

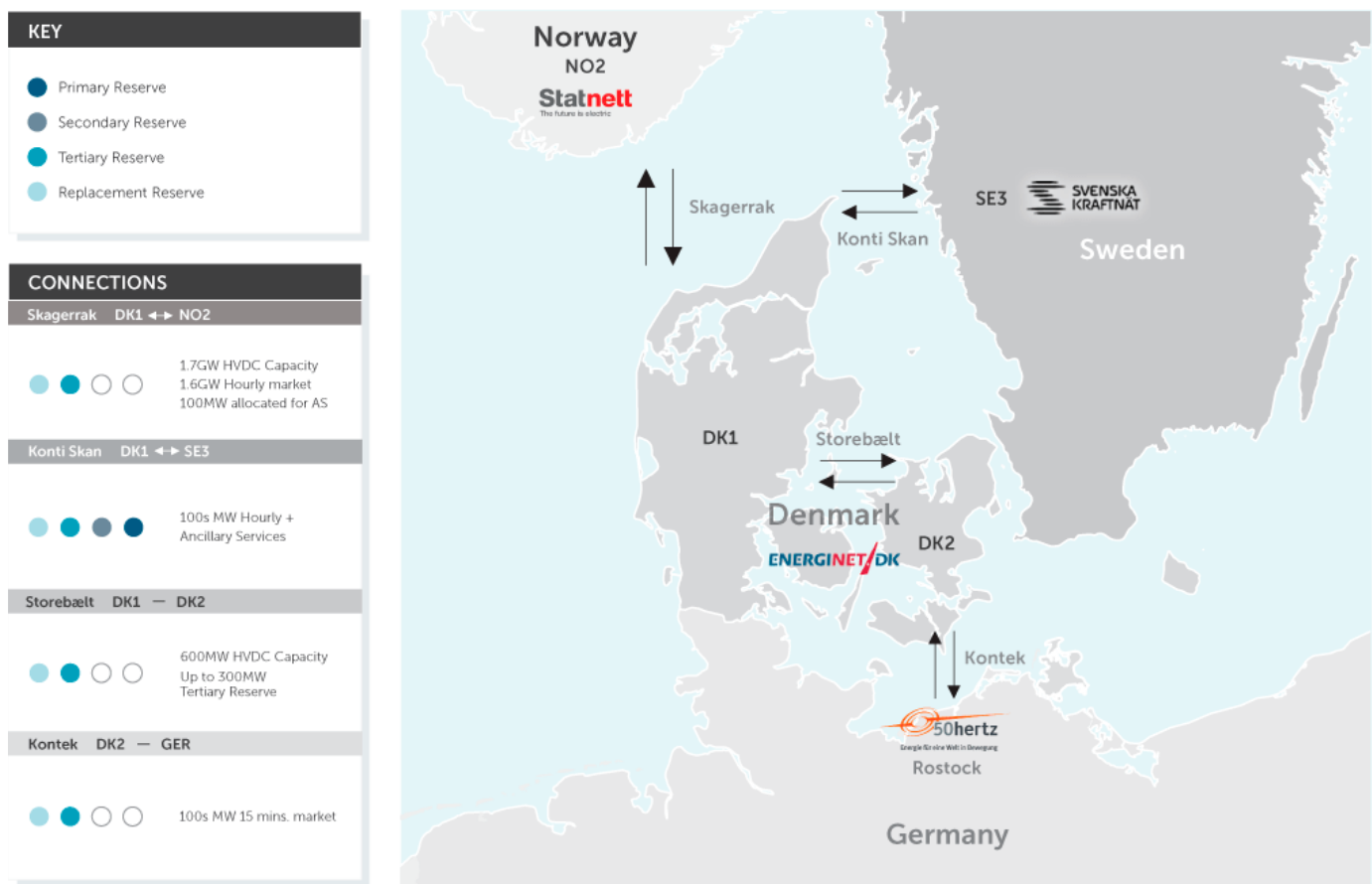
Ancillary Services at the Grid Edge: Distributed Energy Resources in Denmark

A. Kristoffer Torvik | Consultant, Grid Edge

Investment in renewables has drastically increased over the last decade, creating the necessity for investment in increasingly flexible management technologies. In an effort to avoid expensive expansion of the entire power system, grid operators continue to iteratively improve variability management strategies. In this series, GTM Research drills down into shifts in policies related to the acquisition of and requirements for the resource mix providing ancillary services to the grid during this transition.

Denmark is a leader in wind power installations. Today, wind can provide up to 40% of Denmark's total instantaneous electricity demand. This makes it an important test bed to develop best practices for variable-generation penetration ratios approaching 50%.

HVDC Interconnections and Ancillary Services To and Between DK1 and DK2



Source: GTM Research

This report provides an introduction to ISOs/TSOs, wholesale markets and ancillary services in Europe, and more specifically the dynamics and ancillary players of the Danish market. It provides an analysis of the dynamics and role players in the Danish market and covers system stability and balancing metrics, connections to other markets, and pricing and volume trends.

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Ben Kellison
Director, Grid Edge Research
kellison@gtmresearch.com
+ 1 646 661 4801

Hunter Sapp
Research Sales Associate
sapp@greentechmedia.com
+ 1 646 661 4805

