

MRE State of Industry

- Fixed Offshore Wind
- Floating Offshore Wind
- OTEC
- Wave Energy
- Tidal/Ocean stream



Prerequisites



Installed capacity



Five-year pipeline



LCoE



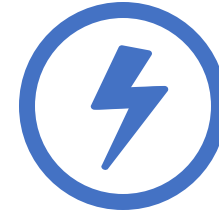
Caribbean resource

Fixed Offshore Wind



Prerequisites

<50m water depth
<50km to shore



Installed capacity

22,500MW



Five-year pipeline

44,000MW



LCoE now \$0.12

LCoE future \$0.06



Caribbean resource

= Europe

Mature tech, rapidly expanding market, low cost at scale, good resource, need site identification

Floating Offshore Wind



Maturing tech, rapidly expanding market, reducing costs, excellent Caribbean potential



Prerequisites

60-200m depth
<50km to shore



Installed capacity

44MW, 200MW pending



Five-year pipeline

4,500MW and growing



LCoE now \$0.25

LCoE future \$0.10



Caribbean resource

= Europe

OTEC



Baseload renewable, high potential, high technology risk, ancillary benefits



Prerequisites

1km depth, 25°C temp surface, <30km to shore



Installed capacity

>1MW (5 or 6 demos)



Five-year pipeline

~50MW



LCoE now \$0.??

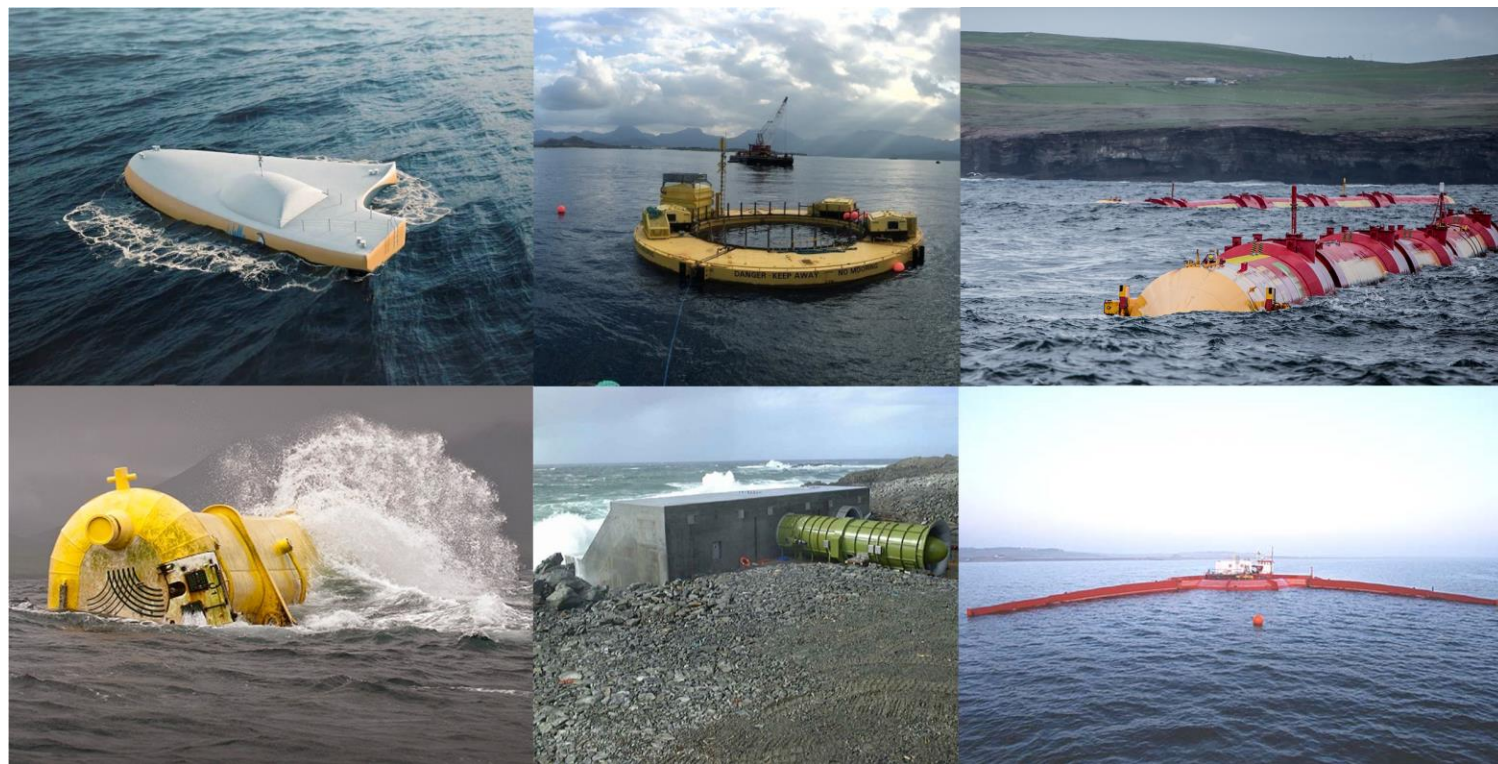
LCoE future \$0.20



Caribbean resource

Excellent

Wave Energy

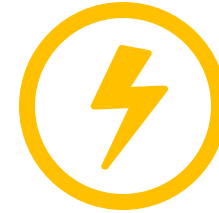


No technology convergence, huge potential but will take time to reach maturity



Prerequisites

<50m depth, waves,
<10km to shore



Installed capacity

<5MW



Five-year pipeline

~50MW



LCoE now \$0.50

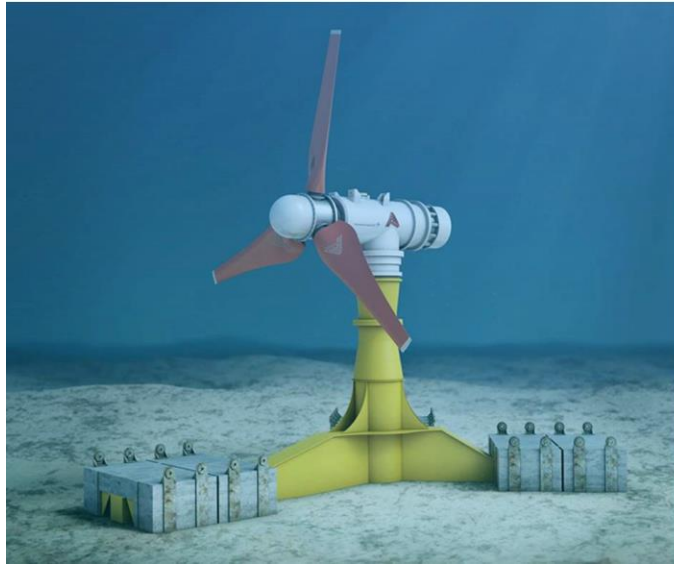
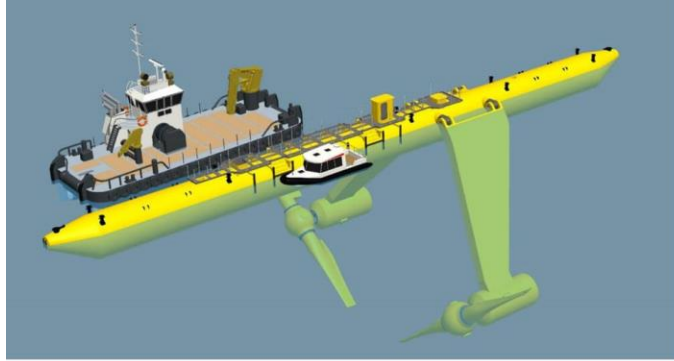
LCoE 1GW \$0.09



Caribbean resource

Extensive and regular

Tidal/ocean current



Semi-commercial tech, niche market with some potential but low in global terms



Prerequisites

>2m/s current speed
<10km to shore



Installed capacity

~15MW Tide, <1MW OC



Five-year pipeline

300MW Tide, 5MW OC



LCoE now \$0.37

LCoE 100MW \$0.18

LCoE 1GW \$0.09



Caribbean resource

Limited/unquantified

Thankyou and References

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