



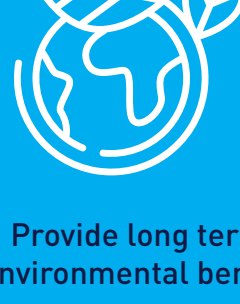
GOALS



Encourage private capital investment

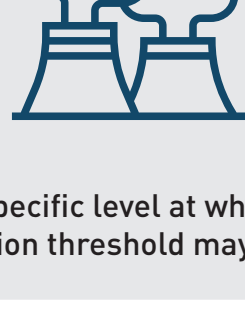


Make the EU's climate targets more practical and attainable



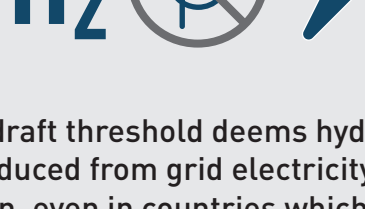
Provide long term environmental benefit

CONCERNS



The specific level at which the emission threshold may be set

MAIN ISSUE



The draft threshold deems hydrogen produced from grid electricity not green, even in countries which have a low carbon-intensive electricity

OPPORTUNITY

\$30
TRILLION
2018

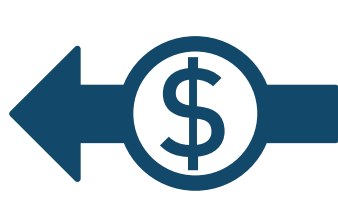


GLOBAL ASSETS WITH AN ESG MANDATE

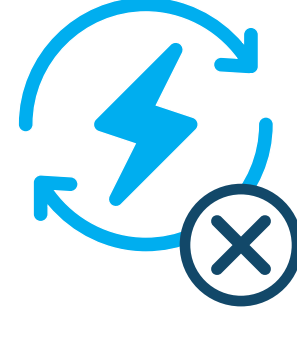
\$80
TRILLION
2025



Technologies and projects which can clearly show they meet its criteria will be more easily able to attract financing



Funds may shift across to other projects which do fit under the threshold.



Some projects which are currently labelled as sustainable will be shown to not meet the criteria

IS THE SOLUTION TO GO OFF-GRID?

The carbon intensity of the electricity produced and used for hydrogen manufacturing needs to be under

50.8
gCO₂e/kWh

a level not normally achievable if grid electricity is used

80%

Lifecycle GHG emissions savings reduction

338
gCO₂e/kWh

Relative to a fossil fuel comparator

WITH A PLANT EFFICIENCY OF

75% (Lower Heating Value of hydrogen)

There is an alternative energy source:

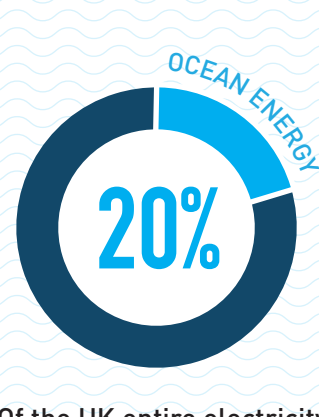
WAVE ENERGY



Market Opportunity

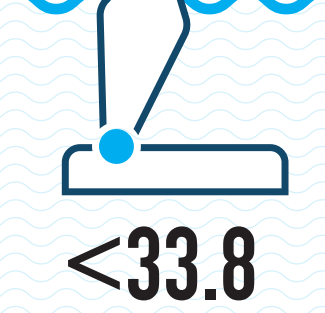


Compelling Power Output Credentials



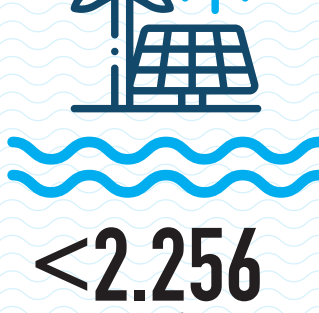
Of the UK entire electricity requirements

UP TO 50GW
Installed Capacity



<33.8
gCO₂eq/kWh

The life cycle of a wave energy converter -WaveRoller



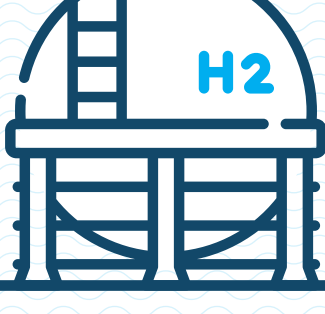
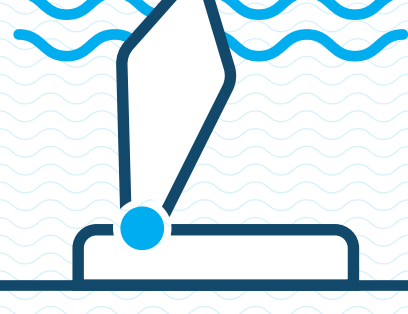
<2.256
tCO₂e/tH₂

When combined with other forms of intermittent renewable generation to supply green hydrogen



\$0.047
/kWh

Global Renewable Power Generation Costs



Plugging WaveRoller in to a solar-powered green hydrogen plant would lead to

60%

Electrolyser Capacity Factor

50%

Total Production Costs

33%

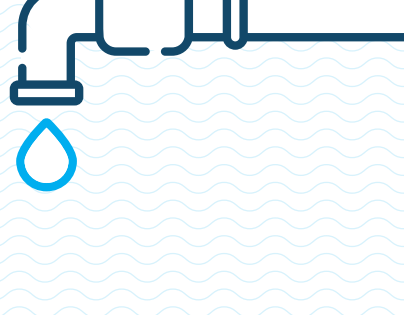
Land Area Used



WaveRoller also maintains production at night, avoiding process shutdowns, and supplements seasonal changes and smooths sudden swings in power.



In arid regions, the renewable power not harnessed by the electrolyzers can be used for freshwater production, supporting climate resilience and sustainability goals of local communities.



Wave energy is an ideal candidate and enabling technology which ensures hydrogen manufacturers meet the criteria outlined by the EU's sustainable finance taxonomy.



WAVEROLLER[®]
by AW-Energy

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