



SAMSOE OFFSHORE WIND PARK - 2 YEARS STATUS

*Hans Bjerregaard Consulting - Project
Leader for the Developer,*

Samsøe Havvind A/S

Hans@Bjerregaard.com

+45 2015 0520



FACTS

- 10 x 2,3 MW Bonus (Siemens)
- 13.5-19.5 meters Sea depth
- Mono-pile, soft sea bottom
- Cost: 1.39 M€/MW
- 3,535 kWh/kW (2004), 90% wind year, 116% of budget
- Feed-in: 5.73 c€/kWh in 10 years + re-powering certificates
- Payback: 10 years





OPERATIONAL EXPERIENCES

- 2 transformer break-downs due to too little bending curve of cable causing heat development**
- Costs, 2 x 100-120,000 €, corresponding to 0.07% of investm.**



MAIN CONCLUSIONS

- Good site in interior sea areas but with good wind resources
- Making a profitable investment with a low feed-in tariff compared to other countries as Germany and UK
- Relatively low risks, e.g. on transmission costs, extreme weather and planning-failure
- Good spirits -local proudness





RECOMMENDATIONS

- Coastal and offshore wind parks in “interior sea areas” with good wind conditions are interesting “niche markets”
- Risks are smaller on:
 - Grid connections (think of UK and DE)
 - Operation (think of helicopters for Horns Rev)
 - Planning - if the community is involved



HOW TO SUCCEED WITH THE NICHE MARKETS?

- Cooperation between developers and local community -
- Community benefits - offering community co-ownership
- Open planning process
- Good relationship=lower risks and costs
- 50-100 MW of 3,500-4,000 MWh is not that small an investment and production



EUROPEAN PERSPECTIVES

- **Potential for offshore niche markets in UK, Sweden, France, Netherlands, Belgium, Spain, Eire and Denmark**
- **Potential could easily be 50 x 50-100 MW = 2,500-5,000 MW**
- **Why not utilize the potential -**
- **While solving problems of large scale offshore development in UK and DE?**



LET'S GET STARTED DEVELOPING THE EUROPEAN NICHE MARKET!





**Thanks to Samsøe Soeren Hermansen,
Energy- and Environmental Office for
photos etc.**

Samsø@sek.dk - +45 8659 23 22

www.samsøhavvind.dk