalised Equality, Diversity and Inclusion strategy. We will launch this in late 2018. This work will allow us to bring together three strands: (1) CSR strategy and STEM activity (2) Learning &Development (3) Equality, Diversity and Inclusion under our general people objective.

(iii) Promote

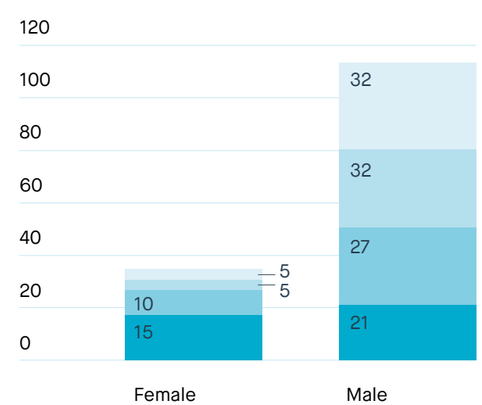
By analysing the career trajectory of females within the organisation we are also able to understand better whether adequate support is provided via Learning and Development to enable progression within the organisation. Feedback from our internal talent pipeline suggests that our employees would welcome coaching rather than mentoring alone as a means of development.

Pay Statistics

Comparison of mean pay in Offshore Renewable Energy Catapult shows a gap in favour of men of 28%. Comparison of median pay in Offshore Renewable Energy Catapult shows a gap in favour of men of 27%. The mean bonus pay gap is 41% and the median is 27% in favour of men.

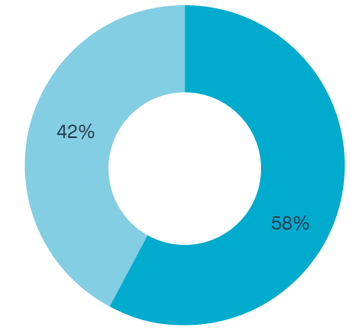
Gender Distribution across pay quartiles

- Q1 - £10.09 - £19.63
- Q2 - £19.64 - £24.40
- Q3 - £24.41 - £33.18
- Q4 - £33.19 - £137.80



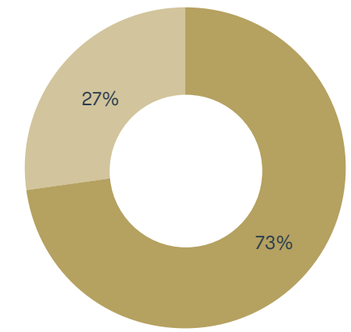
Lower Quartile

- Female
- Male



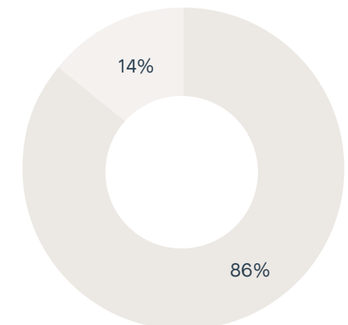
Lower Middle Quartile

- Female
- Male



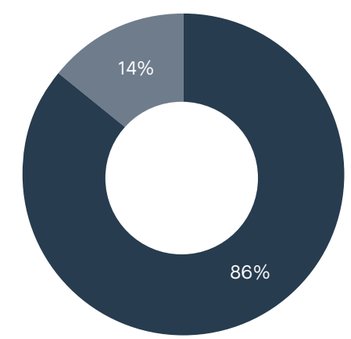
Upper Middle Quartile

- Female
- Male



Upper Quartile

- Female
- Male



13.1 RISK MANAGEMENT PROCESS

ORE Catapult manages a portfolio of risks that represent both internal and external challenges to the business. Risks are proactively identified, assessed and reported to the Executive Leadership Team and Board. Mitigations are progressed to reduce the impact of the risk should it materialise and the likelihood of occurrence. All risks are identified and categorised against risk categories that reflect the nature and scope of the Catapult's activities.

A review of risk reporting was completed in December 2017, with a refreshed risk reporting suite developed for submission to the ORE Catapult Board and Audit Committee. This exercise aimed to refine and focus risk reporting to highlight high level risks and issues for the Board's attention and action.

Risk Management relies on the continuous flow of information to and from risk owners, the Risk function, the Executive Leadership Team and the Board. Work to refresh and improve this process commenced during the year and will continue into FY18-19. This will include establishing a risk appetite model that will be embedded into risk management and decision making across the Catapult.

13.2 KEY RISK THEMES

ORE Catapult has considered a number of strategic and operational risks, including:

Health & Safety - The safety of our staff is paramount in ORE Catapult. If the right controls and protections are not in place, the consequences could be catastrophic for our staff and visitors.

Mitigation: The Catapult has a comprehensive set of policies and controls in place to manage the safe operation of our activities. We ensure Health & Safety is discussed regularly and have implemented a new cultural behaviour programme, 'Each and Everyone', to embed Health & Safety across the organisation.

Innovation and CR&D Funding – The availability of publicly available funding for research and innovation work is vital to ensuring the Catapult can collaborate with UK businesses and deliver impact to the sector.

Mitigation: ORE has a strong track record of accessing and winning publicly available funds. It has developed strategic relationships with BEIS and across Europe to ensure visibility of forthcoming opportunities. The Catapult is also pursuing opportunities beyond Europe and identifying opportunities in high potential international markets such as China and the USA.

Data Management – The Catapult must ensure it understands and protects all the data it processes and uses.

Mitigation: The Catapult has realigned all its policies and processes to ensure compliance with the new EU General Data Protection Regulation (GDPR), and ensuring staff are appropriately trained to recognise and process data accordingly. We also have strict data storage and cyber security protocols in place to ensure we are storing data safely and securely.

Expansion Exceeds Capacity – Ensuring the Catapult is sufficiently resourced to deliver our new Strategy and Delivery Plan is vital to the continued success of the business and delivering impact in the offshore renewable energy sector.

Mitigation: Extensive forward planning has taken place as part of the new strategy planning process to ensure it has identified the skills and experience it requires to deliver. We have also refined our resource planning capability to ensure a holistic view of capacity and demand.

ORE Catapult's Key Performance Indicators (KPIs) are set out in its Grant Funding Agreement with Innovate UK and monitored by the Executive Leadership Team. In addition, Innovate UK conduct a quarterly review of ORE Catapult's performance, including progress against KPIs.

		2017/2018			2016/2017
Ref	Common Set of KPIs	Target	Total	Variance	Total
1	Innovate UK Core Funding (£m) [1]	15.025	15.025	0	16.618
	CR&D Income (£m) [2]	3.298	3.987	0.689	2.5
	Public Income (£m)	0	0	0	0
	Commercial Income (excluding in-kind) (£m)	4.393	3.336	-1.057	3.493
	In-Kind Contributions (£m)	0	0	0	0
	IUK Non-Core Funding (£m)	0	0	0	0
2	Value of Innovation Work Performed (£m)	22.716	22.348	-0.368	22.611
3	Capital Expenditure Within Core Funding (£m)	3.215	3.709	0.494	5.718
4	Utilisation (%)	100	63	-37	53 %
5	Order intake (£m)	_	1.748	_	1.92
	Therein: CR&D (£m)	_	1.242	_	1.20
6	Sales Order Book (£m)	7.505	7.679	0.174	9.20
	Therein: CR&D (£m)	3.661	3.48	-0.181	2.70
7	Staff Numbers (FTEs) [3]	141*	151	10	133
8	Number of Business Clients [4]	130	108	-22	142
9	New SME engagements (Stage 1) [5]	113	125	12	109
	Enduring SME Engagements (Stage 3) [6]	20	39	19	11
10	Academic Collaborations (new in brackets)	17	51 (21)	34	39
11	Patents and licenses	5	0	-5	0
12	New businesses created	4	4	0	

[1] This does not include the additional £3.6m of grant funding awarded by Innovate UK during FY17-18
[2] The Catapult Group in aggregate delivered revenue of £7.3m, achieving 95% of the budget at £7.7m. Each of the three customer facing directorates has grown the delivery of revenue, translating to 16% growth on the FY16/17 outturn revenue delivery of £6.3m.
[3] Staff numbers re-forecast during FY17-18 to 150.
[4] Method of calculation changed for FY17-18. This year, 1 count per business and additional count where one business was in contract for each individual project. In previous years, clients were counted as repeat for each quarter of engagement.
[5] UK SMEs only - Stage 1 is an informal engagement to discuss a piece of work
[6] UK SMEs only - Stage 3 is where the Catapult and SME enter a formal agreement to undertake a piece of work

As part of the new Grant Funding Agreement for FY18-19 to 22-23, a new set of common KPIs have been developed. ORE Catapult has sought to define these KPIs through development of technical notes which have been agreed by the Executive Leadership Team and Innovate UK. These will inform the methods by which the Catapult records and reports KPIs to the Board and Innovate UK. The revised KPIs are as follows:

1. Number of businesses the Catapult has partnered with or been sub-contracted by, year to date
2. £s invested by businesses as match funding to CR&D projects with the Catapult, split between large and SMEs (£000s)
3. Progression from concept to commercialisation (Number of projects completed)
4. % of commercial income target for year achieved
5. Number of active projects with a business (split between large and SMEs)
6. % of CR&D income target for year achieved
7. Number of collaborative 'R&D focussed' (i.e. not HR, Finance, etc.) projects completed year to date
8. % of projects in current project portfolio that involve both academic and industrial partners

Inovo
121 George Street,
Glasgow, G1 1RD
+44 (0)333 004 1400

National Renewable Energy Centre
Albert Street Blyth,
Northumberland, NE24 1LZ
+44 (0)1670 359 555

Fife Renewables Innovation Centre (FRIC)
Ajax Way,
Leven, KY8 3RS
+44 (0)1670 357 649

Operations & Maintenance Centre of Excellence
Ergo Centre
Bridgehead Business Park,
Meadow Road,
Hessle, HU13 0GD

ore.catapult.org.uk
info@ore.catapult.org.uk

Twitter
@ORECatapult

CATAPULT
Offshore Renewable Energy

We work with
Innovate UK