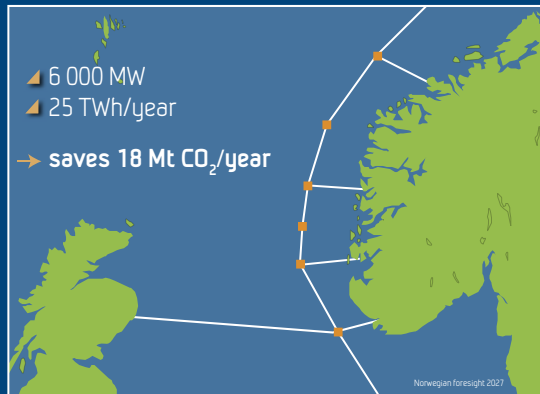


Offshore Wind Energy

- a solution to the climate challenge



Grid connection - a stepwise development



- ▲ Small wind farm connection to oil & gas installation
 - ▲ Wind farm operate in parallel with gas turbines
 - ▲ Saves fuel and emissions



- ▲ Large wind farm directly connected to mainland grid
 - ▲ Possibly also connects oil & gas installation
 - ▲ Options:
 - a) HVAC with SVC
 - b) LCC HVDC
 - c) VSC HVDC



- ▲ An offshore transmission highway is established
 - ▲ Connections to wind farms, oil & gas installations, mainland grid and trans-national
 - ▲ Options:
 - a) HVAC
 - b) Multi-terminal HVDC
 - c) combination



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