

The Big Green Challenge

Note on Content: This document will be submitted online to the Big Green Challenge (<http://www.biggreenchallenge.org.uk>). It is non-binding although a follow-up proposal would be expected to substantially follow this proposal. The sections (Group details, Summary, CO₂ reduction etc.) and length of each section is defined by the online application form. The text in italics is guidance notes from the application form.

Group details

The Albert Square and St Stephens Association (ASSA), founded in 1980, represents the interests of the residents of the conservation area made up of four streets of Victorian terrace housing in South Lambeth, south west London (www.assaweb.org). ASSA works to preserve the best of the past, enhance the quality of life for today's residents, and ensure that future generations can benefit from the best possible environment.

The ASSA Committee is 8 people, meets every 4–6 weeks to discuss issues such as local environment, crime, traffic, events and planning. Issues of importance are communicated by email and/or mail drops to residents. We hold an AGM which is held in the local church and well attended by a large cross-section of the community.

Summary

500 Words

You might find it easier to fill this section in last. To help us understand your project please include a description of the wider community you will be working with. Your application also needs to include details of how the community uses energy – so you will need to consider, and potentially include, the activities, people, buildings and equipment that are used by, and are part of, that community.

Our community is the residents of the conservation area made up of three streets and one garden square of Victorian terrace housing in south west London

These Victorian houses are attractive and pleasant to live in but are typically very inefficient and large consumers of energy. They are

typical of much of the urban UK housing stock: 1.5 million of the UK's 24 million homes are in conservation areas or listed as architecturally important and most of these are pre-1919.

Our proposal is to achieve CO₂ reductions of 60% in the buildings in the ASSA area through an increase in domestic energy efficiency, the use of local low-carbon energy generation and behavioural change.

The challenge of this scheme is to get all residents involved, not just the committed environmentalists. We hope to achieve maximum possible uptake by presenting a scheme to the members of our community that requires limited lifestyle changes, will cost nothing, involve no capital outlay and will increase the value of their property and/or reduce their bills. This will be supported by a co-ordinated marketing and communications campaign to get buy-in from as many residents as possible.

The foundation of the scheme will be the setting up of a single collective entity or co-operative, owned by all participants of the scheme. The co-operative will purchase and negotiate on behalf of all the houses in the community. This will enable collective bargaining and reduce transaction and administration costs. It will also reduce the burden on the individual homeowner, landlord or tenant who will be offered solutions that work for them by the co-operative.

The CO₂ reductions will be free and require no capital outlay by the residents. This will be achieved through several ways. Energy efficiency savings, expected to contribute half of the total CO₂ reductions, will be financed from guaranteed energy savings which will provide the security for up-front funding. Low-carbon technologies will be funded by energy savings and grants. These grants will be sourced from foundations and local and central government as appropriate. We use the collective purchasing power of the co-operative to switch to an energy provider(s) that offers assistance, for example under the Carbon Emissions Reduction Target. A key role of the co-operative will be to identify and apply for optimal funding and assistance. Behavioural changes can mostly be achieved at no cost.

Once implemented the CO₂ reductions will be long-term. Energy efficiency measures and low-carbon technologies have a lifetime of at least ten years after which the same funding models can be used again. The scheme places a lower emphasis on behavioural change

to encourage participation and to ensure a long term reduction even if new residents move in.

If successful, the co-operative model of community engagement and the funding model will be universally replicable and scaleable for local community groups, energy efficiency and low carbon companies and energy providers throughout the UK, urban or rural, period or modern, conservation area or not.

CO2 Reduction

How will your idea(s) reduce CO2 emissions in your community?
300 words

Please explain how your proposed activities will reduce CO2 emissions. You don't need to use technical or scientific language to describe this

The scheme aims to reduce CO₂ emissions in three ways:

- improvements in energy efficiency will reduce emissions by 25%-30%,
- the use of low carbon power and heat generation will reduce emissions by a further 25-30% and
- behavioural changes such as reducing thermostat temperatures and turning off lights will contribute 0-10%.

The most effective energy efficiency measures for each house will be assessed and then implemented by third party energy service company (ESCO). We would expect to use a small number of providers to achieve economies of scale (the houses within each street are structurally very similar). Typical measures will include draught-proofing, loft insulation, lighting, more efficient boilers and improved lighting and heating controls.

It is likely that there will be a number of low carbon technologies used to achieve the 25-30% CO₂ reduction depending a variety of factors. For example, suitability of solar heating and PV technologies will depend upon the aspect of the building. Other solutions could include small scale CHP and ground source heat pumps. Advice would be required on the most cost effective and appropriate solutions.

Behavioural changes will be encouraged through a variety of communications methods. Less emphasis is placed on this option as it does not ensure long-term reductions and requires lifestyle

changes that may not be acceptable to all residents. However, it is vital to combine the other measures with this awareness raising.

The baseline emissions level and progress against it will be measured using power and gas bills and standard conversion methodologies (green tariffs will be ignored).

Innovation

Please tell us how you think your ideas are innovative. 300 words

We want to encourage fresh thinking about the way we live our lives, in order to find new and better ways to tackle climate change. This might involve coming up with a brand new idea, it might involve combining things in a new way, or finding new ways of making existing solutions work better. We look at innovation very widely. The best innovations need not be technical or scientific – they might involve re-organising processes or the way people interact for example.

The challenge of this scheme is to get all residents involved, not just the committed environmentalists. We hope to achieve maximum possible uptake by presenting a scheme to the members of our community that requires limited lifestyle changes, will cost nothing, involve no capital outlay and will increase the value of their property and/or reduce their bills. This will be supported by a co-ordinated marketing and communications campaign to maximise uptake by residents.

To achieve this we will need to set up a co-operative or similar central administrative body, owned by the participants of the scheme, that will purchase and negotiate on behalf of all the houses in the community. This will enable collective bargaining and reduce transaction and administration costs. The scale will also make tendering more attractive to energy service companies (ESCOs), low-carbon technology companies and power and gas providers. The co-operative will reduce the burden on the individual homeowner, landlord or tenant who are often discouraged from energy efficiency or low carbon technologies because of the spiders web of information, grants and bureaucracy.

The reductions will be financed, at no cost or capital outlay to residents by:

- Energy efficiency savings, financed using an 'ESCO-model' where energy savings are guaranteed by the ESCO and these

guarantees provide the security for up-front funding by the ESCO or a bank.

- Low-carbon technologies will be funded by energy savings and grants. Many grants are available to individual and communities. There are also many supporting initiatives and organisations such as the London Climate Change Agency, Energy Savings Trust, electricity providers under the Carbon Emissions Reductions Targets etc. A key role of the co-operative will be to identify and apply for optimal funding and assistance.
- Behavioural changes can mostly be achieved at no cost.

Longer term

How could the activities you are proposing be sustained and developed in your community in the longer term? 300 words

Please tell us why you think your approach has the potential to continue to be successful after the Big Green Challenge is over. Consider the following when thinking about your answer: Will people continue to get involved? Will it be possible to find the funding, skills and other resources to keep the activities going?

Emphasis on solutions that are long-term and not heavily reliant on the behavioural changes of residents is a key element of the scheme.

The planned changes have lifetimes of 10 to 25+ years. It is expected that maintenance contracts will be incorporated into most of the energy efficiency and low carbon technology contracts and that the energy savings will cover these costs. Therefore only replacement of worn out or broken equipment will need to be replaced. After equipment has reached the end of its lifetime it can be replaced using the same financing mechanisms.

It is important however, to engage new residents when they move in to encourage energy efficiency. This would be done using the methods described in the community engagement section.

After the initial 'big push' by the co-operative to get energy efficiency and low carbon energy generation installed, the co-operative will downsize and become a function of the existing ASSA residents association in the same way that planning and neighbourhood watch are.

Wider impact

How could the activities you are proposing be taken up by others, or benefit a wider community? 300 words

Please tell us why you think your approach has the potential to be replicable (it can be repeated), transferable (it can be used in a different context) and/ or scaled up (it can grow).

The scheme we have described has been designed to address a specific failure. The failure for existing technologies to be applied to older housing stock because of problems of scale and organisational barriers. In addition, we will be addressing the further challenges presented by our conservation area status.

These failures are the norm. Our houses are typical of many urban areas and 1.5 million of the UK's 24 million homes are in conservation areas or listed as architecturally important and most of these are pre-1919.

If we can demonstrate that our scheme works, it will provide a model to parish councils, residents associations and other small communities throughout the UK. With some adjustments it could be applied to other organisations such as housing associations. Whilst it has been designed to address a specific need of older housing in an urban area it could easily be applied to rural communities and more modern housing. The technical needs of these communities may vary but the community engagement and self-financing models are replicable.

This scheme would also provide a replicable model for all third parties involved, such as the energy service companies, low carbon technology companies, energy providers and grant-making and other supporting organisations.

Our community has approximately 150 buildings and 300 owners or tenants. Whilst the economics of the scheme improve with scale, the ability to effectively engage the community diminishes beyond a certain level. For this reason, each scheme would be best as a relatively small unit. However, there is obviously no limit to the number of schemes and multiple schemes could partner to take advantage of economies of scale, collective bargaining and information sharing.

Community Engagement

How will your group or organisation work with others in your community to develop your ideas and make them happen? 300 words

We are looking for ideas that are led by or actively involve communities. Please describe how you will involve people from your community in the planning and delivery of your ideas, and how you plan to achieve and demonstrate buy-in from people in your community.

Community engagement is the most crucial component of this proposal. The scheme has been designed for uptake of energy efficiency and low carbon energy generation by residents to be as convenient and affordable as possible. However, despite the obvious financial and environmental advantages of the scheme for each resident we expect reluctance and even suspicion of the scheme initially.

There already exists a strong sense of community in the area. This has resulted from a combination of the time many residents have lived in the area, the central community area and identity that comes with the garden square and, not least, the work of ASSA. There are also two large landlords in the area and we will seek their involvement from the outset. One is a large London housing association, the other is an educational establishment.

We will build on this strong foundation and use a diverse and dedicated communications and marketing strategy to engage residents on a personal level. We will market the idea via the ASSA local advertising and marketing, key presentations at the local church and at communal events such as the annual summer fete. Street 'champions' will be trained to present the idea to each household in individual evening meetings to go through the detailed proposal and get their participation. We will leverage the professional skills that a number of community members have in design, marketing, media and advertising.

Once residents decide to participate and become members of the co-operative, they will receive an ownership stake. Each owner will have an equal vote and be able to take as active or passive role in the co-operative as they wish. Key decisions that affect individual residents will be subject to approval by them.