Tidal stream energy

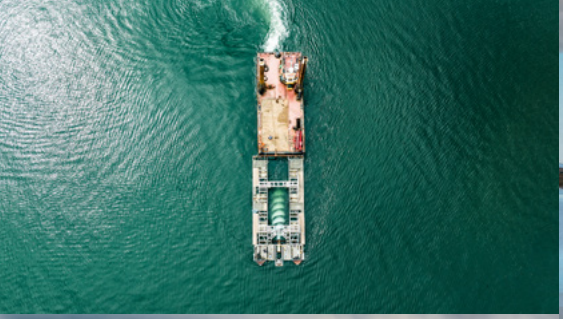
An entirely predictable renewable resource

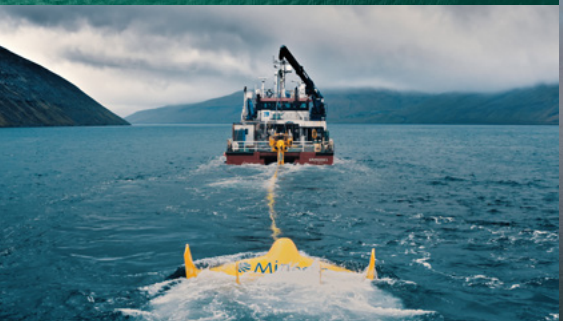
Tidal stream energy harnesses the gravitational pull of the moon and sun on earth. It is distinct from lagoons or barrages which require additional infrastructure.

Predictable renewable energy supports a secure net zero transition. **Over 10% of the UK's electricity demand** can be met by tidal stream energy.

The UK leads the world in developing, deploying and exporting tidal stream technologies with over **130MW** set to be installed in its seas by 2029.

UK MARINE ENERGY COUNCIL





Tidal stream energy will support the UK becoming a clean energy superpower, delivering:

A homegrown renewable industry

The UK has over 11GW of accessible tidal stream capacity, and projects are being deployed with over 80% UK supply chain content spend.[1]

Energy security

Tidal stream supports energy security by replacing the role that gas currently plays on the energy system.[2]

Valuable renewable energy

Deployment of 6GW of tidal stream will reduce energy system costs by £1bn per annum.[3]

A cost-effective transition to net zero

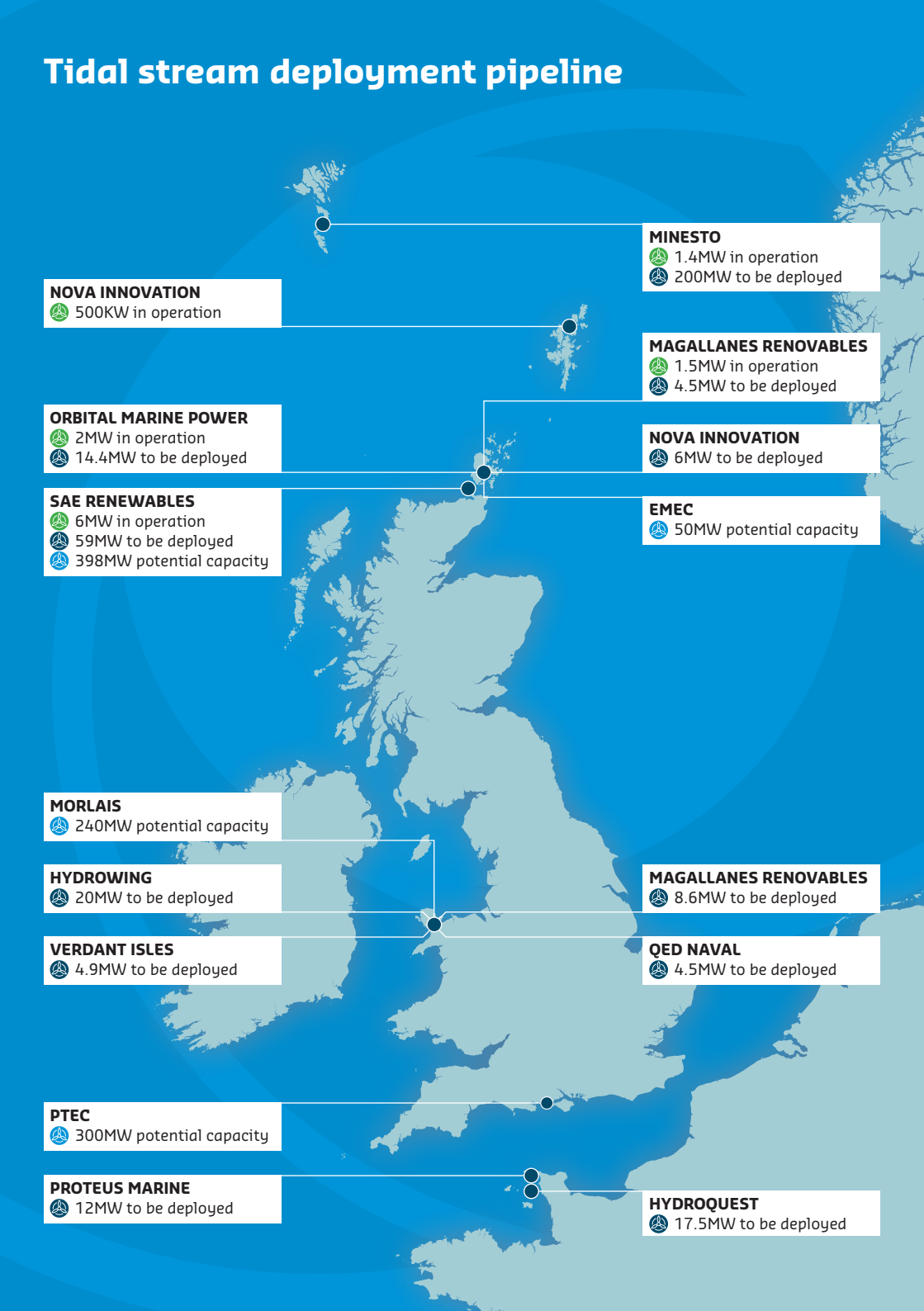
Through economies of scale, volume and accelerated learning, tidal stream will follow a similar cost-reduction pathway to solar and wind and with the right support could fall below £50/MWh.[4]

A global export market

The UK is a specialised innovator of tidal stream and can secure £17bn GVA to its economy through leading this growing market.[5]

1 University of Plymouth (2021) *A review of the UK and British Channel Islands practical tidal stream energy resource.*
2 Imperial College London (2022) *Role and Value of Tidal Stream Generation in the Future UK Energy System.*
3 University of Edinburgh (2023) *What are the UK power system benefits from deployments of wave and tidal stream generation?.*
4 ORE Catapult (2022) *Cost Reduction Pathway of Tidal Stream Energy in the UK and France.*
5 University of Edinburgh (2021) *What is the value of innovative offshore renewable energy deployment to the UK economy?*

Tidal stream deployment pipeline

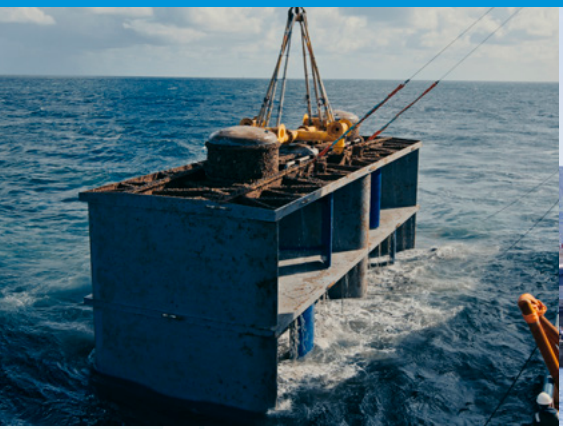


The UK must act to maintain its leadership

Tidal stream energy has already provided enough predictable renewable electricity in the UK to power 25,000 households for a year. The Marine Energy Council's ambition is to see UK content embedded in projects deployed here and around the world.

Industry is calling on the UK Government to:

- **£30m** Commit to a £30m tidal stream ringfence in future renewable auctions.
- Co-invest in projects via GB Energy.
- Set a 1GW deployment target for 2035.
- Streamline the consenting process for new projects.



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