

Guide on using the Integrated Search of the Research Atlas

This document describes how to use the search of the whole Research Atlas by guiding you through a series of searches, indicating what you should see and explaining what is going on.

The Research Atlas is available from <http://ukerc.rl.ac.uk/>

UKERC
Tuesday, February 22, 2011

Home About Learning Research Activities International

Research Atlas

Atlas | Register | Landscapes | Roadmaps | Energy Data Centre | Classification | FAQ | Contact

Home » Research Atlas | Welcome

Welcome to the Research Atlas

The UK Energy Research Centre has created four tools to assist policy makers and researchers to review the current status of UK Energy Research and Development, and identify the key research challenges

[Overview of UK Energy Research and Development](#)

New Function:

Search the Whole Research Atlas Search the whole atlas for information on specific [Energy Categories](#), organisations or keywords

Or go directly to the component parts of the Atlas:

Research Register On-line searchable database of energy-related awards and projects.

Landscapes Describes energy-related research activities and capabilities in the UK, classified by [Energy Category](#)
"Where we are today"

Roadmaps Identifies the sequence of research (and other) problems to be overcome before new technologies can be commercially viable. Classified by [Energy Category](#)
"Where we should be going"
Initially this will comprise a systematic characterisation of existing energy research roadmaps.

Energy Data Centre Online, searchable datasets supporting energy research

13/01/11: **Research Register currently contains 2132 grants:**
BBSRC 16; Carbon Trust: 86; DCLG 77; DEFRA 33; DfT: 94; DTI 137; EPSRC: 1418; ESRC 62; Leverhulme Trust 1; NERC 208

24/12/10: **Landscapes revised: Coal Combustion, Coal Conversion finalised, Solar, Fuel Cells,, Electricity T&D Socio-Economic, Ocean and Wind draft landscapes available for review**

19/10/10: **Roadmaps revised: New Ocean Energy road map added**

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Energy
For a Low Carbon Future

The first option is the new function which searches the whole Atlas; the buttons underneath take you to the different components of the Research Atlas and allows direct access to them.

Click on **SEARCH THE WHOLE RESEARCH ATLAS**



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Research Atlas

Atlas | Register | Landscapes | Roadmaps | Energy Data Centre | Classification | FAQ | Contact

Home » Research Atlas » Search the Atlas

Search the Research Atlas

Please choose from the search options below. Where appropriate, information will be fetched from the Research Register, the Energy Data Centre, the Landscapes and the Roadmaps.

Searches can take several minutes to run so please be patient - there is a lot of work going on behind the scenes

Energy Category
This searches Landscape text, Roadmaps, the Research Register and the Energy Data Centre

Organisation
This searches Landscape text and the Research Register

Display Landscape Section

Keyword Searches

Keyword
This searches the ENTIRE Research Atlas.
Because of this, searches can take a LONG TIME!
Please be patient.

Landscape Table Search
This searches the landscape tables for information about activity on projects, facilities etc.

Search the Atlas

Return to Atlas Home

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Energy
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There are five types of search. This tutorial will go through each in turn. To get the most out of this we suggest following the examples we use.

First click the radio button for Energy Category and select an energy category from the menu. We have chosen Nuclear Fusion.

Once the search begins, be patient - searches can be very slow because it has a lot of complicated work to do

Click **SEARCH THE ATLAS**

Search the Atlas

The screenshot shows the UKERC Research Atlas interface. At the top, the UKERC logo is displayed along with the date 'Tuesday, June 21, 2011'. A navigation menu includes 'Home', 'About', 'Learning', 'Research', 'Activities', and 'International'. Below this is the 'Research Atlas' section with a sub-menu: 'Atlas | Register | Landscapes | Roadmaps | Energy Data Centre | Classification | FAQ | Contact'. The breadcrumb trail reads: 'Home » Research Atlas » Search the Atlas » Results for Energy Category: Nuclear Fission'.

The main content area states: 'The following entries were found from your search for Energy Category: Nuclear Fission' with links to 'Landscapes | Organisations'.

Landscapes

If more than three sections in a landscape were relevant, the whole landscape is presented
 NUCLEAR FISSION and FUSION Nuclear Fission [Whole Landscape](#)
[Return to top](#)

Roadmaps

No Road Maps were found for your query
[Return to top](#)

Organisations

159 organisations were found with a total of 149 different grants
For each organisation the total amount of money allocated to that organisation is shown
 This is NOT the same as the grant value, and does NOT indicate the amount associated with a particular keyword or energy category
 Very small amounts are shown in cases where the organisation is an industrial collaborator or has supplied a Recognised Researcher (i.e. not a Principal or Other Investigator)

Organisation	Grants	£ Value for Organisation
University of Manchester	34 Grants	23,378,602
Imperial College London	25 Grants	27,732,987
Serco Group plc	15 Grants	1
Nexia Solutions	12 Grants	1
University of Sheffield	12 Grants	1,289,099
University of Bristol	11 Grants	1,593,785
Rolls Royce plc	10 Grants	1
University of Leeds	10 Grants	5,401,389
University of Oxford	10 Grants	8,611,545
National Nuclear Laboratory	8 Grants	1

To restrict the search, or to do more detailed drill-down, go to the Research Register Customised Search

The kind of things returned depends on the search – not all kinds of searches bring back landscapes, roadmaps, grants and datasets.

Landscapes:

If there are more than three sections of a landscape that satisfy the search, the whole landscape will be returned. Otherwise, each section will appear separately.

Click on the links next to the landscape sections to see whole landscapes or sections relevant to the Energy Category you chose.

CLICK ON WHOLE LANDSCAPE

[Whole Landscape](#)

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Research Atlas

Atlas | Register | Landscapes | Roadmaps | Energy Data Centre | Classification | FAQ | Contact

Home » Research Atlas » Search the Atlas » Results for Energy Category: Nuclear Fusion » Nuclear Fusion

NUCLEAR FISSION and FUSION - Nuclear Fusion

Author	Dr David Ward UKAEA
Last Updated	08 August 2008
Status	Peer reviewed document
Download Landscape	PDF 72 KB

Section 1 Overview	Section 6 Research Facilities and Other Assets
Section 2 Capabilities Assessment	Section 7 Networks
Section 3 Basic and applied strategic research	Section 8 UK Participation in EU Activities
Section 4 Applied Research and Development	Section 9 International Initiatives
Section 5 Demonstration Funding	

Section 1: Overview

Fusion is the power source of the Sun and the goal of fusion research is to establish it as a viable option for providing for our energy needs. The particular strengths of fusion are the enormous fuel resources, capable of providing thousands of years of energy supply; its intrinsic safety, due to very low energy and fuel inside the power plant at any time, and the extremely low levels of atmospheric emissions, particularly of carbon dioxide.

Fusion is researched in many countries around the world and is a highly co-ordinated research area. The UK work is an integrated part of the EU effort, which in turn is increasingly co-ordinated with work on other continents. These collaborations are most clearly evidenced by the EU collaborative venture JET, the world's biggest fusion device located in the UK, and ITER, the new device to be built in France. ITER is a global collaborative venture involving the EU, Japan, China, Russia, India, US and South Korea. The UK's own research device, MAST, is also the subject of much international collaboration.

Fusion made enormous progress when the generation of devices like JET were built following the oil crises in the 1970's. This led to the production of 16 MW of fusion power, thousands of times higher than was possible before. The decline of energy R&D budgets following the reduction of oil prices in the 1980's and 1990's prevented fusion from taking the next step up to the scale needed for a power plant. The new emphasis placed on clean energy has resulted in a renewed impetus and the agreement to move to the power station scale device, ITER, which is designed to produce 500MW of fusion power. The UK is traditionally strong in fusion research, and hosts the world's largest device, JET, but the R&D cuts since the 1980's have been particularly strong in the UK leading to a funding level much lower than most G8 nations. Progress in fusion research in the UK is strongly dependent on international collaboration.

The main research challenges have been i) achieving the conditions needed for fusion, ii) developing materials suitable for use in a fusion environment and iii) addressing the major technological challenges associated with large scale fusion power production. The first is largely solved and the emphasis globally is shifting towards the materials and technology issues. The UK capabilities in these areas are addressed in Section 2.

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[Section 2: Capabilities Assessment](#)

This is a complete landscape; a single section will show only the top part of the header: you can see who wrote it and when, and click a link to see the entire landscape as a PDF document. For whole landscapes, you can go to specific sections.

NUCLEAR FISSION and FUSION - Nuclear Fusion

Author	Dr David Ward UKAEA
Last Updated	08 August 2008
Status	Peer reviewed document
Download Landscape	PDF 72 KB

Section 1 Overview	Section 6 Research Facilities and Other Assets
Section 2 Capabilities Assessment	Section 7 Networks
Section 3 Basic and applied strategic research	Section 8 UK Participation in EU Activities
Section 4 Applied Research and Development	Section 9 International Initiatives
Section 5 Demonstration Funding	

USE BACK BUTTON TO RETURN TO PREVIOUS SCREEN

The screenshot shows the UKERC Research Atlas interface. At the top, the UKERC logo is displayed along with the date 'Tuesday, June 21, 2011'. A navigation menu includes 'Home', 'About', 'Learning', 'Research', 'Activities', and 'International'. Below this is the 'Research Atlas' section with a sub-menu: 'Atlas | Register | Landscapes | Roadmaps | Energy Data Centre | Classification | FAQ | Contact'. The breadcrumb trail reads: 'Home » Research Atlas » Search the Atlas » Results for Energy Category: Nuclear Fission'.

The main content area states: 'The following entries were found from your search for Energy Category: Nuclear Fission' with links to 'Landscapes | Organisations'.

Landscapes

If more than three sections in a landscape were relevant, the whole landscape is presented
 NUCLEAR FISSION and FUSION Nuclear Fission [Whole Landscape](#)
[Return to top](#)

Roadmaps

No Road Maps were found for your query
[Return to top](#)

Organisations

159 organisations were found with a total of 149 different grants
For each organisation the total amount of money allocated to that organisation is shown
 This is NOT the same as the grant value, and does NOT indicate the amount associated with a particular keyword or energy category
 Very small amounts are shown in cases where the organisation is an industrial collaborator or has supplied a Recognised Researcher (i.e. not a Principal or Other Investigator)

Organisation	Grants	£ Value for Organisation
University of Manchester	34 Grants	23,378,602
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Serco Group plc	15 Grants	1
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University of Bristol	11 Grants	1,593,785
Rolls Royce plc	10 Grants	1
University of Leeds	10 Grants	5,401,389
University of Oxford	10 Grants	8,611,545
National Nuclear Laboratory	8 Grants	1

To restrict the search, or to do more detailed drill-down, go to the Research Register Customised Search

Under the **Roadmaps** heading will be any roadmaps found that contain the Energy Category you wanted. Click on it to see the PDF file.

Under **Organisations**, all organisations with grants that mention the chosen Energy Category in title, objectives or abstract are listed. The amount of money is the amount allocated **to that organisation**, which is determined by whether the person or people to whom the grant was awarded was Principal Investigator (the lion's share of the funding), Other Investigator (0.001% of the funding), Industrial Collaborator (no funding) or Recognised Researcher (no funding). If the amount of funding was less than £1 but more than zero, it is rounded up to £1.

The list is in order of number of grants found.

Click on the “grants found” link to go to the Research Register, showing the actual grants – from this you can drill down to see the details for individual grants. [EURATOM/UKAEA Fusion Association](#) [15 Grants](#)

You can also jump to the “Build-Your-Own” search for grants in the Research Register by clicking on “Customised Search” in the green box on the right hand side.

To restrict the search, or to do more detailed drill-down, go to the Research Register
Customised Search

[Customised Search](#)


At the bottom will be a list of datasets found from the Energy Data Centre linked to the Energy Category you chose.

Go back to the search by scrolling to the bottom of the page and CLICKING “RETURN TO SEARCH”

[Return to Search](#)

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[Home](#) [About](#) [Learning](#) [Research](#) [Activities](#) [International](#)

 **Research Atlas**

[Atlas](#) | [Register](#) | [Landscapes](#) | [Roadmaps](#) | [Energy Data Centre](#) | [Classification](#) | [FAQ](#) | [Contact](#)

[Home](#) » [Research Atlas](#) » [Search the Atlas](#)

Search the Research Atlas

Please choose from the search options below. Where appropriate, information will be fetched from the Research Register, the Energy Data Centre, the Landscapes and the Roadmaps.

Searches can take several minutes to run so please be patient - there is a lot of work going on behind the scenes

Energy Category
This searches Landscape text, Roadmaps, the Research Register and the Energy Data Centre

Organisation
This searches Landscape text and the Research Register

Display Landscape Section

Keyword Searches

Keyword
This searches the ENTIRE Research Atlas. Because of this, searches can take a LONG TIME ! Please be patient.

Landscape Table Search
This searches the landscape tables for information about activity on projects, facilities etc.

Enter start of organisation name

Put phrases in single quotes e.g. 'quantum optics'
You may use AND and NOT e.g Wind AND Wave NOT solar
Searches are not case-sensitive

Enter keyword to search for

[Search the Atlas](#)

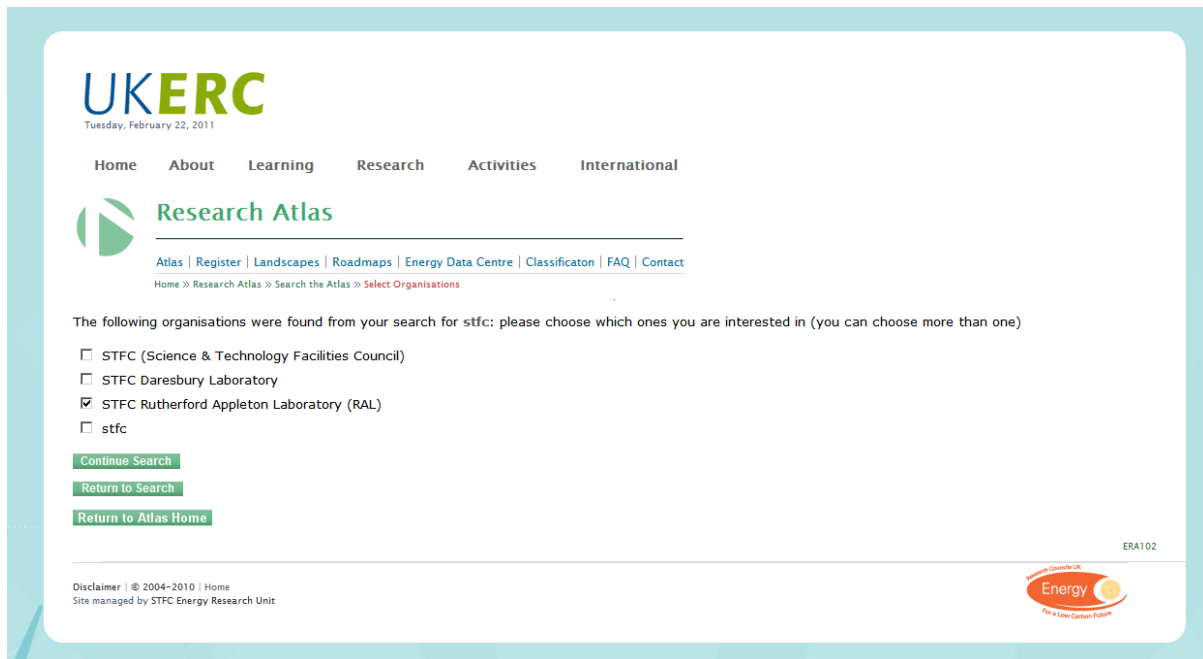
[Return to Atlas Home](#)

ERA100

Now check the radio button for Organisation. Put in some part of the organisation name; this is not case sensitive. We have put in **stfc**

Click **SEARCH THE ATLAS**

Search the Atlas



The screenshot shows the UKERC Research Atlas search results page. At the top, the UKERC logo is displayed with the date 'Tuesday, February 22, 2011'. A navigation menu includes 'Home', 'About', 'Learning', 'Research', 'Activities', and 'International'. The 'Research Atlas' section is highlighted, with a sub-menu containing 'Atlas', 'Register', 'Landscapes', 'Roadmaps', 'Energy Data Centre', 'Classification', 'FAQ', and 'Contact'. The breadcrumb trail reads 'Home » Research Atlas » Search the Atlas » Select Organisations'. The main content area displays the search results for 'stfc', stating: 'The following organisations were found from your search for stfc: please choose which ones you are interested in (you can choose more than one)'. A list of four organizations is provided with checkboxes: 'STFC (Science & Technology Facilities Council)', 'STFC Daresbury Laboratory', 'STFC Rutherford Appleton Laboratory (RAL)' (which is checked), and 'stfc'. Below the list are three buttons: 'Continue Search', 'Return to Search', and 'Return to Atlas Home'. The footer contains a disclaimer, copyright information, and the Energy Research Council logo with the slogan 'For a Low Carbon Future'.

The system shows you a list of all the organisations it knows about that contain the text you searched for.

If you choose an exact name, you will find less information than if you choose a more general term. This is because the system looks literally for the exact name chosen.

Click on **STFC Rutherford Appleton Laboratory (RAL)**

CLICK “CONTINUE SEARCH”

Continue Search

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Research Atlas

Atlas | Register | Landscapes | Roadmaps | Energy Data Centre | Classification | FAQ | Contact

Home » Research Atlas » Search the Atlas » Select Organisations » Results for Organisations: STFC Rutherford Appleton Laboratory (RAL)

The following entries were found from your search for **Organisations: STFC Rutherford Appleton Laboratory (RAL)** | [Organisations](#)

Landscapes

If more than three sections in a landscape were relevant, the whole landscape is presented
No Landscape Sections were found for your query
[Return to top](#)

Organisations

1 organisations were found with a total of 9 different grants
For each organisation the total amount of money allocated to that organisation is shown
This is NOT the same as the grant value, and does NOT indicate the amount associated with a particular keyword or energy category
Very small amounts are shown in cases where the organisation is an industrial collaborator or has supplied a Recognised Researcher (i.e. not a Principal or Other Investigator)

Organisation	Grants	£ Value for Organisation
STFC Rutherford Appleton Laboratory (RAL)	9 Grants	100,737

To restrict the search, or to do more detailed drill-down, go to the Research Register Customised Search
[Customised Search](#)

[Return to top](#)

[Return to Search](#)

[Return to Atlas Home](#)

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Not much is found - only some grants. This is because the system is looking for the exact name **STFC Rutherford Appleton Laboratory (RAL)** which is not in the text of any landscape.

USE BACK BUTTON TO RETURN TO PREVIOUS SCREEN

The screenshot shows the UKERC Research Atlas interface. At the top left is the UKERC logo and the date 'Tuesday, February 22, 2011'. A navigation menu includes 'Home', 'About', 'Learning', 'Research', 'Activities', and 'International'. Below this is the 'Research Atlas' section with a sub-menu: 'Atlas | Register | Landscapes | Roadmaps | Energy Data Centre | Classification | FAQ | Contact'. A breadcrumb trail reads 'Home » Research Atlas » Search the Atlas » Select Organisations'. The main content area displays search results for 'stfc' with the instruction: 'The following organisations were found from your search for stfc: please choose which ones you are interested in (you can choose more than one)'. The results are: STFC (Science & Technology Facilities Council), STFC Daresbury Laboratory, STFC Rutherford Appleton Laboratory (RAL), and stfc. Below the list are three buttons: 'Continue Search', 'Return to Search', and 'Return to Atlas Home'. The footer contains a disclaimer, copyright information, and the Energy Research Councils UK logo with the slogan 'Energy For a Low Carbon Future' and the code ERA102.

This time, also click the more general **stfc**, and **CLICK “CONTINUE SEARCH”**

Continue Search

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Home About Learning Research Activities International

Research Atlas

Atlas | Register | Landscapes | Roadmaps | Energy Data Centre | Classification | FAQ | Contact

Home » Research Atlas » Search the Atlas » Select Organisations » Results for Organisations: stfc; STFC Rutherford Appleton Laboratory (RAL)

The following entries were found from your search for Organisations: stfc; STFC Rutherford Appleton Laboratory (RAL)
[Landscapes](#) | [Organisations](#)

Landscapes

If more than three sections in a landscape were relevant, the whole landscape is presented

RENEWABLE ENERGY SOURCES	Wind Energy	Section 3: Basic and applied strategic research
RENEWABLE ENERGY SOURCES	Wind Energy	Section 7: Networks
RENEWABLE ENERGY SOURCES	Wind Energy	Section 8: UK Participation in EU Activities
RENEWABLE ENERGY SOURCES	Marine Energy	Section 3: Basic and applied strategic research
HYDROGEN and FUEL CELLS	Hydrogen	Section 3: Basic and applied strategic research

[Return to top](#)

Organisations

3 organisations were found with a total of 50 different grants
For each organisation the total amount of money allocated to that organisation is shown
This is NOT the same as the grant value, and does NOT indicate the amount associated with a particular keyword or energy category
Very small amounts are shown in cases where the organisation is an industrial collaborator or has supplied a Recognised Researcher (i.e. not a Principal or Other Investigator)

Organisation	Grants	£ Value for Organisation
STFC (Science & Technology Facilities Council)	40 Grants	1,831,571
STFC Rutherford Appleton Laboratory (RAL)	9 Grants	100,737
STFC Daresbury Laboratory	1 Grant	1

To restrict the search, or to do more detailed drill-down, go to the Research Register Customised Search

This time it finds landscape entries, and the grants for the other STFC organisations. Landscapes are essays, so organisation names can be in all kind of formats e.g. Edinburgh University, University of Edinburgh or just Edinburgh. The more general a search, the more results there will be.

The links on this screen are the same as for the Energy Category search – you can go to sections of landscapes, whole landscapes and lists of grants found for the organisations.

Go to bottom and CLICK “RETURN TO SEARCH”

[Return to Search](#)

The screenshot shows the UKERC Research Atlas search page. At the top left is the UKERC logo and the date 'Tuesday, June 21, 2011'. A navigation menu includes 'Home', 'About', 'Learning', 'Research', 'Activities', and 'International'. Below this is the 'Research Atlas' header with a sub-menu: 'Atlas | Register | Landscapes | Roadmaps | Energy Data Centre | Classifieron | FAQ | Contact'. A breadcrumb trail reads 'Home » Research Atlas » Search the Atlas'. The main heading is 'Search the Research Atlas', followed by instructions: 'Please choose from the search options below. Where appropriate, information will be fetched from the Research Register, the Energy Data Centre, the Landscapes and the Roadmaps.' A note states: 'Searches can take several minutes to run so please be patient - there is a lot of work going on behind the scenes'. There are three search options, each with a radio button: 1. 'Energy Category' with a dropdown menu set to 'Choose Energy Category'. 2. 'Organisation' with a text input field and the prompt 'Enter start of organisation name'. 3. 'Display Landscape Section' with a dropdown menu set to '2: Capabilities Assessment'. Below these is a 'Keyword Searches' section with two options: 'Keyword' with a text input field and instructions: 'Put phrases in single quotes e.g. "quantum optics" You may use AND and NOT e.g Wind AND Wave NOT solar Searches are not case-sensitive'; and 'Landscape Table Search' with a text input field and the prompt 'Enter keyword to search for'. At the bottom left are two buttons: 'Search the Atlas' and 'Return to Atlas Home'. At the bottom right is the ERA100 logo with the text 'Energy For a Low Carbon Future'.

The next option to try out is looking for a specific landscape sections across a selection of different landscapes.

Check the Display Landscape Section and choose a section from the list.


Here we have chosen Section 2: Capabilities

Click **SEARCH THE ATLAS**

Search the Atlas

Tuesday, February 22, 2011

[Home](#) [About](#) [Learning](#) [Research](#) [Activities](#) [International](#)

 **Research Atlas**

[Atlas](#) | [Register](#) | [Landscapes](#) | [Roadmaps](#) | [Energy Data Centre](#) | [Classification](#) | [FAQ](#) | [Contact](#)

[Home](#) » [Research Atlas](#) » [Search the Atlas](#) » [Select Landscapes](#)

Section 2: An assessment of UK capabilities in relation to wider international activities, in the context of market potential

Which Landscapes do you want to see Section 2 for? Choose as many as you like.

- All the Landscapes
- Industry
- Residential and commercial
- Transport
- Oil and Gas
- Coal combustion
- Coal conversion (excluding IGCC)
- CO2 Capture and Storage
- Solar Energy
- Wind Energy
- Ocean Energy
- Bio-Energy
- Geothermal Energy
- Hydropower
- Other Renewables
- Nuclear Fission
- Nuclear Fusion
- Hydrogen
- Fuel Cells
- Electric power conversion
- Electricity transmission and distribution
- Energy storage
- Energy system analysis
- Environmental, social and economic impacts

[Show Sections](#)

[Return to Search](#)

You can choose to see the chosen section for all the landscapes, or select certain ones. We have chosen Solar and Nuclear Fusion

CLICK “SHOW SECTIONS”

[Show Sections](#)

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Home | About | Learning | Research | Activities | International

Research Atlas

Atlas | Register | Landscapes | Roadmaps | Energy Data Centre | Classificaton | FAQ | Contact

Home » Research Atlas » Search the Atlas » Select Landscapes » Section 2: Capabilities Assessment

An assessment of UK capabilities in relation to wider international activities, in the context of market potential

[Solar Energy](#) | [Nuclear Fusion](#)

RENEWABLE ENERGY SOURCES - Solar Energy

Author	Professor Stuart J C Irvine Glyndŷr University
Last Updated	13 August 2010
Status	Peer reviewed document
Download Landscape	PDF 387 KB

Section 2: Capabilities Assessment

[Table 2.1: UK Capabilities](#)

The UK is active over all aspects of PV solar energy technology but capabilities vary widely. The UK also has good strengths across the supply chain from materials supply through to system integration. A common characteristic is the degree of innovation and the number of small as well as large businesses. The research landscape follows the range of PV industrial activity but is much stronger in areas such as materials science and weaker in manufacturing technology research and process monitoring. This relates to the nature of start-up businesses in the UK which tend to be small, innovation led, whereas larger scale manufacture is typically as a result of inward investment. The UK is strong in architecture and design and probably reflects the sensitive nature to aesthetics in the UK market. However, integrating systems is somewhat weaker, reflecting both the nature of research funding and the low base of PV installation in the UK. There is an opportunity for this to change with the UK FIT and will stimulate more applied research in driving down system costs and extracting the maximum power under variable light conditions. The UK market is predominantly export led and is therefore globally competitive. It is interesting that of the newer technologies, such as Dye Sensitised Solar Cells (DSSC) the UK is in a very strong position for early manufacture. However, in the main stay of PV production, crystalline silicon cells, the pioneering work of BP Solar is no longer active in the UK. Other notable gaps in manufacturing capability exist with the thin film PV modules. Hopefully, this will change as the base of thin film PV research continues to expand in the UK.

Overall the diversity of R&D strengths in the UK has made it difficult in the past to achieve critical mass in any one area. However, the trend towards collaborative projects, which is strongly reflected in this data base, is making the UK more globally competitive and starting to make some of the links both within supply chains and between PV technologies.

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Table 2.1: UK Capabilities

The landscapes for which the sections are shown are listed across the screen, and you can use these links to go to Section 2 for the specific landscapes you chose.

[Solar Energy](#) | [Nuclear Fusion](#)

From each one, you can also go to the PDF file for the whole landscape

To go back to the search, either use the back button or

CLICK ‘SEARCH THE ATLAS’ ON THE BREADCRUMBS TO CONTINUE

Research Atlas

Atlas | Register | Landscapes | [Roadmaps](#) | Energy Data Centre | Classificaton | FAQ | Contact

Home » Research Atlas » Search the Atlas » Select Landscapes » Section 2: Capabilities Assessment

You can always use the breadcrumb trail to return to where you came from

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Home About Learning Research Activities International

Research Atlas

Atlas | Register | Landscapes | Roadmaps | Energy Data Centre | Classification | FAQ | Contact

Home » Research Atlas » Search the Atlas

Search the Research Atlas

Please choose from the search options below. Where appropriate, information will be fetched from the Research Register, the Energy Data Centre, the Landscapes and the Roadmaps.

Searches can take several minutes to run so please be patient - there is a lot of work going on behind the scenes

Energy Category
This searches Landscape text, Roadmaps, the Research Register and the Energy Data Centre

Choose Energy Category

Organisation
This searches Landscape text and the Research Register

Enter start of organisation name

Display Landscape Section

Choose a Section

Keyword Searches

Keyword
This searches the ENTIRE Research Atlas.
Because of this, searches can take a LONG TIME!
Please be patient.

Put phrases in single quotes e.g. 'quantum optics'
You may use AND and NOT e.g. Wind AND Wave NOT solar
Searches are not case-sensitive

Enter keyword to search for

Landscape Table Search
This searches the landscape tables for information about activity on projects, facilities etc.

Search the Atlas

Return to Atlas Home

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Research Councils UK
Energy
For a Low Carbon Future

Now we will look at the two kinds of Keyword Searches. The two are separated partly for performance reasons, and partly because the table search shows you the current projects satisfying your search.

First check the Keyword radio button and put in some text to search for.

In Keyword searching, you can do quite complicated enquiries by using AND, OR and NOT, and single quotes to show phrases, such as **battery OR 'fuel cell' NOT solar**

We will search for **battery**

Click **SEARCH THE ATLAS**

Search the Atlas

The screenshot shows the UKERC Research Atlas interface. At the top, the UKERC logo is displayed along with the date 'Tuesday, June 21, 2011'. A navigation menu includes links for Home, About, Learning, Research, Activities, and International. Below this is the 'Research Atlas' section with a sub-menu containing Atlas, Register, Landscapes, Roadmaps, Energy Data Centre, Classification, FAQ, and Contact. The breadcrumb trail reads: Home » Research Atlas » Search the Atlas » Results for Keywords: battery.

The main content area states: 'The following entries were found from your search for Keywords: battery'. It is divided into three sections: Landscapes, Roadmaps, and Organisations.

Landscapes
 If more than three sections in a landscape were relevant, the whole landscape is presented

ENERGY EFFICIENCY	Transport	Section 8: UK Participation in EU Activities
RENEWABLE ENERGY SOURCES	Solar Energy	Section 1: Overview
RENEWABLE ENERGY SOURCES	Wind Energy	Section 1: Overview
HYDROGEN and FUEL CELLS	Hydrogen	Section 3: Basic and applied strategic research
HYDROGEN and FUEL CELLS	Fuel Cells	Section 1: Overview
HYDROGEN and FUEL CELLS	Fuel Cells	Section 3: Basic and applied strategic research

[Return to top](#)

Roadmaps
 No Road Maps were found for your query
[Return to top](#)

Organisations
 81 organisations were found with a total of 45 different grants
 For each organisation the total amount of money allocated to that organisation is shown
 This is NOT the same as the grant value, and does NOT indicate the amount associated with a particular keyword or energy category
 Very small amounts are shown in cases where the organisation is an industrial collaborator or has supplied a Recognised Researcher (i.e. not a Principal or Other Investigator)

Organisation	Grants	£ Value for Organisation
Imperial College London	7 Grants	2,284,120
University of Southampton	7 Grants	2,766,379
University of Sheffield	6 Grants	467,939
University of Surrey	5 Grants	865,016
ARM Ltd	4 Grants	1
Mentor Graphics Europe	4 Grants	1

[Customised Search](#)

Text searching gives a similar display to Energy Category and Organisation searches, and behaves the same way.

This has a dataset in the Energy Data Centre. The format of this is outside our control because it is held in BADC, the British Atmospheric Data Centre, and they do not readily change their format.

CLICK “DETAILS” to go to the Energy Data Centre entry for this dataset. From this, you can find out more,

Datasets from the Energy Data Centre

1 datasets were found from your search for battery

UKERC Energy 2050 Scenario Data

[Details](#)

Model output (from UK MARKAL Elastic Demand) for all UKERC Energy categories: Primary Energy demand (PJ) Final Energy demand by fu (PJ) Generation by plant type (PJ) Electricity storage (PJ) Installed Sectoral Emissions (Million t-CO2) Enduse Sectoral Emissions (Millio Transport fuel demand by vehicle type (PJ) Demand Reductions (% Sources of Biofuel Residential biomass (PJ) Service sector biomass

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and drill down to be able to download the actual data set. From the EDC, use the **BACK BUTTON** to return here.

Go to bottom and **CLICK “RETURN TO SEARCH”**

Return to Search

UKERC
Tuesday, June 21, 2011

Home About Learning Research Activities International

Research Atlas

Atlas | Register | Landscapes | Roadmaps | Energy Data Centre | Classification | FAQ | Contact

Home » Research Atlas » Search the Atlas

Search the Research Atlas

Please choose from the search options below. Where appropriate, information will be fetched from the Research Register, the Energy Data Centre, the Landscapes and the Roadmaps.

Searches can take several minutes to run so please be patient - there is a lot of work going on behind the scenes

Energy Category
This searches Landscape text, Roadmaps, the Research Register and the Energy Data Centre

Organisation
This searches Landscape text and the Research Register

Display Landscape Section

Keyword Searches

Keyword
This searches the ENTIRE Research Atlas.
Because of this, searches can take a LONG TIME !
Please be patient.

Landscape Table Search
This searches the landscape tables for information about activity on projects, facilities etc.

Search the Atlas

Return to Atlas Home

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Energy
For a Lower Carbon Future

The Table Search will produce a different result entirely, because it ONLY searches landscape tables, which mainly produces projects and groups actively working in the area.

In this section, only the first word you enter will be searched on.

Here we will again search for **battery**

Click **SEARCH THE ATLAS**

Search the Atlas

The following activity was found from your search for battery

Landscape Table

Transport [3.1: EU Framework Programmes](#)

Project	Objectives	Action Line	Type of Action	UK Participants	Co-ordinator and Partners	Total Funding	EU Funding	Duration	Annual Spend
PRAZE: Personal zero emission transport for the city of the future ("PRAZE")	The objective of PRAZE is to develop a zero emission personal 2-wheel vehicle for city driving, with over 60km range per battery charge during the ECE 47 urban cycle, compatible with a future product cost of under 2,200 Euro. The PRAZE vehicle is expected to have a primary energy efficiency of 191Wh/km for the ECE 47 urban cycle, compared with 241 Wh/km for current scooters, and 346 Wh/km for an equivalent thermal scooter.	FP5: Economic and Efficient Energy for a Competitive Europe, Hybrid and electric drivelines, and energy storage and conversion devices	Cost sharing contracts	PML Flightlink Ltd	PML Flightlink Ltd 5 partners	€1.90m	€0.99m	2000-04-01 to 2003-03-31 36 months	€0.33m

Hydrogen [3.2: Key Research Providers](#)

Name	Description	Sub-topics covered	No of staff	Field
Centre for Materials Research, Department of Materials, Queen Mary University of London	Materials research at Queen Mary constitutes one of the largest and most diverse centres for the discipline in the UK.	<ul style="list-style-type: none"> Alloys, nanostructured materials, composite polymers; MgH₂ phases, carbonaceous materials Computational chemistry on: catalysts in MgH₂ Computational chemistry on: metal alloys; carbon based materials; catalysts in MgH₂ Electronic Design of Hydrogen Storage Materials Electronic Simulations of Hydrogen Storage Mechanisms of Carbon Nanostructures Processing of ... 		Chemistry; Metallurgy and Materials

This returns all the rows in any of the landscape tables that contains your search term.

These tables might overflow from the white panel onto the blue background – this is a constraint of the current web design which we have little scope for correcting.

The links in the table rows should work, but this is dependent on the landscape authors having checked them at time of publication, and the organisations involved not having subsequently changed their website links.

Go to bottom and CLICK “RETURN TO SEARCH”

[Return to Search](#)

Now you have tried out all the options, go ahead and play with the system. Please send any feedback to us via the Contact link above the breadcrumbs. Please also send details of any errors that may occur so we can fix them.