Wave & Tidal Asset Profile

1. Context

Crown Estate Scotland manages property – including buildings, land, coastline and seabed – on behalf of the Scottish people.

**We work in a way that:**
- Generates prosperity and value for all of Scotland;
- Supports the growth of sustainable business and industry in Scottish seas and on the coast;
- Makes places better for those who live, work and visit there;
- Promotes sustainable ways of producing energy, food, and other products; and
- Creates opportunities for people to use and benefit from the Scottish Crown Estate.

The Scottish Crown Estate Act 2019 requires us to manage the assets in a way that is likely to contribute to the promotion of improvement of economic development, regeneration, social wellbeing and environmental wellbeing. To do this, we need to understand the wider value delivered by the assets and our management activities.

Asset profiles have been developed for the Estate’s 21 asset classes. The profiles include information on financial returns, the public benefits delivered through our management activities, and our view of the opportunities for wider value creation.

The analysis has been undertaken in-house, using qualitative assessment and expert judgment.

2. Asset summary

Scotland has some of the best tidal and wave power resources in the world. Crown Estate Scotland is helping to develop the industry, working closely with companies, government and communities. This includes:

- Bringing new development opportunities to market by leasing areas of the seabed and managing the associated seabed rights.
- Funding research and technical studies to support sector growth.

**Asset information**

| No of agreements | 13 |
| No of tenants    | 10 |

**Financial information**

- **Asset value (March 2022)**: £0.24m
- **Value share (% of total Estate value, March 2022)**: 0.04

**Wave & Tidal – change in value and value share over time**

Map correct as at November 2022. Under the Open Government Licence, we give free access to our open datasets and map which can be found on our [Spatial Data Hub](#), which gives access to view and download spatial data, PDF maps for download, and our [interactive map](#).
3. Understanding Value

Five value categories have been identified:

- Economic;
- Social;
- Environmental;
- Climate Change; and
- Regeneration.

Each value category has a set of three or four indicators. The indicators are relevant for all Scottish Crown Estate asset classes and also align with Scotland’s National Performance Framework and the UN Sustainable Development Goals.

Measures of success

**Economic**
- Employment – jobs created or safeguarded
- Local economy – local businesses are active in the supply chain and provide local employment
- National interests – benefiting Scotland’s national economy / showing leadership
- Circular economy – increasing efficiency / reducing waste in processes and products

**Social**
- Health – reflects / promotes good health at local or national level
- Skills – stakeholders gain valuable skills
- Community participation – community is an active stakeholder and participant

**Environmental**
- Natural resources – resources used / maintained in a sustainable way
- Biodiversity – biodiversity is protected/strengthened
- Pollution prevention – pollution is decreased / not increased

**Climate change**
- Mitigation – low or zero emissions
- Adaptation – actions increase resilience / reduce risk
- New opportunities – new, low or net zero emissions activities/businesses/products pursued

**Regeneration**
- Assets – positive impacts on associated assets
- People – people are enabled or empowered
- Organisations – activities involve collaboration with other organisations
4. Potential for Wider Value

The diagrams below demonstrate the wider value currently generated by the asset class as a whole and indicate where we consider there is potential to deliver increased wider value. This is influenced by a range of factors including the inherent value of the assets, tenant activity, regulator activity and other external factors. For wave and tidal, key areas identified with potential for increased wider value include:

- **Economic** – significant opportunity for Scotland to demonstrate leadership of the sector and support the deployment of new technology which in turn can create jobs and support local supply chains.
- **Climate change** – increased renewable energy generation using new technology.

**Opportunities**

- Supports Scotland's transition to a net zero economy;
- Export market for skills and technical expertise;
- Predictable resource, once established, for decades in advance;
- Enables better balancing of supply and demand (ideal partner for solar or wind);
- Contributes to Scotland's climate change targets;
- Energy independence can be created for local/island communities; and
- Supports economic development in coastal communities across Scotland.
- Ring-fenced Contracts for Difference support for tidal stream projects from BEIS.

**Threats**

- UK's constant push for lowest cost of electricity rather than looking at highest value creation; and
- Tidal power markets in Europe, particularly Wales, England and France.

This full value potential is indicated by the blue line. The actual average performance of the assets as currently managed is shown by the orange line. The opportunity for delivering enhanced value is the stretch between the orange line and the blue line.
5. Benefits delivered by Crown Estate Scotland

Our latest Corporate Plan sets out our four roles:

**Investor**
Investing in, for example, property development, as well as building external partnerships and supporting staff.

**Asset Manager**
Careful management of leases and agreements, as well as direct management of forestry.

**Co-ordinator**
Supporting other Scottish Crown Estate managers by, for example, coordinating spatial information.

**Enabler**
Empowering others by supporting local plans and projects, providing access to property and helping address barriers to sector growth.

For wave and tidal, some examples of our activities include:

**Investment**
- £10m investment in the Meygen tidal energy project supporting the deployment of the first phase of the project.

**Enabler**
- Commissioned studies on Local Energy Systems, looking at how offshore (including wave & tidal) and onshore generation can contribute to an island-based energy system, and the wider value that projects can bring to the local community.

The table below presents our assessment of the significance of the benefits that we currently deliver through these four roles. Our Corporate Plan sets out actions against these four roles. Over time, we expect the significance of benefits to increases considerations regarding wider value are embedded into decision making.