

## Policy Motion - Spring 2025: Marine Energy

Conference reaffirms its support for the NW Region's Policy initiative on Marine Energy as set out our Regional Conference motion of Spring 2019 and subsequently incorporated within Autumn 2019 Federal conference motion "Tackling the Climate Emergency".

### Conference notes

- i) That the Irish Sea is unique in having, by global standards, exceptionally high tidal ranges at multiple locations throughout the length of its coastline providing opportunities for the construction of estuarine barrages or coastal lagoons for the generation of Marine Energy.
- ii) The EDF Marine Energy barrage at the Rance estuary in Brittany is now almost 60 years old and its 24 turbines continue to generate up to 600 million kilowatt-hours of power each year providing the cheapest energy in France.
- iii) Such schemes do not involve risks of delay and cost escalation associated with highly complex technologies such as nuclear power but can deploy well-established civil engineering techniques and utilise turbines comparable to those widely deployed in hydroelectric power generation. They can be designed to generate power on both the ebb and flow of the tide and incorporate storage to even out variations in the rate of flow of the tide and to make more cost effective use of power generated overnight.
- iv) Speculative private sector initiatives proposed under previous Tory governments did not take sufficient account of the longevity of such plants, nor did they invest sufficiently in design and planning, instead seeking inflated prices for the electricity produced.
- v) Previous considerations of the potential for Marine Energy have not taken adequate account of wider community benefits such as flood protection, opportunities to incorporate transport infrastructure or the opportunity to locate industries with high power demands in reasonably close proximity to this reliable source of clean energy.
- vi) Opportunities to reduce construction costs have not been fully explored. These include scope for significant economies of scale through sequential construction of schemes at various points on the coastline and modular construction deploying prefabricated caissons constructed in coastal yards and towed into position.
- vii) Recent government announcements on the need for high energy consuming data centres has highlighted the need for stable and reliable sources of clean energy both for these new users and existing high energy consuming industries. Marine energy provides a viable alternative to nuclear for these purposes as well as for less intense domestic and industrial usage. While the NW has some good national grid connections, for example via the near life-expired Heysham nuclear facility, there are also economic development opportunities to establish new plant for high energy consuming industries within reasonable distance of new sources of Marine Energy.

Conference regrets that despite the need for further investment in renewable energy no serious initiative to exploit this resource has been forthcoming despite Labour manifesto commitments to Marine Energy and the establishment of Great British Energy as a vehicle for public investment.

Conference calls on the Government to task Great British Energy with the development and implementation of a strategy for the exploitation of Marine Energy. This should include

- a) An analysis of cost cutting opportunities that may be derived from a rolling programme of implementation, design competitions for civil and electronic engineering inputs to the programme and detailed surveys of potential locations to enable more accurate construction cost predictions and the identification of optimal sites for such infrastructure.
- b) A study of the potential societal gains additional to the provision of further clean energy capacity to address flood defence and environmental benefits, opportunities for contributions to transport infrastructure and economic development opportunities.