

Summary of responses received to the public consultation document to select options for the development of wave energy in Ireland.

The Marine Institute and Sustainable Energy Ireland jointly published a public consultation document in November 2002, with the objective of eliciting discussion and feedback on the approach to the development and utilisation of wave energy in Ireland. The ultimate aim of this exercise is to support and inform the development of a national strategy for ocean energy, of which wave may be an important component.

Three options /approaches for the development of wave energy technology in Ireland were outlined.

Option 1: To become a technology leader in the field of ocean energy by committing to a significant development programme for ocean, wave and tidal energy.

This would be achieved through capital grants and price supports for demonstration projects, funding of a research and development programme and support of generic research studies.

Option 2: To provide Ireland with the means to utilise the Irish wave resource and develop an exportable core of research excellence.

This would be achieved through price purchase agreements for demonstration projects, funding of a research and development programme and support of generic research studies

Option 3: To maintain a watching brief in the field of wave and tidal energy. Funding for research and development programmes would be through existing programmes operated by the Marine Institute and Sustainable Energy Ireland

The consultation exercise ran from November 7th 2002 to February 28th 2003

Twenty-four responses to the document have been received. These include replies, with suggestions and recommendations, from Irish and international experts in the field of wave energy. Other responses have been received from commercial companies in the UK, Holland, Australia and the USA who are keen to explore installation of near-commercial technology in Irish waters if given suitable support.

Table 1. Summary of Responses

Interest	Country	Favoured option
Researcher	Ireland	Option 2
Energy agency	Ireland	No comment
Industry professional	Ireland	Compromise between 1/2
Industry Professional	Ireland	Option 2
Developer	Ireland	Option 1

Researcher	Ireland	Option 1
Researcher	Ireland	Option 1
Developer	Ireland	Option 2
Developer	Australia	Option 2
Developer	Australia	Option 2
Developer	Australia	Option 2
Developer	Australia	Option 2
Developer	Australia	Option 2
Industry Professional	Australia	Option 2
Developer	USA	Option 2
Developer	USA	Option 2
Energy Agency	USA	Option 2
Developer	Holland	Option 2
Developer	Holland	Option 2
Energy Agency	UK	Option 2
Developer	UK	Option 2
Developer	UK	No direct comment, favoured option 1 level of funding
Energy Agency	UK	Option 2
Developer	UK	Option 2
Developer	UK	Option 2

Eighteen of the replies received strongly favoured the option 2 strategy. 14 of these responses were from developers of wave energy devices. These were sourced as follows:

- UK - 3
- Holland – 2
- Australia – 6
- US –2
- Ireland - 1

These developers state that price purchase agreements combined with the favourable wave resource in Ireland would make Ireland very attractive for the installation of prototype/commercial technology. This approach would lead to the creation of a “market pull” similar to the successful Danish approach to wind technology which lead to steadily decreasing cost and increasing capacity.

The remaining responses favouring option 2 were from renewable energy agencies and industry professionals.

Only four of the respondents, three from Ireland and one International engineering company felt that a strategy with greater capital support than option two was necessary. The respondents who favoured the option 1 strategy considered that this option was necessary for Ireland to benefit fully from the development and deployment of this technology, i.e. to be a leader in this emerging area and to compete with the Scandinavian countries that are rapidly developing this technology through availability of suitable funding.

Other comments and suggestions regarding the consultation document included:

- Premium price tariff should be made available for a total capacity of 50MW.
- A tidal stream resource assessment study is required.
- There was no stated support for the development of a serviced test site.
- The roles of the M.I. and S.E.I. need to be defined before any strategy is put in place, and a more unified approach should be possible now that M.I., S.E.I. and CER are under one government department.
- The energy resource needs to be safeguarded in the long term in terms of availability due to further designations of heritage sites etc.
- Any generation projects should be designed around the technical specification of supply as required by ESB.
- The adoption of option 2 will favour established, well-funded, international developers over Irish developers.
- Option 2 is similar to the Danish wind energy model which, through creation of market pull, has led to the creation of a €6 billion industry.
- Option 2 is a low risk option in that projects are only financed if successfully generating electricity.
- By establishing itself as an attractive market, Ireland can benefit in the longer term, industrially and economically, through technology development.
- Option 2 represents the best balance between encouraging developers to deploy devices and supporting R+D with more modest expenditure.
- A graduated premium price tariff regime should be introduced with the highest level of support for first 0-1 MW, less for next 1-10 MW, with at least 12 years support. Grants should be used for long term infrastructure and local skills.

- This strategy would lead to larger scale deployment with higher penetration, on the back of a stronger grid and at unsubsidised rates at a time when it is most beneficial to Ireland.
- A common data acquisition and recording system for measuring device outputs should be developed for trials.
- The pool of experienced Irish researchers and research facilities needs to be built on and mechanisms to support and maintain existing facilities and skill pool must be put in place.