

DECC Initial Guidance on EU Funding Mechanism "NER300" for Carbon Capture and Storage (CCS) and Renewable Demonstration Projects.

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Introduction

This document contains a general overview of the NER300 Funding Mechanism and initial guidance on the UK's approach to short-listing of Carbon Capture and Storage (CCS) and Renewable demonstration projects. Further, more detailed guidance will follow on CCS and Renewables (see the relevant sections for more information).

About the NER300

At the European Council in December 2008 Heads of Government agreed to make available up to 300 million EU emissions allowances (EUAs) from the New Entrants' Reserve (NER) of the EU Emissions Trading Scheme to part-fund "demonstration of carbon capture and storage and innovative renewable energy". The arrangements for awarding the allowances are detailed in the final Commission Decision¹. The following Q&A provide an overview of the main features of the NER300 Funding Mechanism (hereafter referred to as the "NER300"), but we strongly recommend that potential applicants become familiar with the text of the Decision itself.

It is the intention that NER300 funded projects will contribute to the objectives of the EU's Strategic Energy Technology (SET) Plan, in particular, to the activity being organised under its European Industrial Initiatives. The SET Plan outlines, from a European perspective, what needs to be done in terms of technology development, demonstration and deployment, to achieve the EU's 2020 energy and emission targets and its 2050 vision. Member States and the European Commission have been working with industry representatives, on the development of a range of technology-based European Industrial Initiatives. These will be tasked with developing the technologies identified as priorities under the SET Plan through to 2020.

What is the NER300?

The NER300 is a common pot of 300 million EU ETS allowances set aside for supporting 8 CCS and 34 renewable energy projects. A greater or lesser number of projects may be funded depending on the costs of the proposals². The process announced by the European Commission for the 1st NER300 Call (Annex 1) limits the maximum number of projects that can be awarded from the 1st Call to 8 CCS and 34 Renewable projects, with the potential for unused funds to be awarded under the 2nd NER300 Call.

How and when will the NER300 funds be awarded?

The European Commission will launch two calls for proposals – the 1st Call in 2010 for project selection at the end of 2011 will award 200m allowances, and the 2nd Call in 2012 for project selection at the end of 2013 will award 100m allowances. Member States will be asked to assess whether projects meet the eligibility criteria in the Decision and provide a shortlist of projects that they support to the European Investment Bank (EIB). The EIB will undertake financial

¹ COMMISSION DECISION "laying down criteria and measures for the financing of commercial demonstration projects that aim at the environmentally safe capture and geological storage of CO2 as well as demonstration projects of innovative renewable energy technologies under the scheme for greenhouse gas emission allowance trading within the Community established by Directive 2003/87/EC of the European Parliament and of the Council" – available on the DECC website at www.decc.gov.uk/occs

and technical due diligence and make recommendations for selection to the European Commission. The European Commission will rank and select projects on the basis of least cost to public funders (EU and national) per tonne of CO2 stored (CCS) or unit of clean electricity produced (Renewables).

What is it worth?

The allowances will be sold on the carbon market and the total value of the pot will therefore depend on the carbon price when the allowances are sold. The European Commission estimates a wide total value range of between €4.5bn (at a carbon price of €15 per allowance, approximately today's prices) and €9bn (at a carbon price of €30 per allowance). The European Investment Bank intends to publish a plan setting out how and when they intend to sell the allowances. Based on this estimate, the 1st Call could provide funding in the range €3-6bn.

How much could the UK benefit from the NER300?

The UK's potential share also depends on the:

- Number of successful projects Member States are guaranteed at least one, but no more than three projects overall, excluding transboundary projects³ (from both Calls); and
- Total cost of successful projects The NER will support 50% of the relevant costs⁴ of a successful project. So the maximum return to the UK would be achieved by securing funding for the three largest demonstration projects that are in the public interest. The remaining costs will need to be co-funded by Member State governments and/or the private sector.

What kind of projects are eligible?

The mechanism has been designed to fund:

- 8 CCS projects, consisting of:
 - o at least one but no more than three of each of:
 - post-combustion (250MW gross)
 - pre-combustion (250MW gross)
 - oxyfuel (250MW gross)
 - industrial applications (500kt CO2 per annum)
 - at least three storing in saline aquifers and at least three storing in depleted hydrocarbon fields
- **34 renewable energy projects**, one in each of the defined technology subcategories with thresholds (see the Decision for a full list).

However, the Decision also provides for Member States to choose which projects they put forward into the NER300 selection process, to ensure that successful projects will contribute to national strategic priorities. Following publication of the call for proposals, the Decision requires applications to be made to Member

³ See Article 8.4 of the Commission Decision

¹ See Article 3 of the Commission Decision

States who are required to assess all applications against the criteria in Article 6 and are able to make a pre-selection according to national preferences.

What will the UK's preferences be?

Our approach to preparing the UK shortlist (pre-selection) for the NER300 will be to seek to maximise the UK's overall financial return and ensure that return contributes to our domestic priorities. This means that DECC, in consultation with the Devolved Administrations, will seek, as far as possible, to put forward large demonstration projects that contribute to our domestic priorities and that we judge to have the best chance of being successful when assessed by the EIB against similar projects from other EU countries. Our preferences for CCS and Renewable demonstration projects are detailed further in subsequent sections of this document.

Is there scope for "Transboundary" projects?

Yes. A "transboundary project" is defined in the Decision⁵ and such projects will be considered separately to the maximum of three potential projects a Member State can receive funding for.

What is the timetable for the 1st Call?

The European Commission has outlined a timetable for its process for selecting projects, which could be subject to change:

- 3rd Quarter 2010:
 - European Commission announces 1st call in September/October 2010, with Member States setting out the national priorities on which they will base their shortlisting decisions as necessary. Member States then receive proposals by 31 December 2010.
- 1st Quarter 2011:
 - Member States assess proposals and submit chosen projects to the European Commission.
- 2nd Quarter 2011:
 - EIB assess the financial and technical robustness of proposals and rank proposals according to cost per unit performance
- 3rd Quarter 2011:
 - European Commission consults Member States to ensure that projects have sufficient funding to be able to proceed
- 4th Quarter 2011:
 - European Commission consults the EU Climate Change Committee before making final award decisions.

⁵ See Article 5.2

Can an application be amended after it has been submitted to DECC (4th quarter 2010) but before it is submitted to the European Commission (1st quarter 2011)?

No. The information that we submit to the European Commission has to be the information that has been sent to us by the NER300 deadline. However, the EIB may request further information during its due diligence stage in Q2 2011.

How will the European Commission make the final selection?

If there are not enough funds to support 8 CCS projects and 34 renewable energy projects, the funds will be split and projects deleted from each group separately until the request in each group is lower than the available funding. Deleted projects are those with highest cost per unit performance.

The process is illustrated in Annex 1.

Preferences for CCS demonstration projects

Our intention is to shortlist and enter into the NER300 Call all projects applying to be part of the UK CCS demonstration programme of four projects[1] that meet the programme objectives, to ensure that NER funds are used to complement the UK's priorities for demonstrating CCS on power generation, either post- or precombustion capture (which includes oxy-fuel combustion). Projects that meet the UK demonstration programme objectives will therefore be shortlisted for entry into the 1st NER300 Call in preference to projects that do not. However, projects shortlisted for the NER300 are not guaranteed UK funding or a place in the UK demonstration programme.

Over the summer we are engaging industry on the additional demonstration projects through a market sounding exercise, following which we hope to announce the objectives for demonstration of four projects. To ensure that UK projects can prepare bids for the 1st NER300 Call that are also candidates for national co-funding, we will aim to issue further guidance on the objectives for the UK demonstration programme of four projects by the end of October, when we will have been able to consider all of the responses to the market-sounding exercise and still developing our thinking on the objectives for these projects we are not able to provide further information at this time, however we hope the following Q&A will be useful.

What is the timing of the competitions?

DECC has said that it will launch the process for selecting additional CCS demonstration projects towards the end of this calendar year. The European Commission intends to launch the 1st NER300 Call in September/October 2010. As outlined above, we intend to issue further guidance on the objectives for the UK demonstration programme of four projects by the end of October to inform UK projects applying to the 1st NER300 Call.

Will DECC and EU processes duplicate?

We are still developing our thinking on the UK process and will work to align this with that of the European Commission as closely as possible. We have said that we will keep all parties informed of how we anticipate these processes to relate each other once more clarity on the 1st NER300 Call becomes available to us. We intend to publish further guidance nearer the time of the 1st NER300 Call.

^[1] Commitment of the coalition government on page 16 of "The Coalition: our programme for government": <u>http://programmeforgovernment.hmg.gov.uk/files/2010/05/coalition-programme.pdf</u>

What is the interaction between DECC and the EU competition?

We envisage that projects that qualify for EU funding under the NER300 and also meet the objectives of the UK demonstration programme of four projects are likely to present the best value for money to the UK. Therefore we would encourage all project developers that seeking to be part of the UK demonstration programme to put forward proposals in response to the 1st NER300 Call. However, projects shortlisted for the NER300 are not guaranteed UK funding or a place in the UK demonstration programme. In the third quarter of 2011, the European Commission will ask Member States to confirm national support for any UK projects that have qualified (ranked high enough) to be part of the European Programme, and projects that have not secured national co-funding will not receive an award. This means that applicants for UK CCS projects needs to ensure that their projects satisfy NER300 and UK demonstration programme objectives as far as possible to maximise their chances of success.

Preferences for Renewable demonstration projects

Will a particular renewable energy category be targeted?

Among the 34 subcategories of innovative Renewable Demonstration projects eligible for support, our preference for the projects we would like to consider short-listing for NER support are those projects falling within the ocean category. These are wave energy devices with nominal capacity 5MW, marine/tidal currents energy devices with nominal capacity 5MW and ocean thermal energy conversion with nominal capacity 10MW.

What are the reasons for our preference for the ocean category?

The Government set out priorities in the Coalition Agreement⁶ for a programme of measures including a technology focus to "*introduce measures to promote a huge increase in energy from waste*" and to "*introduce measures to encourage marine energy*".

Priority is being given to the ocean category as a reflection of national priority alongside the following evidence:

- UK has unique level of wave and tidal resource that is in the order of 67TWh/yr equivalent to the annual electricity demand of 15 million households, with the potential to meet up to 20% of the UK's electricity demand by 2050. It is anticipated that 1-2GW of generation may be able to be deployed by 2020 (with up to 30GW by 2050)⁷.
- Wave and tidal technologies are at a critical stage of development and the UK can benefit from a greater security of supply by exploiting its wave and tidal energy, in addition to the opportunity to reap the economic benefits of developing an indigenous marine energy generation sector. There is an opportunity for the UK by exporting technologies to countries looking to exploit their marine resource. By 2050, the UK's annual domestic and export market for marine energy could provide £600million £4.2billion –which is similar to Denmark's current annual share of wind turbine market (£2.6bn)⁸.
- The National Renewable Energy Action Plan (NREAP)⁹ which was submitted by the UK under Article 4 of the European Renewable Energy Directive (2009/28/EC), cites marine energy as a priority technology for development in the UK. It recognises that the UK is a natural place from which to develop marine energy and the significant level of resource. The plan encourages the development and commercialisation of the industry over the coming decade. It points to the fact that the world's first full-scale wave and tidal stream devices are British innovations, showing we have the skills and know-how to develop a new world-leading UK-based energy sector.

⁶ The Coalition: Our programme for Government, 2010

⁷ The Marine Energy Action Plan, 2010

 ⁸ Carbon Trust, Future Marine Energy, 2006
⁹ National Renewable Energy Action Plan, 2010

http://www.decc.gov.uk/en/content/cms/what_we_do/uk_supply/energy_mix/renewable/ored/uk_action_plan/uk_action_plan.aspx

- Analysis by The Committee on Climate Change¹⁰ (CCC) suggests that wave and tidal technologies are priorities for UK support and that the UK should adopt a develop and deploy approach. Wave and tidal technologies "increase the diversity of the power system and increase its resilience if other technologies fail to materialise...and the UK therefore has an important role to play in developing marine energy technologies for both domestic and global markets".
- Industry evaluation¹¹ has shown that "wave power is likely to play an important part in the radical decarbonisation of UK electricity by 2050". Due to the UK's significant tidal stream resource and the similar nature of wave and tidal technology development, it is expected that energy from tidal stream can play an equally important part in meeting the UK's carbon reduction target.

When will the funding be paid from the NER300?

NER300 funding will be paid post completion of construction, per unit of clean electricity produced.

Will there be any matched public funding available for the NER300? No, we would expect that successful renewables projects would match the

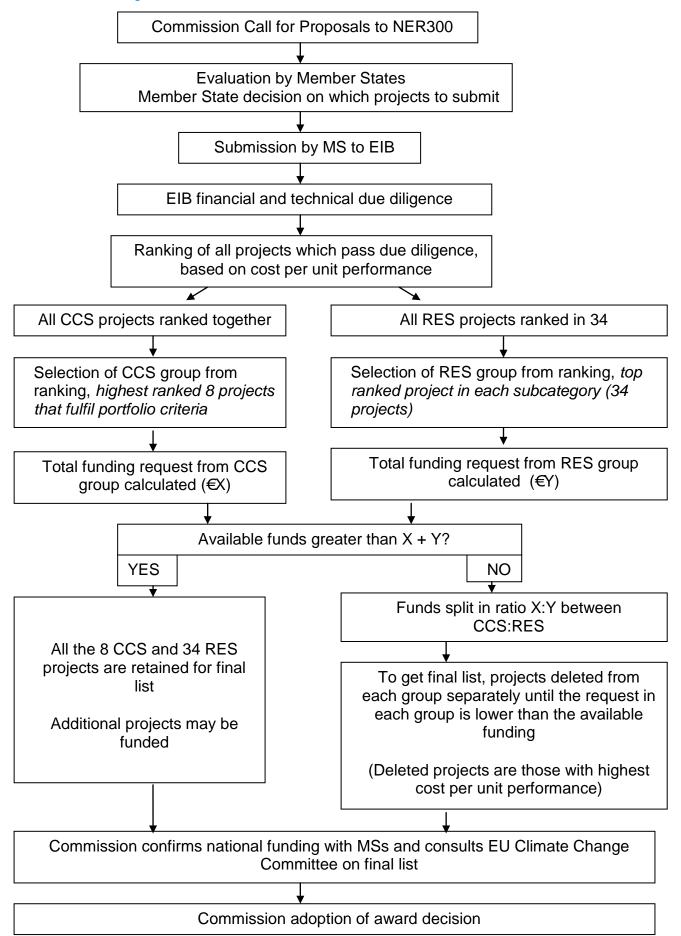
No, we would expect that successful renewables projects would match the NER300 funding with private sector funds.

Will DECC be issuing any further guidance on the criteria for evaluation?

Yes, further guidance will be provided after the Call for Proposals has been released by the European Commission, as this will help to provide further information on the EIB evaluation criteria.

¹⁰ Committee on Climate Change, Building a low-carbon economy – the UK's innovation challenge, 2010

Annex 1 - European Commission diagram of NER300 selection process



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