



# Low Carbon Buildings Programme - Phase 2

## Guidance Notes

These Guidance Notes are for applications to the Low Carbon Buildings Programme - Phase 2 (LCBP2), which is open to public sector and not-for-profit organisations only. Examples of eligible organisations are given in section 2.1 below.

Organisations can apply for between 30% and 50%, depending on technology, of the total project cost of installing microgeneration technologies as specified in section 2.2. These technologies have to be supplied and installed through LCBP2 Framework Suppliers – a list of which is available at [www.lowcarbonbuildingsphase2.org.uk/page.jsp?id=6](http://www.lowcarbonbuildingsphase2.org.uk/page.jsp?id=6)

Please note: this document is intended to provide general guidance only and is not intended to have any legal effect.

Further information can be found at [www.lowcarbonbuildingsphase2.org.uk](http://www.lowcarbonbuildingsphase2.org.uk) or from the Helpline: 08704 23 23 13.

Organisations can receive up to £1.0 million in grant funds over the lifetime of the programme. This may be for multiple technologies at multiple sites - subject to a maximum of three eligible technologies per site, and through more than one application.

Maximum grant levels as % of total project costs are listed at: [www.lowcarbonbuildingsphase2.org.uk/page.jsp?id=2](http://www.lowcarbonbuildingsphase2.org.uk/page.jsp?id=2)

Applicants who intend to use non-Framework Suppliers and/or install microgeneration technologies not eligible under LCBP2, may qualify for grants under Phase 1 of the Low Carbon Buildings Programme.

For more details, see: [www.lowcarbonbuildings.org.uk](http://www.lowcarbonbuildings.org.uk)

There are two grant application methods, both are outlined in these guidance notes:

- on-line application at [www.lowcarbonbuildingsphase2.org.uk/page.jsp?id=7](http://www.lowcarbonbuildingsphase2.org.uk/page.jsp?id=7)
- paper application, download from [www.lowcarbonbuildingsphase2.org.uk/page.jsp?id=11](http://www.lowcarbonbuildingsphase2.org.uk/page.jsp?id=11)

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## Section 1

### 1.1 What is the scheme?

LCBP2 will provide £50 million of capital grant funding (minus programme management costs) for the installation of microgeneration technologies by organisations in the UK public and not-for-profit sectors.

The scheme is operating in England, Wales, Scotland and Northern Ireland (excluding Isle of Man and the Channel Islands), beginning December 2006, and aims to commit the bulk of its funding by April 2008.

Phase 1 of the programme launched in April 2006 and provides microgeneration grants and support, chiefly to householders and the private sector. Public sector and not-for-profit bodies are also eligible for grants under Phase 1, subject to different criteria. For more details, see:

[www.lowcarbonbuildings.org.uk](http://www.lowcarbonbuildings.org.uk)

### 1.2 How is the scheme managed?

LCBP2 is being managed overall by BRE, which is responsible for all stages of the application process.

The supply and installation of microgeneration technologies will be carried out by “Framework Suppliers”, who have been appointed by and are contracted to the DTI (see 4.1 for more details).

## Section 2

### 2.1 Who can apply?

Public sector and not-for-profit organisations only. Organisation types likely to be eligible for grants under LCBP2 include:

- Local authorities
- Housing associations and trusts
- Hospitals
- Schools
- Universities and colleges
- Libraries
- Public service organisations
- Registered charities
- Environmental trusts
- Local community groups governed by written constitution

Please note that whenever such organisations, in performing a general interest task, engage in economic activities, then State Aid rules may apply and grants may not be available. Further details are available in Appendix II.

### 2.2 What can be funded?

Grants are available for the purchase and installation of any combination of the following technologies, at one or more sites owned or leased by the applicant, provided that no more than three technologies are proposed for each site, unless pre-agreed by BRE and DTI.

- Solar photovoltaics
- Solar thermal hot water
- Wind turbines
- Ground source heat pumps
- Automated wood pellet stoves
- Wood fuelled boiler systems

Organisations can receive up to £1.0 million in grant funds over the lifetime of the programme. This may be for multiple technologies at multiple sites - subject to a maximum of three eligible technologies per site, and through more than one application.

Grants will only be offered, and must only be applied for, towards the reimbursement of particular costs associated with the installation of particular technologies. A list of these eligible costs, by reference to each technology type, is set out in the following table.

Technology Type	Capacity	"Eligible costs" in respect of which grant can be claimed
Solar photovoltaics	0.5kWe – 50kWe	Cost of solar photovoltaic generation equipment, plus direct costs of fixing panels to roof/ground mount, any performance displays and connecting to electricity supply, but <u>excluding</u> (a) all VAT on those items; (b) the cost of any extended warranty beyond the two year warranty all accredited installers are required to offer free of charge; and (c) the cost of any other materials, works or other items whatsoever (such as, but not limited to, any cost of general rewiring at property)
Solar thermal hot water	Up to 45kWth	Cost of solar thermal hot water panels controllers, solar cylinders, safety components and valves, plus direct costs of fixing panels to roof/ground mount and connecting to water supply for property, but <u>excluding</u> (a) all VAT on those items; (b) the cost of any extended warranty beyond the one year warranty all accredited installers are required to offer free of charge; and (c) the cost of any other materials, works or other items whatsoever.
Wind turbines	0.5kWe – 50kWe	Cost of wind turbine generation equipment, plus direct cost of roof/ground mount, any performance displays and connecting to electricity supply, but <u>excluding</u> (a) all VAT on those items; (b) the cost of any extended warranty beyond the one year warranty all accredited installers are required to offer free of charge; and (c) the cost of any other materials, works or other items whatsoever (such as, but not limited to, any cost of general rewiring at property)
Ground source heat pumps <sup>1</sup>	Up to 45kWth	Cost of heat generation pipes and other equipment, plus direct costs of ground works for boring vertical or horizontal pipe work and connecting to the electrical supply and heat distribution system at the property, but <u>excluding</u> (a) all VAT on those items; (b) the cost of any extended warranty beyond the one year warranty all accredited installers are required to offer free of charge; and (c) the cost of any other materials, works or other items whatsoever (such as, but not limited to, upgrading of radiators or other elements of central heating system at property)
Wood pellet heaters, stoves or boilers <sup>2</sup>	Up to 45kWth	Cost of relevant heater/stove/boiler equipment, plus direct costs of connecting the unit to an automated fuel delivery mechanism and connecting to the property's heat distribution system, but <u>excluding</u> (a) all VAT on those items; (b) the cost of any extended warranty beyond the one year warranty all accredited installers are required to offer free of charge; and (c) the cost of any other materials, works or other items whatsoever (such as, but not limited to, upgrading of radiators or other elements of central heating system at the property).

1. Ground source, non-reversible, closed-loop heat pumps are eligible. Reversible, open, and air-water systems are excluded.

2. Conventional multi-fuel room heaters/stoves (i.e. log/coal) and kitchen ranges (e.g. AGA) – are excluded.

The following general conditions of the scheme apply to all applications:

- **grants will not be payable on any works carried out prior to the date of the Grant Offer Letter. You may wish to wait until you receive the Grant Offer Letter before signing any contracts with suppliers;**
- **the equipment installed must be NEW and not refurbished;**
- **supply and installation of the microgeneration technologies must be carried out by a Framework Supplier or accredited sub-contracted installer of a Framework Supplier;**
- **technologies must be chosen from the list of Accredited Products;**
- **DIY installations will NOT attract a grant.**

## 2.3 Other funding

The applicant is not entitled to receive a grant if the applicant has already received or expects to receive any other funding from the national government or devolved administrations in relation to the proposed technology and/or its installation at the property. This includes any funding under Low Carbon Buildings Phase 1, Clear Skies; Major PV Demonstration; Bioenergy Capital Grants Scheme; Scottish Community and Household Renewables Initiative; or Scottish Biomass Support Scheme.

However, applicants may receive funding from other public sources (including BIG Lottery and local government) and funding is available from LCBP2 for new technologies, even if other technologies have previously been grant-aided at the same property. (*See also 12.1 of Terms & Conditions*).

## Section 3

### 3.1 Microgeneration technologies

#### 3.1.1 Solar photovoltaics

Solar photovoltaic (PV) systems use energy from the sun to convert solar radiation into electricity, which can be used directly to run appliances and lighting, or sold to the national grid, or stored in batteries in off-grid locations.

PV systems perform best in direct sunlight, but continue to perform well in reduced light conditions. Systems come in various forms including solar tiles, roof-integrated panels and on-roof panels. PV systems are also available for cladding buildings and covering walkways.

#### 3.1.2 Solar thermal hot water

Solar panels, also known as "collectors", can be fitted onto or integrated into a building's roof. They use the sun's energy to heat water, or a heat-transfer fluid, which passes through the panel. The fluid is fed to a heat store (e.g. a hot water tank) to provide part of the hot water demand for the building. Usually another heat source will be needed to supplement collectors in winter months. Solar panels can also be used to heat swimming pools.

#### 3.1.3 Wind turbines

A wind turbine harnesses energy from the wind to produce electricity. The most common design is of three blades mounted on a horizontal axis, which is free to rotate into the wind on a tall tower or mast. The blades drive a generator either directly or via gearbox (generally for larger machines) to produce electricity.

Wind turbines can be mounted on masts that are free-standing or tethered with wire guys, or on buildings. The greatest amount of power will be generated if turbines have a constant

supply of steady wind, and advice should be taken on where to site the turbine to optimise output.

The electricity can either link to the grid or, in the case of off-grid systems, charge batteries. Modern designs can be very quiet in operation.

#### 3.1.4 Ground source heat pumps

Ground source heat pumps can be used efficiently for space and water heating, by transferring energy from the ground, concentrating it and delivering it to the building. Systems use a pump and compressor to remove heat from one side of the circuit and eject heat to the other side.

Heat pumps require electricity for their operation and users may consider buying this through a green tariff scheme, which promotes the use of renewable energy sources by power generators.

#### 3.1.5 Automated wood-pellet stoves and wood-fuelled boilers

Wood burning systems, unlike other renewable energy sources, emit carbon dioxide. However, as the wood fuel is cultivated, it absorbs the same amount of carbon dioxide as is released when burnt. As such it does not add to the carbon dioxide in the atmosphere.

To be eligible for grant funding, wood-pellet stoves can be used for heating a single room, hot water or an entire building. Wood-fuelled boiler systems must comprise the main heating system of the building, and can be run on logs, wood chips or wood pellets. Care should be taken to ensure that appropriate provision for supply and storage of fuel is made (see also Appendix I.b).

Please note: conventional multi-fuel room heaters/stoves (i.e. log/coal) and kitchen ranges (e.g. AGA) are not eligible for funding.

## Section 4

### 4.1 Framework suppliers

Framework Suppliers have been appointed to oversee the supply and installation of microgeneration technologies under LCBP2. For a list of Framework Suppliers please see [www.lowcarbonbuildingsphase2.org.uk/page.jsp?id=6](http://www.lowcarbonbuildingsphase2.org.uk/page.jsp?id=6) They have specified the products they will supply and the accredited organisations that they will work with to install the technologies. In order to qualify for a grant, applicants are required to enter into agreements with one or more of these suppliers or their designated sub-contractors. A full list of products is available at [www.lowcarbonbuildingsphase2.org.uk/page.jsp?id=13](http://www.lowcarbonbuildingsphase2.org.uk/page.jsp?id=13)

Applicants should note that Framework Suppliers have been engaged to supply at least one but not necessarily all of the eligible technologies, and must therefore ensure that their chosen supplier has been appointed to supply the technology the applicant wishes to install.

## Section 5

### 5.1 How to apply

Applications should be made on-line at [www.lowcarbonbuildingsphase2.org.uk/page.jsp?id=7](http://www.lowcarbonbuildingsphase2.org.uk/page.jsp?id=7)

If for any reason this is not possible, a paper application may be downloaded and printed out from [www.lowcarbonbuildingsphase2.org.uk/page.jsp?id=11](http://www.lowcarbonbuildingsphase2.org.uk/page.jsp?id=11)

There are two sets of supporting documents that must accompany the application in electronic form – copies of installer quotations and proof of not-for-profit status. For on-line applicants, a

password-protected folder is made available for uploading these documents to. If applying by post, these documents must be provided on CD-ROM or floppy disk.

Postal applicants should note that the application form will be revised periodically and you should therefore ensure that you have the latest version.

If at any point you require further assistance, contact the Helpline ( **08704 23 23 13** or access the scheme website at [www.lowcarbonbuildingsphase2.org.uk](http://www.lowcarbonbuildingsphase2.org.uk).

## 5.2 Devolved nations and regions

Where you are asked in the application form to state the country or region of an installation address, one of the following should be used:

### East of England

(Bedfordshire, Cambridgeshire, Essex, Hertfordshire, Norfolk, Suffolk)

### East Midlands

(Derbyshire, Leicestershire, Lincolnshire, Northamptonshire, Nottinghamshire)

### London

(Inner London & Outer London)

### North East

(Cleveland, Durham, Northumberland, Tyne & Wear)

### North West

(Cheshire, Cumbria, Greater Manchester, Lancashire, Merseyside)

### South East

(Berkshire, Buckinghamshire, East Sussex, Hampshire, Isle of Wight, Kent, Oxfordshire, Surrey, West Sussex)

### South West

(Avon, Cornwall & Isles of Scilly, Devon, Dorset, Gloucestershire, Somerset, Wiltshire)

### West Midlands

(Herefordshire, Shropshire, Staffordshire, Warwickshire, West Midlands, Worcestershire)

### Yorkshire & Humberside

(Humberside, North Yorkshire, Rutland, West Yorkshire, South Yorkshire)

### Northern Ireland

### Scotland

### Wales

## 5.3 Grant administration process

Prior to making an application, you should ensure that you have fully investigated the microgeneration options for your project and received all necessary quotations and advice from a Framework Supplier. We strongly advise however that you do not enter into any binding agreements with suppliers, installers or contractors, in respect of your proposed project, until you have received a decision on your grant application.

Step 1. Complete an on-line or paper application and submit with electronic copies of installer quotations and proof of not-for-profit status.

Step 2. Receipt of application at BRE will be confirmed via email (or letter if applicant does not have email address) within 2 working days of receipt by BRE. If you have not received this confirmation 5 working days after submitting (either electronically or by first class post), you should contact the Helpline: 08704 23 23 13

- Step 3. Application will be checked to ensure it is compliant with the scheme Terms & Conditions, has been fully completed, and that the required supporting documents have been supplied and are acceptable. The applicant may be contacted where information is missing.
- Step 4. A technical appraisal will be made of the application. Project costs and predicted energy yield figures provided in the submission will be compared with assessment criteria, including the benchmarks detailed in Appendix III. A decision will then be made on whether or not a grant can be awarded.
- Step 5. Applicants will be notified of the decision within 5 to 7 working days of receipt of application form at BRE. Unsuccessful applicants will be provided with appropriate feedback and will be allowed to reapply. Grant applications over £100,000 will require more detailed assessments and applicants will be notified within 20 working days.
- Step 6. Successful applicants will receive a Grant Offer Letter detailing the maximum grant offer, proposed technologies and installation addresses. Applicants will be required to sign and return an acceptance letter agreeing to the general scheme Terms & Conditions, and any specific conditions that may be applied as part of the grant offer.
- Step 7. A first stage payment of up to 50% total grant award may be payable on production of appropriate installer invoices, shown as paid.
- Step 8. The final grant claim must be received at BRE within 12 months of the date of Grant Offer Letter, and be accompanied by:
- Originals of relevant Framework Supplier / Accredited Installer final invoice(s), shown as paid;
  - Copies or originals of commissioning forms for all technologies installed;
  - Photographs of the installation, showing both the technologies installed and the installation site.
  - Completed feedback form.

A site inspection may be required prior to grant funds being released. If the installation is selected for monitoring purposes, the applicant agrees to cooperate with DTI or its representatives to publicise live monitoring data for a period of up to 5 years following payment of the grant.

## 5.4 General compliance

The following summarises some of the key aspects of the complete **LCBP2 Terms & Conditions**, which are available from the Helpline: 08704 23 23 13, and on the scheme website at: [www.lowcarbonbuildingsphase2.org.uk/filelibrary/LCBP2\\_Scheme\\_Conditions\\_v1.0.pdf](http://www.lowcarbonbuildingsphase2.org.uk/filelibrary/LCBP2_Scheme_Conditions_v1.0.pdf)

The full Terms & Conditions will be supplied with any Grant Offer Letter. You should read and satisfy yourself that you understand these Terms & Conditions prior to making an application and, in the event of your application being successful, accepting a grant offer.

- The applicant is only entitled to apply for and receive a grant if the property is a permanent building located in the United Kingdom.
- The applicant must be the freehold owner of the property OR the owner of a leasehold interest in the property with all necessary consents from other owners.
- The applicant must ensure that it has obtained and will continue to maintain all necessary consents and approvals in order to install the technology at the property and to enable the applicant to comply with the scheme terms and conditions.

- Grant funds are limited and grant offers will be made on a "first come, first served" basis, subject to the overall availability of funds. BRE cannot and does not guarantee that any application for a grant will be successful.
- On submitting a grant claim, the applicant must provide BRE with original invoices from the contractor for the supply and installation of each relevant technology, shown as paid.
- The applicant must keep a record of all relevant documentation in relation to the technology and its installation, for at least 6 years following payment of the grant.
- If at any time the applicant uses the technology in any advertising or otherwise publishes any information about the technology, the applicant must make clear as part of the relevant activity that the applicant has received a grant from the DTI under the Low Carbon Buildings Programme. However, the applicant must not do or say anything that may lead a third party to believe that the applicant is acting as an agent of the DTI or BRE.
- The applicant must ensure that in carrying out any activities in connection with the installation and use of the technology the applicant and anyone acting on its behalf complies with all applicable laws and regulations.
- In addition to any other rights it may have under the Terms and Conditions or the general law, BRE may reduce, suspend or withhold payment of any grant, or require all or part of any grant to be repaid, if any one or more of the following events occurs:-
  - a decision is made by the DTI or the European Commission and/or an obligation arises under any applicable law which requires that the grant should be varied, withheld, reduced, cancelled or recovered;
  - any information that the applicant provided to BRE in relation to the grant (whether in the grant application form or otherwise) is subsequently found to be materially untrue, inaccurate or incomplete;
  - the applicant ceases to be eligible to receive a grant (either at all, or at the level previously offered or paid to the applicant by BRE);
  - the applicant fails to comply in any respect with the Terms and Conditions;
  - the applicant or any person employed by the applicant has offered or given or agreed to give any person any improper gift or commission or consideration of any kind in relation to any of BRE's programmes;
  - the applicant becomes insolvent or is wound-up or dissolved or it appears to BRE that the applicant is likely to become insolvent or to be wound-up or dissolved;
  - there has been an overpayment of grant.

Without prejudice to any of BRE's rights under the paragraph above, if it becomes apparent at any time that the applicant incorrectly notified BRE as to the applicant's status for State Aid purposes, i.e. if the applicant indicated to BRE that it was not an "undertaking" when in fact the applicant is an undertaking, a breach of State Aid rules may have occurred and the applicant may be required to pay back the amount of grant received, together with interest on that amount. (*See Appendix II for further guidance*).

## Appendices

### Appendix I. Useful contacts

#### a) Low Carbon Buildings Programme

	Phase 2	Phase 1
Helpline:	08704 23 23 13	0800 915 0990
Website:	<a href="http://www.lowcarbonbuildingsphase2.org.uk">www.lowcarbonbuildingsphase2.org.uk</a>	<a href="http://www.lowcarbonbuildings.org.uk">www.lowcarbonbuildings.org.uk</a>
Email:	<a href="mailto:info@lcbpphase2.org.uk">info@lcbpphase2.org.uk</a>	<a href="mailto:info@lowcarbonbuildings.org.uk">info@lowcarbonbuildings.org.uk</a>
Address:	Low Carbon Buildings Programme - Phase 2 c/o BRE Building 17 Garston Watford WD25 9XX	Low Carbon Buildings Programme c/o Energy Saving Trust 21 Dartmouth Street London SW1H 9YY

#### b) Useful websites

DTI's microgeneration homepage	<a href="http://www.dti.gov.uk/energy/sources/sustainable/microgeneration/index.html">www.dti.gov.uk/energy/sources/sustainable/microgeneration/index.html</a>
Community Renewables Initiative	<a href="http://www.countryside.gov.uk/LAR/Landscape/CRI/index.asp">www.countryside.gov.uk/LAR/Landscape/CRI/index.asp</a>
Carbon Trust	<a href="http://www.carbontrust.co.uk">www.carbontrust.co.uk</a>
Energy Saving Trust	<a href="http://www.est.org.uk">www.est.org.uk</a>
Micropower Council	<a href="http://www.micropower.co.uk">www.micropower.co.uk</a>
Biomass fuel suppliers	<a href="http://www.nef.org.uk/logpile/">www.nef.org.uk/logpile/</a>

## Appendix II. State Aid

### Overview

The European Commission has considerable powers to monitor, control and restrict the forms and levels of aid given by all Member States to undertakings. The objective of State Aid control is to ensure that government interventions do not distort competition and intra-community trade. In this respect, State Aid is defined as an advantage in any form whatsoever conferred on a selective basis to undertakings by national public authorities.

The State Aid rules apply to aid granted by the State or through State resources, and includes any private body established or appointed by the State to administer aid (e.g. BRE administering the Low Carbon Buildings Programme on behalf of DTI).

### Details

Grant awards under the Low Carbon Buildings Programme cannot be made to any organisation or public body which falls within the concept of an 'undertaking', defined by Article 87(1) EC Treaty as any entity engaged in an economic activity, regardless of the legal status of the entity or the way it is funded. An activity can be regarded as 'economic' even if it is not profitable, or if it lacks an economic purpose provided that it is carrying on some commercial activity.

Article 87(1) sets out criteria, all of which must be met for a State Aid to be present:

- The grant favours certain undertakings or the production of certain goods;
- The grant is provided through State resources;
- The grant distorts or threatens to distort competition;
- The grant affects trade between Member States.

If it is absolutely certain that one or more of these conditions is NOT met, then your organisation is not affected by State Aid rules.

### Organisations not covered by State Aid

It is impossible to provide a categorical definition of this because each organisation will have to assess whether it is an undertaking. However, it can be stated that an undertaking is an organisation or individual that carries on an economic activity.

The following types of organisations will be undertakings for the purpose of the State Aid rules:

- Sole traders;
- Partnerships running a business;
- Companies running a business.

However, it is likely that the payment of grants to organisations and public bodies which carry out the following functions and activities will NOT amount to State Aid:

- a. Organisations and public bodies which administer matters which are intrinsically prerogatives of the State (such as ensuring internal and external security, the administration of justice, the conduct of foreign relations and other exercises of official authority - Police Authorities & Government Departments);
- b. Organisations and public bodies which provide services where the State is not seeking to engage in gainful activity but is fulfilling its duty towards its own population in the social, cultural and educational fields (such as national education - Schools, NHS, GP surgeries & Local Authorities);
- c. Organisations and public bodies which provide services/schemes based on the principle of solidarity, which are non-profit-making and where the benefits paid are not proportional to the amount of the compulsory contributions (such as organisations charged with the management of State-imposed compulsory basic social security schemes);
- d. Organisations and public bodies which perform largely social functions, are not profit-oriented and are not meant to engage in industrial or commercial activity (such as the non-economic activities of trade unions, political parties, churches and religious societies,

consumer associations, learned societies, charities as well as relief and aid organisations). Please note that whenever such organisations, in performing a general interest task, engages in economic activities then the State Aid rules can apply.

## Examples

The examples below provide guidance on the way in which certain types of organisation are likely to be classified. Please note that these examples are illustrations only and in each case you will need to assess your organisation's activities to determine whether your organisation is an undertaking.

### Example 1

A community group owns and manages a community hall. The community group rents the hall out to local clubs and charges a nominal fee to cover electricity costs. The community group also arranges various fundraising events such as jumble sales and sponsored walks to raise funds for the hall. The community group does not raise funds in any other way. The community group is not an undertaking.

### Example 2

A charity is set up to protect local wildlife. The charity raises funds through donations and by selling gifts through a mail order catalogue. All the profits raised by sale of goods through the catalogue are used to protect local wildlife. The charity is an undertaking because it carries on commercial activities by selling goods through the catalogue.

### Example 3

A housing association provides affordable housing for people in need. The housing association is not involved in any commercial property developments. The housing association is not an undertaking.

## Frequently Asked Questions

### How do public-private joint ventures (Public Private Partnership or "PPP") steer clear of State Aid concerns?

Due to the difficulties in determining whether organisations involved in PPPs are undertakings it has been decided that any organisations involved in these initiatives should refer to Phase 1 Stream 2. Please see [www.lowcarbonbuildings.org.uk/how/stream2/](http://www.lowcarbonbuildings.org.uk/how/stream2/) for further details.

### Is funding to universities treated as aid?

Not normally: the funding of universities to provide teaching to students is not deemed State Aid. Neither the Universities nor the students (individuals) are considered to be "undertakings". However, where Universities enter into collaboration with firms, there may be State Aid present. There will be no State Aid where the firms pay a commercial fee for the use of University facilities or where the results of the collaboration are made available to all-comers, but otherwise, there is a danger of State Aid being present and such applicants should refer to Phase 1 Stream 2: [www.lowcarbonbuildings.org.uk/how/stream2/](http://www.lowcarbonbuildings.org.uk/how/stream2/)

### Why must we comply with the State Aid rules?

The State Aid rules work to create fair competition for UK companies in Europe. Application of the rules means that competitors in other EU Member States cannot receive unlawful State subsidies which distort competition. Unauthorised State Aid is illegal. These are the consequences for giving such aid:

- aid payments can be suspended;
- firms may have to repay the State with interest;
- policies may have to be altered;
- legislation may need to be amended;
- a recipient could be sued by a competitor for damages.

### I am still unsure about my organisation's status with regard to State Aid. Where can I go for further advice?

Private companies and organisations that are likely to be defined as 'undertakings' are able to apply for grants under Phase 1 of the Low Carbon Buildings Programme.

See [www.lowcarbonbuildings.org.uk](http://www.lowcarbonbuildings.org.uk)

See [www.dti.gov.uk/bbf/state-aid/advice/index.html](http://www.dti.gov.uk/bbf/state-aid/advice/index.html) for further details on State Aid.

## Appendix III. Benchmarks

Information gathered from section D of the application form will be used to estimate the cost (based on total installation cost) of saving a unit quantity of carbon dioxide over the expected lifetime of the installation. These figures are compared to the following “benchmarks” and if they are significantly higher, it may cause BRE to reject the application or request further information and clarification. The benchmarks (figures in bold) are expressed as £/tonneCO<sub>2</sub>. Please note the benchmark figures may change from time to time and the applicant will need to check these before applying.

	Solar PV	Solar thermal	Ground source heat pumps	Wood pellet stoves	Wood fuelled boilers
<b>Assumed life (years)</b>	25	20	20	20	20
<b>Displaced fuel/energy</b>					
<b>Electricity</b>	<b>£990</b>	<b>£388</b>	<b>£119</b>	<b>to be confirmed</b>	<b>£106</b>
<b>Natural Gas</b>	<b>N/A</b>	<b>£563</b>	<b>£212</b>	<b>tbc</b>	<b>£315</b>
<b>Oil</b>		<b>£489</b>	<b>£225</b>	<b>tbc</b>	<b>£171</b>
<b>Coal</b>		<b>£296</b>	<b>£86</b>	<b>tbc</b>	<b>£83</b>
<b>LPG</b>		<b>£523</b>	<b>£263</b>	<b>tbc</b>	<b>£185</b>

	Wind turbines ( by size in kW)				
	less than 1.5	1.6 – 5.0	6.0	15.0	20 and larger
<b>Assumed life (years)</b>	20	20	20	20	20
<b>Displaced fuel/energy</b>					
<b>Electricity</b>	<b>£1,049</b>	<b>£531</b>	<b>£419</b>	<b>£345</b>	<b>£294</b>

### Carbon emission factors for displaced fuels for use in the £/tonneCO<sub>2</sub> calculation

Electricity= 0.43 kgCO<sub>2</sub>/kWh

Natural Gas= 0.19 kgCO<sub>2</sub>/kWh

Coal= 0.3 kgCO<sub>2</sub>/kWh

Oil= 0.25 kgCO<sub>2</sub>/kWh

LPG= 0.21 kgCO<sub>2</sub>/kWh

#### Calculation formula:

£/tonneCO<sub>2</sub> = (Total cost (based on eligible costs) x 1000) / (Energy yield x emission factor x assumed life)

Example for PV system costing £12,000 with an estimated annual yield of 1500 kWh:

(12,000 x 1000) / (1500 x 0.43 x 25) = **£744.19 /tonneCO<sub>2</sub>**