

reFOCUS

The international renewable energy magazine

# Marine Renewable Energy Report

Global Markets,  
Forecasts and  
Analysis 2005–2009

From the publisher of

reFOCUS

Produced by

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DOUGLAS-WESTWOOD

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# **Refocus Marine Renewable Energy Report**

**Global Markets, Forecasts and  
Analysis 2005–2009**

**Adam Westwood**



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UK	Elsevier Ltd, The Boulevard, Langford Lane, Kidlington, Oxford OX5 1GB, UK
USA	Elsevier Inc, 360 Park Avenue South, New York, NY 10010-1710, USA
JAPAN	Elsevier Japan, Tsunashima Building Annex, 3-20-12 Yushima, Bunkyo-ku, Tokyo 113, Japan

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Published: May 2005  
British Library Cataloguing in Publication Data  
A CIP Catalogue record for this book is available from the  
British Library  
ISBN 185617462X

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Published by  
Elsevier Advanced Technology  
The Boulevard, Langford Lane, Kidlington, Oxford OX5 1GB, UK  
Tel: +44 1865 843695  
Fax: +44 1865 843971  
E-mail: re-focus@elsevier.com  
Web: www.elsevier.com

Produced by  
Douglas-Westwood Limited  
St Andrew's House, Station Road East, Canterbury CT1 2WD, UK  
Tel: +44 1227 780999  
Fax: +44 1227 780880  
E-mail: admin@dw-1.com  
Web: www.dw-1.com

Typeset by Land & Unwin (Data Sciences) Ltd, Northamptonshire  
Printed and bound in Great Britain by Headley Brothers (Digital) Ltd

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# About the Author

**Adam Westwood** is the lead author of a number of Douglas-Westwood's published renewable energy studies, including for Scottish Enterprise, '*Renewable Energy Spends & Trends*' and for Renewables UK, '*The World Offshore Renewable Energy Report*'. He manages a number of renewable energy project databases including '*The World Offshore Wind Database*' and '*The World Offshore Wave & Tidal Database*'. Past research activity also includes a renewable energy market entry study for a multi-national energy industry project management organisation and work on renewable energy industry business prospects worldwide. He has also been engaged in a project for the UK DTI relating to the financing of capital assets.

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# Abbreviations

US\$/MW	Dollars per megawatt
US\$m	Dollars-millions
AC	Alternating current
Bbls	Barrels
BSH	Bundesamt für Seeschifffahrt und Hydrographie
BWEA	British Wind Energy Association
Cents/kWh	Cents per kilowatt hour
CFCs	Chlorofluorocarbons
CO <sub>2</sub>	Carbon dioxide
DC	Direct current
DKK	Danish Krone
DOWEC	Dutch Offshore Wind Energy Converter
DWL	Douglas-Westwood Limited
EB	The Engineering Business
EC	European Commission
EIA	Environmental impact assessment
EIS	Environmental impact statement
EMEC	European Marine Energy Centre
Enso	El Nino Southern Oscillation
EPC	Engineering Procurement and Construction
EU	European Union
EWEA	European Wind Energy Association
FSU	Former Soviet Union
GBS	Gravity-base structure
GHGs	Greenhouse gasses
GRP/FRP	Glass fibre reinforced plastic
GW	Gigawatt
Gton	Gigatonne
HCFCs	Hydro chlorofluorocarbons
HVDC	High voltage direct current
IEA	International Energy Agency
IPCC	Intergovernmental Panel on Climate Change
IWEA	Irish Wind Energy Association



kV	Kilovolt
kW	Kilowatt
kWh	Kilowatt hour
M	Metre
Mmbbls	Million barrels
m/s	Metre per second
MCT	Marine Current Turbines
MPI	Marine Projects International
MW	Megawatt
NaREC	New and Renewable Energy Centre
NEDO	The New Energy and Industrial Technology Development Organization
NFFO	Non-fossil fuel obligations
OPD	Ocean Power Delivery
OPEC	Organization of the Petroleum Exporting Countries
OWC	Oscillating water column
OXERA	Oxford Economic Research Associates
RSPB	The Royal Society for the Protection of Birds
SP Jackup	Self propelled jackup
TLP	Tension leg platform
TW	Terawatt
TWh	Terawatt hour
UNFCCC	United Nations Framework on Climate Change
WD	Water depth
WEC	World Energy Council
Wm <sup>2</sup>	Watts per square metre
WTG	Wind turbine generator

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