



Demo 1 – Tidal project

Farm Technology	Tidal energy
Farm Size	170 MW
Currency	Pounds Sterling
Operating duration	15 Years
Location and Year	Arklow 2014
Device	Siemens MCT 1200kW
Energy Calculation	Adjust Farm Size to 174 MW Availability 92% Results: Device Capacity Factor 33.19% Farm Annual Delivered Energy 505903 MWh
CAPEX	“Total CAPEX per farm” £2,600,000/MW
OPEX	“Total OPEX per farm” 10% of CAPEX per year
Revenue Rates	Revenue-Basic Input – FIT included £180/MWh ROC Equivalent Included – Variable “input per annum” – starting at £50/MWh in yr 1, increasing by £1/MWh each year to £64/MWh in year 15
Real discount rate	“Apply Cash Flow in Real Terms” 6%

Results

Net Present Value	267,430,860
Levelised Cost of Energy (LCOE) £/MWh	181.50
Internal Rate of Return %	13.96%