MARINE ENERGY

The power of advanced knowledge can help you capture the awesome power of the ocean
TRANSFORMING THE POWER OF WATER INTO ENERGY

As a global leader in building critical human infrastructure, clients worldwide have looked to Black & Veatch for expert advice and leading-edge solutions for nearly 100 years. Fuelled by our dual expertise in the energy and water industries, we’ve worked on 50 tidal and wave power projects since 2005. We’re helping investors, project and technology developers, utilities, and government agencies take potential projects from concepts to commercial reality.

SUPPORTING YOUR VISION

Once-emerging energy sources are maturing as new sources emerge. What do all those energy sources have in common? They all involve capturing the awesome power of nature.

Black & Veatch is committed to finding clean, green power alternatives that maximise the role of renewables in your energy portfolio. For more than 40 years, we’ve planned and executed renewable energy and other power generation infrastructure worldwide. Our team of experts, on top of the latest trends in renewables, energy efficiency and energy storage, engages in projects from early concept definition and research through to turnkey project execution.
WAVE AND TIDAL SERVICES
Our talented professionals have expert knowledge and understanding of the technical and commercial drivers, risks and challenges related to tidal and wave energy. Whether it is assessing ocean resources, reviewing the capability of technology to convert the power of the ocean into energy, or determining the financial viability of the entire project development, we produce quality results.

OUR CLIENTS HAVE COME BACK TO US TIME AND AGAIN BECAUSE OUR WORK ADDS VALUE TO THEIR DEVELOPMENTS

Our last 50 marine assignments included:

■ COST-OF-ENERGY ANALYSIS
Using the most up-to-date economic models and in-house databases, we analysed, forecast and reported on the cost of energy for 19 wave and 22 tidal developments.

■ TECHNICAL DUE DILIGENCE
We stringently assessed and reported on the engineering, performance, economics and environmental aspects of 16 wave and 16 tidal devices.

■ RESOURCE ASSESSMENTS
Working in collaboration with other specialists, we developed methods and guidelines to produce accurate resource assessments. Using detailed hydrodynamic models and proven processes, we assessed the resources for 8 wave and 15 tidal projects.

■ PROJECT DEVELOPMENT AND TECHNICAL ADVISOR
Leveraging our technical expertise and global market vision, we provided expert technical advice to the developers of 9 wave and 9 tidal projects.

■ TECHNOLOGY DESIGN DEVELOPMENT
We worked with technology developers to optimise the designs of 7 wave and 8 tidal devices.

■ POLICY DEVELOPMENT
We used our global expertise in marine energy and markets to assist industry and regulatory bodies to develop 5 wave and 4 tidal policies.

BLACK & VEATCH PROJECT EXPERIENCE BY SERVICE OFFERING;

ATLANTIS RESOURCES CORPORATION
Since 2007, Black & Veatch has provided various technical support services to Atlantis Resources Corporation, an Australian tidal energy company that’s pursuing development of tidal energy projects in Canada, India, China and the UK.

Marine Energy Array Deployment (MEAD) Technical Advice & MeyGen Funders’ Technical Advisor
Between June 2012 and mid 2014, Black & Veatch provided technical advice to DECC in the selection of the projects that were awarded funding from the £20M MEAD programme. Since MeyGen Phase 1A reached Financial Close in Q3 2014, Black & Veatch has worked closely with the MeyGen project and provided technical advice to the collective Funders (DECC, The Crown Estate, Scottish Enterprise and Highlands & Islands Enterprise) through monthly meetings with both the Funders and MeyGen and review of project milestones. Black & Veatch has also provided additional review through Monte-Carlo risk analysis and contingency use review.

SEVERN TIDAL POWER RESOURCE MODELLING
Black & Veatch prepared a strategic environmental assessment for a UK Government feasibility study of tidal power generation in the Severn Estuary. Work included parameterisation and optimisation of potential schemes and multi-dimensional hydrodynamic and environmental modelling.
Black & Veatch is an employee-owned, global leader in building Critical Human Infrastructure™ in Energy, Water, Telecommunications and Government Services. Since 1915, we have helped our clients improve the lives of people in over 100 countries through consulting, engineering, construction, operations and programme management. Our revenues in 2015 were US $3.0 billion. Follow us on www.bv.com and in social media.