

IBM et l'Autorité de l'Energie Durable d'Irlande se concentrent sur l'énergie renouvelable

Une collaboration permettant d'envisager l'Océan comme une source d'énergie

Paris, France - 04 nov. 2011: IBM et l'Autorité de l'Energie Durable d'Irlande (Sustainable Energy Authority Ireland -SEAI) travaillent de concert pour comprendre et minimiser l'impact environnemental induit par la conversion de l'énergie marémotrice en électricité. Ce projet, le premier à utiliser l'analyse de données en continu et en temps réel pour contrôler le bruit sous-marin généré par les outils de conversion marémotrice, représente une étape significative permettant d'envisager l'utilisation de l'océan comme une nouvelle ressource d'énergie renouvelable avec succès et de manière durable.

L'océan contient d'énormes quantités d'énergie renouvelable inexploitée, mais l'impact environnemental que suppose la collecte de cette énergie n'est pas encore pleinement appréhendé. Bien que des limites concernant les bruits sous-marins aient été définies par la politique environnementale marine de l'Union Européenne, il n'existe pour l'instant aucune norme mondiale concernant l'impact sonore des outils de collecte d'énergie marémotrice sur l'écosystème marin. L'impact de ces émissions sonores sur l'environnement n'a pas non plus été évalué. Cette collaboration cherche à accélérer le développement des méthodes et technologies qui permettent une évaluation de l'impact environnemental desdits outils afin d'assurer une collecte de l'énergie marémotrice respectueuse de l'environnement.

Le système s'appuiera sur des plates-formes d'acquisition, une infrastructure de communication et de l'analyse de données en continu qui utilise la technologie cloud computing. Le premier site pilote, situé dans la Baie de Galway, fait partie du projet SmartBay impliquant la Recherche IBM et l'Institut Marin irlandais qui vise à contrôler l'état des vagues, l'acoustique, la vie marine et les niveaux de pollution dans et autour de la baie. Le développement d'un site pilote à grande échelle connecté à un réseau de type grid sur la côte ouest de l'Irlande près de Belmullet, dans le Comté de Mayo, est en cours. Des équipes de R&D IBM en Irlande et la SEAI travailleront étroitement avec l'Institut Marin irlandais, qui fournit une assistance technique sur les deux sites.

IBM, Sustainable Energy Authority Ireland Focus on Renewable Energy

Collaboration to Drive Progress Toward Ocean As An Energy Source

DUBLIN, IRELAND, 27 October 2011 -- IBM (NYSE: IBM) and The Sustainable Energy Authority Ireland (SEAI) are working together to understand and minimise the environmental impact of converting wave energy into

electricity. This project, the first to use real-time streaming analytics for monitoring underwater noise generated by wave energy conversion devices, represents a significant step toward the ability to successfully and sustainably utilise the ocean as a new renewable energy resource.

The ocean contains vast quantities of untapped renewable energy, but the environmental impact of collecting this energy is not fully understood. While underwater noise limits have been established by the European Union's marine environmental policy, there are no established global standards for the noise impact of wave energy collection devices on the marine ecosystem, and noise emissions from these devices have not been assessed for environmental impact. This collaboration seeks to accelerate methods and technologies that enable environmental impact assessment of these devices to ensure an environmentally friendly, sustainable approach to wave energy collection.

“Underwater noise is a global environmental issue that has to be addressed if we are to take advantage of the huge potential of ocean energy,” said European Union Commissioner for Research, Innovation and Science Máire Geoghegan-Quinn. “This project is a great example of collaboration among global companies, industry experts and government agencies, and will help us make real progress toward practical and sustainable ocean energy systems. I’m delighted to see Ireland playing a lead role in this area, which has great importance for meeting the EU’s energy challenges.”

The system will consist of sensing platforms, a communications infrastructure, and advanced stream analytics that utilise cloud computing. The first test site, located in Galway Bay, has been part of the [SmartBay](#) collaboration involving IBM Research and the Marine Institute Ireland to monitor wave conditions, acoustics, marine life and pollution levels in and around the bay. Development of a full scale, grid connected test site on the west coast of Ireland near Belmullet, County Mayo, is underway. Teams from [IBM Research & Development – Ireland](#) and SEAI will work closely with Ireland’s Marine Institute, which is providing extensive technical marine services support at both sites.

“Ireland has one of highest concentrations of wave energy in the world, presenting a significant opportunity to expand its renewable energy portfolio and develop new industry capabilities,” said Professor J. Owen Lewis, CEO SEAI. “This project supports Ireland’s commitment to the development of sustainable energy resources and the range of industrial technologies and services that will underpin their utilisation.”

When fully operational, the system will produce one of the largest continuous collections of underwater acoustic data ever captured. This data will be made available to marine researchers and regulatory agencies to further advance knowledge of natural and man-made underwater sound, and help develop standards and reporting, benefitting marine environmental agencies as well as industries including renewable energy, shipping, and offshore oil and gas.

“While the issue of environmentally sound, renewable energy resources is clearly of global importance, the demand in Ireland is particularly great,” said IBM Vice President of Industries Research Katharine Frase. “In 2010, Ireland imported approximately 86% of its energy, the vast majority of which was fossil fuels, and the European Renewables Directive has set a target for Ireland to source 16% of its energy from renewable resources by 2020.”

Ultimately, the team hopes to establish foundational platforms for comprehensive ocean energy monitoring with deep analytics that will tie in to smart grid technologies.

This project is supported by a grant issued under the Ocean Energy Industry Prototype fund, administered by the Ocean Energy Development Unit in SEAI.

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For more information on SEAI visit <http://www.seai.ie>

For more information on the Marine Institute visit <http://www.marine.ie>
