



Market Report

A Snapshot of your Market Sector

Wave and Tidal Power

This pack has been designed to provide information on setting up a business in the **wave and tidal power** industry in Scotland, as well as helping to inform the market research section of your business plan. You can find more information on how to write a business plan from the Business Gateway website (www.bgateway.com/businessplan), including an interactive template and tips to get you started.

This market report was updated by Business Gateway in **January 2024**. If you find the information contained in this document useful, tell us about it! Send us feedback [here](#); we will use your comments to help improve our service.

What do I need to know about the Wave and Tidal Power market?

The following summary statistics have been taken from market research reports and reliable resources that the Information Service uses to compile industry information. They should give you an indication of how your industry is faring at present and whether there is demand for your type of business:

- ◆ Electricity-generating capacity from waves remains low in the UK, with the overall installed capacity **increasing from 9 MW in 2014 to 24 MW in 2023**. The technology's overall contribution to renewable electricity is very small, while generation is intermittent due to test rigs not being continuously online. **All currently installed shoreline wave energy capacity is in Scotland**. (Intel, *Renewable Energy – UK 2023*, January 2024)
- ◆ The UK was the 2nd-largest country in the market in 2023 and will continue to be the 2nd-largest segment in 2028. It will **grow at a compounded annual growth rate of 30.01% between 2023 and 2028**, which is faster than that of the overall market. Among the key countries, UK will be the fastest growing country and will **grow from \$83.58 million in 2023 to \$310.46 million in 2028**. It will **contribute 16.22%** to the incremental growth of the overall market between 2023 and 2028. (Technavio, *Global Wave and Tidal Energy Market 2024-2028*, December 2023).
- ◆ Deployments in Europe are set to **increase in 2023. At least 1.4 MW of capacity is slated for installation**. As 2023 gets underway, Nova Innovation has already extended its tidal farm in the Scottish Shetland Islands with two additional 100 kW turbines. This makes it the largest array in the world, with six turbines in operation. (Ocean Energy Europe, *Ocean Energy Key Trends and Statistics*, March 2023)
- ◆ The Scottish government's draft energy strategy, released in early 2023, recommends continued support for Wave Energy Scotland and suggests that an appropriate target for wave energy could be the testing of up to **four wave energy convertors (250 kW each)** at European Marine Energy Centre (EMEC) by 2027. (Policy & Innovation Group at the University of Edinburgh, [2022 UK Ocean Energy Review](#), March 2023)
- ◆ The Fraser of Allander Institute, commissioned by Scottish Renewables, published updated estimates of the economic impact of Scotland's renewable energy sector. The FAI estimates that the **renewable energy industry supports more than £5.6 billion of output, more than £2.5 billion of GVA and more than 27,000 full-time equivalent jobs across the Scottish economy**. (Scottish Renewables, [Annual Review 2022-2023](#), January 2024)
- ◆ The national organisation for this industry is [Scottish Renewables](#). Other industry bodies include [Wave EnergyScotland](#), [RenewableUK](#) and the [UK Marine Energy Council](#).



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Where can I find more information on my market?

The Information Service has access to a number of databases which can offer more detail on this industry. Some of these reports are listed below - if you would like to be sent extracts from any of these reports, please contact us on **0300 013 4753** or email info@bgateway.com.

- ◆ **Mintel – Renewable Energy – UK 2023 (January 2024)**: The UK's position on the northeastern rim of the Atlantic gives it some of the highest wave power in the world. The UK has some of the highest tidal ranges in the world with estimates of potential generation capacity ranging from 30 to 50 GW for all wave and tidal energy. The majority of the potential capacity is in the Severn Estuary (which has 8-12 GW), with the estuaries and bays of the Northwest representing a similar amount and the east coast a further 5-6G W.
- ◆ **Technavio – Global Wave and Tidal Energy Market 2024-2028 (December 2023)**: Wave Energy was the largest segment of the market in 2023 and will continue to be the largest segment of the market in 2028, growing slower than the overall market (29.47%). Ongoing advancements in wave energy technology have improved efficiency and reduced costs, making wave energy projects more economically viable. Innovations in wave energy converters and energy storage solutions enhance the overall feasibility of wave energy generation. Tidal Energy was the smallest segment of the market in 2023 and will continue to be the smallest segment of the market in 2028, growing faster than the overall market (29.47%).

There are also a number of online resources you may find helpful:

- ◆ **NatureScot** is Scotland's Nature Agency and has [published guidance and advice on marine renewables](#) development - *Our guidance has been developed either within NatureScot or with Marine Scotland and/or the UK's other country nature conservation agencies. Our guidance covers a range of topics, including Environmental Impact Assessment and Habitats Regulations Appraisal for proposed schemes.*
- ◆ **RenewableUK – UK Marine Energy Database (UKMED)** - *UKMED is a growing map and database of wave and tidal sites compiled by RenewableUK. Members of RenewableUK can now also access our project intelligence hub to interrogate our relational renewable energy database and search for information on contracts, project ownership, generator type and news relating to offshore wind projects across the globe, UK onshore wind projects above 100kW in size and UK marine energy projects.*
- ◆ **Wave Energy Scotland** is a subsidiary of Highlands and Islands Enterprise and *has funded 132 contracts, committed £50m and been involved with 300 separate organisations, across 18 different countries.*
- ◆ **Scottish Government - [Draft Energy Strategy and Transition Plan](#)** – Section 3.1.3 – *A recent independent report by the Scottish Marine Energy Industry Working Group highlights the scale of the opportunity from wave and tidal energy supply chains in Europe and the UK, the latter totalling between £4.9 billion and £8.9 billion GVA by 2050.*

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How can I find out about my competitors?

Business Gateway's online guide to [Competitor Analysis](#) explains how to find your competitors, how to research what they're doing and how to act on what you learn about them.

Immediate competition will be from other businesses in your local area. There are several online directories which can be used to find company information and generate lists easily and at no expense. Many Local Authorities also publish local business directories on the web. Below are some key web resources:

- ◆ General business directories such as [Yell](#) ,[Thomson Local](#) or [Google Maps](#)
- ◆ Trade specialists like [EuroPages](#) (European directory), [The Wholesaler](#) or [Free Index](#)
- ◆ Business to business (B2B) specialists such as [Kompass](#)

Likewise, your local Chamber of Commerce may publish a members' directory; find your local Chamber on the [Scottish Chambers](#) website.

Once you've identified who your competitors are, the next step is to gather information on the way they do business. Which services do they provide? How do they market themselves? How much do they charge?

To learn about your competitors:

- ◆ Look for articles or adverts in local newspapers, trade press and directories.
- ◆ Try to read their marketing material; if the company has an online presence, visit the company's website as a first port of call. Not only does it give you a better understanding of the company's activities, it can also offer a wealth of information such as a company history or staff biographies, as well as the company's partners or suppliers
- ◆ Search for information on limited UK companies via the [Companies House](#) website
- ◆ Gain an insight into your competitor's performance using credit checks and the accounts that limited companies are required to submit to Companies House each year.

We can provide credit checks free of charge; if you are interested in using this resource, or looking for us to help you find relevant publications, please contact us by emailing info@bgateway.com or by calling **0300 013 4753**



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What about suppliers?

[Choosing and Managing Suppliers](#) can help you decide what you need from a supplier, how to identify one and how to choose one to deal with.

Trade associations or industry specific organisations may also be able to recommend suppliers or contacts. You can also use the aforementioned resources for finding competitors to find suppliers.

Once you have decided on a supplier, we can run a credit check on the company to help assess their financial stability. We provide credit checks free of charge; if you are interested in using the resource please info@bgateway.com or by calling **0300 013 4753**.

Who are my customers?

Your business plan should include information about the customers you would expect. Business Gateway's guides on [Market and customer research](#) will help you to identify new trends, opportunities, customers and competitors.

It can be useful to group your customers by geographical location, age or lifestyle. The websites listed below are freely available and can provide most of this information. If you can't find what you're looking for from these websites, please contact us and one of the team will be happy to help:

- ◆ Access the latest population estimates from the [National Records of Scotland \(NRS\)](#). NRS also offers demographic factsheets for each council area in Scotland, which can provide summary statistics for the area you will be based in.
- ◆ Information from the most recent census in 2011 is released via the official website. See in particular the [Census Area Profiles](#). Clicking on your area of interest will give the latest population figures, including estimates by age.
- ◆ [Understanding Scottish Places](#) has interactive profiles of towns and cities across Scotland. It can be useful for understanding the interrelationships and flows between towns, and also gives comparisons between two or more places.
- ◆ [Scottish Government Statistics](#) provide accurate and up-to-date statistics on Scotland, covering population, health, education and housing.
- ◆ [The Scottish Household Survey](#) provides information on the structure, characteristics, attitudes and behaviour of Scottish households, both at a national and local level.
- ◆ [Office for National Statistics \(ONS\)](#) is the recognised national statistical body for the UK. ONS covers a wide range of demographic, economic and social issues at a UK level.

How can you help me with other aspects of starting my business?

The Business Gateway website has guides, videos, online tutorials and tips on all aspects of starting up a business in Scotland. Follow the links below to explore each resource:

Accountancy

Institute of Chartered Accountants of Scotland's (ICAS) "[Find a Chartered Accountant](#)" tool

Funding

[Practical information](#) on finance and funding for starting and growing your business

Insurance

[Business insurance guide](#)

Legal Help

Gov.uk "[Licence Finder](#)" tool

Law Society of Scotland's "[Find a Solicitor](#)" tool

Pricing

Business Companion [Pricing & payment guide](#).

Please note: the most effective way to research pricing is to conduct your own research – visit wholesalers or suppliers to obtain price lists, find quotes from similar companies and work out what other businesses in your area are charging

Promotion

[BG guides to Marketing](#)

Training

[Skills Development Scotland's My World of Work](#)

[Funding for training](#)

[Small Business Bonus Scheme \(Scotland\)](#)

Your local Business Gateway can offer events, workshops and 1:2:1 support on all aspects of starting and developing your business. Call the helpline on **0300 013 4753** to find out what is available in your area.

We hope you find this Market Report useful and we'd love to hear your feedback [here](#).

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You must not rely on the information in the report as an alternative to advice from an appropriately qualified professional. If you have any specific questions speak to your Business Gateway Advisor or consult an appropriately qualified professional.

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