HiPRWind consortium decides to not complete floating research turbine

The European project HiPRWind, a €20m R&D effort co-funded by the EU's Framework Programme, was to develop and build a floating research platform, equipped with a MW-scale wind turbine and state-of-the-art monitoring and measurement systems. Installation was planned at an offshore site where it would be used for several years generating field results, data and knowledge to be shared with Europe's R&D community working on new solutions for offshore wind in deep waters.

On 27 March 2015, at an Extraordinary General Meeting, the HiPRWind consortium decided that it is no longer possible to complete, install and operate the floating wind platform. In close consultation with the European Commission, the project will formally be closed during the coming months.

- It is with deep regret that we take this decision, says Jochen Bard, coordinator, representing Germany's Fraunhofer Institute for Wind Energy & Energy Systems Technologies. Despite our intense and dedicated efforts until very recently, it is no longer feasible to carry out the plan.

HiPRWind started in late 2010 with 18 partners from 8 countries, including large industries, high-tech SME's, and Research & Academic partners working on next-generation offshore wind technologies. Design work for the platform and several research tasks progressed rapidly and according to plan for the first two years. Most of the engineering for the innovative floating platform was completed, and fabrication was started. However, after the Spanish government cancelled renewable energy support in late 2012, causing energy company Acciona to leave the project, the resulting budget constraints forced HiPRWind to abandon its original installation site off the Basque coast. The various challenges this caused to the remaining partners took more than a year to address, during which time the EU contract was suspended. After an intense negotiation process, HiPRWind succeeded in resuming its operation, with the EU contract renewed from October 2014 and new industry partners on board.

The new scope of work also included cooperation with Norway's national Research Infrastructure on floating wind, the project *Floating Experimental Wind Turbine*, FlexWT and HiPRWind working under a Memorandum of Understanding signed on 31.07.2014. A new installation site was identified off the coast of Norway, not far from Trondheim, where continued use of HiPRWind's floating R&D platform was intended after the re-scheduled EU contract for HiPRWind was to end in March 2017.

- We were very happy with the European Commission support in letting us re-negotiate the contract, giving us sufficient time to identify the new partners, set out the new opportunity and get everything into place, says Bard. Our new Spanish industry partners Ingeteam, ALE Heavy Lift and Qi Energy have shown great motivation and the new plan seemed viable. The Norway link-up presented a true winwin situation, which created new possibilities for a durable use of our unique R&D facility.

The joint effort required a design review to guarantee safe use of the facility for an extended test period at the Norway site, which took time and effort to handle many technical and organisational challenges. This process created delays with regard to an ambitious schedule for the construction, transfer to Norway and installation in spring 2016. After a detailed analysis of the time constraints and associated risks, first the Norwegian project, and shortly thereafter the HiPRWind consortium, were forced to abandon their efforts – it was not possible to complete HiPRWind on its own. All the active research and engineering work has now ended, and the project will be wound down over the next few months, the HiPRWind consortium still collaborating to document the results achieved and solutions developed and to share the lessons learned with the community. Bard is still optimistic:

- A lot of very solid engineering work was done. Significant results have been achieved in HiPRWind, under very challenging circumstances, and the learning experience gained by attempting to reach the highly ambitious objectives of HiPRWind has already fed into follow-on activities in other European and National projects – and will continue to do so in the future.