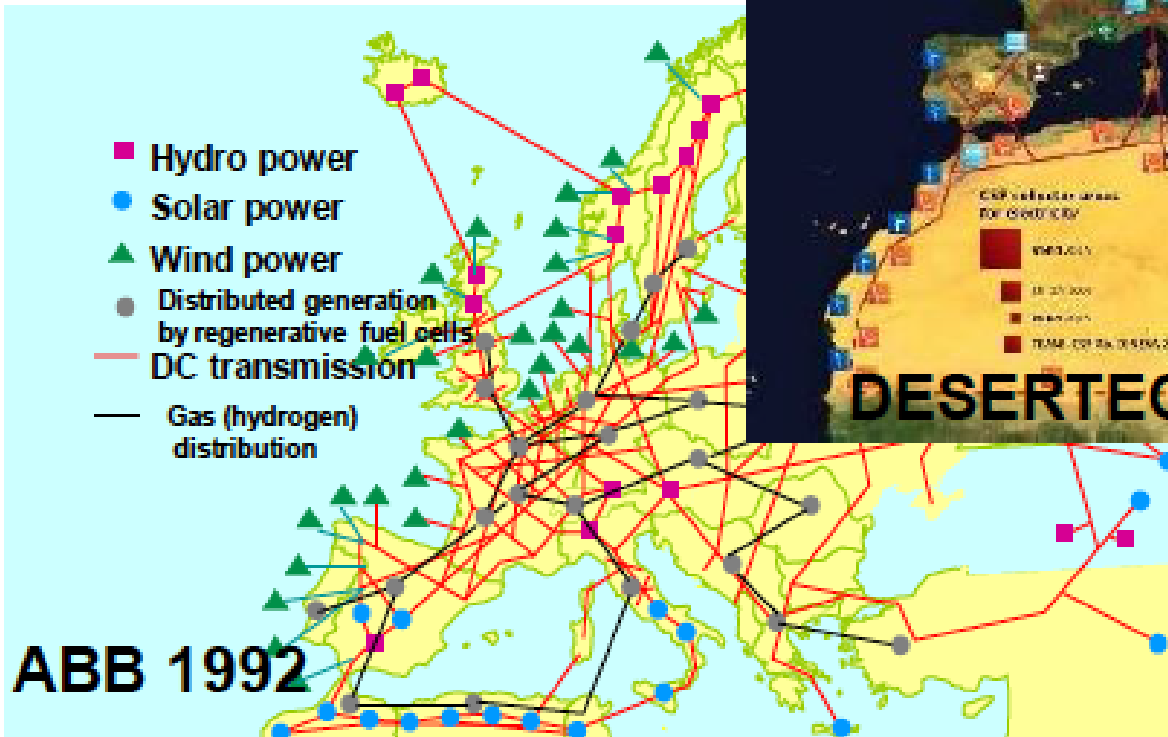


Building a European Supergrid

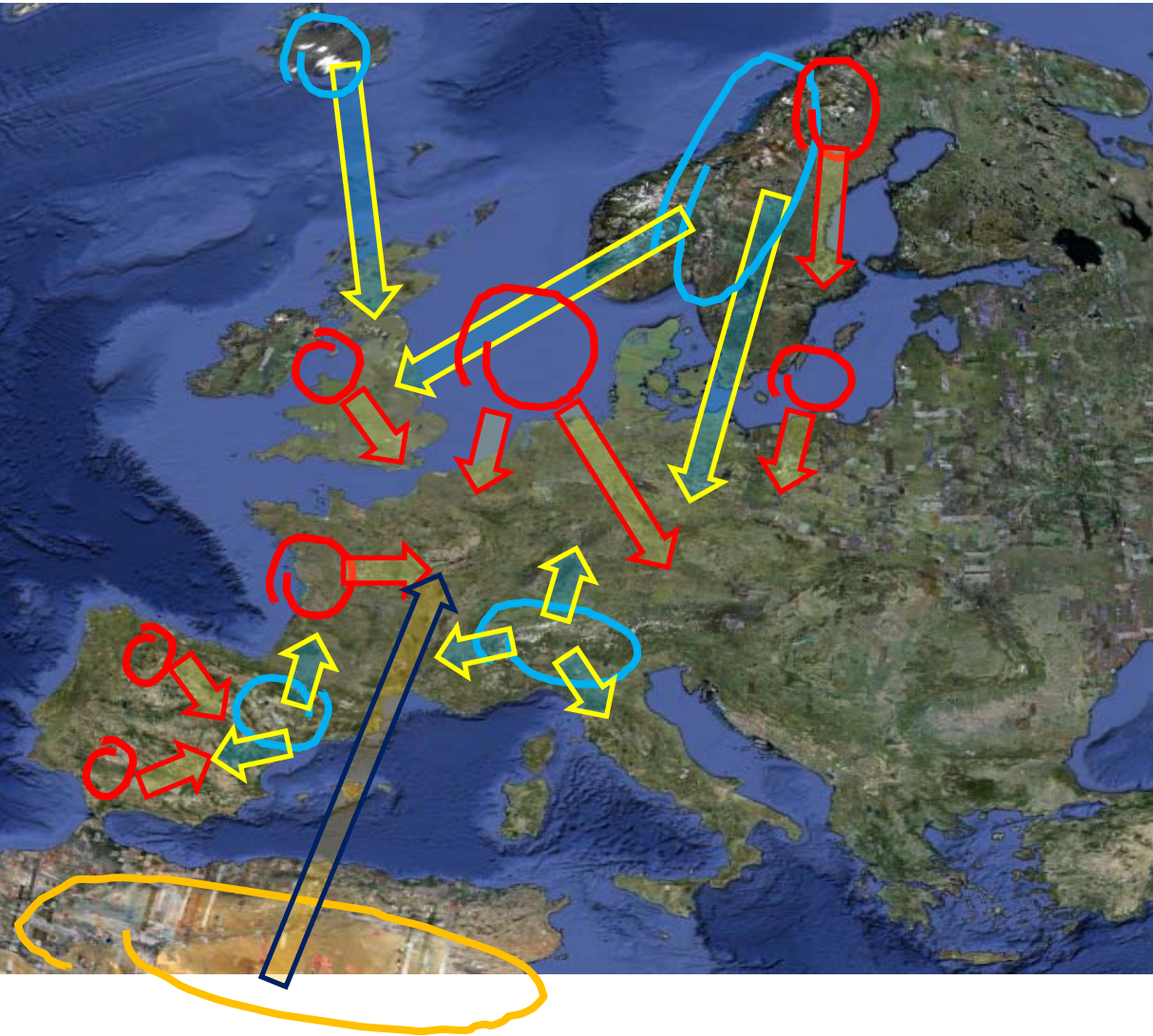
Japan Renewable Energy Foundation
Conference, September 2011

Bo Normark

Vision, renewable energy for Europe



Combine the resources..



Wind



Hydro



Large Scale Solar



Source: Power Circle

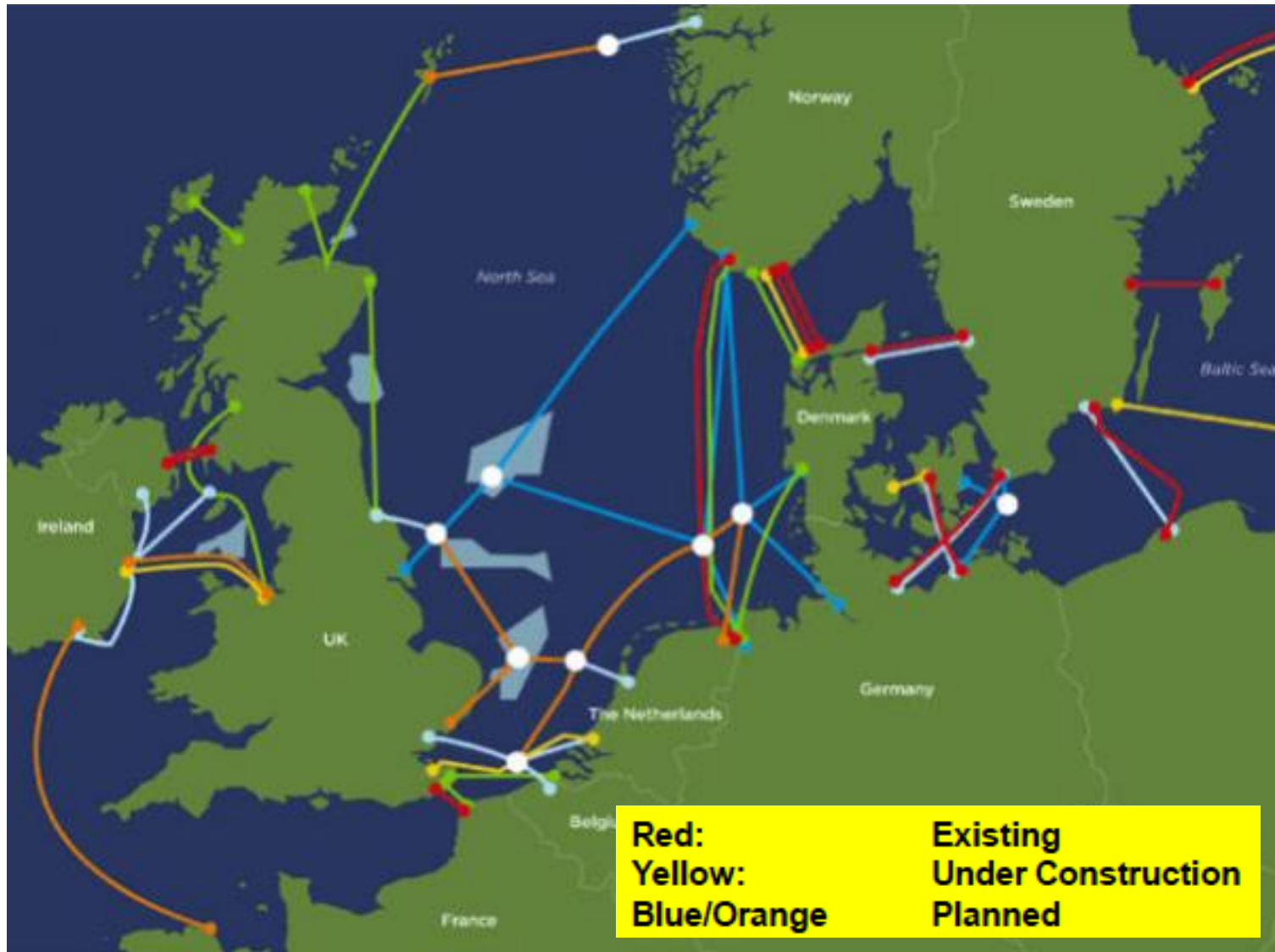
Off Shore Supergrid concept

- **Combine:**
 - Connection of off shore wind
 - Interconnections for trading
 - Sharing of back-up power
- **Benefits**
 - Reduced investment
 - Large geographic area gives more stable wind production



Source: Airtricity

North Sea Supergrid



From vision to reality

- Technology for European Supergrid is VSC/HVDC
- Currently **under construction** 9 projects:
 - Total length 1900 km
 - Total Value 4.200 MEUR
 - Total Capacity 7600 MW

China: over 217 GW of additional HVDC Transmission Capacity expected between 2010 and 2020

