

Aquaculture Wind Wave Energy(AWWE)

	€ 1	11,74 kr	Euro	Norwegian kr
Investment(AWWE)			3,00E+08 € 300,0 million	3,52E+09 kr 3,5 mrd.
Repayment period			30 year	
Interest rate			6 %	
Repayment each year			1,00E+07 € 10,0 million	
Interest each year			9,00E+06 € 9,0 million	
CAPEX			1,90E+07 € 19,0 million	
OPEX			0,01 € pr. kWh	0,1174 kr/kWh
Power(AWWE)			5,00E+07 W	50 MW
Hour in a year			8760 heures	
Capacity factor			50 %	
Energy in a year			2,19E+11 Wh	2,19E+08 kWh
LCOE without aquaculture			0,10 €/kWh	1,14 kr/kWh
Rental income from aquaculture:				
Capcity			10000 tons	10000000 kg
Income from aquaculture each kg			0,5 €/kg	5,9 kr/kg
Rental income aquaculture each year			5,00E+06 €	
LCOE(aquaculture included)			0,064 €/kWh	0,75 kr/kWh

Calculation if this technology was used to build 500 MW at Utsira North, and the auction was won with € 0,14/kWh.

Auction(PPA)			0,14 €/kWh	1,64 kr/kWh
Subsidies of kr 35 billion garanty the price			2,98E+09 € 2,98 billion	3,50E+10 kr 35,0 mrd.
Power			5,00E+08 W	500,0 MW
Numbers of AWWE			10	
Energy each year			2,19E+09 kWh	
Profit each kWh			7,61E-02 €/kWh	
Profit each year			166600000,0 € 166,6 million	
Investment			3,00E+09 € 3,00 billion	3,52E+10 kr 35,2 mrd.
Profit in %			5,6 %	