

## Flash Note

By MAKE Consulting

April 2011

### Vestas 7 MW – Drivetrain Defies Direct Drive

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Vestas announced its long awaited large offshore product specifications - a 7MW turbine that features a 164m rotor and a medium speed drivetrain. Although the exact details of the drivetrain arrangement are not yet known, the design decision should set Vestas apart from a majority of its competitors who opted for a direct drive configuration. At present, it is difficult to gauge the future success of either of the current popular technology choices - direct drive and medium speed configurations - due to a relatively low operational track record for these choices for 5MW+ rated turbines and in offshore conditions. For both drivetrain choices MAKE expects competitive advantage will be based upon the ability to lower lifetime CoE.

MAKE Consulting is currently planning to execute two multi-client studies on topics related to this Flash Note. The first study being evaluated is an in-depth study of offshore wind turbine topology and the second study is focused on cost of energy improvements achieved with high capacity factor wind turbines. Both studies are being scheduled for Q2 and Q3. Please contact Dan Shreve or Steffen Sørensen to learn more about these studies:

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