



Invitation to Tender

Restricted Commercially Confidential

CLOSES 1200hrs on Friday 6 March 2009

Technology Acceleration Support for Development of a New Offshore Supply Vessel

1 SUMMARY

Renewables East ("RE") is engaged in programmes with both the East of England and East Midlands Development Agencies (EEDA & EMDA) to accelerate the route to market of very early stage renewable energy technologies, increasing both the quantity and quality of investable concepts capable of growing across the two regions.

Invite capable businesses, consultants and service providers to support the acceleration of the route to market for a novel offshore supply vessel concept, through provision of patent / IPR support and initial stability analysis.

2 Background

The East of England is the leading English region for renewable electricity, currently producing 9% of the electricity it uses from renewable sources. It benefits from wide scale deployment of **bio energy** (for example the world's first chicken litter electricity plant at Thetford, the UK's first **bio ethanol** plant at British Sugar Wigginton, and the world's fastest biofuelled car at Lotus in Norfolk) and 2007 saw a record year for deploying on shore renewable energy. The region's coast is also surrounded by the majority of the UK's Rd1, Rd2 and [proposed] Rd3 offshore wind installations, with around £50 billion capital investment anticipated by 2020 as well as being the host region for **OrbisEnergy**, a Centre of Excellence focussed wholly on R&D, innovation, business development & growth for offshore wind, wave and tidal technologies. As a result, the region is well on target to meet its 2010 target of 14% electricity from renewable sources and has also been engaged by the East Midlands Development Agency to increase exploitation of the sector growth in offshore renewables.

In order to further strengthen the regional renewable energy proposition, RE is carrying out feasibility studies to underpin the business case for additional infrastructure projects which, if realised, will enhance the region's ability to (1) capture economic benefit for businesses, (2) develop high calibre skills, and (3) increase knowledge holding in each of the areas of Primary Renewable Energy (Heat, Electricity & Transport Fuels). Each feasibility study will lead to a full Green Book business case assessment on which capital investment decisions can be based.

The Renewable East Technology Acceleration Scheme helps entrepreneurs, businesses and other technology developers create successful and innovative renewable energy solutions. It

does this by providing early-stages funding and other support to help ideas reach a level of development and credibility at which other significant funding options become viable.

The general objectives of the scheme are to:

Increase the strength of the renewable energy engineering and service sector in the East of England and East Midlands.

Help adoption of renewable energy technologies by producers and consumers in the region.

Invite capable businesses, consultants and service providers to support initial development studies for a novel boat stabilisation system through provision of concept IPR support and initial stabilisation studies via suitable marine engineering and analytical techniques.

3 About Renewables East

Renewables East is a private company delivering the services associated with being the renewable energy agency for the East of England. The Company is funded by the East of England Development Agency (EEDA) and officially designated as an EEDA sister organisation. For the year 2008/09, **RE** has been allocated £2.4M from various sources including EEDA, EMDA, EU, Local Authorities and central government to continue its mission.

The objectives of the Company are:

- a. To enable the East of England to meet its adopted target for the production of energy from renewable resources, within the context of national energy policy and the need to move towards a lower carbon economy; and
- b. To maximise the rate of growth of the renewable energy sector and the economic benefits to the East of England and East Midlands' regions, especially through stimulating investment and job opportunities, supply chain development and innovation.

RE's primary work areas are Bioenergy (Biomass and Biofuels,) Offshore/Onshore Wind and the emerging marine renewables (i.e. Wave & Tidal technologies), Planning, Supply Chain Development and the On-site Renewables agenda. If you have not already done so, you may find a visit to our web-site useful www.renewableseast.org.uk.

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4 Scope of work

The concept owners are developing a novel stabilisation concept that has potential for reducing both the risk element and time required for maintenance crew transfer at WT pylons. If sufficient stability enhancements are demonstrated it may also increase the range of sea state operating conditions.

The innovation centres upon both the use of a separately mounted crew transfer bow and the use of a retractable stability system that mimics the stability of catamaran vessels. This is expected to improve fuel economy during transit and enhance stability whilst at rest.

It is aimed at numerous markets in the UK and overseas and is intended to be manufactured via a local supply chain.

The following scope of work will assist the company achieve greater clarity and focus surrounding the concept design, potential IPR issues, possible registration of IP and a feasibility study to create more accurate performance/size data.

Based on information which will be made available from the concept owners, the successful bidder(s) will have the capability to provide one or all of the following support packages:

PACKAGE 1 – Support with Highlighting and Protecting Intellectual Property Rights (IPR)

This package of work is specifically focussed on investigation of prior art and any intellectual property rights arising and advising the innovator on a range of IPR issues surrounding the potential for further UK and overseas protection (where appropriate).

Therefore it is likely to include one or both elements of the following overall scope of work subject to signing of the declaration of confidentiality offered in Appendix 1:

a) Outline Patent Search:

Low-cost search to highlight the existence of prior-art (if any) which could effectively limit the concept owner's ability to develop all or specific parts of the technology. Based on the outcome of the outline patent search potential exists to progress to a detailed patent search (b) if evidence is presented to justify the need.

b) Detailed Patent Search:

Subject to the results of (a) above, a more detailed search may be necessary to establish in more detail the specific nature of potential prior art which could effectively limit the concept owner's ability to develop all or specific parts of the technology.

PACKAGE 2 – Detailed review of the stability factors/ issues of the concept

Initial Outrigger Investigation:

Investigate the proposed outrigger system design/layout and make an initial estimate of the stability enhancement whilst at rest. From this investigation it should be shown:

- Expected level of improvement in known sea conditions in comparison with the standard hull design.
- Potential sea condition change which will produce similar performance to current hull performance in lower sea states.

From this activity several design considerations are to be evaluated.

- Size/volume and position of outriggers
- Extent of movement required at the bow station to further improve crew transfer and the potential mechanism for providing this level of articulation

By working with the innovator, support the production of revised CAD renderings that would be suitable for illustrative purposes only (i.e business plans, investor brochures etc).

NOTE: Due to both the stability issues and the mechanical design requirements, it is anticipated that only naval architects will have the requisite skills and experience to conduct this activity within the time and cost constraints.

Detailed design is outside the scope of this contract.

5 Tender Details

Responses to this tender must be received by **Renewables East** no later than **1200 hours on Friday 6th March 2009** and should be sent via email to:

**John Heath
Delivery Manager
Renewables East
ZICER Building
School of Environmental Sciences
University of East Anglia
Norwich
NR4 7TJ**

Responses should be submitted electronically, and should include your total fees (including the number of people involved, their daily rates, plus any expenses and VAT), outline proposals on the form and type of training session and supporting materials you would develop, evidence of previous experience, and any additional value you can add.

The successful applicant will be notified by Monday 9th March 2009 at the latest and must be in a position to start work immediately upon notification.

The materials produced will be the property of **Renewables East** and will need to be supplied in formats (hard copy and/or electronic) that can be reproduced by us without further project cost.

6 Tender Process & Assessment

Tenders should be no longer than ten pages, including a two page executive summary. Further information can be included in the form of an appendices.

Above all else, the successful tenderer will clearly articulate specifically how the work packages will be delivered, stating how resource will be deployed to stay within the budget and timescale.

The tenders will be assessed against the following criteria:

- 30% - Value for money: Clear, concise evidence of how the tenderer will not only deliver the scope, but will deliver a greater/wider value to the overall project/programme.
- 50% - Track Record: Demonstratable (evidenced) examples of knowledge and experience in delivering work packages of a similar nature on time and to budget.
- 20% - Understanding economic drivers in SME businesses: Demonstratable (evidenced) examples of funding and resource constraints often prevailing within small to medium size enterprises (SME's)

Any information provided will be treated with total confidentiality.

7 Fees

The total budget available for this work will not exceed GBP£10,000

Package 1 (Support for IPR):

GBP£3,000.00

Package 2 (Stabilisation Study):

GBP£7,000.00

All prices are inclusive of VAT and any materials/expenses incurred in the course of this work and will be released in line with tangible evidence of progress against milestones.

8 Further Information

Should you require any further information on this brief to complete your tender submission, please contact John Heath by e-mail or post: JohnHeath@RenewablesEast.org.uk

John Heath, Delivery Manager
Renewables East
ZICER Building, School of Environmental Sciences
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9 Restricted and Commercially Confidential

PLEASE NOTE THAT THE INFORMATION AND ASSOCIATED DOCUMENTS SUBMITTED IN RESPONSE TO THIS INVITATION TO TENDER AND ALL SUBSEQUENT INFORMATION RELEASED TO TENDERERS SHALL NOT BE AVAILABLE IN THE PUBLIC DOMAIN AND SHALL REMAIN COMMERCIALY CONFIDENTIAL. THE INFORMATION IS NOT TO BE USED FOR ANY PURPOSES OTHER THAN TO RESPOND TO THE TENDER.