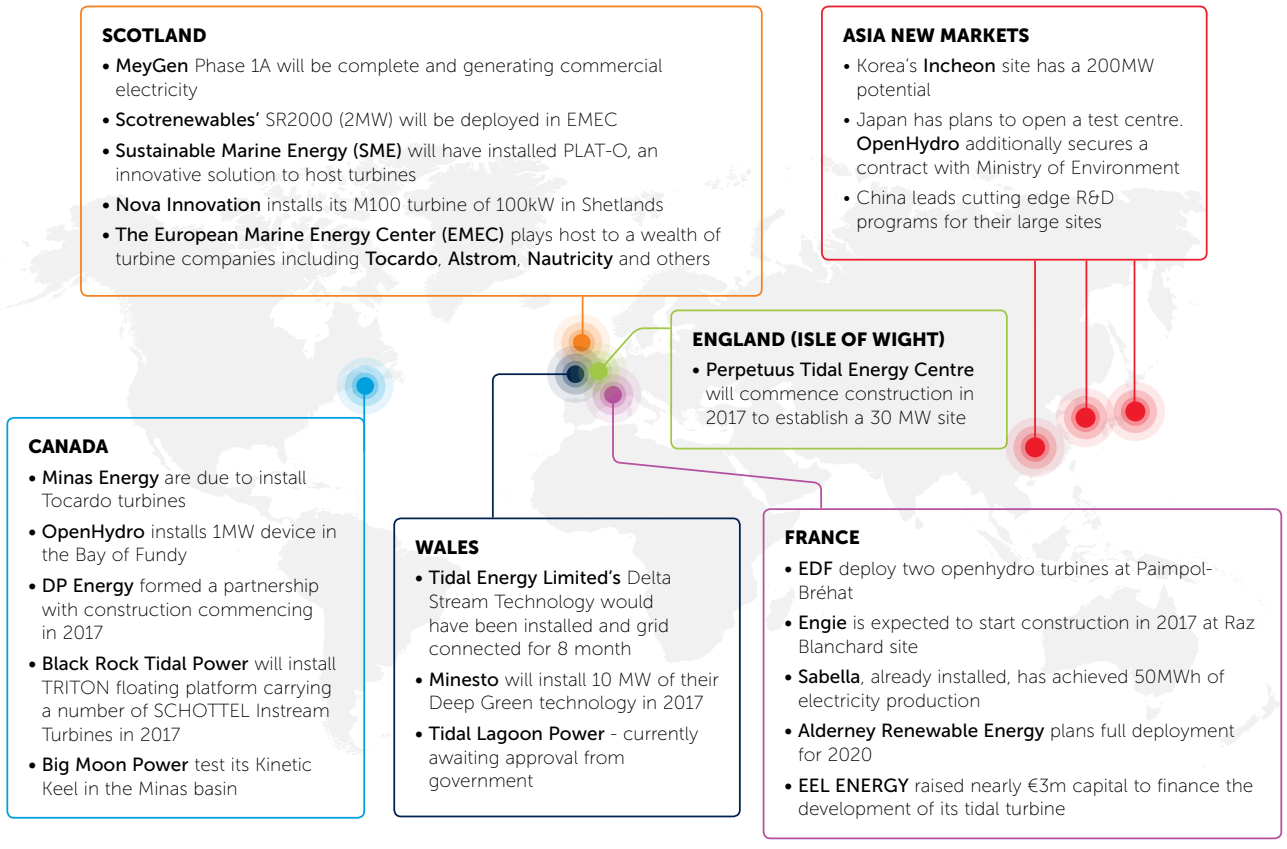
Global Tidal Markets Analysis – Going beyond 2016

Produced by Tidal Today in conjunction with

The 10th Annual Tidal Energy Series

International Tidal Energy Summit

21st-23rd November 2016 • Novotel London West Hotel



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EXECUTIVE SUMMARY

A lot has changed since the last Tidal Today Market Analysis in 2015 – and fortunately largely positive changes for the sector. The development of the tidal industry continues to represents a significant opportunity for France, Canada as well as Asia and Britain is still at the helm even as the Brexit vote has brought some uncertainty to the UK industry.

"With the UK's industrial policy of the past littered with missed opportunities it is essential that the government learns the lessons of the past and puts its shoulder behind this British innovation. There would be no excuse for failing to capitalise on this opportunity, an opportunity we are already exploiting and in which we have a world lead and absolute sovereignty," Neil Kermode, Managing Director at European Marine Energy Centre (EMEC) said.

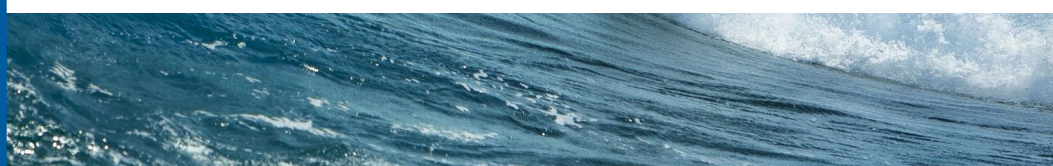
Canada has maintained its important role in developing tidal technologies. One Canadian company, Water Wall Turbine Inc. (WWT), launched an innovative anchored floating structure at Dent Island Lodge, British Columbia where the anchored floating structure will provide electricity for the guest house.

Atlantis and DP Energy are also making leaps and bounds in the country, placing it firmly on the map of tidal energy, and perhaps setting it on course to overtake the UK one day.

France also deployed new turbines off the Atlantic coast, while existing plants in the country achieved higher electricity production. Among others, EDF deployed two OpenHydro turbines at Paimpol-Bréhat and Engie is expected to start construction in 2017 at the Raz Blanchard site. Sabella, which has already been installed, has achieved 50MWh of electricity production and Alderney Renewable Energy plans full deployment in 2020.

Asian markets are also making huge progress, especially Japan where only recently OpenHydro has been selected by the Japanese Ministry of the Environment to supply a tidal turbine system for installation at the Naru Strait.

China has also taken steps to increase its footprint as well as South Korea where there are plans to build a tidal-energy plant on the southern tip of the peninsula, saving an estimated 330,000 tonnes of greenhouse gas emissions a year.



Global Wave and Tidal Energy Market to reach US$ 11.3bn in 2024

Source Transparency Market Research: the global wave and tidal energy market was valued at US$ 497.7 Million in 2014 and is anticipated to reach US$ 11345.0 Million in 2024, expanding at a CAGR of 23.2% from 2016 to 2024.

UNITED KINGDOM

The UK is regarded as having the most mature supply chain, although other nations are catching up. Scottish Enterprise (SE) estimates that total spend on wave and tidal energy systems in Europe will be over £15 billion between 2014 to 2030. Over 80% of this will be on device manufacture, balance of plant and installation. According to industry figures, the tidal power sector has the ability to create 20,000 direct jobs in the UK over the next decade. Already, there are approximately 1,700 people employed in the marine energy industry in Britain, across turbine supply, offshore construction, logistics, ports, fabrication facilities and the broader supply chain.

EMEC's Kermode said that "the UK supply chain needs to be supported now to ensure its market share, just as the Norwegians did in the North Sea build up and the Danes did in wind."

The UK has seen huge changes in the past year and many new developments have come a long way. The future still seems bright, albeit a little more uncertain in light of the Brexit vote, and many industry leaders have sought to reassure observers that the UK is still a safe place to invest.

Brexit

Although the UK has voted to leave, any EU funding that has already been committed will be spent here. In addition, UK firms can still apply for funding as the UK will remain inside the EU for at least two more years - but some estimate that the exit procedures can take as much as five years – during which funding will still be available.

Dr Martin Edlund, Minesto's CEO said on Brexit: "The referendum results will not affect Minesto's EU project in Wales. The financial support is secured and tidal energy is now more important than ever for the region." (published on the company's website on 2016-06-27).

In May 2015, Minesto secured an offer of a €13m grant from the European Regional Development Fund through the Welsh European Funding Office (WEFO), part of the Welsh Government. Brexit does not affect Minesto's EU project, which is now in the delivery phase, to demonstrate its first full-scale device of its subsea tidal kite technology called Deep Green off the coast of Anglesey.

"During the period when Britain negotiates the conditions for leaving the EU, the question marks for every overseas business looking to invest in the UK will gradually be answered. What we do know now is that our financial support from WEFO remains in place. This EU-funded project has already seen several new jobs created in Holyhead, and Minesto is fully committed to develop our first tidal energy array and to build our future assembly facilities in North Wales," Edlund added.

Bright Spots

A bright spot is the announcement of a new strategic fund to the tune of several million euros. The €11m Funding Ocean Renewable Energy through Strategic European Action (FORESEA) programme opened its first call for support package applications in July 2016.

The project is lead by EMEC and is funded through Interreg NWE, part of the European Regional Development Fund.

Kermode said: "We're leading the €11m FORESEA programme in which successful applicants will receive free access to test ocean energy technologies in real sea conditions at the project's network of open sea test centres."

The programme will bring together Europe's world-leading ocean energy test facilities: EMEC (Orkney Islands, UK); SmartBay (Galway, Ireland); SEM-REV (Nantes, France); and the Tidal Testing Centre (Den Oever, Netherlands).

Challenging Environment

According to Kermode, the industry's greatest challenge is to improve efficiency and lower the levelized cost of energy (LCOE).

"As an industry, we will be required to produce electricity that is cost competitive with wind and other sources of non-polluting electricity - however we are at an earlier stage of development than they are," Kermode added.

"We need to make sure the value in supporting British innovation now is apparent to all, so there is an industry to support the economy later," he said.

Tim Cornelius, CEO of Atlantis added that "the industry's main challenge is to prove reliability at scale and lower the levelized cost of energy (LCOE) within a politically relevant timeframe. As an industry, we are required to produce electricity that is cost competitive with wind and other sources of generated electricity."

Cornelius added that this can be achieved through the adoption and integration of existing proven engineering solutions adapted from relevant mature industries with well-established supply chains, combined with deployment at scale and lower cost O&M solutions driven by innovative support craft design.

According to John Thouless, Chief Operating Officer of DP Energy, "the biggest challenge at present is the transition from R&D and prototype deployment to full commercialisation. A stable policy environment is clearly needed for this transition. Similar to the development of wind and solar PV technologies previously, this will require subsidies but DP Energy believes the fundamentals of tidal will make it a competitive technology once deployed in volume."

DP Energy works across renewable technologies. "Our strong drive is to see the potential for tidal energy to be realised and we are approaching the positions we have in our portfolio of tidal projects with that end in mind. Rather than a specific project being more important to us than any other, it is the desire to help deliver the industry that is our main concern in the tidal sector," Thouless added.

What needs to be addressed in the future is continuity and stability of policy. "Clear, stable policy attracts long term patient capital which is perfectly suited to the long term, predictable returns that commercial scale tidal power projects offer. Uncertainty is a confidence killer," Cornelius said.

To truly capitalise on the potential of the tidal sector, and to stimulate a high value industry to the UK, "the government will need to stand by its 2014 policy to ring fence the 100MW CfD allocation," Cornelius added.

He said that the Danish government made a similar visionary commitment in the early 1980s, securing the on and offshore wind industries which now employ 28,000 workers in Denmark and generate £5bn in exports.

"The UK could replicate the successes that the Danish industry has achieved but only with early support through the CfD – without it, the opportunities will be lost," Cornelius said.

The big question now is how the UK can maintain its top position at the "helm" of the tidal industry and what message the Brexit vote will send to firms out the UK.

Kermode thinks that the industry can continue to showcase its successes and in doing so the Government will be able to see that its past investments have paid off in terms of jobs and new companies formed.

"In parallel the scale of the UK's present lead can be extended whilst also enabling British companies to continue to drive forward. As with any successful export, this requires there to be a strong home market and so the support of the innovation in this arena needs to be maintained," Kermode said.

Project Developments

Meygen/Scottish Hydro/Atlantis

Perhaps one of the most important developments in the UK is the Meygen Project owned by Atlantis. "The Atlantis-owned MeyGen project is the world's undisputed, flagship tidal power project at 398 MW of total installed capacity when fully constructed. Situated in the Pentland Firth, Scotland, the MeyGen array will consist of 269 submerged tidal turbines, enough to power circa 175,000 UK homes," Cornelius said.

He added that "the MeyGen project is special because it is the largest planned commercial scale tidal stream array to be built in the world and we're making it happen. Its successful financing and construction represents a major milestone for the global tidal industry as it shows what can be achieved."

Construction is almost complete on Phase 1A of the project and the first four turbines will be installed later this year. First power is expected to be delivered at the end of 2016.

"Deployment of this array will herald the tidal sector's evolution from research & development to commercialisation. The next phase will see a roll out of 65 turbines, with a capacity of 100MW and an accompanying capital spend in excess of £460m," Cornelius said.

Phase 1A achieved more than 40% local UK content. Phase 1B is seeking to achieve more that 60% local content – this is an industry that will create high value jobs and attract significant amount of direct foreign investment at a time when the economy needs it most, said Cornelius.

In addition, Scottish Hydro Electric Power Distribution completed a 17 km on-shore cable installation campaign in April, making it the largest capacity tidal grid connection in the world. MeyGen is classed as a Large Power Station by National Grid and hence has a requirement to satisfy the UK grid code. This will be the first tidal energy project to go through this process and demonstrates the scale of it.

JGC Engineering and Technical Services, one of the largest independently owned employer's in the Scottish Highlands, completed 16 of the 24 ballast blocks required for the projects turbine support structure. Once completed, all of the 200 tonne foundation ballast blocks will be transported to the Port of Scrabster in preparation for deployment onto the pre-installed turbine foundations.

Isleburn, a member of the Global Energy Group, are fabricating the huge turbine support structures which will be installed on the seabed later this year ready to receive each turbine. The giant structures are being fabricated in Isleburn's yards in Aberdeen and Nigg.

In addition, Andritz are rapidly completing the assembly of the three 1.5MW tidal turbine generators destined for the MeyGen project at their Ravensberg factory in Germany. Delivery of these turbines is due to commence in the summer of 2016, subsequent to undergoing rigorous

factory testing. Each turbine nacelle is approximately 12m in length and weighs 200 tonnes in air with a design life of 25 years. The Andritz 1.5MW turbine will reach rated power at 3 meters per second.

Scotrenewables

Another major step has been the launching of Orkney-based Scotrenewables Tidal Power's 2 MW SR2000 turbine, the world's largest tidal energy turbine, on May 12.

The launch of the 550 tonne machine took place at Harland & Wolff Heavy Industries in Belfast. This is the first commercial scale machine the company has built and the turbine underwent preliminary tow trials in Belfast Lough before being towed to the European Marine Energy Centre (EMEC) in Orkney to start a grid-connected test program.

DP Energy Fairhead

In a separate development, DP Energy completed a baseline survey at the Fair Head site off County Antrim, as part of a major tidal project development. The next step is an environmental impact assessment before an application for a marine construction licence is submitted.

Northern Ireland's sea areas see a peak flow at mean spring tide of more than 4 m/s across the potential array site. At a mean neap the tide reaches 1.5 m/s as the Atlantic rushes in between the Irish headland and Scotland's Mull of Kintyre, 20 km away.

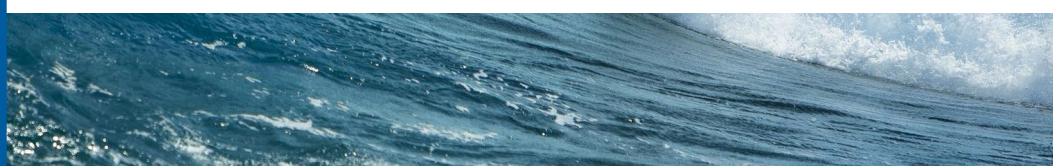
Centred around 2 km to the east of the promontory, the development area lies around 1km at its nearest point to land, designated an area of outstanding natural beauty. If realized, the Fair Head project will provide 100 MW of electricity to the island, starting in phases from 2018.

Swansea Bay

The £1bn tidal lagoon in Swansea Bay, in Wales, which received planning consent last year, will be the world's first tidal lagoon power plant. It will be able to power 155,000 homes, equating to about 90% of the annual domestic use of Swansea Bay (173,000 households) and 11% of the annual Welsh domestic use (1,369,000 households), the company said on its website. However, the viability of the project has been called into question given the Brexit vote and it is currently under government review, according to a BBC report. The government is reportedly looking at the project's feasibility and level of subsidy required and is expected to report its findings in the autumn.

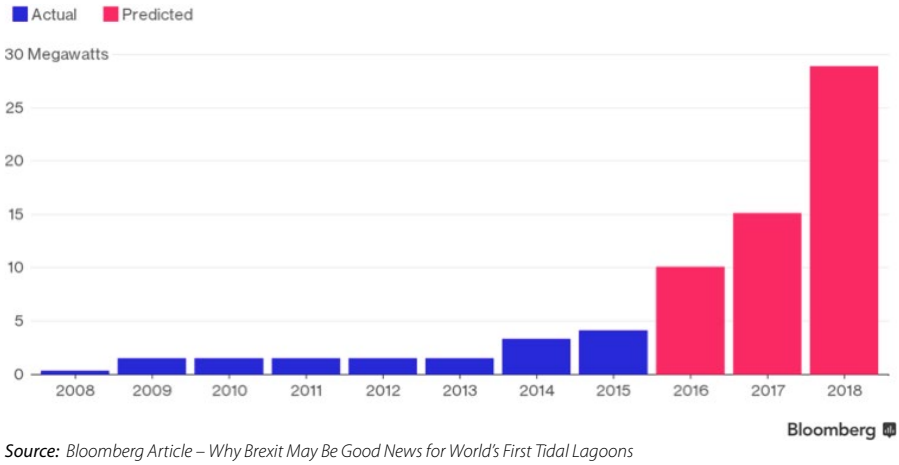
The Swansea development will contain up to 16 variable speed hydro-turbines with a gross combined installed generating capacity of up to or equal to 320 MW. Each turbine will have a maximum output of 20 megawatts (MW) and the net annual output of the project is estimated at approximately 495 gigawatt hours (GWh).

The Severn Estuary has the second highest tidal range in the world, with a tidal range of up to 10.5 m.



British Marine Power Could Make Waves

U.K. wave and tidal capacity may hit 29 MW by 2018



Source: Bloomberg Article – Why Brexit May Be Good News for World's First Tidal Lagoons

Perpetuus Tidal Energy Centre (PTEC)

PTEC of the Isle of Wight, passed a major project milestone when the Marine Management Organisation (MMO) issued a marine licence and S36 consent in April. Perpetuus Energy is the project developer and a main shareholder in PTEC.

"PTEC is not a test centre but a commercial multi-technology array project at St Catherine's Point, the southernmost tip of the Isle of Wight. Every turbine deployed will have to have been tested at a test centre like EMEC and ideally grid-connected. We are a project developer in the same arena as DP Energy and Atlantis. We signed an agreement for lease from the Crown Estate in 2012, carried out the EIA, obtained planning consents from the local planning council, have an MMO licence and have completed front-end engineering design and stakeholder engagement. We have also signed the grid connection offer from DNO Southern Electric Power Distribution," Mark Francis, PTEC project director said.

PTEC plans a 30 MW split into discrete projects of 5-10 MW each and the arrays would run a full 15 years once commissioned. "So we could have three arrays of 10 MW or six arrays of 5 MW. Each array will be operated under a Special Purpose Vehicle," Francis added.

Sustainable Marine Energy

In what is believed to be a world first, Sustainable Marine Energy (SME) has successfully completed installation of four subsea drilled rock anchors at its berth at the European Marine Energy Centre. The anchors will be used to moor its PLAT-O tidal energy platform which will be deployed at EMEC. The Anchoring Remotely Operated Vehicle (AROV) which was used for the installation has been developed in-house at SME over the past three years. Marine operations were performed from Leask Marine's multicat C-Salvor.

"This is a very exciting time for SME" David Stoddart-Scott, Head of Project Development said in a statement. "Not only are we making great progress with the PLAT-O tidal energy platform, but we are also developing subsea anchoring solutions for rock and clay. We will be offering these to the marine industry as a whole."

NETHERLANDS

The Netherlands is home to Tocardo, a company which has been working on numerous projects recently. It has three developments in the water and has just signed a 20-year contract to trial eight grid-connected turbines at EMEC from 2017. The company reached several milestones in 2015, a year in which it installed a 300 KW R&D array at Den Oever consisting of three T1 turbines. Tocardo also installed their Eastern Scheldt (Oosterschelde) commercial demonstrator in a storm surge barrier. It consists of a 1.2 MW array of five of the Tocardo T2 turbines fitted with bi-directional rotor blades. The barrier only closes when a heavy storm approaches, so that the turbines generate electricity during ebb and flood.

"At the Eastern Scheldt we are developing a maintenance programme to turbine and blade replacement. We have tested remote control from our offices, which is very important. Our T2 turbines are commercially available and we are selling to clients," Hans Van Breugel, CEO of Tocardo said.

Another Tocardo pilot is a foundation system called BlueTEC which they have been running at Texel in the Netherlands since 2015, initially with a single grid-connected turbine but the platform's capacity will double and continue to increase.

"A consortium of companies have participated in this pilot. It's a floating tidal energy platform which could be used in remote locations such as islands in the Pacific, is of an innovative modular design and uses a new type of permanent mooring line," Van Breugel said.

"Next we have the T2 turbines we are going to deploy on a commercial basis at EMEC. The new step there is testing them offshore for the first time but we are confident about going to EMEC because of the earlier trials we have taken at the Eastern Scheld," Van Breugel added.

Economies of scale

According to Tocardo, the industry is depending on a facilitating government and look for a level playing field with other renewable sectors. "Even the oil and gas sector receives large amounts of government support in the form of tax breaks in the UK, for instance. Renewable energy is not a big subsidy in comparison. We need to get to economies of scale and facilitate the bumpy ride through the learning curve," Van Breugel said.

If the industry doesn't get Contracts for Difference in 2017 the technology won't be cheaper in 2021, he added.

Unfortunately government policies change quite often and the Netherlands has been no exception. According to Van Breugel, the support the industry had five years ago has now stopped completely and the Dutch tariff is too low.

"It would be a silly move for the UK government to have invested so much to get to where we are, and for developers to come forward, to then kill the industry. A couple of hundred megawatts are in development in the UK, and there are not enough replacements in Canada and France," Van Breugel said.

FRANCE

France is quickly catching up with its western neighbour and has installed various tidal projects in recent months and the world's first grid-connected tidal array off North Brittany.

In a further development, the EU has approved French government funding for an experimental tidal power plant at the north-western coast of France. In a Reuters article on July 27 it was revealed that "France will support the construction of four turbines, which will each produce 1.4 MW of electricity, through a direct grant and repayable advances."

The NEPTHYD (Normandie Energie PiloTe HYDrolien) pilot farm will be located at Raz Blanchard, west of the Cotentin peninsula. A subsidiary of Engie will build and operate the plant for 20 years.

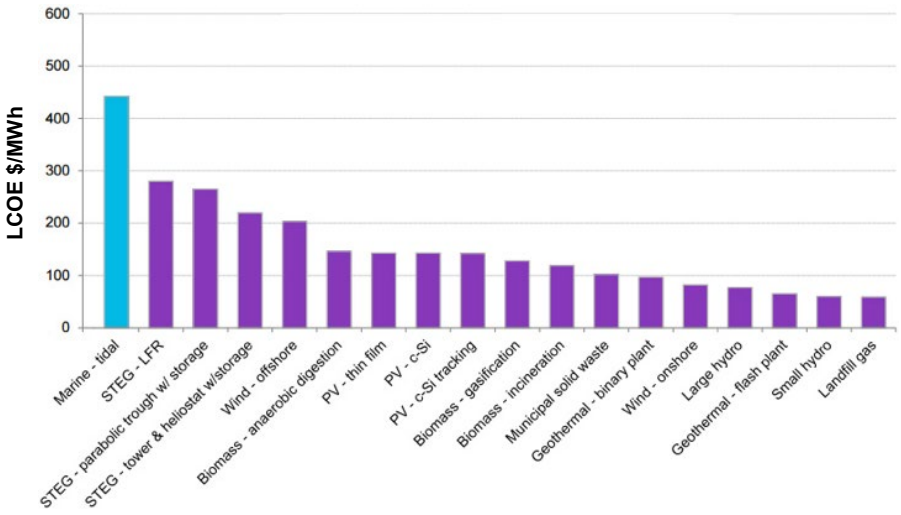
The European Commission said the project supported market entry of a novel renewable energy technology, including turbines with several innovative features.

Earlier in 2016, Segolene Royal, France's Energy and Environment minister inaugurated the second DCNS/OpenHydro tidal turbine for the EDF Paimpol-Brehat tidal-turbine demonstration farm project, DCNS said May 13.

EDF's Paimpol-Brehat tidal project comprises of two 16-metre diameter DCNS/OpenHydro tidal turbines connected to a common underwater converter, designed and produced by General Electric.

The plant will convert energy into direct current to be transported to land. The second turbine will be installed on the sea bed at a depth of almost 40 metres, next to its twin, installed in January this year. The goal is now to connect the two tidal turbines to the power network this summer.

Tidal's Mission: Lower the Levelised Cost of Energy (LCOE)



Source: *Nawitka Capital Advisors Ltd and Bloomberg New Energy Finance*

The above figures were produced in early 2015. It's clear that tidal's LCOE remains too high. However, Tidal Today believes that the LCOE could be reduced over the next few years. With more projects being deployed than ever before, including the MeyGen Project, and more investment in the supply chain, one could expect the LCOE to be further reduced as the industry strives for cost-competitive electricity generation.

CANADA

Canada's contribution to tidal energy has been great during the past year with various projects being launched in the country and its efforts to become a world leader in the safe development of tidal energy technology continue. According to a study commissioned by the Offshore Energy Research Association of Nova Scotia (OERA), by 2040, the tidal energy industry could contribute up to $1.7 billion to Nova Scotia's gross domestic product (GDP), create up to 22,000 full-time jobs, and generate $815 million in labour income.

As already reported, DP Energy and Atlantis formed a partnership to develop a multi-turbine array at the Fundy Ocean Research Centre for Energy (FORCE) facility in the Bay of Fundy, Nova Scotia. On July 12 Minas Tidal Limited Partnership (MTLP) purchased Minas Energy's FORCE Berth A with all associated assets (for example the feed in tariff allocation, FORCE sublease). This means that MTLP is now one of the FORCE developers and not Minas Energy. Minas Energy founded and established the FORCE site in the Minas Passage in 2009. They were contracted by the Nova Scotia Government in January 2008 and within 18 months they had found the site and obtained environmental consents.

Challenges facing the industry in Canada

According to John Woods, CEO of Minas Energy, there are three important challenges facing the industry that are paramount at this time:

- ***Continue to build and maintain public trust – reasonably demonstrate that tidal turbines do not harm marine life.***
- ***Successful deployments/retrievals of tidal generators.***
- ***Advances in generator efficiencies and reductions in deployment costs.***

Another of the industry's greatest challenge is to improve efficiency and lower the levelized cost of energy. And some observers would like to see tidal produce electricity that is cost competitive with wind and other sources of generated electricity.

But, according to Woods, "cost competitiveness with wind may never be achievable in Nova Scotia and I don't think we are expecting a head-to-head contest anyway. Our tidal energy is just as concerned about creating a new renewable energy industry as much as it is in producing sustainable electricity. Incremental success among the various developers at FORCE, combined with advances in generation technologies and deployment know-how, should reduce costs while maintaining investor interest."

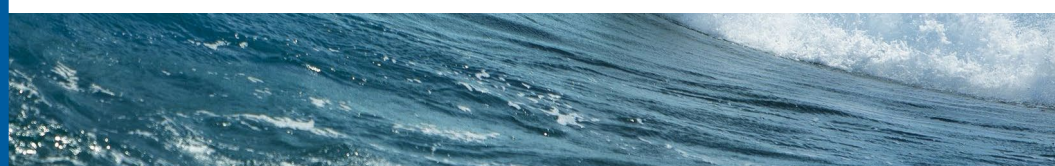
Keith Collins, Executive Director of Sustainable & Renewable Energy at the Nova Scotia Department of Energy added that "a significant challenge for the tidal industry is also how to reliably and effectively monitor potential effects to the marine environment. Nova Scotia is dedicated to taking a sustainable approach to tidal development, by adopting an adaptive management approach. This approach should ensure flexibility in how we move forward."

The industry and the government are taking steps to this end, ensuring the environment is protected. FORCE is building the Fundy Advanced Sensor Technology (FAST) Platform, which is a recoverable instrument platform designed to monitor and characterize the test site and identify the best sensing equipment for high flow environments.

"It will monitor and evaluate the interaction of tidal turbines with the Bay of Fundy environment through measurements of currents and turbulence, marine life activity, noise levels and seabed stability. It is connected to shore via a dedicated data cable," Collins said.

In a recent development, FORCE has been awarded $835,000 from the Atlantic Canada Opportunities Agency (ACOA) to strengthen its research and monitoring efforts. The opportunity to harness the energy of the waves is huge in the area:

- ***50,000 MW of energy potential in Bay of Fundy***
- ***7,000 MW of energy potential in Minas Passage***
- ***2,500 MW estimated extractable from Minas Passage without significant effects***
- ***13 meter tidal range***
- ***Peak surface speed of 5 meters/second***



Another step forward has been by Black Rock Tidal Power (BRTP) that awarded a contract on May 18 to manufacture its TRITON S40 tidal power platform to Aecon Atlantic Industrial. This will be the first full-scale manufacture of this technology in the world and the in-stream tidal device will be installed in the Bay of Fundy in 2017.

BRTP's tidal-current energy technology uses forty SIT 250 turbines mounted on the TRITON, providing a total capacity of 2.5 MW. The TRITON can be easily brought to the surface, allowing easier maintenance access.

In addition, Tocardo is to install a 1MW tidal device next year at Canada's Bay of Fundy in partnership with Nova Scotia's Minas Energy.

Tocardo will deploy four 250kW-rated T2 bi-directional turbines in the Minas Passage in late 2017. The turbines will be attached to Tocardo's patented semi-submersible Universal Floating Platform Structure to form a 1MW system held in place by catenary mooring systems.

Minas Tidal will start discussions with local supply chain companies including fabricators, marine contractors, system integrators, engineers and scientists in the autumn.

"We are looking forward to demonstrating Tocardo's capabilities in North America and hope to make Nova Scotia the centre of our future manufacturing operations," said Tocardo's Hans Van Breugel said.

A smaller, although nonetheless very promising development is a new technology Water Wall Turbine Inc. (WWT) that will provide energy to the Dent Island Lodge, British Columbia, by efficiently using tidal stream energy. The anchored floating structure has a large turbine that rotates at a low speed and can provide up to 1 MW of tidal energy power. It was deployed by tug on June 11 to Dent Island Lodge where it will be connected to WWT's innovative Microgrid System and its Energy Storage equipment.

This technology will displace diesel generation and substantially reduce the cost of Dent Island's electricity on an annual basis.

WWT CEO Marek Sredzki said that "this first full scale tidal energy system when commissioned, will be unique to the West Coast and will be the catalyst for further orders both here in Canada and internationally."

JAPAN

Asia, although not as progressed as western Europe and Canada in terms of tidal technology, is making huge progress and is expected to do so in the future. A promising sign that regional governments are interested in this innovative technology is that OpenHydro has been selected by the Japanese Ministry of the Environment to supply a tidal turbine system for installation at Naru Strait, Goto City, Nagasaki Prefecture. The consortium, of which OpenHydro will be part of, includes Kyuden Mirai Energy Co., Inc, Nippon Steel & Sumikin Engineering Co., Ltd. and NPO Nagasaki Marine Industry Cluster Promotion Association.

Site surveys will commence later in 2016, with procurement activities, fabrication and cable laying scheduled to start in 2017. The 2MW Open-Centre Turbine unit will be built in France and shipped to Japan. The subsea base will be manufactured locally by Nippon Steel & Sumikin Engineering that will also be responsible for all mobilisation and deployment activities.

The turbine is planned for deployment in 2018 and will be subsequently connected to the grid. During the first year of operation, intensive tests will be conducted, the results of which will provide a reference for the build-out of commercial scale tidal arrays in Japan.

Conclusion

It is clear that there is huge potential in the tidal industry and many companies have tapped into this already. Much of the future development will now depend on how the countries that have yet to be exposed to these new technologies react. In addition, investors will need to have confidence that they will get a return on their investment and that the regions they invest in are safe and that major economic or political turbulences will not jeopardize future growth.

Some industry experts are optimistic that in five to ten years' time the sector will have reached bigger volumes to become cost-competitive with offshore wind. And, subject to the proper delivery of the Contracts for Difference (CfD) we might see both new developers attracted to the UK and also the deployment of small arrays. In doing so the industry will see the foundations of a new British industry laid and the benefits of the investments to date pay off. However, the industry needs continual support in order to get the costs down and improve yield and reliability.

"The tidal power industry is set to deliver £500m of investment into the UK over the next three years, establishing Scotland as the world's centre of excellence for tidal power generation in the process. This amount of investment will repurpose jobs lost recently in the oil and gas sectors, create new high value positions, stimulate further advances in technology development and make a meaningful contribution to the UK's future fuel mix and GDP," said Tim Cornelius.

"The UK lost the wind industry. It lost the nuclear industry. It will own the tidal industry," Cornelius added.

This report is produced in conjunction with

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International Tidal Energy Summit

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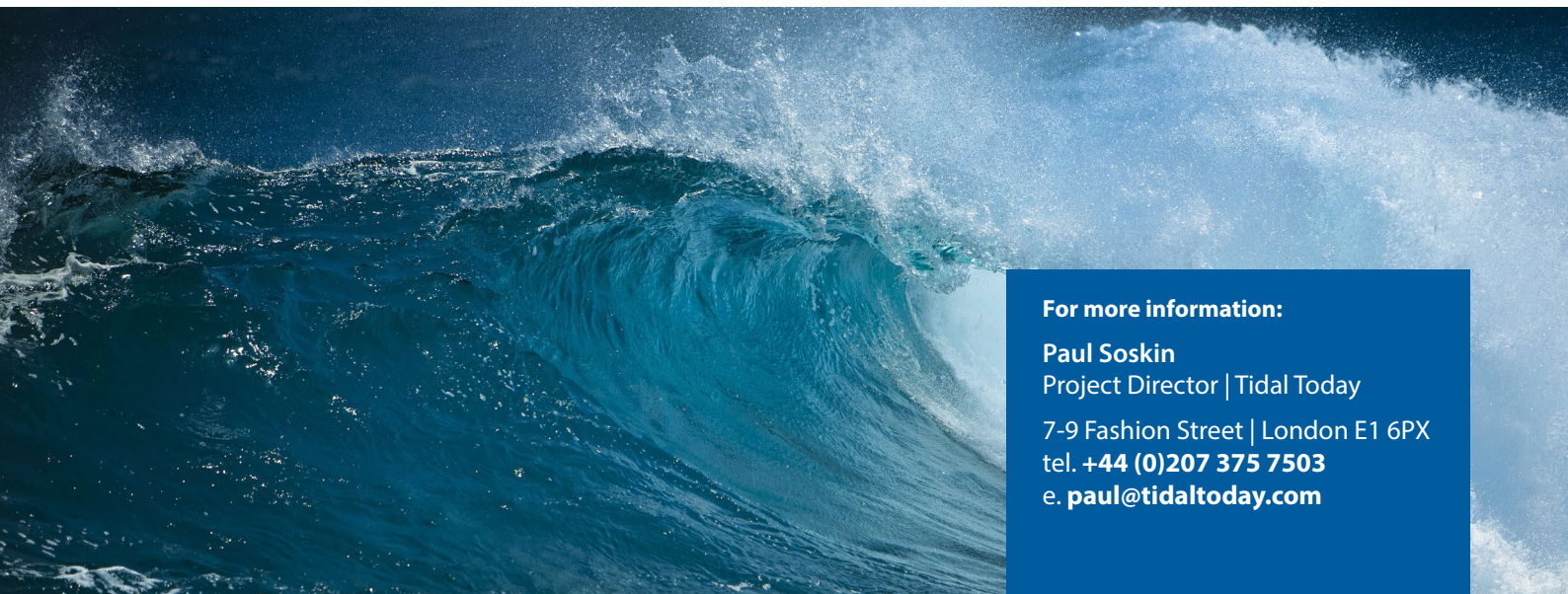

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