

TIDAL ENERGY



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GVA: £3.5bn
estimated UK

USE: Tidal range energy generation

LOCATION: Between Aberthaw and Barry, South Wales

PLANNING STATUS: Early-stage development. The planning phase is expected to run from 2027 to 2032

CURRENT STAGE/STATUS: Preferred commercial demonstration project identified following work by Cardiff Capital Region and the West of England Combined Authority

START ON SITE: 2032, subject to planning, funding and regulatory approval

The Aberthaw Tidal Lagoon would establish the Severn Estuary as a predictable renewable power source and create a commercial pathway for a wider UK tidal range industry. The project would use the Estuary’s exceptional tidal range to generate around 1.3TWh of low-carbon electricity each year, enough for 450,000 homes.

The lagoon would create 41,000 job years across planning, construction and early operations. Its position next to Aberthaw Clean Energy Park links long-life renewable generation to brownfield industrial land and grid infrastructure.

A publicly backed development vehicle would de-risk planning, design and consenting before private capital enters at, or before, final investment decision for construction and long-term operation, with strong supply chain potential across South Wales and the west.

KEY FACTS

- One of the world’s strongest tidal resources, with tidal ranges up to 14.5 metres
- 600MW expected installed capacity
- c.£3.25bn construction cost at 2025 prices
- The wider Severn Estuary lagoon pipeline is modelled at £27bn capital cost

INVESTMENT PROPOSITION

Aberthaw Tidal Lagoon offers a major private investment opportunity in predictable renewable power, with potential across construction, operations and grid-linked infrastructure.

A publicly backed development vehicle would help de-risk planning, design and consenting before construction investment.