

Inslee and Baird Introduce Legislation to Harness the Power of the Oceans to Produce Energy (September 29 2010)

Washington, D.C. – This afternoon, Congressmen Jay Inslee (WA-01) and Brian Baird (WA-03) introduced the Marine and Hydrokinetic Renewable Energy Promotion Act of 2010. The legislation is designed to overcome barriers to the deployment of marine hydrokinetic renewable energy (MHK), by promoting research, demonstration of commercial applications of technologies, and identify ways to address any potential environmental impacts.

“Our oceans have an amazing potential to produce renewable energy on a consistent basis that as of now is relatively untapped,” said Congressman Inslee. “If we are going to lead the world in clean energy technology and development, we must seize every opportunity. This legislation will help advance our understanding of the possibilities of marine hydrokinetic renewable energy which is abundant in Puget Sound, and lays the foundation for future public and private investments. The future of dirty and dangerous fossil fuels is quickly coming to an end.”

“Developing renewable energy means job creation. Hydrokinetic energy should be a critical part of our energy policy because it will put people to work, help protect the environment, and keep us safer by reducing our dependence on foreign oil,” said Congressman Baird. “This legislation will develop hydrokinetic energy test sites around our country, where we can test prototype technologies. It’s vital that we get these devices in the water so that we can start making hydrokinetic energy a part of our clean energy future.”

The Electric Power Research Institute (EPRI) has estimated that ocean resources in the United States could generate 252 million megawatt hours of electricity -- 6.5 percent of America’s entire electricity generation – if ocean energy gained the same financial and research incentives currently enjoyed

by other forms of renewable energy.

A 2009 study by the University of Washington and Virginia Tech Advanced Research Institute and EPRI published a paper in HydroReview that marine renewable resources could yield 51,000 MW of power – equivalent to 34 conventional coal-fired power plants.

"Marine hydrokinetics (MHK) is an exciting new field involving the use of ocean tides, currents, and waves for the generation of electrical power," explained Dr. Pilip Malte, Co-Director of the Northwest National Marine Renewable Energy Center at the University of Washington. "Although the US resource is large, we lag Europe, and may soon also lag Asia, in the development of MHK technology, thereby losing significant job growth potential. Both Congressmen Inslee and Baird realize that the US has strength in the design of equipment and systems that mitigate environmental impacts, and the US has the expertise to develop and manufacture environmentally superior MHK technology. This legislation, once approved, is a good first step to significantly increase our funding for this technology, bringing it up to the level of other countries, and to bringing to operation national test centers for tidal, ocean current, and wave energy as soon as possible."

The Marine and Hydrokinetic Renewable Energy Promotion Act would establish a series of competitive demonstration grants to facilitate the commercial application of MHK technology components, devices and systems at a variety of scales.

Grants may be used for:

- Industry and stakeholders to test and evaluate MHK technologies at a variety of scales, including full-scale prototypes
- Conducting research, development and monitoring activities to support the demonstration project
- Collecting data to evaluate MHK systems, and communicating information that will help utilities, and power producers, or suppliers.
 - Provide information regarding environmental impacts, effective

monitoring techniques, and engineering designs that can reduce environmental impacts.

The bill also establishes a competitive environmental research and development grant program that will help to determine how best to monitor these technologies in the water, and avoid their impact on the environment and marine life.

Additionally, the bill expands an existing Department of Energy program to create test facilities that will demonstrate a variety of technologies at a range of scales to evaluate the technical viability of each technology. At test facilities, developers would be able to tap into existing infrastructure and resources. Competitive grants for 3 MHK test facilities could provide up to \$50 million in federal funding for MHK programs, like the program at the University of Washington.