

URN: The URN is the Unique Reference Number of the application and will be completed by the Carbon Trust. You will be informed of this number during the review process.
Date: The date identifies the open and close dates of the call (round of the competition) and you will be able to see if you have the correct version.

Initial Proposal Form – Guidance Notes

You must submit your application on the most recent version of our application form. Please check the call date in the box on the top left hand corner of the form.

Before completing the form, please see our website:
<http://www.carbontrust.co.uk/technology/appliedresearch/>.

The site contains full information about Carbon Trust Applied Research Grants and you will find all the information you need about Funding and Eligibility, State Aid, What we do/don't fund, etc here.

How to submit your application:

1. Send the form as a word document by email to arapplications@carbontrust.co.uk.
 - ~ You must provide your answers within the application form. Section 6 can be used to provide supporting figures, diagrams, CVs and letters of support.
 - ~ The maximum size email you can send is 5MB.
 - ~ Do not put any further information relating to your application in the text of the email.
 - ~ Send the form as a Word document, .pdfs will not be accepted.
2. You will receive an automatically generated response letting you know that your email has been received and the timescale for reviewing and sending out the responses.

Frequently asked questions

Submission deadline

No proposals, attachments, amendments, additions or deletions will be accepted after the deadline. There are no exceptions to this.

Proposal form

Applicants must use the most recent form. Proposals on previous forms will not be accepted.


Proposal size

The size of the proposal is limited to 5MB. This is because the Carbon Trust's email filter will not deliver anything larger.

Type of file

Only .doc files will be accepted.

If you need any help, please contact the helpline:

 0800 085 2005

Section 1: You and your organisation's details

1. Lead contact (the person who will receive any communication regarding the project)

Title	Please chose from the drop down box
All other details	Add in as text

2. Name of organisation

The organisation that will lead the project.

3. Nature of organisation

Pick the option from the drop down box that best relates to the lead organisation. Please see our website for a definition of what constitutes a small or medium enterprise.

4. The sector in which you operate

Pick one of the options from the drop down box. These are the UK Standard Industrial Classifications of Economic Activities (UK SIC(92)).

5. Address

Applicant address
The address and other details for the lead organisation.

Project address (if different)

If the majority of the project work will take place somewhere other than at the lead organisation's address, please complete these fields

All details	Add in as text	Add in as text
Region	Pick the option from the drop down box that best relates to the lead organisation	Pick the option from the drop down box that best relates to the lead organisation

Please note: Funding from the Scottish Government to support Applied Research Open Call applications from institutions or organisations based in **Scotland** is now fully committed for the 2009/2010 financial year. **If you are based in Scotland and considering making an application you should first contact the Carbon Trust's Scotland office** by e-mailing scotlandoffice@carbontrust.co.uk, to notify us of your interest and to discuss the possibilities for funding in 2009/2010 or beyond.

6. How did you hear about the grant?

Specify as requested:

If through previous work with CT please give a brief description stating which department of CT, with whom you worked, when it was and a summary of what the work involved.

Pick an option from the drop down box
Complete this box if the option you selected above ends with "(specify)"

Section 2: Your Project

This is the section where you tell us what you're going to do, why and how.

7. Title of your project

Add in as text. This field is limited to 100 characters.

8. Nature of your project (complete as applicable)

Carbon Trust Applied Research grant applicants

Complete if you are applying for funding from the Carbon Trust. **Note: These terms have specific meanings which are relevant for State Aid compliance. Please see our website for details.**

Applicants to RDA for Grant for R&D

Complete if you are applying for funding from an RDA.

9. Funding requested

Total cost of project (£)

The sum of all the project costs. Please complete question 19 then copy the number from the 'Grand total' there.

Funding requested (£)

The total value of grant requested. Please complete question 19 then copy the number from the 'Grand total grant sought' there.

Funding %
(Funding/Total cost)

This box should show the % of funding you are requesting. Please check that the funding % is State Aid Compliant and does not exceed the Carbon Trust funding caps. The Carbon Trust funding caps are 40% for Experimental Development and 60% for Industrial Research. However, other restrictions apply depending on the type of applicant and project structure. Please see our website for details.

10. Project duration in months?

Add in as text.
This should be the same as the 'Total timescale' in question 24.

11. What is your project idea?

Describe in the box below both the project and the rationale for undertaking it (maximum three pages). Include:

A. What is the technology innovation you are proposing? – Explain exactly how your project is distinctive from what has been done before, either by yourselves or by others. The innovative element may be either an improved technology design or in the application of a technology or process in a clearly novel way. It must be clear exactly what is innovative about the project you are proposing to undertake. Provide detail regarding any IP you own or expect to generate relating to the project.

B. What are the technical principles of the product or process that this project will develop? – Briefly describe the technical / operational principles underpinning your project and explain how your project fits into this broader context.

C. What evidence do you already have to verify that this new technology is feasible? This should include details of previous research or development activities and/or relevant calculations or numerical modelling. - If previous work has directly contributed to this proposal, describe the main findings. If your project is dependent on specific assumptions – what are they? Justify why you think they are reasonable. We need to understand what stage the research is at because this scheme covers Applied Research – that is research based on proof of concept or technical verification. Therefore you must demonstrate that the project is not too early stage or too late stage – ie product development – for us to support.

D. What are the objectives of this particular project? – Explain what you are aiming to achieve in the project. The objectives should be specific and measurable.

E. How will you set about achieving these objectives? – This should take the form of a succinct overview of the approach you are planning to take. Be specific, tell us WHAT you are going to achieve and WHO is going to do the work.

This question is limited to 17000 characters (approximately 3 pages).

Diagrams and photographs can be included in Section 6 to enhance the description of your technology. Please ensure the total file size does not exceed 5MB.

12. What is the commercial potential of the idea?

Please use the box below to describe the commercial potential of the idea (maximum one page), including

A. What is the market for your idea? - If you are developing a new product who will buy it and why?

B. Why will the technology you are developing have an advantage in that market? - Explain your unique selling points and the advantages your technology has in terms of potential commercial viability. Include of the value proposition of your technology (where applicable) which could include the expected payback time for customers and how this compares to other products in development or on the market.

C. How will your innovation be protected? – Briefly outline how you intend how you intend to protect the innovations developed during this project.

D. Who are your competitors within the market and what is/are your advantage(s) over them? Explain who you believe your main competitors within the target market are, and how they could impact on both the project and the commercial potential of your technology. Refer back to point B in terms of explaining the advantages of your technology.

E. What are your plans to commercialise your idea? - Include which stakeholders you need to engage with, your exploitation plan, where the project fits in your overall business plan. Please include any letters of support in Section 6.

The case here should support the case put forward in question 23 for the estimate of how many installations/applications there are likely to be.

This question is limited to 5500 characters (approximately 1 page).

13. Risk identification & management

Describe any risks and adverse effects associated with your project and how these will be managed or mitigated. Please include any technical, commercial, environmental, political or other risks that may affect your project;

All activities have inherent risks. In assessing which proposals should be supported we are looking for evidence that the most significant risks have been recognised by the applicants, and as far as possible mitigation measures put in place. In analysing risk it is sometimes useful to look at groups under the following headings:

- Technical risk –including failure to deliver, knock-on impacts where completion depends on success in early stages of project, where developments overtake the original plan, etc.
- Commercial risk – this could involve cost overruns, new or cheaper competitors emerging, changing fuel prices, market risks etc.
- Environmental risk – This could include greater than predicted emissions etc, changes in pollution control, etc.
- Social/political risk – this could include changes in market drivers and conditions, changes in the regulatory framework, etc.

Also consider how the risks will be managed. These strategies could be generic in nature or address specific (classes of) risks identified above. The Carbon Trust is not looking for all risk to be removed from the work, but it does want to see evidence of plans/actions that would minimise their potential impact.

This question is limited to 5500 characters (approximately 1 page).

14. Project plan

In the box below describe the key tasks that must be performed in order for the project to be completed along with an estimation of the timescale for each task. (Note: Project tasks should be consistent to those in section 25.)

This section should set out a logical sequence of tasks which would be performed during the project. The key sub-elements of each task should also be set out. An approximate timescale for each task and an overall project duration should be given. Where there is more than one project partner also indicate which partner is primarily responsible for the delivery of each task.

Tasks identified in this section should correspond to the tasks listed in section 25.

Section 3: Your financial position

We need evidence that you are a company that has the ability to finance the project. This is because you are required to produce match funding. You should enter the details of the main financier of the project, which does not necessarily have to be the lead organisation.

15. Financial performance

Is the main financier a research institute, a university or a company who commenced trading within the last 12 months?	Please select If Yes, please provide the date commenced trading below, and then progress to Q 15. If No, Progress with all of Q14. Projects where research institutes, universities and new companies less than 12 months old are the sole applicant or in projects where they are providing the majority of the project's funding, these organisations are not required to complete the remainder of Q14. This is because research institutes/universities may find it difficult to provide this information and new companies will not have this information. By identifying yourself as falling within this category you will avoid being penalised for not being able to provide the information. Please use questions 20 and 21 to demonstrate how you will provide and secure your match funding.
Date commenced trading	Enter as dd/mm/yyyy
Turnover – last 3 years (£)	Enter a numerical value For the three years up to the end of the last financial year
Pre-tax profits - last 3 years (£)	Enter a numerical value For the three years up to the end of the last financial year
Balance sheet total (£)	Enter a numerical value The sum of all assets minus the sum of all liabilities
Bank borrowing: overdraft (£)	Enter a numerical value The sum of all overdrafts currently being used
Loans (£)	Enter a numerical value The sum of all outstanding loans to banks

16. What financial management systems does the business have in place?

Tick as many of the offered list as you need – you may use more than one system

- Book keeper/ Accountant
- In house computerised accounting system e.g. Sage
- Firm of Accountants/ Auditors

17. How frequently do you produce profit and loss information?

Add in as text

18. Is more than 25% of the company owned by a non-SME for example a group, venture capitalist or investor?

Pick yes or no from the drop down box

19. Current number of employees

The number of employees employed by the lead organisation

Section 4: Project finances

This section should be used to detail what contribution you are requesting and how the project costs will be met and provide information on why state aid support is required.

20. Estimated project costs

Cost	Value (£)
Sub-contracts	Other external costs
	Enter a numerical value. If you have arising IP costs for a CT AR application, please enter them here.
All other categories	All other categories
	Enter numerical values
	Subtotal 1:
	Sum of all costs above
	Grant sought 1:
	Contribution requested towards the above costs
Other project costs:	<p>These costs are not eligible for Carbon Trust Applied Research Grant applicants. For arising IP costs see Other External Costs above.</p>
	Subtotal 2:
	Must be £0.00
	Grant sought 2:
	Must be £0.00
	Grand total:
	Equals Subtotal 1
	Grand total grant sought:
	Equals Grant sought 1

21. How will the project costs be met?

The full project finance package needs to be explicit and all contributions to the project must be disclosed, including the Carbon Trust grant you are applying for.

All contributions to the project must be fair, honestly priced and auditable. We expect to see each collaborator making a financial contribution of some form to the project.

There are restrictions on the amount of public money that a project can receive, please see the funding and eligibility guidelines on the website for further details:

<http://www.carbontrust.co.uk/technology/appliedresearch/funding.htm>.

Organisation	Finance source	Value (£)
Name of the organisation making a financial contribution to the project. If an organisation is contributing funds from more than one source then their name should appear more than once in this column.	Please select from drop down list. This is where the organisation will get their funds from.	Value of contribution to be made
Total funds:		Sum of the above

22. Financially, why do you need a grant to enable the project to proceed? And what is stopping you from undertaking the project at present?

Use this section to describe why the project would not proceed without a grant.

This question is limited to 5500 characters (approximately 1 page).

23. What other sources of finance have you explored in place of grant funding and what were the outcomes?

This question is limited to 5500 characters (approximately 1 page).

Section 5: Additional information for carbon reduction projects

This section should give evidence for how your project fits with the strategic aims of the Carbon Trust's Applied Research Grant scheme. In addition, it provides evidence for how you are going to deliver the project and why you have the skills necessary to do it.

24. What is the carbon reduction potential of your project?

Please describe in the box below

A. How your project will reduce emissions of Carbon Dioxide in the UK? – Explain how undertaking the project will directly and/or indirectly lead to reductions in carbon dioxide emissions. For example, through displacement of grid electricity, carbon capture and storage, improved efficiency etc. Refer back to Section 11, to justify the technical assumptions which lead to carbon savings.

B. The potential estimated annual reduction in UK Carbon Dioxide emissions (Tonnes CO₂/yr) as a result of the sales of your product or process (illustrate saving for a single installation/application and multiply by the estimated sales) – This estimate should be based on the potential savings associated with one installation/application together with an estimate of how many installations/applications there are likely to be. Potential savings of other greenhouse gases should be converted into carbon dioxide equivalents, in these cases the Carbon Trust will consider the amount of CO₂ that would have an equal impact on the atmosphere as the emissions considered in the proposal. The Carbon Trust uses the following conversion factors:

http://www.carbontrust.co.uk/resource/conversion_factors/default.htm.

Please consider the following points:

- Present your calculations clearly, showing all your working and units.
- The potential carbon savings must be in the UK.
- Justify your sales figures in terms of the available target market size and your likely market penetration. Refer to your commercialisation plans in question 12.
- You must reference all figures/assumptions used.
- If your technology is likely to have a global application, you can discuss this, but the number we are looking for is the **Tonnes CO₂/yr UK saving**.
- You may also include a discussion of the total carbon footprint of your technology if applicable.

Example of a Standard Carbon Case Q 23 Part B(not taking into account embodied carbon or life cycle).

The technology is a 2MW offshore wind turbine. This will save CO₂ by displacing grid electricity. The technical assumptions outlined in Question 11 illustrate that through the innovative component X, an improved design has been achieved in terms of the required maintenance time. The turbine is therefore able to run for 7884 hours/year.

The project partners X and X are well placed to deploy the technology as market leaders, as described in the commercialisation plans and backed up in the Letters of Support (Section 6). They have committed to installing 1000 turbines by 2020, should this project be successful. The market size is described in question 12 and is 50,000 turbines worldwide, and 10,000 in the UK. The project partners have access to half of the total UK market and therefore we believe that installing 1000 turbines by 2020 is realistic.

As a result of this project it is likely that 1000 turbines will be installed and be actually in use in the UK in 2020. This is approximately 10% of the UK market in 2020. The global sales figures are likely to be around 5000 by 2020 and 50,000 by 2050 and this represents around 5% and 2% of the global market in 2020 and 2050 respectively. The future installation predictions are based on growth rates provided by X [ref].

The 2MW turbine which I propose to develop has a capacity factor of 0.9. This takes into account maintenance and downtime and the estimated achievable efficiencies.

- The power produced per year by one turbine is $2000\text{kW} \times 0.9 \times 8760 \text{ hours} = 15768000 \text{ kWh/year}$.
- If this displaces grid electricity at $0.43 \text{ kg CO}_2/\text{kWh}$ [future grid average] then the total annual carbon dioxide savings are: $10512000 \text{ kWh} \times 0.43 \text{ kg CO}_2/\text{kWh} = 6780240 \text{ kg CO}_2/\text{year} = 6780.24 \text{ tonnes CO}_2/\text{year/turbine}$.

Therefore in 2020 the total annual carbon saving would be: $1000 \text{ turbines} \times 6780 \text{ tonnes CO}_2/\text{year/turbine} = 67,800 \text{ tonnes.yr}$.

This question is limited to 5500 characters (approximately 1 page).

25. How will the project be delivered?

Outline project plan: The project plan is presented in tabular form. Each task (work item) needs to reach a tangible outcome or specific milestone. The milestones and outcomes are expected to show a logical approach that is practical and capable of delivering the project objective as set out in question 11. At this stage the work should be described in terms of 5-7 tasks.

Task	Who will do this?	Duration (mths)	Description	Estimated cost (£)
1.01, 1.02, 2.01, etc	Name of organisation	How long the task will take	What work will the task involve	Cost of the task
Total timescale:		Sum of the above	Total estimated cost:	Sum of the above

26. Who are the project team?

Include the lead organisation as well as any partners and major subcontractors. A partner is any organisation that is making a significant contribution to the project and that is essential to the successful delivery of the project.

Organisation	Nature of organisation	Role
Name of organisation	Please select from drop down list	What is their relationship with the lead organisation with respect to this project

27. What skills and experience do you have?

Please describe in the box below the skills and experience of all organisations in the team, including the lead organisation, partners and significant sub-contractors.

Use this section to provide evidence for why these organisations are involved and why other stakeholders are not required. Taken as a whole this section should demonstrate that the project team has available to it the skills required to bring the project to a successful conclusion. These descriptions should not exceed 100 words for the lead applicant and 50 words for each collaborating organisation.

If you are planning to use subcontractors their roles should be elaborated here, along with an indication as to how these roles will be filled (eg competitive tender). You should also explain why subcontracting is the right approach for the completion of the work in question.

This question is limited to 5500 characters (approximately 1 page).

28. How will your project benefit the UK?

To qualify for UK state aid the project must provide a benefit to the UK economy, please describe that here. Benefits could be direct for example job creation, intellectual property, etc; or indirect, for example reducing barriers to technology exploitation/uptake.

This question is limited to 5500 characters (approximately 1 page).

Section 6: Supporting information (optional)

29. Please paste any pictures or diagrams into the boxes below.

Use this section to provide any supporting information in the form of letters of support, project personnel CVs and any diagrams or pictures to illustrate your answers in Sections 1 to 5. You are limited to a maximum of 10 items and you should ensure the total file size does not exceed 5MB. Please label all items clearly and refer to them within the application form if you wish the committee to take them into account in the reviewing process.

Note: this section must not be used to provide text to answer the questions in Sections 1 to 5. Any items other than letters of support, CVs and diagrams and figures that are included here may not be considered in support of your application.

Figure 1: Type the name and a short description here (maximum 500 characters)

Paste here

Figure 2: Type the name and a short description here (maximum 500 characters)

Paste here