Editorial

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As governments around the world increasingly turn their attention to the issue of global warming, the drive to develop reliable renewable energy schemes is greater than ever. Whilst wind and solar technologies are relatively advanced, marine renewable-energy technologies are still being developed and civil engineers are beginning to face up to the challenge of constructing viable schemes in the toughest environments.

Marine renewable energy is a topic that has featured in previous issues of *Maritime Engineering*, notably with the award-winning paper by Professor Ian Bryden¹ which provided an excellent review of marine energy resources, constraints and opportunities in the UK. This neatly complemented a paper by Cooper *et al.*² on the development of a marine renewable-energy atlas for the UK, which was driven by the need for assistance in the strategic planning of investment in marine energy developments. Our sister journals *Civil Engineering* and *Engineering Sustainability* have also published papers covering aspects on marine energy. David Kerr's overview³ of the various forms of energy generation from marine sources that are most likely to make a significant contribution to world energy supplies is recommended as an introduction for readers who are new to the subject matter.

In this current issue of *Maritime Engineering* we continue to cover the topic of marine renewable energy with a highly informative paper by Kirby and Retière.⁴ This excellent paper reviews the environmental effects of the Rance barrage in France, built in the 1960s, and compares them to the potential environmental effects of a barrage across the River Severn in England. This contribution is highly topical as the UK government has recently published a shortlist of potential tidal power schemes to be considered for the Severn estuary, which are now going out to public consultation. A barrage across the Severn has been the subject of various studies over the last 30 years, but increasing awareness of climate change and the need to reduce reliance on fossil fuels has given the current round of investigations added impetus. However, the renewed prospect of harnessing the tidal energy of the Severn has sparked

considerable public debate about the need to strike a balance between addressing global warming through development of renewable energy sources and the potential destruction of our natural environment as a result of such schemes.

Maintaining the momentum of interest in marine renewable energy, *Maritime Engineering* will be publishing a themed issue later this year on the topic of offshore renewable energy. This issue will report on developments in both the technology of marine energy systems and the implementation of schemes.

If you wish to comment on the issues raised in Kirby and Retière's paper, or on any other papers published in the journal, you are invited to contribute a discussion item for publication in future issues. *Maritime Engineering* provides an excellent forum to share experiences of best practice, lessons learnt, innovative techniques and new methods or understanding, and by contributing in the form of a paper, briefing article or discussion you can help advance the professional understanding of engineers around the world. For further information please contact the editorial coordinator, Craig Schaper (tel.: +44 207 665 2240; e-mail: craig.schaper@ice.org.uk).

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