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**TITLE: GREEN DEAL BUSINESS PLAN**

Committee: Development and Transport

Date: 10<sup>th</sup> January 2012

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[M193]

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1.0 ISSUE

1.1 This gives details of the work carried out to date on the Green Deal by Officers across Cambridgeshire, and includes the plan of work to procure a Green Deal provider for Cambridgeshire.

2.0 RECOMMENDATION

2.1 To approve the conduct of a procurement exercise and award of contract(s) to one or more Green Deal Providers to be let on a County-wide basis and in collaboration with Cambridgeshire Local Authorities.

3.0 BACKGROUND/OPTIONS

On the 6<sup>th</sup> November 2012, this committee agreed that an outline business case be presented to Members for consideration including a full appraisal of the resources required to procure and deliver a Green Deal scheme for Cambridgeshire.

3.1 The Green Deal is a new finance framework that will provide householders with up-front loan finance for installing cost effective energy efficiency measures in their homes. The scheme was officially launched by the Government on 1<sup>st</sup> October 2012.

3.2 Green Deal loans will be available for a full range of measures (45 in total) including such things as loft and cavity wall insulation, boiler replacement, heating controls, double glazing, secondary glazing, solid wall insulation, flat roof insulation and micro-generation (solar thermal and PV).

3.3 Green Deal loans will not operate as personal loans but will be repaid through savings achieved in household energy bills. The 'Golden Rule' of the Green Deal is that loan repayments must be less than the expected savings from the measures installed.

3.4 There is also potential to bring in top-up grant funding from the Energy Company Obligation (ECO). Around £1.3bn per annum is to be invested by the major energy companies to cover a combination of the more expensive

measures (e.g. solid wall insulation) and the delivery of affordable warmth to priority householders who may be suffering from fuel poverty.

3.5 In preparation for the launch of the Green Deal, relevant officers from the Cambridgeshire districts have been working together to evaluate legislation, establish a local authority role in the Green Deal, and how best it can deliver strategic goals for the individual councils. Terms of Reference for the Green Deal Partnership Project steering group can be seen in Appendix 1.

3.6 The Green Deal can be provided by commercial companies, social enterprises and local authorities acting alone or in partnership. To deliver the Green Deal locally there are three approaches local authorities might choose to adopt:

Provide – the Green Deal directly to their local residents and businesses, co-ordinating finance and delivery;

Partner – work in partnership with commercial Green Deal providers and community partners to deliver and facilitate delivery; or

Promote – by acting as advocates for the Green Deal locally

3.7 Consultations with stakeholders and potential Green Deal providers has indicated that for the Cambridgeshire Districts a partnership approach as a partner provides the best balance of risk and positive outcomes for the Council. Details of the consultations are within the Green Deal Community Connections Report in appendix 2.

#### 4.0 ARGUMENTS/CONCLUSIONS

4.1 The Green Deal has huge potential to stimulate energy efficiency improvements in the building stock of the District. Although it has largely been devised with housing in mind, it will also be available for commercial and public buildings.

4.2 In addition to the energy efficiency improvements there is the potential for inward investment to East Cambs of £117 million, and the creation of just under 3800 jobs by 2030.

4.3 There are a number of issues local authorities need to consider in deciding what role/s they might play in delivering the Green Deal but the study has indicated that the maximum benefits for a District Council such as East Cambridgeshire (in terms of scheme viability and potential revenue returns) will come from partnering with a commercial provider or providers along with other Cambridgeshire Local Authorities.

4.4 Indications from Central Government are that the Green Deal will be most efficiently delivered by local authorities on a county wide scale and that Local Authorities forming partnerships early are likely to be at an advantage when it

comes to attracting investment from Green Deal providers and energy companies.

- 4.5 The timetable for joint procurement of a Cambridgeshire Green Deal is attached in the Outline Business Case (Appendix 3). A Cambridgeshire Green Deal should be available to members of the public in late 2013.
- 4.6 In order to secure the maximum benefit to the Authority, we will be seeking agreement from a Green Deal Provider to:
  - 4.6.1 Secure the maximum take up of Green Deal measures across the building stock of all cambridgeshire districts to reduce fuel poverty, carbon emissions and improve the building stock;
  - 4.6.2 Ensure good value, high quality energy efficiency installations with outstanding quality of work and customer care;
  - 4.6.3 Boost the local economy (employment, skills and learning, expansion and development of the energy efficiency and microgeneration business sector);
  - 4.6.4 Support local community groups and voluntary sector organisations working on sustainable energy-related issues;
  - 4.6.5 Establish a financially sustainable Green Deal programme which continues to re-invest revenue streams in the delivery of the programme to cover marketing costs, Green Deal Assessments, management costs and affordable warmth support.

## 5.0 FINANCIAL IMPLICATIONS/EQUALITY IMPACT ASSESSMENT

- 5.1 The main costs associated with the development of a local authority Green Deal scheme either for East Cambridgeshire or Countywide are the costs of the procurement process necessary to secure a Green Deal provider partner which will mainly be the costs of Officer time.
- 5.2 The County Council has agreed to contribute upto £4k in order to pay for any consultancy required to develop an effective tender specification.
- 5.3 The running of the contract once procured will be as a minimum at no net cost to the Authority, but there is some potential for income generation or staff resource contribution to the partnership.

## 6.0 APPENDICES

- 6.1 Terms of Reference, Green Deal Partnership Project Steering Group.
- 6.2 Establishing the community connection for the Green Deal In Cambridgeshire
- 6.3 Outline Business Case

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**Background Documents**

Local Authorities and The  
Green Deal – Information  
Note Nov 2011

**Location**

Room  
SF204  
Annex  
The Grange,  
Ely

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**TERMS OF REFERENCE****Cambridgeshire Green Deal Partnership Project Steering Group**

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**Vision**

To develop and implement a Cambridgeshire wide 'Green Deal Offering' sanctioned by the district level authorities within the Government's framework for Green Deal whilst maximising the local economic and community benefits.

**Aim**

To develop a sound business case and procurement framework for partnering with an external green deal provider (or providers) and green deal assessors to deliver cost effective energy efficiency improvements to residents and building owners across Cambridgeshire.

**Objectives**

1. To consolidate and analyse the output from consultancy, Workshops and community engagement to develop a delivery model for green deal in Cambridgeshire
2. To undertake soft market testing and research to establish the likely costs, market appetite for cooperation, acceptable delivery and financial models, and revenue potential
3. To establish the wider local economic and community benefits required in the chosen delivery model
4. To produce a detailed proposed business case for a chosen 'Green Deal Model'
5. To identify and follow the correct procedure for political scrutiny and authority for taking the project forward to procurement
6. To establish the correct procedure, costs and implications for procurement of partners to implement the chosen green deal model

**Principles**

To achieve significant improvement to the energy efficiency of homes and commercial buildings across the county by promoting and enabling the flow of funds and finance through ECO and Green Deal to those residents and businesses who can benefit.

- Provide confidence to residents and businesses in the ECO and Green Deal processes
- Maximise through procurement the use of local assessors and installers to ensure a local economic benefit from the flow of ECO funds and Green Deal Finance
- Make best use of local authority reputation, information, staffing and other assets to ensure successful partnership delivery of the Green Deal
- Make the best use of established community connections with the public, parishes and third sector organisations to promote Green Deal to and engage with our populations.

## Accountability

Immediate accountability will be to relevant service heads in the individual authority and then to relevant committees/ portfolio holders/executive Councillors as set out below

Partners	Reporting
South Cambridgeshire	
Huntingdonshire	
Cambridgeshire County	
Cambridge City	Jas Lally (Head of Refuse & Environment) Tim Ward (Executive Councillor Planning & Climate Change) Environment Scrutiny Committee
East Cambridgeshire	
Fenland	

Action notes and brief minutes will be taken at meetings and progress should be reported to service heads following fortnightly meetings

## Membership

The following partner organisations will be represented:

- Cambridge City Council
- Huntingdonshire District Council
- South Cambridgeshire District Council
- Cambridgeshire County Council
- East Cambridgeshire District Council
- Fenland District Council

## Frequency of Meetings

Meetings will be held fortnightly

## Administration

Establish secretary & Chair

## Review

These Terms of Reference were reviewed and agreed .....



*This project is being developed as part of the Climate Change Skills Fund. The fund is managed by Sustainability East on behalf of Improvement East.*

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## Establishing the community connection for the Green Deal in Cambridgeshire

Delivering the Green Deal in Cambridgeshire

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## Contents

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Executive Summary.....	5
1. Introduction to the Green Deal and ECO.....	16
1.1 Establishing the community connection for Green Deal .....	16
1.2 A national policy framework for investing in energy efficiency ....	16
1.3 How the Green Deal will work .....	18
1.4 Potential benefits of the Green Deal for the local economy .....	20
2. Green Deal and ECO potential in Cambridgeshire.....	21
2.1 Breaking down Cambridgeshire’s building stock .....	21
2.2 Overall approach to modelling Green Deal potential .....	25
2.3 Estimate of Green Deal Potential in Cambridgeshire .....	30
2.4 Identifying the scale of Cambridgeshire’s Green Deal market opportunity	38
3. Creating the conditions for success for Green Deal .....	40
3.1 Key issues affecting Green Deal success .....	40
3.2 Identifying the main conditions for success .....	41
3.3 Encouraging Green Deal Providers to invest in local delivery ....	42
3.4 Building consumer confidence and demand.....	43
3.5 Harnessing local business opportunities .....	43
4. Exploring the main delivery options for local Green Deal schemes	44
4.1 Green Deal delivery chain.....	44
4.2 Key delivery options.....	45
4.3 Sourcing Green Deal finance .....	51
5. Stakeholder involvement in selecting a suitable delivery framework	52
5.1 Process for engaging with stakeholders.....	52
5.2 Delivery issues discussed at the workshops .....	53
6. The preferred approach - forming a partnership with one or more Green Deal Providers .....	56
6.1 Key elements of the preferred delivery approach .....	56
6.2 The ‘Partnership’ model (an adapted version of the Producer model)	56
6.3 How does the Partnership model fare against the conditions for success?	58
7. Establishing the community connection in Cambridgeshire.....	60
7.1 Approaches to the heritage stock, fuel poor households and non-domestic buildings	60
7.2 Resourcing local authority Green Deal activity .....	62
7.3 Action plan for the successful local delivery of ECO and Green Deal in Cambridgeshire	64



8.	Appendix 1 - Technical and financial modelling assumptions.....	69	
9.	Appendix 2 - List of Green Deal Qualifying Measures.....	69	
10.	Appendix 3 – Workshop agendas and outputs.....	72	
10.1	Notes from workshop 1: Tuesday 12 <sup>th</sup> June.....	72	
10.2	Notes from workshop 2: Tuesday 3 <sup>rd</sup> July.....	82	
11.	Appendix 4 – Examples of energy efficiency activity in Cambridgeshire		92
11.1	Sustainable Parish Energy Partnership.....	92	
11.2	Rampton Drift Project.....	92	
11.3	The Green House Project.....	93	
12.	Appendix 5 – Higher resolution maps.....	94	



### **1. Establishing a Green Deal ‘Community Connection’ in Cambridgeshire - project objectives**

- 1.1 The Cambridgeshire Green Deal ‘Community Connection’ project has been delivered by a project team consisting of Verco, CAG Consultants and Public-i. The project has been led by South Cambridgeshire District Council on behalf of all the local authorities in Cambridgeshire and funded through the Climate Change Skills Fund managed by Sustainability East on behalf of Improvement East. The project has brought together interested public, community, voluntary and local business players with prospective Green Deal Providers to prepare for the delivery of the Green Deal in Cambridgeshire.
- 1.2 Through this ‘co-production’ process, the project has explored key barriers to the local delivery of energy efficiency and has identified appropriate solutions for local delivery. Although it has focused on the most appropriate solutions for Cambridgeshire, it has generated transferable knowledge on energy efficiency delivery approaches that is relevant to local authorities across the East of England.

### **2. For the first time, the UK will soon have a national policy framework to encourage investment in energy efficiency**

- 2.1 The Government’s new Green Deal policy is due to be launched in October 2012.
- 2.2 The Green Deal provides a national framework for investing in energy efficiency and will promote and regulate good practice in the energy efficiency industry. The Green Deal concentrates on cost-effective energy efficiency measures which can pay for themselves through reductions in the energy bill.
- 2.3 The Green Deal will be closely linked to the Energy Company Obligation (ECO) which is a requirement on the energy supply companies to subsidise energy efficiency measures in housing. The ECO will be targeted in two main ways; (1) to grant fund energy saving measures in low income and vulnerable households, (under the ‘Affordable Warmth Obligation’ and ‘Carbon Saving Communities Obligation’) and, (2) to subsidise measures that struggle to pay for themselves under the Green Deal (under the ‘Carbon Saving Obligation’). There is a slight delay in the development of the ECO policy and it is now unlikely to be ready until at least December 2012.
- 2.4 The Green Deal overcomes a number of key barriers to energy efficiency by:

- Providing upfront capital specifically for energy efficiency (helps remove the barrier of competing uses for available capital, e.g. a householder may prefer to spend available money on a holiday rather than energy efficiency);
- Linking the repayments to the property rather than the owner or householder (helps circumvent householder resistance to taking on personal debt for measures with a long payback when they might move home); and,
- Removing confusion and misinformation about energy efficiency by ensuring all companies follow a common approach to estimating energy savings from proposed measures and by providing a kite mark for energy efficiency installations.

2.5 The Government's legislative framework specifies distinct roles and requirements for businesses that wish to operate under the Green Deal, including the key role of Green Deal Provider. The Green Deal Provider will have the main customer interface and will organise the finance, oversee the planned works and provide on-going customer support.

### **3. There is huge scope for Cambridgeshire to use this national policy framework to improve building energy efficiency and stimulate the associated job opportunities**

3.1 The scope for improving the energy efficiency of Cambridgeshire's homes and commercial buildings is vast. The potential for installing cost effective energy efficiency measures, as required under the Green Deal, is also substantial and the total investment opportunity in the county has been estimated at £830 Million.

3.2 The supply and installation of these insulation products, efficient heating systems and microgeneration technologies (such as solar power and heat pumps) could stimulate local industry and provide a substantial number of local jobs for Cambridgeshire. Cambridgeshire has a good platform for growth as it already has a healthy local energy efficiency industry.

3.3 If Cambridgeshire can utilise the national Green Deal framework to stimulate local energy efficiency activity and realise this latent potential then the corresponding environmental, social and economic benefits could be significant.

3.4 Government has identified three distinct roles for local authorities interested in maximising the potential of the Green Deal in their local area:

- Acting as Green Deal 'Providers': where local authorities set-up a full Green Deal Provider business themselves to offer tailored services to the local community.
- Acting as Green Deal 'Producers': where local authorities use their local knowledge, credibility and trusted status to produce leads and a customer base for



partner Green Deal Provider(s) who focus on local economic and community benefits.

- Acting as Green Deal ‘Promoters’: where local authorities go no further than undertaking a simple marketing role for the Green Deal.

#### **4. Cambridgeshire’s local government has the ability to unlock this Green Deal/ energy efficiency potential**

4.1 Although the Green Deal provides a national framework for investing in energy efficiency, consumer demand is historically low due to a lack of incentives in the market to encourage householders or businesses to install energy efficiency products. In addition, trust is low in energy supply companies who are likely to represent a key element of the Green Deal Provider market.

4.2 Reasons for low consumer demand include:

- Perception that energy efficiency is unexciting (it does not carry the same levels of consumer interest as new kitchens or bathrooms, or general consumable products)
- Perception that energy efficiency improvements will not make any really noticeable or tangible difference to the quality of life or well-being of building occupants.
- Energy bill savings are relatively small, particularly when the repayment of the Green Deal charge is taken into account
- Energy performance (and the value of energy efficiency and renewable energy) is currently not generally represented in the price of a property.
- The installation of energy efficiency measures can be considered awkward to organise (e.g. having to clear a cluttered loft space) or disruptive to day-to-day life.

4.3 Successful energy efficiency schemes are able to overcome the majority of these barriers by demonstrating the clear benefits of energy efficiency in terms of warmer homes, lower bills and improved properties alongside putting in place carefully tailored customer-focused installation procedures.

4.4 Local authority activity is needed to facilitate the effective inclusion of the key players in the public, community and voluntary sectors who will all have a role in embedding and nurturing energy efficiency schemes within Cambridgeshire’s local communities.

#### **5. Cambridgeshire’s local authorities need to create the optimum conditions for the successful local delivery of energy efficiency, ECO and the Green Deal**



- 5.1 Green Deal Providers need to be attracted to Cambridgeshire and encouraged to invest in the delivery of ECO and Green Deal within the county/ locality.
- 5.2 Consumer demand needs to be developed and harnessed through communicating the Green Deal offering and building-trust in the product.
- 5.3 The local delivery framework for ECO and Green Deal needs to ensure that local business gains access to the significant employment opportunities that an active Green Deal scheme could stimulate, thereby contributing to the development of Cambridgeshire's 'cleantech' sector.
- 5.4 Local employment opportunities need to be facilitated through skills training and development in a whole house approach to energy efficiency refurbishments, including solid wall insulation, air tightness and appropriate design of solutions.

**6. An extensive engagement process has involved key stakeholders across the county in the development of a solution**

- 6.1 To develop local engagement and ensure 'co-production' of the emerging delivery approach, the process has utilised workshops, focused discussion groups, 1:1 meetings, phone conversations, and an online presence to share information and findings.
- 6.2 More than 150 stakeholders were invited to a series of two workshops, to explore and then prioritise options for delivery of the Green Deal in Cambridgeshire. 60-70 stakeholders attended each workshop, and those who could not attend were encouraged to review materials and comment on documents via twitter and a micro-site linked to the Sustainability East website.
- 6.3 The engagement process has included a wide range of key stakeholders including community groups, local sustainable energy sector businesses, building stock owners and landlords, and key public sector representatives, including Members.

**7. Prospective Green Deal Provider companies have been actively involved in the process**

- 7.1 Under the Government's national Green Deal framework, Green Deal Providers are the hub of the Green Deal market-place.
- 7.2 Attracting Green Deal Providers and supporting their activities within the locality is therefore key to the successful delivery of Green Deal and the provision of a Green Deal offering to residents in Cambridgeshire.



7.3 Seven prospective Green Deal Providers, representing a mix of large national and smaller regionally based companies, have been actively involved in analysing the issues and developing the delivery approach.

7.4 These discussions have also focused on how Green Deal Providers can maximise the use of local contractors to the mutual benefit of both local businesses and these national/ regional service providers.

## **8. The key issues have been identified and explored, and a preferred delivery approach has emerged**

8.1 A Cambridgeshire branded Green Deal and ECO energy efficiency scheme is needed in order to increase awareness, build momentum and harness trust.

8.2 A county-level scheme is the most effective scale for operating a branded programme by delivering a local feel that is responsive to local character and communities, whilst also achieving necessary economies of scale.

8.3 A 'Partnership' delivery model has received fairly unanimous support from stakeholders. This would involve the local authorities procuring one or more Green Deal Provider partners to operate a Cambridgeshire branded scheme across the county, with the Green Deal Providers leading all elements of the programme and service delivery with support from the local authorities and the local community in promotion and lead generation.

8.4 The key objectives of this Partnership delivery structure would be that of maximising uptake through building-awareness and trust, and maximising local economic benefits by requiring Green Deal Providers to work with local businesses.

8.5 The scope of this Partnership delivery structure would include affordable warmth, and the incorporation of ECO funded measures, as well as Green Deal and any other financing approaches. The delivery programme will therefore need to address fuel poverty and hard to treat measures such as solid wall insulation, and will need to develop a delivery strategy in line with achieving these objectives.

8.6 A number of stakeholders do however have concerns with this Partnership approach. They have highlighted the risk that partnering with a small number of commercial companies (Green Deal Providers) may jeopardise the impartiality of the Cambridgeshire local authorities and have the perverse effect of restricting the dynamism of the local market place rather than encouraging it to grow.

8.7 This concern is particularly pronounced with regard to the impartiality of the lead generation/referral process and whether this should be run by Green Deal Provider(s) or by the Cambridgeshire local authorities themselves.

**9. The procurement process for selecting one or more Green Deal Provider/s will need to be carefully structured to incentivise local investment in Green Deal delivery**

9.1 The procurement process will need to balance and match the local authorities' objectives with the objectives of commercial Green Deal Providers.

9.2 Key local authority objectives include:

- securing the maximum take-up of Green Deal measures across the building stock of all Cambridgeshire's districts to reduce fuel poverty, carbon emissions and improve the building stock;
- ensuring good value, high quality energy efficiency installations with outstanding quality of work and customer care;
- boosting the local economy (employment, skills and learning, expansion and development of the energy efficiency and microgeneration business sector);
- supporting local community groups and voluntary sector organisations working on sustainable energy-related issues;
- establishing a [financially] sustainable energy efficiency/ Green Deal programme which continues to re-invest revenue streams in the delivery of the programme to cover marketing costs, Green Deal Assessments, management costs and affordable warmth support.

9.3 Key Green Deal Provider objectives include:

- securing access to a large market in Cambridgeshire whilst minimising costs;
- having access to existing local authority communication channels and networks;
- benefitting from local authority partnership endorsement to enhance consumer awareness, confidence and trust;
- having the ability to develop and invest in a long term business plan for Cambridgeshire based on confidence in securing an adequate customer base.

9.4 In establishing a formal partnership with Green Deal Provider[s] the procurement and negotiation process will need to:

- Identify the optimum number of Green Deal Provider businesses for Cambridgeshire and secure this number in the Cambridgeshire market;
- Select Green Deal service offering[s] that most closely match Cambridgeshire's requirements in terms of stock characteristics (e.g. prevalence of rural and of heritage stock), local geography and community governance structures;
- resolve how to cover the cost of Green Deal Assessments, such as through a 'pre-assessment survey', as they are the first step in the process and will be key to the uptake of Green Deal in Cambridgeshire;
- provide financing solutions for marketing and programme management of the local Green Deal scheme;
- identify how best to programme manage a Green Deal/ energy efficiency programme for Cambridgeshire. For example, should a scheme be geographically focused (with resources focused sequentially in an area-by-area approach) or open to all (promoted to all households across the county), or both?
- Determine an approach to the 'letting of concessions' for Green Deal Providers in Cambridgeshire. Should the procured Green Deal Providers operating under the Cambridgeshire Green Deal brand offer services to:
  - Any home within the whole county in competition with the other scheme Providers?
  - Specific geographical areas within the county (with exclusive access to these areas)?
  - Specific house types across the county (for example, procuring a specialist 'heritage Green Deal Provider' and a 'mainstream Green Deal Provider')?

## **10. Cambridgeshire local authorities could acquire a share of the Green Deal value chain so as to resource this Green Deal activity**

10.1 The Cambridgeshire local authorities already dedicate staff resources to running energy efficiency activity within their areas, as demonstrated by a range of activity across the county including, for example, the Green House Project in Huntingdonshire and the Sustainable Parish Energy Partnership (SPEP) in South Cambridgeshire. However, the development of a Green Deal scheme in line with the 'Partnership' model outlined above, will require a significant scale-up of existing energy efficiency activity and the dedication of continued and additional council resources.



10.2 The 'Partnership' delivery model involves Cambridgeshire's public and community sectors delivering key elements of the Green Deal value chain, particularly in terms of generating customers for the Green Deal Provider/s. During negotiations with a Green Deal Provider partner, or partners, the public sector may therefore be able to secure a revenue stream related to the use of the county brand and the generation of leads. This revenue stream could take the form of a referral fee that is paid by the Green Deal Provider/s for each successful lead or customer that the Cambridgeshire programme generates.

10.3 This revenue stream may be significant enough to cover the cost of local authority resources required to run the scheme. The total Green Deal investment opportunity in Cambridgeshire is estimated at £830 Million. 10% of this total potential (i.e. £83 Million) could be considered a realistic (and not too ambitious) market opportunity for local authorities and local business to target in the short to medium term. If Cambridgeshire's local authorities could in turn secure 5% of the value of this market through a referral fee process then approximately £4 million would be available to cover their resourcing costs. Assuming a Green Deal programme runs from 2014 to 2020, then the annual budget available to Cambridgeshire local authorities would amount to £0.6 million per year. However, if a significant proportion of Cambridgeshire's residents were to choose alternative Green Deal Providers who were not part of the branded scheme, then the turnover of the council branded scheme would be smaller and the potential revenue stream for covering local authority costs would also be less.

## **11. Cambridgeshire's heritage buildings are likely to require specialist contractors**

11.1 Cambridgeshire has a significant number of heritage buildings which will typically require specialist knowledge for the installation of energy efficiency measures.

11.2 The county's heritage building stock needs to be assessed in detail to document the key archetypes, understand the main issues and to identify the key retrofit solutions.

11.3 The Retrofit Cambridge project is already assessing the low carbon retrofit options for heritage buildings. This initiative provides a useful platform for taking forward the analysis of the retrofit solutions for the heritage building stock.

## **12. A strategy is needed to attract ECO affordable warmth funding for homes at risk of fuel poverty**

- 12.1 Fuel poor households are generally not suitable for Green Deal finance as they are likely to be under-heating their home so as to lower their energy bill, and will therefore not be able to afford Green Deal repayments.
- 12.2 ECO Affordable Warmth funding is available for low income households (with eligibility based on benefit entitlement and tax credits) and low income areas, but the ECO funding is limited and there are a lot of fuel poor households who are not eligible for this funding anyway.
- 12.3 Government has specified that 15% of the Carbon Saving Communities Obligation should be targeted at rural communities (in settlements with a population size under 10,000). Cambridgeshire should take advantage of this opportunity to help energy suppliers meet this rural element of their Obligation.
- 12.4 Cambridgeshire needs to maximise its access to ECO funding by identifying the eligible households (and particularly the eligible rural households) and making it easy for energy supply companies to target their ECO funding in the county. Cambridgeshire needs to prepare for the ECO 'brokerage' process, to secure the best deals possible from energy companies.
- 12.5 Cambridgeshire may need to develop an 'Affordable Warmth Fund' to support fuel poor households who are not eligible for ECO.
- 12.6 Cambridgeshire needs need to develop a strategy for an affordable warmth programme to make it easy for energy suppliers to target ECO funding in the county.
- 12.7 The development of the energy efficiency delivery programme for Cambridgeshire will need to consider the generation of leads for ECO related installations in the same way as for Green Deal installations.

### **13. Dealing with non-domestic properties**

- 13.1 The implementation of the Green Deal mechanism in non-domestic buildings has had less attention than for housing. The jury is currently out on how well the Green Deal will suit the characteristics of the non-domestic sector and the likely market response. Nonetheless, in principle the Green Deal provides an excellent opportunity to help non-domestic customers improve energy efficiency. Customers could include public buildings, community buildings, commercial landlords, as well as tenants for rented buildings who will also be able to access Green Deal with their landlords consent.
- 13.2 The Green Deal could be a good means of landlords meeting the legal requirement for all rented properties to be brought up to an Energy Performance Certificate 'E' rating by



2018. The Green Deal could also help overcome the ‘split incentive’ in the rented sector between landlord and tenant.

13.3 Green Deal finance could be used in Council owned property as part of a strategic approach to property asset management and refurbishment. It may be that Green Deal offers valuable finance for much needed improvements. Alternatively, financing these measures internally could yield valuable returns which keep profits local.

13.4 Community buildings and SMEs could also benefit from Green Deal finance, although the relatively small energy consumption of these buildings may reduce the Golden Rule potential. In addition, the Green Deal marketing challenge for SMEs is considerable.

#### **14. Cambridgeshire’s local authorities need to act swiftly to develop and implement an action plan to prepare for the successful local delivery of Green Deal and ECO**

14.1 The Green Deal launch date of 1<sup>st</sup> October 2012 is fast approaching. During August the first round of companies have formally applied to become Green Deal Providers. These Green Deal Providers are already developing partnership relationships with local authorities in preparation for the first Green Deal projects going live from January 2013 when Green Deal finance is expected to become available.

14.2 The Cambridgeshire local authorities will need to show leadership – only the public sector can provide the coordination required to get a local energy efficiency scheme off the ground.

14.3 As Cambridgeshire’s public sector has limited resources of its own to invest in local Green Deal delivery, it will be essential to create conditions to harness private sector investment into the county, particularly to cover the costs of marketing and managing a high profile, high turnover Green Deal programme.

14.4 The local authorities will need to continue to engage with the Green Deal Providers (who have been active in this project) in the design of the delivery framework to ensure that it meets their needs and adequately incentivises them to invest in Cambridgeshire.

14.5 The local authorities will need to continue to involve local community groups, voluntary organisations and local businesses in the design of the delivery framework to ensure it has their buy-in and is designed to meet their needs.

14.6 In order to get onto the front foot, a carefully scheduled, but swiftly paced, integrated programme of actions is urgently needed:

- **Inter- and intra-local authority decision-making** – all local authorities to proceed with internal decision-making processes so as to develop an agreed shared course of action for next steps by end of October 2012.



- **Hold informal market testing exercise with Green Deal Providers** - prior to holding a formal procurement process, undertake an informal 'market testing' exercise with a cross section of Green Deal Providers to gage their response to the partnership model and establish what they are willing to put on the table. October 2012.
- **Procurement of Green Deal Provider[s]** - establish a committed local authority managed procurement schedule to commission a formal working arrangement with a Green Deal Provider or Providers (including agreement on resourcing requirements, predominantly officer time). Procurement exercise to run from November 2012 to April 2013.
- **Business plan of delivery programme** – develop the business plan for the preferred delivery programme in conjunction with the Green Deal Provider/s partner and key local community stakeholders. May-July 2013.
- **Strategy for attracting ECO funding into Cambridgeshire** – develop a strategy to attract ECO into the county including identifying households that meet the ECO affordable warmth criteria, identifying rural households that meet the ECO affordable warmth eligibility criteria who could benefit from the ECO's focus on rural households and compiling data on the number and location of solid walled stock and hard to treat cavities across the county. Oct 2012 – December 2012.
- **Communication strategy** - develop the Green Deal communication strategy for Cambridgeshire including interim messages/ approach for the next year and the branding for the longer term delivery programme. Oct 2012 – August 2013.
- **Capacity-building** – compile a strategy to develop the capacity of local supply chain and community groups to delivery of Green Deal including signposting/ training support for SMEs and community groups. July-August 2013.
- **Launch of scheme** – set target date for the launch of the full single-brand 'Cambridgeshire community connected' Green Deal scheme. September 2013.



# 1. Introduction to the Green Deal and ECO

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## 1.1 Establishing the community connection for Green Deal

This project has been led by Verco with CAG Consultants and Public-i undertaking the stakeholder analysis and management and the workshop facilitation. The Cambridgeshire Green Deal Community Connection project has been managed by South Cambridgeshire District Council on behalf of all the local authorities in Cambridgeshire and funded through the Climate Change Skills Fund which is managed by Sustainability East on behalf of Improvement East. The project has aimed to bring together interested public, community, voluntary and local business players and potential Green Deal Provider businesses to prepare for the delivery of the Green Deal in Cambridgeshire.

The Green Deal has huge potential in terms of stimulating energy efficiency improvements in the building stock that will:

- Save energy and reduce fuel bills for local residents and organisations
- Cut carbon emissions
- Create local jobs and boost local economies

However, it is unlikely to deliver this potential without concerted effort and co-operation to develop both customer demand and effective supply chains.

This 'Green Deal community connection' project has estimated the size of the potential Green Deal market within Cambridgeshire, evaluated the various local delivery options and has sought to develop a collaborative framework for Green Deal delivery which encompasses all potential Green Deal players in the county.

## 1.2 A national policy framework for investing in energy efficiency

The Green Deal is the Government's flagship energy efficiency policy which is due to be launched in October 2012. The Green Deal is intended to catalyse the energy efficiency market place, for both the domestic and non-domestic sectors, by providing low cost, long-term finance for energy efficiency investments. At the heart of the Green Deal is a new 'pay-as-you-save' financing mechanism where no up-front cash investment is required from the householder and instead works are paid for out of savings on the energy bill. This Green Deal charge will be linked to the property rather than the individual so that the charge remains with the improved home rather than acting as a personal debt.

The key characteristics of the Green Deal are:

- Upfront finance will be provided for energy efficiency measures which is paid back over a long time period;
- Repayments are tied to the property (electricity meter point) rather than the occupier or owner;
- Repayments are paid back through the energy bill (specifically the electricity bill) by the bill payer;
- Green Deal investment is underpinned by the 'Golden Rule' principle whereby the annual repayment must be equal to or less than the energy bill saving;
- All repayments need to be made within the lifetime of the measure or within a 25 year period;
- The Golden Rule can be applied to individual measures or packages of measures.



The Green Deal will be closely linked to the Energy Company Obligation (ECO) which will replace the existing Carbon Emissions Reduction Target (CERT) and Community Energy Saving Programme (CESP) which both expire at the end of 2012. There is a slight delay in the development of the ECO policy and it is now unlikely to be ready until December 2012 at the earliest. The ECO sets targets for energy companies to install energy efficiency measures (and corresponding carbon reductions) in either hard-to-treat homes or those occupied by low income and vulnerable households. The policy is set for a ten year period from 2012 – 2022 and will require an annual investment of £1.3 billion by energy suppliers. As with CERT and CESP, the cost of delivering ECO will be passed on to household energy bills.

There are three different elements of funding available under the Energy Company Obligation (ECO):

- **Affordable Warmth Obligation.** This will be available to low income households in the private rented and owner occupied sector. Eligible households will be similar to those in the current Carbon Emissions Reduction Target (CERT) 'Super Priority Group'<sup>1</sup>. Any measure will be eligible for support if it reduces the notional cost of heating the property. The majority of measures installed are expected to be loft insulation, cavity wall insulation, and heating systems. It is expected that energy companies will make such measures free of charge to eligible households. The Affordable Warmth Obligation represents 25% of the energy companies' overall ECO target, representing around £325 million/yr.
- **Carbon Saving Obligation.** This will be available to all households, regardless of income or tenure, supporting measures that will typically need subsidy under Green Deal including solid wall insulation (including internal and external) as well as non-standard cavity wall insulation. District heating will also be eligible providing connections are delivered as part of a package that also includes solid wall or non-standard cavity insulation. The funding will be used to provide 'top up' funding for Green Deal Plans, such that the overall package of measures is capable of meeting the Golden Rule. The Carbon Saving Obligation represents 75% of the energy companies' ECO target, representing around £975 million/yr.
- **Carbon Saving Communities Obligation.** This will be targeting low-income communities defined using the Index of Multiple Deprivation and will support measures including solid wall, cavity wall and loft insulation. Eligible areas are defined based on the bottom 15% of Lower Super Output Areas from the Index of Multiple Deprivation. Within this, 15% of the overall target must be delivered to rural, low income households in settlements with a population size under 10,000. To qualify for this assistance a rural household should be in receipt of a qualifying benefit or tax credit under the ECO Affordable Warmth eligibility criteria. Eligible measures will include cavity wall, loft and solid wall insulation. The level of the Carbon Saving Communities Obligation will be set at 20% of the overall Carbon Saving Obligation, representing around £190m per year.

The carbon saving elements of ECO will have a key role in subsidising Green Deal investments for the more expensive energy efficiency measures. Some householders may be able to access a combination of ECO and Green Deal funding, for a package of measures some of which meet the Golden Rule principle and some of which meet ECO criteria. The local authorities and local

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<sup>1</sup> Eligible households will include households eligible for child tax credit with income under £15,860, state pension credit, income-based jobseekers allowance, income support, income-related employment and support allowance, and working tax credit with a household income.



community will need to be proactive in harnessing ECO funding in order to ensure that Cambridgeshire benefits from this ECO subsidy so that more expensive measures such as solid wall insulation can be financed in the county.

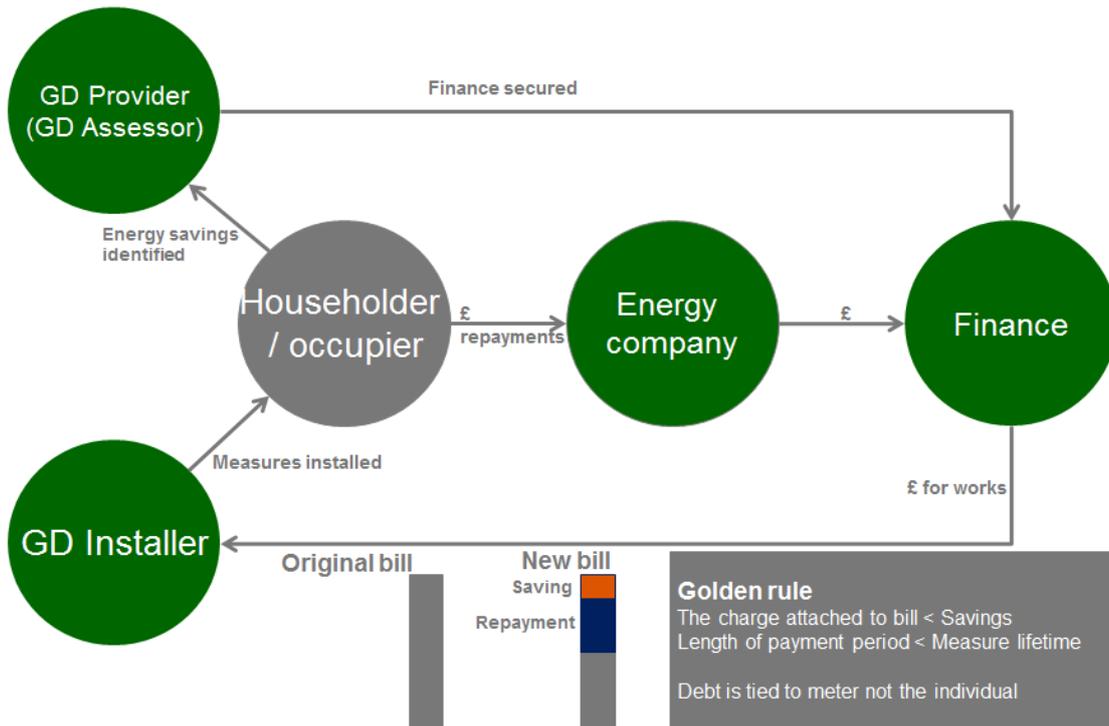
### 1.3 How the Green Deal will work

#### 1.3.1 The key parties in the Green Deal

The Government has developed a new legislative framework for the Green Deal market which specifies distinct roles and requirements for businesses operating under the Green Deal:

- **Green Deal Advisor** - undertakes a Green Deal assessment of properties to assess whether it can benefit from Green Deal finance;
- **Green Deal investor** - puts finance into Green Deal (for e.g. Green Deal Finance Company, banks or local authorities);
- **Green Deal Provider** - provides finance, produces Green Deal Plan, oversees installations and provides on-going contact point for customers;
- **Green Deal Installers** – all Green Deal installations will have to be undertaken by certified Green Deal Installers;
- **ECO brokers** - a set percentage of ECO will have to be allocated through a brokerage system (rather than directly by energy suppliers)
- **Green Deal Oversight Body** - set up by Government to oversee the GD and to ensure that all processes and standards are met

The Green Deal Advisor, Provider and Installer will need to follow strict Government codes of practice and will have to be formally accredited as meeting these industry requirements. Figure 1 below illustrates how these key players will provide a Green Deal service to householders who will then benefit from a lower energy bill whilst making annual repayments through their electricity bill. The key actor is the Green Deal Provider who is responsible for delivering the Green Deal service to the customer, arranging finance, arranging all the energy efficiency works, providing consumer protections such as warranties, and meeting on-going obligations such as resolving customer complaints.



**Figure 1: How the Green Deal principle works**

A wide range of energy efficiency measures will be eligible for the Green Deal<sup>2</sup> and eligibility will be determined on a case-by-case basis through compliance with the Golden Rule (annual Green Deal repayment charge must be lower than the expected annual bill savings). Green Deal energy efficiency measures are likely to include condensing boilers, heating controls, loft insulation, cavity wall insulation, air tightness measures, solid wall insulation, floor insulation and triple glazing. The more cost-effective measures may need to cross-subsidise the higher cost measures.

### 1.3.2 The Green Deal process

The key stages in the Green Deal delivery process are outlined in Figure 2 below.



<sup>2</sup> See appendix for full list.



## Figure 2: Key steps in the Green Deal journey

- firstly, accredited Green Deal Advisors will need to undertake a Green Deal Assessment as to the potential for installing approved cost effective energy efficiency measures. This will be accompanied by an occupancy assessment;
- secondly, accredited Green Deal Providers offer packages of these approved measures to the customer (including finance and installation);
- thirdly, the customer chooses a package from a Provider and signs up to a Green Deal Plan which binds them and future occupiers of the property to make the Green Deal loan payments;
- fourthly, the work is carried out by accredited installers, and;
- finally, payments are collected through the property's electricity bill and subsequently passed back to the finance provider (investor)
- Green Deal Providers are required to provide some degree of on-going customer support to ensure the performance of the installed measures.

Further detail on different aspects of the Green Deal and ECO and how they will work are available on the website of the Department of Energy & Climate Change:

[http://www.decc.gov.uk/en/content/cms/tackling/green\\_deal/green\\_deal.aspx](http://www.decc.gov.uk/en/content/cms/tackling/green_deal/green_deal.aspx)

### 1.4 Potential benefits of the Green Deal for the local economy

In its report *Building a Greener Britain*, the Federation of Master Builders estimates that the market for green refurbishment could be worth between £3.5 billion and £6.5 billion per year to the UK, over and above current spending on household repair, maintenance and improvement. Typically refurbishing existing homes is more employment intensive, requiring more labour, and less materials, than the construction of new buildings. Labour can typically be sourced locally (while materials are often imported from elsewhere). Measures like solid wall insulation and micro generation are particularly beneficial to job creation supporting many more jobs per installation than lower cost measures such as cavity or loft insulation. There are a number of local businesses in Cambridgeshire which are already active in the energy efficiency industry, including Domestic Energy Assessors, insulation installers and heating engineers. These businesses are well placed to benefit from the Green Deal and a key objective of the 'Green Deal Community Connection' project is to establish processes for ensuring that local contractors are involved in the local delivery of the Green Deal in Cambridgeshire.

## 2. Green Deal and ECO potential in Cambridgeshire

### 2.1 Breaking down Cambridgeshire's building stock

#### 2.1.1 Identifying the different elements of the stock

Although most buildings are likely to have some scope for energy efficiency improvements, not all these improvement measures will meet the Golden Rule requirement. The types of measures will also vary across different types of building and the uptake of Green Deal is likely to vary across different types and tenures. Therefore an assessment of Green Deal potential in Cambridgeshire is in essence an assessment of the building stock breakdown, in terms of scale, type, tenure and condition.

Figure 3 provides an indication of the different types of building stock within Cambridgeshire, showing the split between domestic (residential) and non-domestic stock, and the break-down of non-domestic stock into university, commercial and public sector buildings.

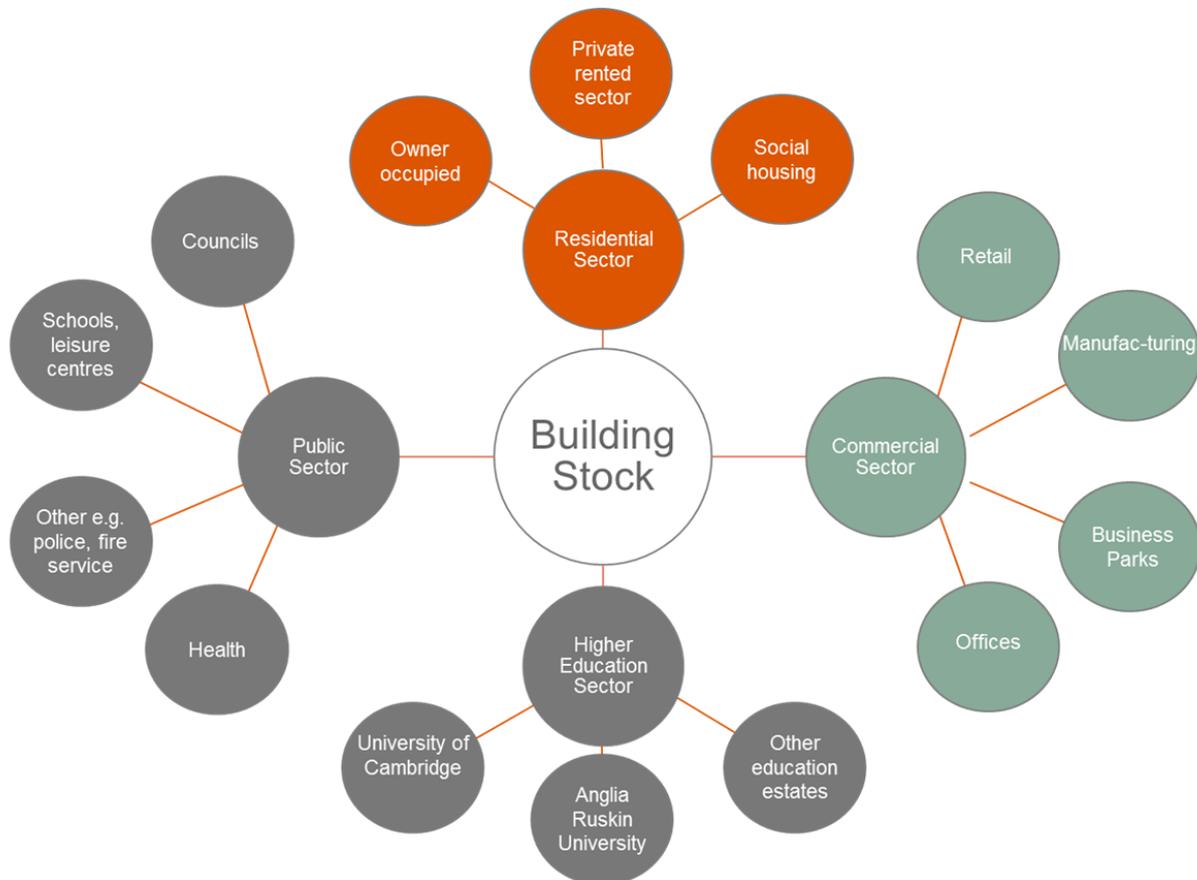
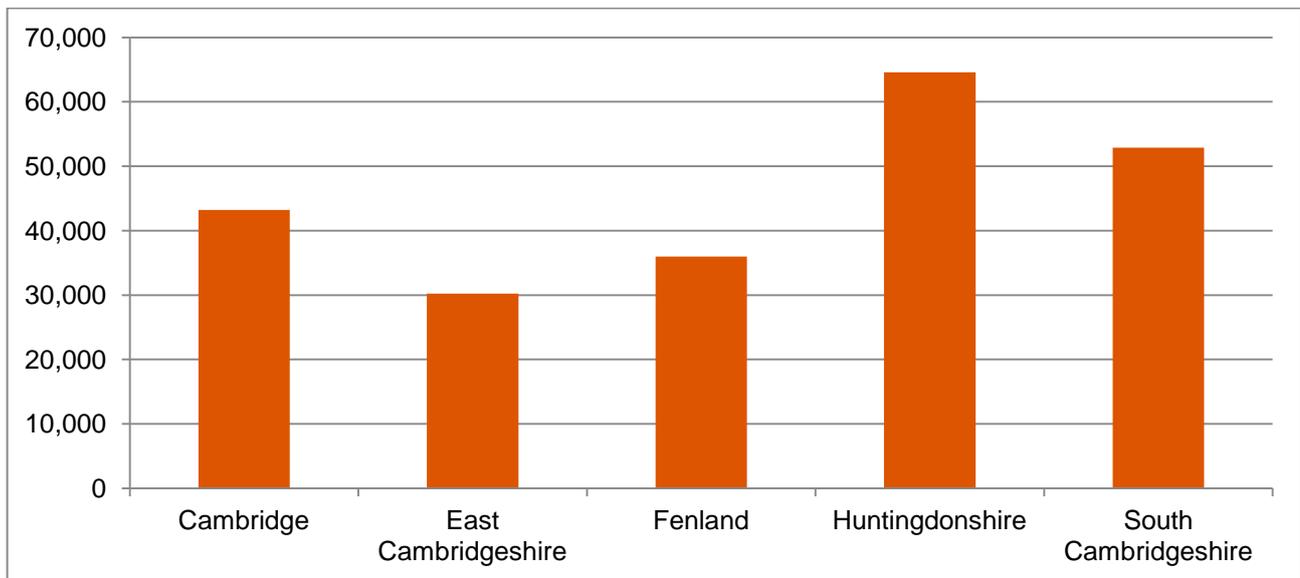


Figure 3: Understanding the Green Deal potential – breaking down the building stock

## 2.1.2 Breakdown of housing stock across Cambridgeshire

Cambridgeshire has a combined stock of 239,000 buildings, consisting of 227,000 homes and 12,000 non-domestic buildings. South Cambridgeshire and Huntingdonshire together have more than 50% of the housing stock in Cambridgeshire. Cambridge has the third largest share of the total stock with 43,000 dwellings (see Figure 4).

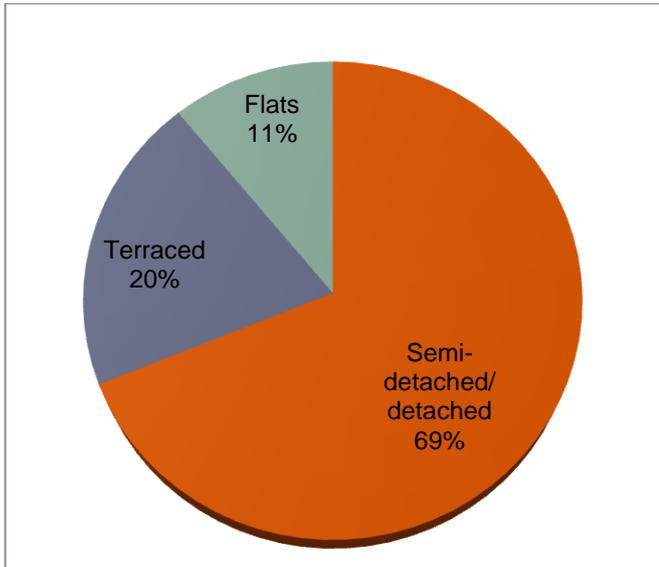
Figure 4 Total housing stock broken down by district/city councils



### 2.1.2.1 Housing stock by type

Figure 5 shows the breakdown of Cambridgeshire's housing stock by typology. Outside of Cambridge, Cambridgeshire is a relatively rural county of small towns and villages, and therefore semi-detached and detached houses dominate the housing stock. As an illustration of this, semi-detached and detached housing constitutes 69% of the overall Cambridgeshire housing stock as opposed to only 40% of Cambridge's housing. This has consequences for Green Deal opportunities as heating demand and corresponding energy bills tend to be higher detached and semi-detached properties due to greater exposed wall areas and larger size.

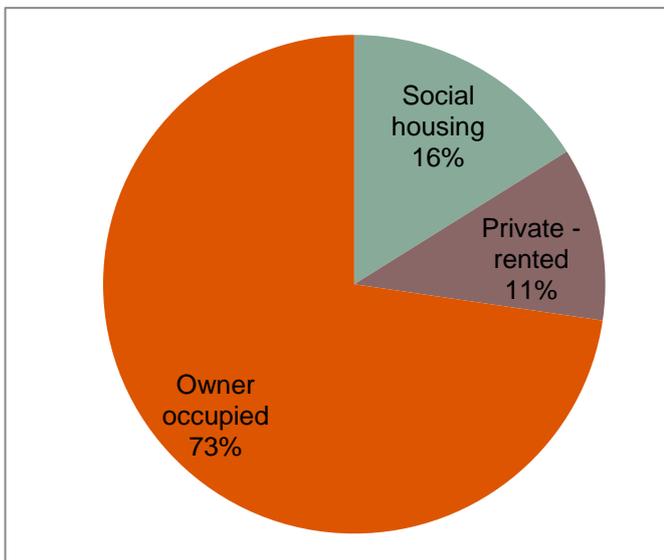
Figure 5 Housing stock broken down by type



### 2.1.2.2 Housing stock by tenure

More than 70% of the housing stock in Cambridgeshire consists of owner-occupied dwellings. Social housing forms 16% of the stock which are properties with relatively better levels of energy efficiency for which many of the cost-effective measures have already been installed. Therefore, Green Deal potential is generally higher in private housing where heating demand is typically higher and more energy efficiency measures can work within the Golden Rule.

Figure 6 Housing stock broken down by tenure



### 2.1.3 Breakdown of non-domestic stock across Cambridgeshire

The non-domestic building stock consists of a huge variety of building types ranging from town halls to restaurants to science labs to storage depots to office blocks. In order to structure the analysis of



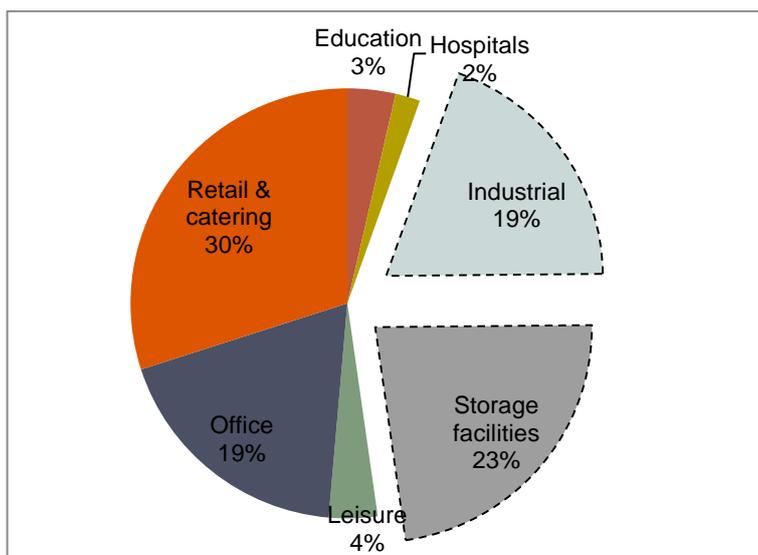
energy efficiency potential in the non-domestic sector we have grouped the building stock into seven main categories:

- Retail and catering
- Offices
- Education buildings
- Health buildings
- Leisure
- Industrial
- Storage facilities

This is clearly a substantial oversimplification of the non-domestic stock but it enables an analysis of general building types and building uses, and provides the basis for estimating the Green Deal potential within the non-domestic sector. All the non-domestic buildings in Cambridgeshire have been allocated to one of these seven main categories, and for example town hall buildings are a sub-category of 'offices' whereas hotels and restaurants are a sub-category of retail and catering. The breakdown of the whole Cambridgeshire non-domestic building stock into these seven categories has been possible through taking MasterMap data of the footprint of all buildings in the county and then cross referencing this with usage categories for all buildings from Valuation Office Agency (VOA) data.

Figure 7 illustrates the breakdown across these categories by number of buildings. The 'retail & catering' and 'office' categories represent almost half of the total non-domestic stock in Cambridgeshire and are therefore likely to be the two significant categories with Green Deal potential. Although industrial and storage facilities also constitute a large share of non-domestic buildings, the Green Deal policy has mainly been designed for energy efficiency measures related to space heating, water heating and building services. For this reason, industrial facilities and their large process energy needs, are unlikely to be a target market for Green Deal Providers. We have therefore removed all industrial and storage facilities from our analysis of Green Deal potential in the county.

**Figure 7 Breakdown of non-domestic stock by number of buildings**



## 2.2 Overall approach to modelling Green Deal potential

### 2.2.1 Domestic sector

The key steps in estimating the county's Green Deal potential are outlined in Figure 8 below and include:

- Assessing the current energy performance of the stock by defining energy archetypes (e.g. heating fuel, wall construction, age) and applying Energy Performance Certificate (EPC) scores to these archetypes;
- Modelling suitable energy efficiency packages for these archetypes using SAP software; and,
- Assessing which if the energy efficiency measures in these packages would meet the Golden Rule (i.e. modelling which energy efficiency measures are 'cost-effective').

Each of these steps are outlined in more detail below.

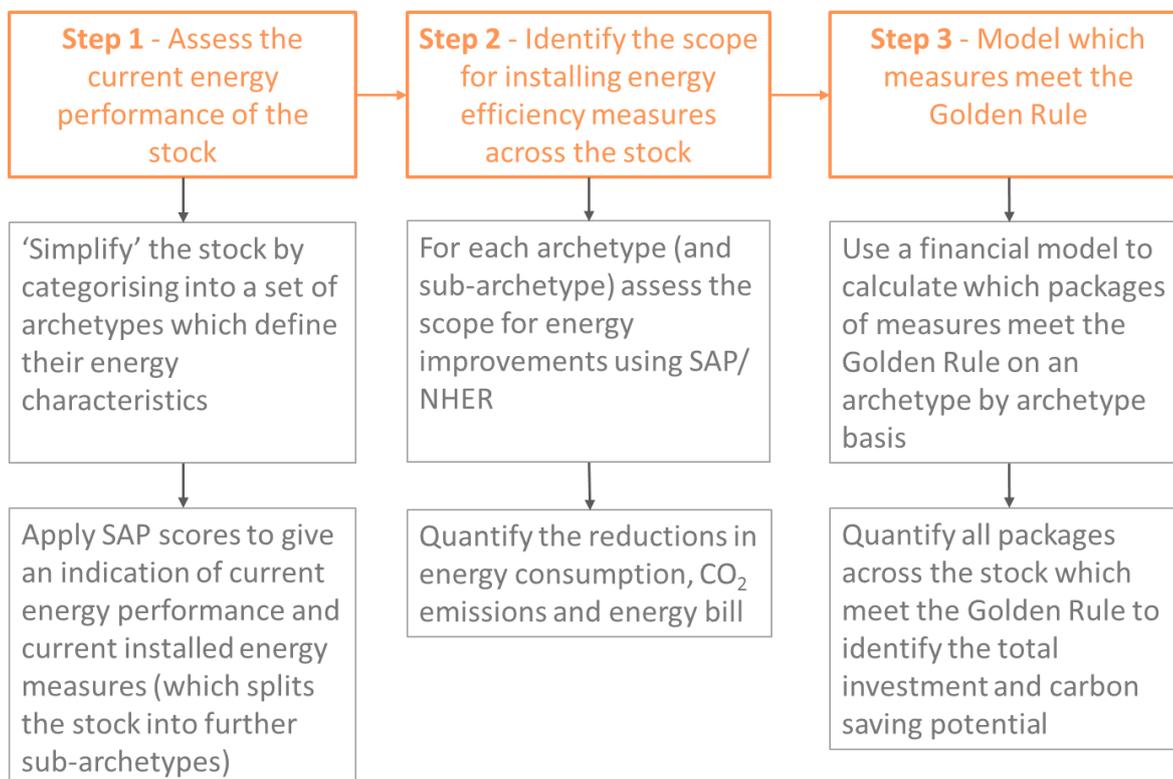


Figure 8: Approach to modelling Green Deal potential in the domestic stock

#### 2.2.1.1 Classifying Cambridgeshire's housing stock into energy archetypes

For the analysis, Cambridgeshire's housing stock has been classified into energy archetypes based on the dwelling type (e.g. detached/semi-detached, terrace, flats), wall construction and heating fuel. For each archetype, sub-archetypes have been defined to cover a range of starting energy efficiency performance levels. The data for the parameters has been sourced from the Office for National Statistics<sup>3</sup> and the English Housing Survey (EHS)<sup>4</sup>. The number and type of dwellings across

<sup>3</sup> Office for National Statistics, Dataset: Accommodation type – household spaces (UV56)

<sup>4</sup> Communities and Local Government, English Housing Survey (2010)

Cambridgeshire (e.g. detached/semi-detached, terrace, flats) has been taken directly from the Office of National Statistics whereas wall construction and heating fuel characteristics have been estimated based on East of England trends outlined in the English Housing Survey. Table 1 presents the main archetypes that have been used to analyse the scope for energy efficiency in the county.

**Table 1 Energy archetypes used to model Green Deal potential in Cambridgeshire**

Name	Age and construction	Fuel	Size	Wall construction
101	Pre 1980	Gas	Terraced	Solid
102	Pre 1980	Gas	Semi / Det	Solid
103	Pre 1980	Gas	Flats	Solid
104	Pre 1980	Electricity	Terraced	Solid
105	Pre 1980	Electricity	Semi / Det	Solid
106	Pre 1980	Electricity	Flats	Solid
107	Pre 1980/1980 onwards	Gas	Terraced	Cavity
108	Pre 1980/1980 onwards	Gas	Semi / Det	Cavity
109	Pre 1980/1980 onwards	Gas	Flats	Cavity
110	Pre 1980/1980 onwards	Electricity	Terraced	Cavity
111	Pre 1980/1980 onwards	Electricity	Semi / Det	Cavity
112	Pre 1980/1980 onwards	Electricity	Flats	Cavity

### 2.2.1.2 Estimating the energy efficiency performance of the building stock

The distribution of EPC scores across these house archetypes in Cambridgeshire has been estimated by applying sample EPC scores for the East of England from the English Housing Survey<sup>5</sup>. These EPC scores suggest that flats and terraced housing have higher energy efficiency levels than semi-detached and detached houses. In fact, 61% of flats have an EPC rating of C or higher whereas for semi-detached and detached houses this percentage drops down to 8%. Figure 9 presents the energy performance of housing by archetype and illustrates that the typical house type in Cambridgeshire is estimated to be a semi-detached/ detached house with gas heating and cavity walls.

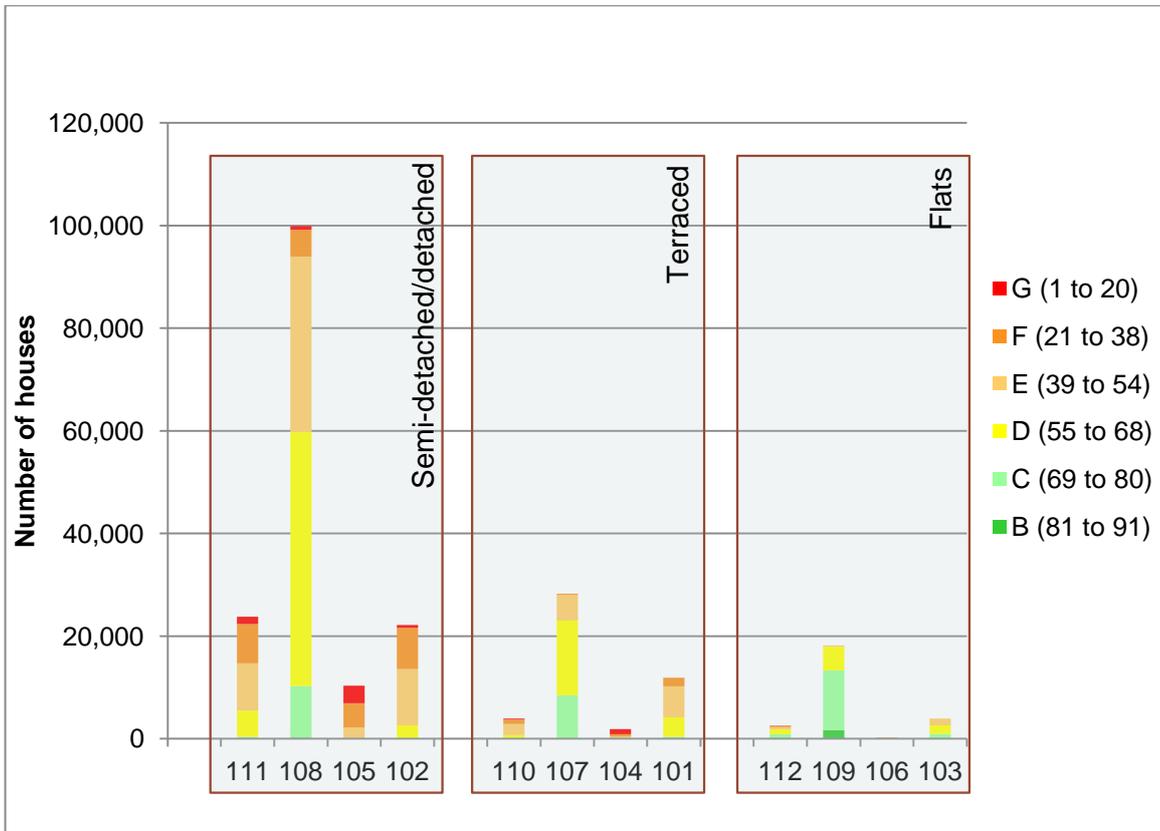
This trend of higher typical EPC scores in flats and terraced housing than in detached and semi-detached houses has significant implications for the distribution of energy performance across Cambridgeshire - 27% of Cambridge's housing is estimated to have an EPC rating of C or higher compared to only 15% for housing in the districts.

Consequently, semi-detached and detached houses (covering around 70% of the total housing stock in Cambridgeshire) which have a higher incidence in the districts rather than Cambridge, are likely to have a higher potential for energy efficiency improvements and therefore Green Deal investment.

<sup>5</sup> Communities and Local Government, English Housing Survey (2010)



Figure 9 Distribution of EPC scores for different house archetypes in Cambridgeshire (estimated)



### 2.2.1.3 Modelling energy efficiency measures for different archetypes

Energy efficiency modelling has then been carried out for each of the archetypes and sub-archetypes using SAP 2005 software. The sequence of measures has been optimised to ensure that the most cost-effective measures are installed first; although consideration has also been given to the hassle factor of installing a measure. The predicted energy savings are based on standard occupancy and heating patterns, and do not include an allowance for any potential comfort take<sup>6</sup>. The Green Deal modelling software that is currently being developed by the Government will take the same approach of standardised occupancy and heating patterns.

### 2.2.1.4 Modelling energy efficiency measures that meet the Golden Rule

The energy efficiency measures have then been fed through a financial model which identifies the package of measures that would satisfy the Green Deal 'Golden Rule' for each of the archetypes and sub-archetypes. The 'Golden Rule' requires that the Green Deal annual payment should not exceed the projected associated cost savings from energy efficiency measures for the duration of the Green Deal Finance arrangement. Discounted cash flow analysis was used to generate the net present value (NPV) of the investment taking into account the capital cost for work packages and the value of the energy savings over a 20 year repayment term. The capital costs are based on the EST Housing

<sup>6</sup> Comfort take refers to the recognised phenomenon of some householders heating their house to higher temperatures or for longer periods following the installation of an improved boiler or heating system.



Energy Model<sup>7</sup> and Verco's experience of helping clients implement energy efficiency measures. These are the total installed costs for the measures.

For the purpose of this study, it has been assumed that 90% of the value of energy savings is used to pay back the capital investment with 10% going to the householder through reduced bills. The analysis is based on a private sector cost of capital of 7%, and no energy price inflation is factored into the Golden Rule calculations, meaning that the householder retains all the benefits of energy bills rising more slowly within an energy efficient home. The distribution of each archetype and sub-archetype in Cambridgeshire has been used as the basis to extrapolate the dwelling level results to the wider housing stock.

### **2.2.1.5 Consideration of conservation areas**

Consideration has also been given to conservation areas which will restrict, and increase the cost of, the installation of certain energy efficiency measures and hence reduce Green Deal potential. Based on LSOA<sup>8</sup> level data provided by individual councils, around 15% of the buildings in Cambridgeshire fall under a conservation area and 20% of these buildings are located in Cambridge, equivalent to one third of Cambridge's building stock.

Installation of Green Deal measures in these areas will be challenging due to more stringent planning requirements which will place additional time and cost implications on Green Deal installations. Fabric and glazing measures are particularly likely to face restrictions or additional costs whereas heating system improvements may be less affected. To incorporate these increased costs and restrictions, the modelled Green Deal potential in conservation areas has been reduced by 80% to reflect the fact that only heating measures would be unaffected. Figure 10 below presents the map of Cambridgeshire highlighting the location of conservation areas across the county. Conservation areas are mainly located in Cambridge, Huntingdon, St Neots and Ely which lowers the Green Deal potential in town centres compared to other rural areas.

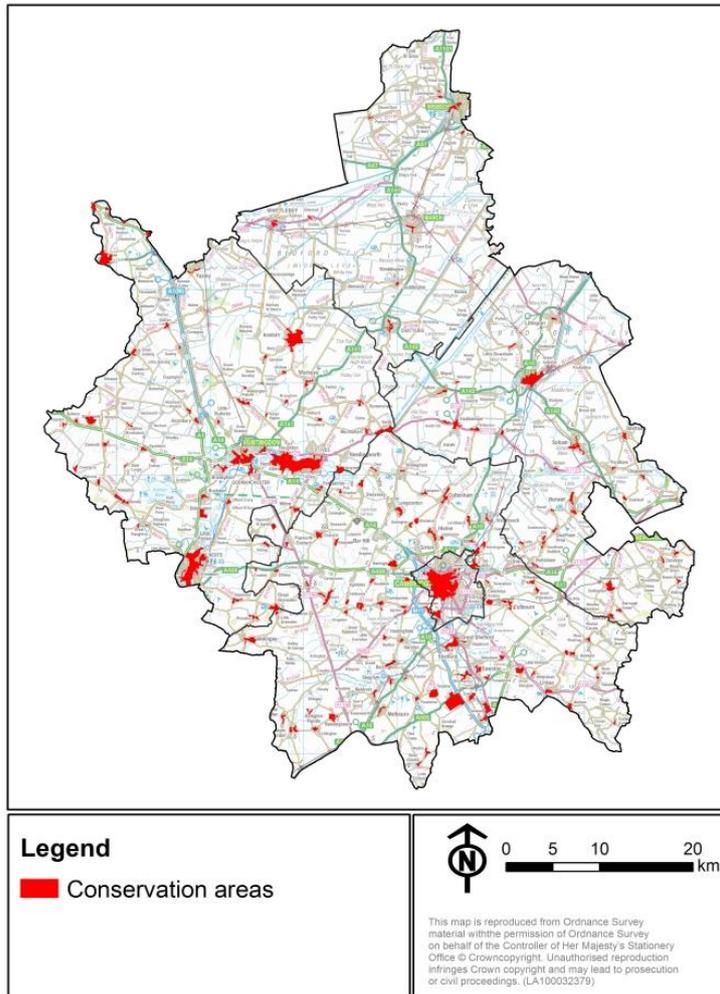
**Figure 10 Map of conservation areas in Cambridgeshire**

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<sup>7</sup> EST Housing Energy Model assumptions: [www.energysavingtrust.org.uk/uk/Publications2/Local-authorities/Strategy-development/The-Energy-Saving-Trust-Housing-Energy-Model-assumptions](http://www.energysavingtrust.org.uk/uk/Publications2/Local-authorities/Strategy-development/The-Energy-Saving-Trust-Housing-Energy-Model-assumptions)

<sup>8</sup> Lower Layer Super Output Area (LSOA): Units of geographic boundary developed by the Office for National Statistics which consist of around 1,500 people.

## Conservation areas in Cambridgeshire



### 2.2.2 Scope to increase Green Deal potential through ECO subsidy

To provide an indication of the benefit that ECO subsidy (the Carbon Saving Obligation) could bring in increasing the Green Deal potential amongst more expensive energy efficiency measures, it has been assumed in the modelling that ECO can provide 50% subsidy to cover the cost of solid wall insulation. Channelling ECO funding towards higher cost measures such as solid wall insulation will help reduce the cost of the measure and enable it to work within the Golden Rule.

### 2.2.3 Estimating Green Deal potential in the non-domestic sector

The huge variety of building types and building uses in the non-domestic sector mean that it is not possible to compile a relatively small number of building archetypes for modelling energy efficiency in the way that we have done for housing. We have therefore followed a different methodology for estimating Green Deal potential within the non-domestic sector.

The energy consumption of all non-domestic properties in the ‘retail & catering’, ‘offices’, ‘education’, ‘hospitals’ and ‘leisure’ categories has been modelled by applying CIBSE<sup>9</sup> standard benchmark data on typical energy consumption for these different building types.

The Committee on Climate Change have produced a Marginal Abatement Cost Curve<sup>10</sup> for non-domestic buildings which states that non-domestic buildings can typically reduce their energy consumption and carbon emissions by 18% through the implementation of cost-effective energy efficiency measures. The Golden Rule is in effect a proxy for cost effective energy efficiency measures as only measures which pay for themselves (through energy bill savings) will meet the Golden Rule. We have therefore assumed that 18% of the energy consumption across Cambridgeshire’s non-domestic buildings could be reduced with measures that work within the Golden Rule. We have calculated the total energy savings that an 18% reduction would deliver and the total capital cost associated with investing in energy efficiency measures to deliver this scale of energy savings.

## 2.3 Estimate of Green Deal Potential in Cambridgeshire

### 2.3.1 Overall Green Deal potential within the county

Total Green Deal investment potential in domestic and non-domestic buildings is estimated at around £800 million which would result in annual CO<sub>2</sub> savings of 370,000 tCO<sub>2</sub> corresponding to 13% of Cambridgeshire’s current emissions (not including transport). Table 2 and Table 3 present the investment and carbon saving potential of Green Deal in Cambridgeshire. Huntingdonshire and South Cambridgeshire have the highest Green Deal potential and collectively have more than 50% of the total estimated potential.

**Table 2 Breakdown of total Green Deal investment potential in Cambridgeshire**

District/city council	Investment potential – domestic	Investment potential - non-domestic	Total GD investment potential
Cambridge	£79m	£49m	£128m
East Cambridgeshire	£107m	£10m	£117m
Fenland	£121m	£18m	£138m
Huntingdonshire	£190m	£33m	£223m
South Cambridgeshire	£187m	£35m	£221m
<b>Cambridgeshire</b>	<b>£684m</b>	<b>£146m</b>	<b>£830m</b>

<sup>9</sup> The Chartered Institute of Building Services Engineers: Documents used: TM46 “Energy Benchmarking” (2008) and CIBSE Guide F (2004)

<sup>10</sup> Committee on Climate Change, ‘Building a low-carbon economy – the UK’s contribution to tackling climate change’ (December 2008)



**Table 3 Breakdown of total Green Deal carbon savings potential in Cambridgeshire**

District/city council	Carbon savings potential - domestic (tCO <sub>2</sub> )	Carbon savings potential - non-domestic (tCO <sub>2</sub> )	Total GD carbon savings potential (tCO <sub>2</sub> )
Cambridge	34,095	17,367	51,462
East Cambridgeshire	43,206	8,743	51,950
Fenland	49,036	17,604	66,640
Huntingdonshire	77,325	24,514	101,838
South Cambridgeshire	75,472	20,731	96,203
<b>Cambridgeshire</b>	<b>279,134</b>	<b>88,959</b>	<b>368,093</b>

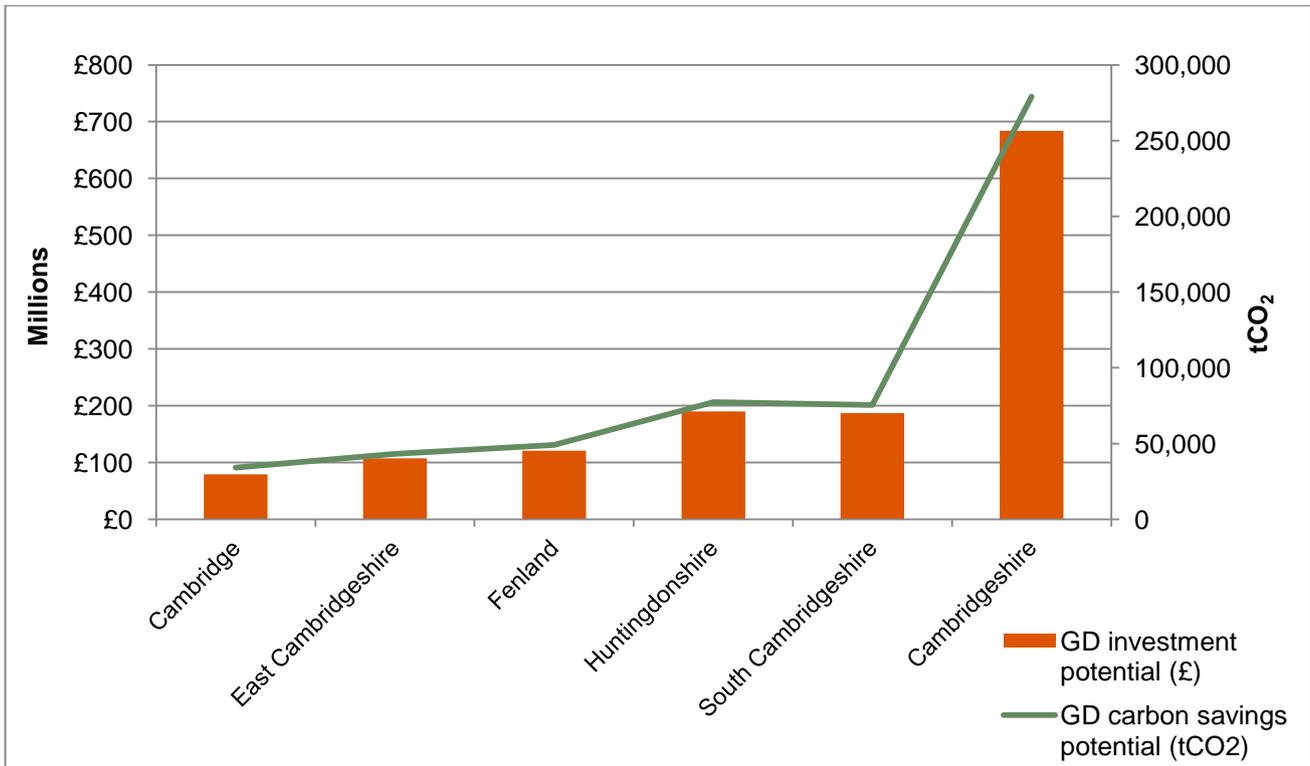
### 2.3.2 Green Deal potential in domestic buildings

#### 2.3.2.1 Green Deal potential by district

Total Green Deal investment potential in Cambridgeshire’s domestic buildings is estimated at £684M. Investment at this scale would lead to annual CO<sub>2</sub> savings of 280,000 tonnes which is equivalent to 10% of Cambridgeshire’s total emissions. Figure 11 illustrates the total Green Deal potential in domestic buildings broken down by each district.



Figure 11 Cambridgeshire Green Deal potential in domestic buildings



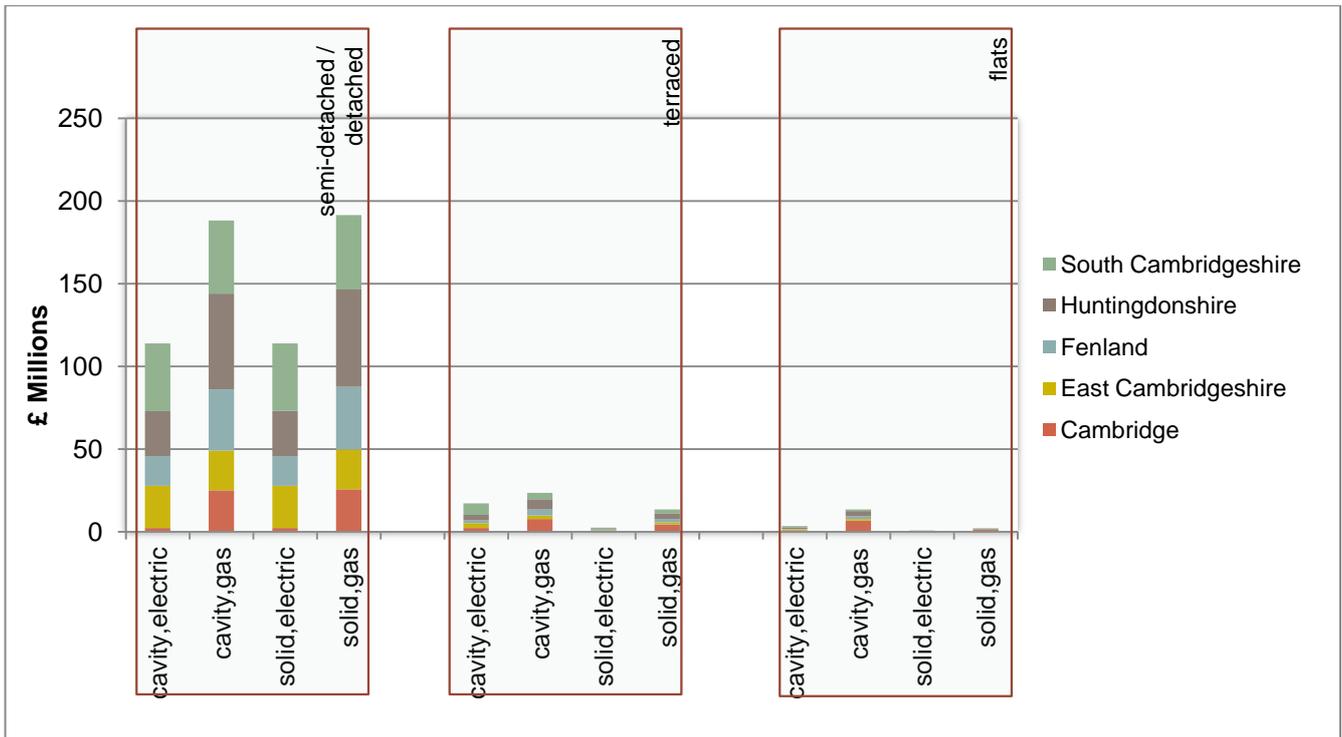
South Cambridgeshire and Cambridgeshire which contain more than 50% of Cambridgeshire’s homes have the highest potential for Green Deal. Cambridge on the other hand has the lowest potential even though it has a higher number of homes than East Cambridgeshire and Fenland. This is due to its higher proportion of flats and terraced houses which have higher EPC scores and lower Green Deal potential than semi-detached and detached houses.

**2.3.2.2 Green Deal potential by archetype**

A significant proportion of this Green Deal potential (89%) is in semi-detached and detached properties which have greater heat loss areas and therefore have greater potential for energy efficiency improvement compared to terraced houses and flats which represent 8% and 3% of the total Green Deal potential respectively. Within semi-detached and detached properties, gas heated-cavity walled properties and gas heated-solid walled properties each had 28% of the total Green Deal potential. This is despite their respective share of the overall housing stock being 44% and 10%, highlighting the greater Green Deal potential of solid walled properties. The breakdown of Green Deal potential by house archetype is presented in Figure 12.



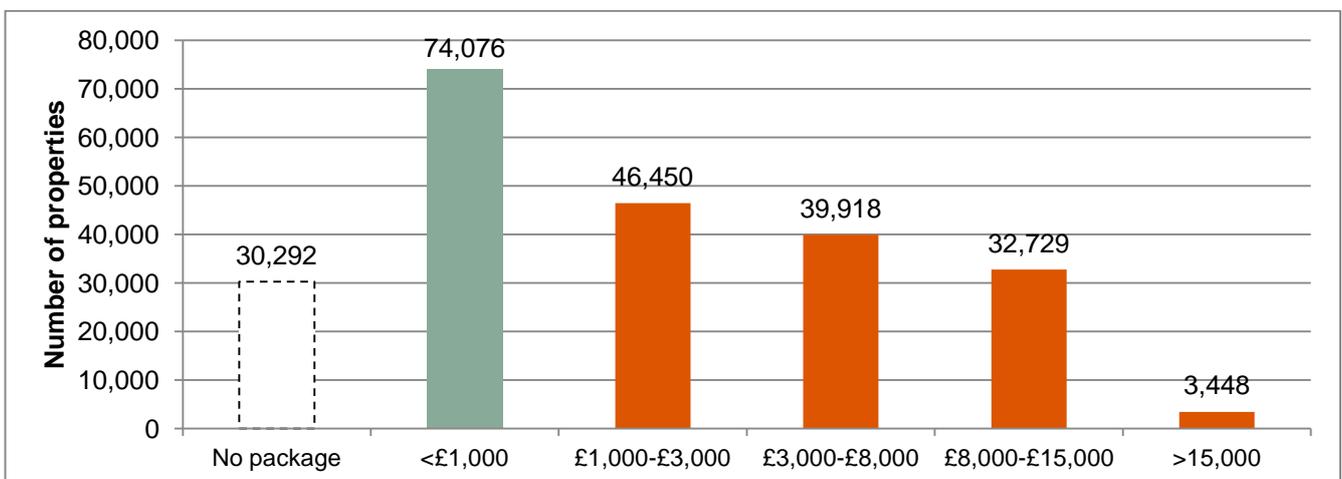
Figure 12 Breakdown of Green Deal potential by archetypes



2.3.2.3 Green Deal potential by scale of investment in each individual home

Figure 13 below presents the breakdown of this Green Deal potential by size of investment package in each individual home. 13% of the housing stock have no packages that work within the Golden Rule. 33% have energy efficiency packages with a value of under £1,000 and may therefore be unsuitable for the Green Deal as the investment level would be small compared to the hassle factor of entering into a Green Deal Plan agreement. 20% of the housing stock have moderate investment potential with package values ranging between £1,000 and £3,000. Finally 34% of the housing stock have higher investment potentials with a package size of more than £3,000.

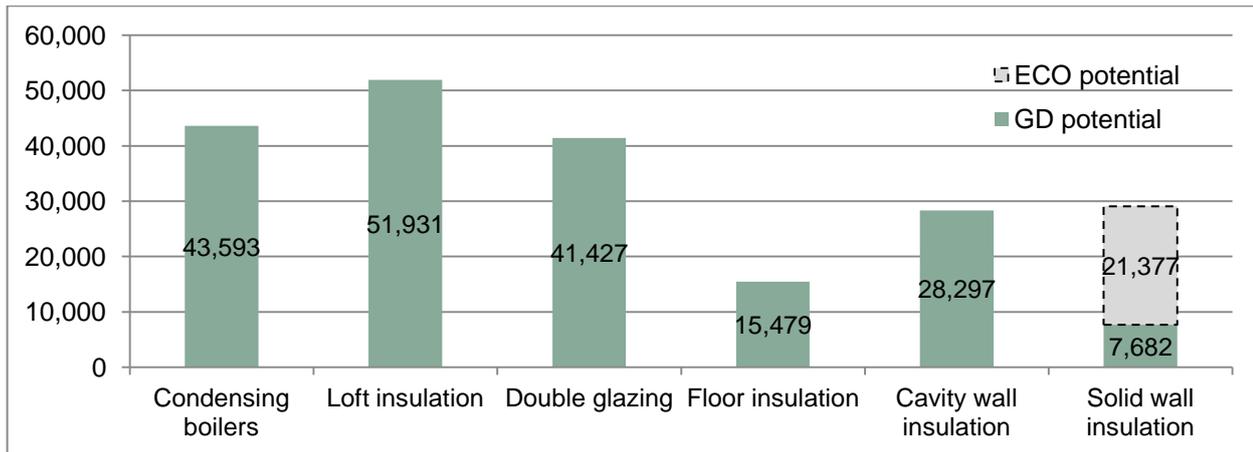
Figure 13 Green Deal potential by size of investment package



### 2.3.2.4 Green Deal potential broken down by measure

Figure 14 below shows the breakdown of the main measures that can be installed under the Green Deal. Loft insulation and loft top-up have the highest potential followed by condensing boilers and double-glazing. Approximately 20% of the housing stock is Green Deal viable for one of these three measures. Solid wall insulation can only be installed in 3% of the housing stock however this rises to 13% once ECO funding is utilised to subsidise the measure.

Figure 14 Breakdown of numbers of installations that could meet the Golden Rule



### 2.3.2.5 Scope to increase Green Deal potential through ECO subsidy

Figure 14 and Table 4 estimate the impact that ECO subsidy could have on solid wall insulation in Cambridgeshire. Without ECO subsidy, the installation of solid wall insulation (SWI) only meets the requirements of the Golden Rule in 14% of solid walled properties (estimated at 3% of the overall housing stock in Cambridgeshire). Even for this 14% of the solid walled stock, the SWI installations only meet the Golden Rule due to the subsidy effects of installing other lower cost measures at the same time. However, if ECO subsidy were to be used to fund 50% of the cost of these solid wall insulation packages, the total number of installations meeting the Golden Rule would increase to 67% of the county's solid wall properties. This level of ECO funding across Cambridgeshire, would require a total ECO contribution of £83M which would be equivalent to 11% of the total available in the national ECO Carbon Saving Obligation pot for carbon savings. By contrast, Cambridgeshire's share of ECO based on its proportion of the UK's housing stock, is just 1%.

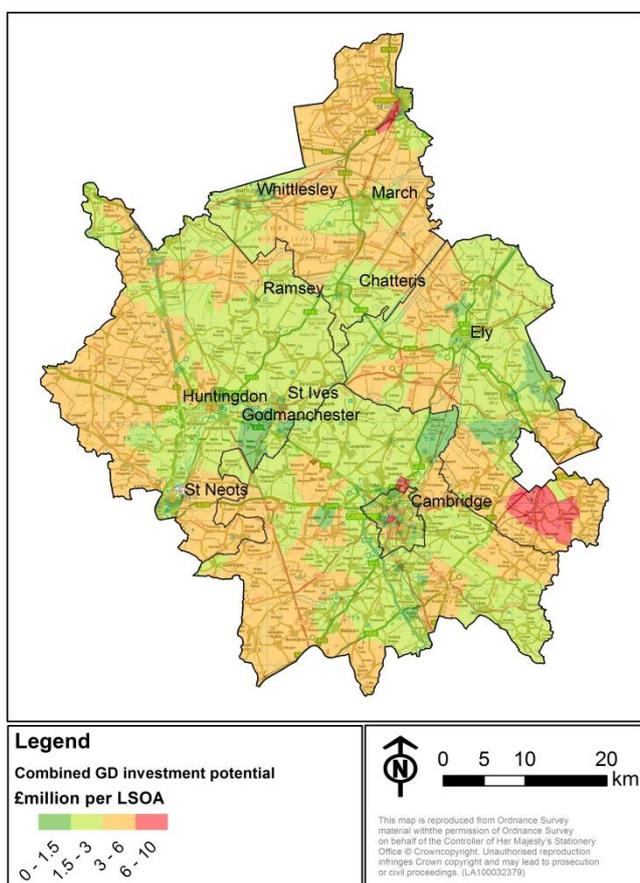
Table 4 Potential impact of ECO on increasing the Green Deal SWI

	Number of properties	% of total housing stock	% of solid walled housing stock
SWI where GD without subsidy meets the Golden Rule	7,106	3%	14%
Additional SWI installations when ECO subsidy included	21,377	12%	53%
<b>Total number of SWI achieving Golden Rule when ECO included</b>	<b>33,527</b>	<b>15%</b>	<b>67%</b>

### 2.3.2.6 Distribution of Green Deal potential across Cambridgeshire

Green Deal potential in Cambridgeshire was initially estimated at an LSOA level which was then added up to derive the total potential in the region. Figure 15 illustrates the level of Green Deal potential each LSOA has in terms of the investment potential it offers to the market. The orange and red shaded areas illustrate where Green Deal potential is higher. It can be seen that potential is estimated to be higher in the more rural areas away from towns where semi-detached and detached properties have a higher prevalence than smaller flats and terraced properties. Consequently, these areas generally have a greater Green Deal potential compared to higher density urban areas.

Figure 15: Distribution of Green Deal potential in Cambridgeshire



### 2.3.2.7 Comparing the distribution of Green Deal potential with the incidence of fuel poverty

Prevalence of fuel poverty at LSOA level in Cambridgeshire was sourced from DECC<sup>11</sup> and mapped as per Figure 16 below. The fuel poverty map provides additional insight into the Green Deal potential which is not captured within the estimated figures. Green Deal is not suitable for fuel poor households

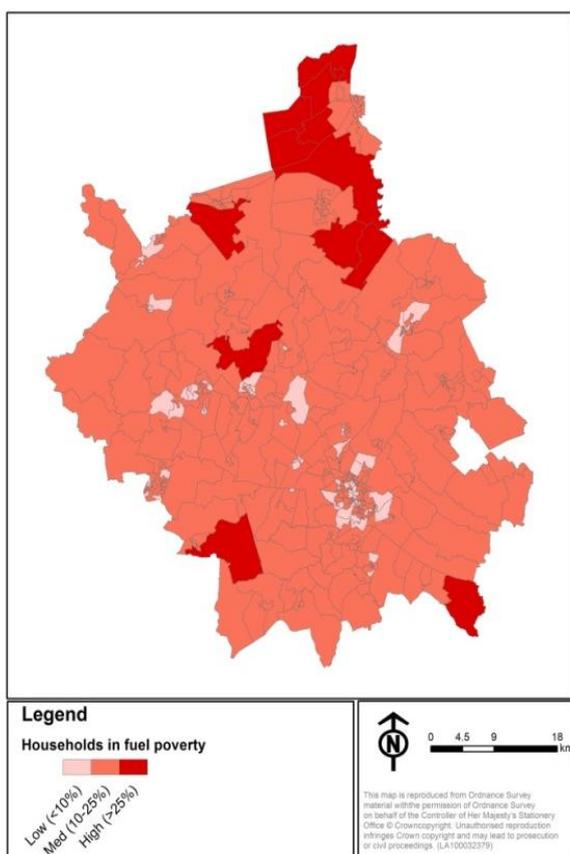
<sup>11</sup> Based on DECC's estimation of number of fuel poor households in Cambridgeshire. Source: DECC: Sub-regional Fuel Poverty Levels, England (2010)



and therefore areas with high fuel poverty levels would have implications on the total Green Deal potential. This is because fixed charges added onto a fuel poor household's energy bill might lock them into fuel poverty until the Green Deal contract comes to an end. As an example, northern parts of Fenland where the Green Deal potential is relatively high also have a high prevalence of fuel poverty which reduces the number of homes that might be suitable for the Green Deal.

ECO should be maximised and channelled into these parts of the county in order to make sure that they benefit from an holistic energy efficiency programme. The 'Affordable Warmth' and 'Carbon Saving Communities' components of ECO (which form 42% of the total ECO pot) are targeted at fuel poor households. Based on the number of dwellings in Cambridgeshire as a proportion of the UK, Cambridgeshire's share of Affordable Warmth and Carbon Saving Communities funding could be around £3.6M and £2.0M respectively. If Cambridgeshire managed to access this full amount for fuel poor households, it would only provide an average of £160 per fuel poor household. This would fall short of the expected cost of implementing measures that would significantly reduce the energy bills of fuel poor households.

**Figure 16: Distribution of fuel poor households in Cambridgeshire**



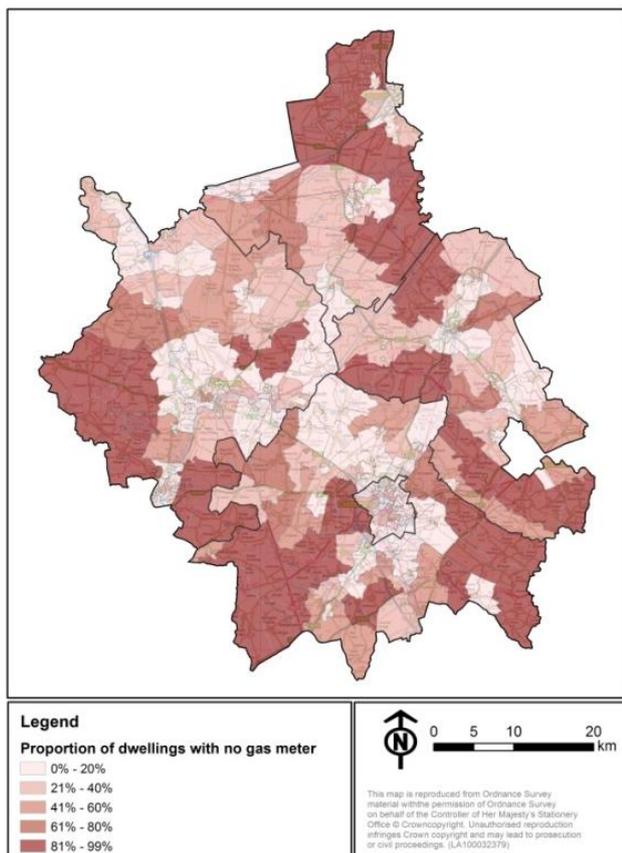
### 2.3.2.8 Comparing the distribution of Green Deal potential with off-gas areas

The distribution of off-gas properties is mapped in Figure 17 where darker shaded areas represent a higher prevalence of off-gas properties. When this figure is compared to Figure 15 showing the



distribution of Green Deal potential in the area, it is observed that there is generally an overlap between areas where there is a high proportion of off-gas properties and areas with high Green Deal potential. This is an expected outcome as the fuel bill savings from different energy efficiency measures in off-gas properties will be greater due to the higher price they pay for energy (for oil or electric heating), hence enabling the Golden Rule to work for a larger number of measures.

**Figure 17 Distribution of off-gas properties in Cambridgeshire**

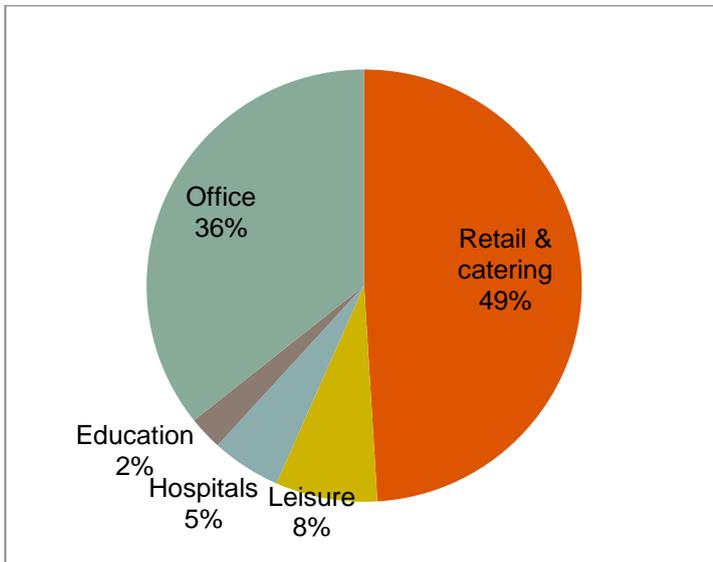


### 2.3.3 Green Deal potential in non-domestic buildings

Green Deal potential in non-domestic buildings has been estimated at around £150M, equivalent to annual reductions of 20,000tCO<sub>2</sub>. The non-domestic building sector constitutes approximately 20% of the total Green Deal potential in Cambridgeshire. As can be seen from Figure 18, retail & catering and office represent 85% of this total non-domestic Green Deal potential.

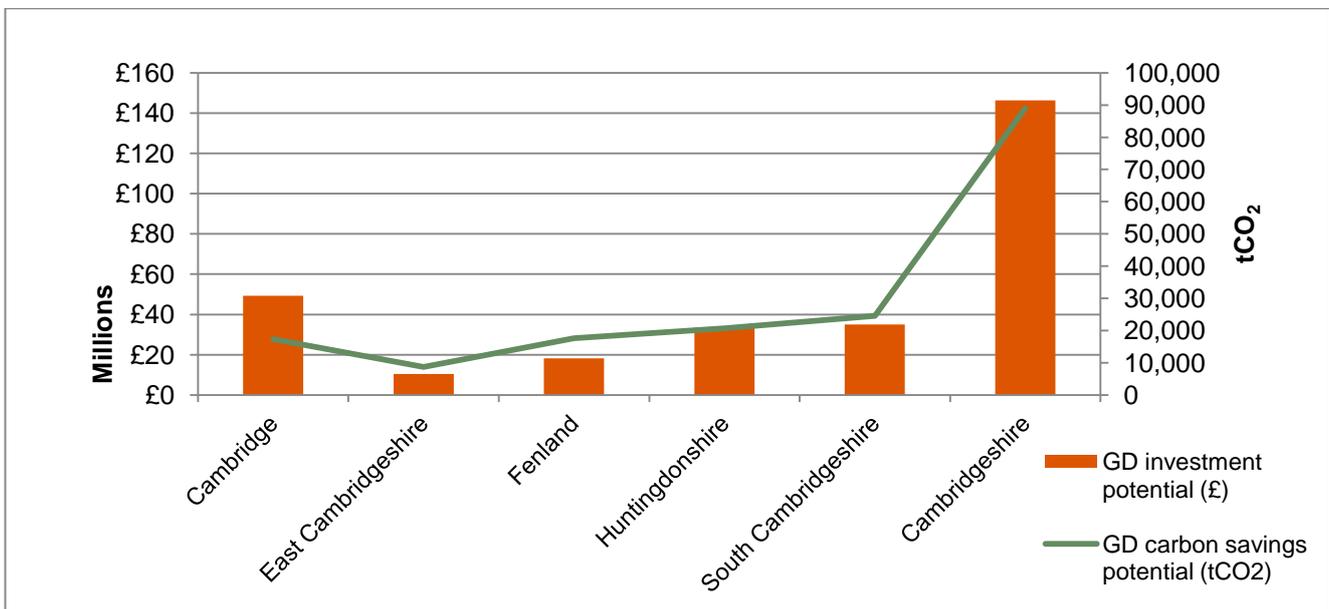


**Figure 18 Breakdown of non-domestic Green Deal potential in Cambridgeshire**



In contrast to housing, the area with greatest non-domestic Green Deal potential is Cambridge, which is due to its high concentration of commercial, public and education properties. South Cambridgeshire and Huntingdonshire have the second and third highest non-domestic Green Deal potential. Figure 19 provides a detailed breakdown of the non-domestic potential across the districts.

**Figure 19 Breakdown of non-domestic Green Deal potential in Cambridgeshire**



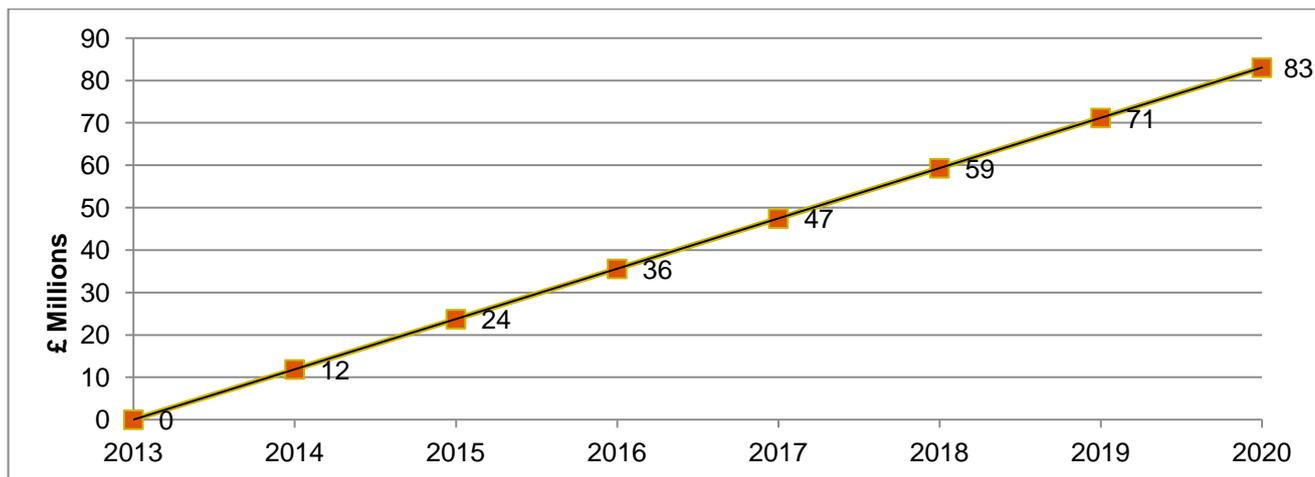
## 2.4 Identifying the scale of Cambridgeshire’s Green Deal market opportunity

It is not yet clear how customers will respond to the Green Deal. The evidence to date is not that positive with the public generally showing little interest in energy efficiency measures even when they are provided for free. We have considered issues around uptake in subsequent sections of the report, and the impact that different delivery options can have upon consumer trust and demand.

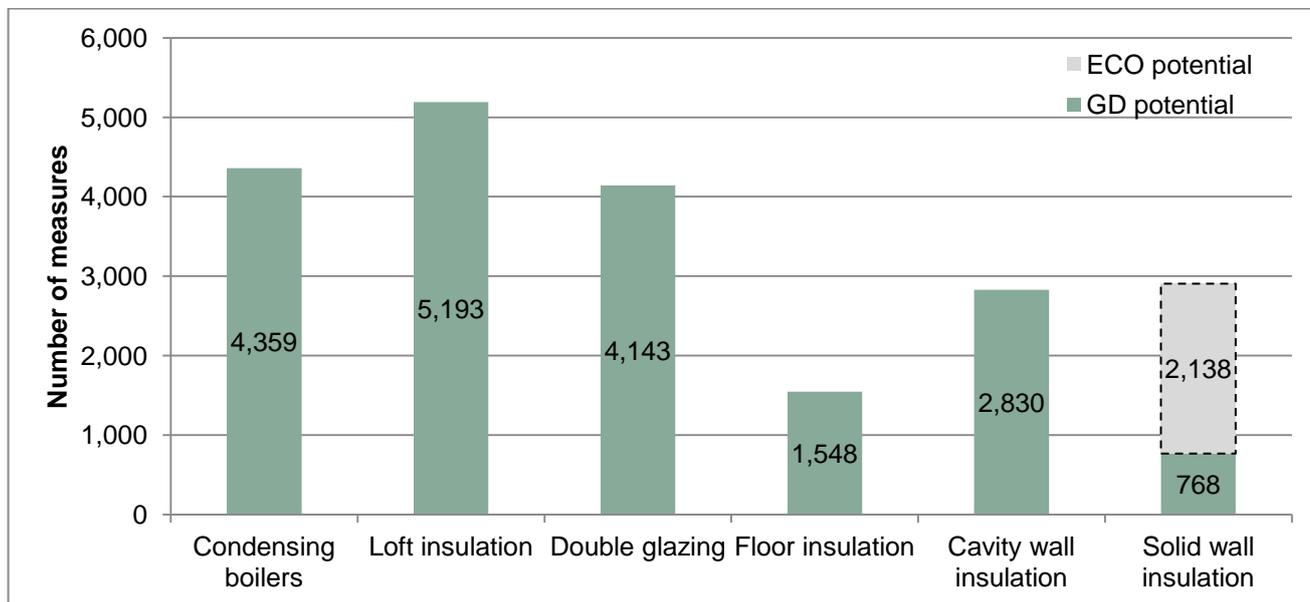


If 10% of the total Green Deal potential estimated above could be realised within the Cambridgeshire marketplace then it could be worth £83M. Figure 20 illustrates this level of Green Deal activity if it were to grow in a linear fashion up to 2020. Figure 21 illustrates how this investment might be spread across different energy efficiency measures if 10% of the total potential market for each measure was to be realised.

**Figure 20: Potential growth in Green Deal investment associated with a 10% share of total market size by 2020**



**Figure 21 Installation of measures by 2020 assuming a 10% market share of overall Green Deal potential**



## 3. Creating the conditions for success for Green Deal

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### 3.1 Key issues affecting Green Deal success

#### 3.1.1 Incentivising consumer demand for Green Deal

The Green Deal has yet to be proven as a delivery mechanism for low energy retrofit and there is a great deal of uncertainty about how the market will respond and what levels of customer uptake might be achieved. A key issue is the traditionally low demand for energy efficiency in both the domestic and non-domestic sectors. Energy efficiency doesn't seem to excite the consumer and energy costs aren't a significant enough proportion of overall expenditure to spur investment in energy saving measures.

In order to drive uptake, marketing strategies are likely to need to be more effective than under previous, more simplistic programmes. An integrated approach will be needed which includes a focus on 'trigger points' (such as moving house), incentives and local exemplars. Trust has been shown to be a critical element of success, and local authority or community endorsement has been shown to contribute to this trust in previous energy efficiency programmes such as CERT and CESP<sup>12</sup>. Community involvement or even community-led approaches to Green Deal delivery has good potential to deliver this and generate maximum levels of uptake.

There is a wide body of evidence from projects and pilots around the country that illuminates the key issues that will influence success of the Green Deal and that point towards likely success factors.

#### 3.1.2 Trust (and quality, trusted advice)

A new report by Consumer Focus, *What's in it for me? Using the benefits of energy efficiency to overcome the barriers*, stresses the importance of gaining and building trust in order to generate uptake. There is generally a low level of trust in utilities and other potential major providers of Green Deal. The decline in public trust in large corporations, utilities, financiers and government has been accompanied by a tendency for people to look towards people with shared demographic interest (such as a shared place of living, work, faith group, peer group). The 'messengers' will be just as important as the 'message' itself. People trust the experience of others who have already taken action, more than almost any other source. This word of mouth 'social diffusion' will be a key factor in helping to establish trust in Green Deal and in a Green Deal delivery scheme over time.

#### 3.1.3 Trigger points

Householders are most likely to install energy efficiency measures in their house at key 'trigger points' such as when they are moving home, undergoing redecoration or major works, having a new boiler, having a new kitchen or bathroom installed, or replacing windows. These trigger points will be key to the success of Green Deal as many energy efficiency measures will be impractical or high cost unless they are installed at the right time when the opportunity arises. In order to take advantage of these trigger points it is vital that these respective industry areas are aware of Green Deal finance and make it easy for householders to incorporate Green Deal measures within the programme.

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<sup>12</sup> Evaluation of the delivery and uptake of the Carbon Emissions Reduction Target, DECC October 2011, <http://www.decc.gov.uk/assets/decc/11/funding-support/3339-evaluation-of-the-delivery-and-uptake-of-the-carbo.pdf>



### 3.1.4 Marketing and promotion

Awareness raising and promotion of the Green Deal will be key to understanding. The Green Deal is a complex offer and will require careful 'social marketing'. Market research will be needed to identify the best selling points for energy efficiency across different types of consumers in Cambridgeshire. For example, some types of consumer may be motivated by environmental considerations, while others will be motivated primarily by financial savings or increased comfort. And consumers of different ages and socio-economic backgrounds will face different financial constraints and hold different attitudes to taking out Green Deal finance with respect to differing perceptions around personal debt.

### 3.1.5 Green Deal Assessments

All Green Deal projects will have to start with a Green Deal Assessment, and therefore resolving the issue of how to fund Green Deal Assessments is a key issue for the successful delivery of Green Deal. There is still a great deal of debate over exactly how the cost of undertaking Green Deal Assessments should be covered. Due to the complexity of Green Deal assessments, the process is fairly lengthy and their cost will be substantially higher than that of producing EPCs. In addition, Green Deal Assessments will need to be seen as impartial by householders rather than a hard-sell by Green Deal Providers, and therefore impartial assessment will form a key element of obtaining trust in Green Deal schemes.

### 3.1.6 Financial incentives

Financial incentives, such as cash-back schemes, could help raise awareness and the take-up of Green Deal. Use of local financial incentives could be used to reward certain behaviours. For example, Council Tax cash-back style rebates could be linked to EPC rating or cash-back vouchers could be offered against local Green Deal Assessments or installations using local Green deal installers.

### 3.1.7 Local business involvement

Green Deal Providers are the central players in the Green Deal and yet the substantial requirements and responsibilities on Green Deal Providers will mean that larger companies with a national presence and economies of scale will generally take the role of Green Deal Provider. The key issue for Cambridgeshire is how to encourage Green Deal Providers to use local contractors for assessments and installations and thereby retain within the locality a substantial proportion of the wealth created, whilst also ensuring that local businesses have the necessary skills capacity.

## 3.2 Identifying the main conditions for success

Three key conditions for success can be identified when considering options for a Green Deal delivery framework for Cambridgeshire:

1. **Optimise conditions for industry investment** - develop confidence of Green Deal Providers and local SMEs (i.e. assessors and installers) to invest in energy efficiency delivery in Cambridgeshire;
2. **Ensure consumer confidence** - build trust and confidence within the community and households in the measures and service provided by a Green Deal programme;
3. **Maximise local economic benefits** - ensure that local businesses have a significant share of the Green Deal market in Cambridgeshire.

These three conditions for success all involve building industry and consumer confidence in the Green Deal market in Cambridgeshire. These conditions are essential criteria for evaluating alternative Green Deal delivery options in terms of whether they facilitate consumer demand and develop industry capacity and investment.

### **3.3 Encouraging Green Deal Providers to invest in local delivery**

#### **3.3.1 Green Deal Providers are central to the Green Deal process**

Under the Government's national Green Deal framework, Green Deal Providers are the hub of the Green Deal market-place. Green Deal Providers will coordinate the whole Green Deal package for consumers; they will need to provide the finance, produce the Green Deal Plan, oversee installations and provide an on-going contact point for customers. Attracting Green Deal Providers and supporting their activities within the locality is therefore key to the successful delivery of Green Deal and the provision of a Green Deal offering to residents in Cambridgeshire.

#### **3.3.2 Green Deal Provider Pioneers**

While any organisation could become a Green Deal Provider, in practice there are important issues to consider including scale, delivery capability, ability to handle on-going obligations, and appetite for risk. Organisations that have demonstrated an interest in becoming Green Deal Providers, include local authorities, energy utilities, supermarkets, construction companies, DIY retailers, and social enterprises.

Green Deal Providers may provide these functions in-house or may wish to subcontract these stages to independent organisations. In-house delivery maximises their control of the process and may be seen as a way of minimising risk.

#### **3.3.3 What do Green Deal Providers want?**

Key Green Deal Provider objectives include:

- securing access to a large market in Cambridgeshire whilst minimising costs;
- having access to existing local authority, and community, communication channels and networks;
- benefitting from local authority partnership endorsement to enhance consumer awareness, confidence and trust;
- having the ability to develop and invest in a long term business plan for Cambridgeshire based on confidence in securing an adequate customer base.

Green Deal Providers will also be interested in the minimum market threshold requirements that will enable them to invest in delivery in a locality. Cambridgeshire is a large enough market to be attractive to national-scale Green Deal Providers.

#### **3.3.4 How should local areas work with Green Deal Providers?**

Local authority activity is needed to facilitate the effective inclusion of key players in the public, community and voluntary sectors who will all have a role in embedding and nurturing energy efficiency schemes within Cambridgeshire's local communities.

Cambridgeshire branding and local authority endorsement will be extremely desirable to Green Deal Providers as will the scope to use the networks provided by well-established voluntary/community organisations. Timing will also be an important element since Cambridgeshire's own Green Deal offer will be competing with offers from other Green Deal providers, both national and local.

### **3.4 Building consumer confidence and demand**

The reasons for typically low consumer demand for energy efficiency include:

- Perception that energy efficiency is unexciting (it does not carry the same levels of consumer interest as new kitchens or bathrooms, or general consumable products)
- Perception that energy efficiency improvements will not make any really noticeable or tangible difference to the quality of life or well-being of building occupants.
- Energy bill savings are relatively small, particularly when the repayment of the Green Deal charge is taken into account
- Energy performance (and the value of energy efficiency and renewable energy) is currently not generally represented in the price of a property.
- The installation of energy efficiency measures can be considered awkward to organise (e.g. having to clear a cluttered loft space) or disruptive to day-to-day life.

Successful energy efficiency schemes are able to overcome these uptake barriers by demonstrating the clear benefits of energy efficiency in terms of warmer homes, lower bills and improved properties, whilst also generating trust in the delivery of a quality product.

### **3.5 Harnessing local business opportunities**

Local business needs to gain access to the significant employment opportunities that an active Green Deal scheme could stimulate, through working in partnership with Green Deal Providers that are active in the area. In order to be attractive to Green Deal Providers, local businesses will need to have the necessary skills base and capacity to provide Green Deal Assessments and Installations across the wide range of building types and energy efficiency measures. Local business is likely to need support in terms of skills training and development in low carbon refurbishment, including solid wall insulation, air tightness and appropriate design of solutions.

## 4. Exploring the main delivery options for local Green Deal schemes

### 4.1 Green Deal delivery chain

There are a number of stages within the Green Deal delivery chain and each of these stages could benefit from the input of different stakeholders so as to maximise uptake of the Green Deal, and maximise the benefits to Cambridgeshire's residents and other energy customers.

In addition, proactive planning around the supply chain for the Green Deal will help Cambridgeshire's local economy to benefit from the business opportunities that it brings forward. Figure 22 illustrates the main stages in the Green Deal delivery chain from marketing through to agreeing a Green Deal Plan and installing the measures through to customer aftercare. Clearly there are additional elements to the process such as identifying potential customers, referring them on to Green Deal Providers, arranging Green Deal quotations and providing advice and support to potential customers.

It is a widely held concern that low consumer demand for the Green Deal could significantly limit the size of the Green Deal market. There is recognition that Green Deal Providers are likely to need local support from elements of the local public, community and business sectors in order to penetrate the market-place, secure customers and thereby maximise the carbon and energy benefits for Cambridgeshire. The marketing and promotion elements at the beginning of the delivery chain are therefore key areas of focus for determining the support and role that the local public and community sectors can play in stimulating Green Deal uptake.



Figure 22: Key stages in the Green Deal delivery chain

There are a number of issues surrounding these stages in the delivery chain:

- Marketing and promotion – how are the costs covered, particularly for the level of marketing needed to achieve a volume scheme (which in turn can )
- Lead generation - high value activity that could be performed most effectively by local community
- Assessment – should the Assessment be provided for free or for a charge, will it generate local income/ employment?
- Quotes and customer acquisition - potentially low uptake following time consuming quotation process

- Installation – likely to be the highest value work for local business although local employment is by no means guaranteed
- Aftercare – could add to Green Deal costs

## 4.2 Key delivery options

### 4.2.1 Overview of alternative delivery frameworks

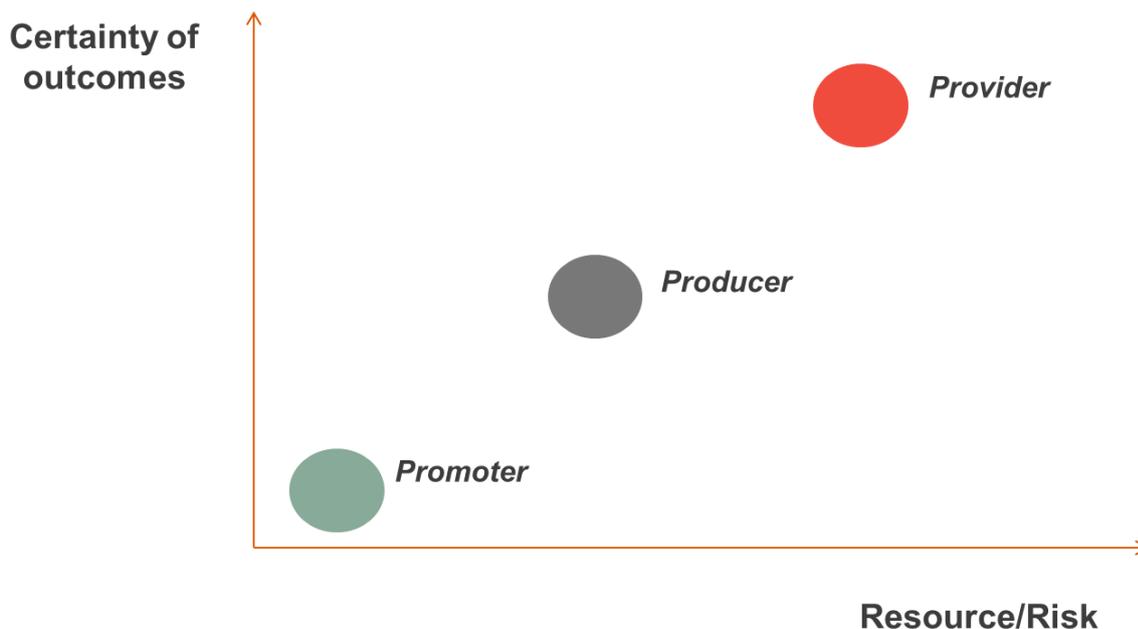
In order to tap into the full potential of the Green Deal, local delivery partnerships with trusted local partners are likely to be needed. Community-led or area-based schemes could facilitate intensive marketing, while offering economies of scale for the delivery of measures.

The Government has developed terminology for a number of generic approaches to local authority involvement in the Green Deal, as shown in Figure 23. These options for local delivery in Cambridgeshire include:

1. Doing nothing – just leave the Green Deal market in Cambridgeshire to its own devices;
2. Promoting Green Deal (**Promoter**) – simple marketing and promotion of the Green Deal to Cambridgeshire residents and businesses;
3. Producing leads and procure a framework of Green Deal Providers (**Producer**) – procure an agency/ agencies to identify and refer potential customers to a panel of Green Deal Providers to deliver the works;
4. Establishing a joint venture with a Green Deal Provider or establish a social enterprise for the purpose of local Green Deal provision (**Provider**).

Each of these delivery options has its pros and cons in terms of the level of resource that it would require and the level of influence that it would provide the public and community sectors in the roll-out of the Green Deal across Cambridgeshire.

Figure 23: Local area approaches to Green Deal delivery



### 4.2.2 The Promoter model

Under this approach the Cambridgeshire local authorities, in partnership with the community, would undertake to promote the Green Deal locally. There would be no local brand or specific local Green Deal offering. It would be left to the market to deliver Green Deal, with GDPs (most likely the major national players) relying solely on their standard promotional routes (such as direct mail, door to door or in-store advertising) to market the Green Deal to customers in the local area.

Since GDPs would not necessarily have local knowledge, partnerships or trusted delivery routes in the local area, customer take up would be expected to be lower than in other models. There is a risk that GDPs would simply ‘cherry pick’ the most financially advantageous customers and packages of work, bypassing homes in fuel poverty or those requiring more complex interventions with longer paybacks.

Local activity could support local businesses to adapt their services for the growing market in retrofit, but there would be no guarantee of work for local businesses as Green Deal providers may prefer to deliver via their own supply chains. This is likely to result in labour potentially being drawn from outside the area, displacing jobs from local SMEs. It also has potential to raise costs to consumers as installations (such as heating systems) by large organisations often tend to cost more than SMEs.

The primary advantage of this route however is that it carries lower reputational risk of things being perceived to ‘go wrong’ with the Green Deal locally.

Figure 24: An illustration of the ‘Promoter’ model

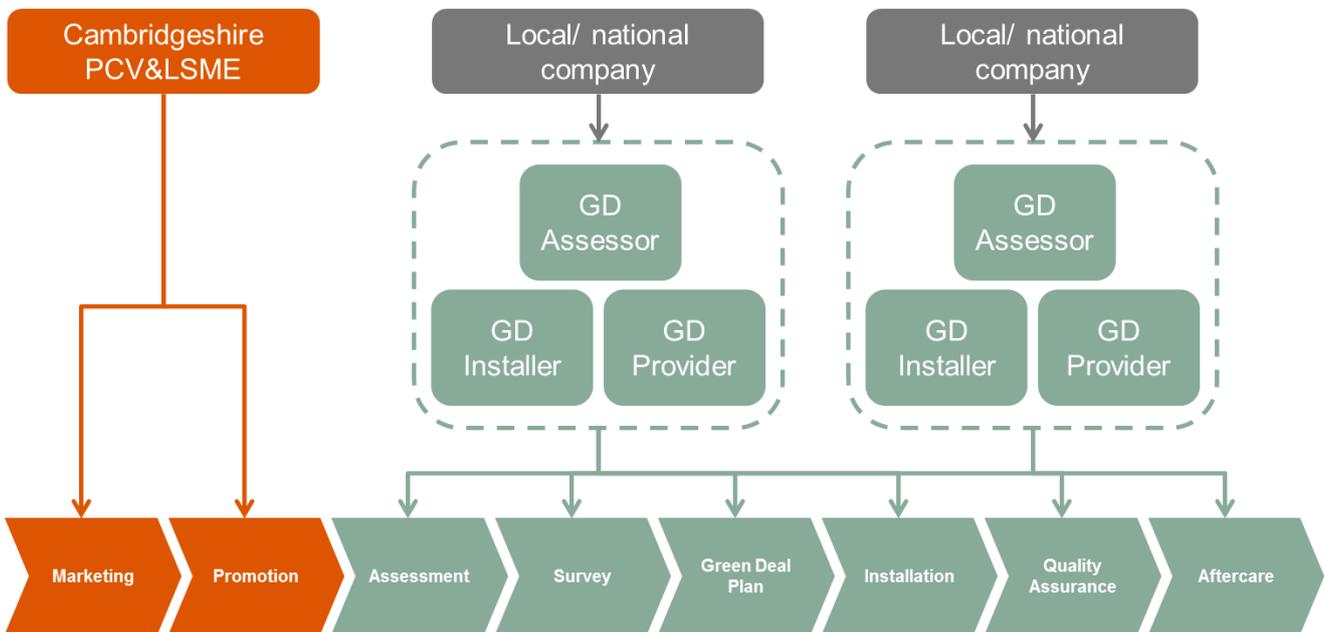


Table 5: Pros and cons of the ‘Promoter’ model

Pros and cons of the ‘Promoter’ model	
<b>Pros</b>	<ul style="list-style-type: none"> <li>• Low reputational risk for Council &amp; partners (i.e. of inferior quality)</li> </ul>



	<ul style="list-style-type: none"> <li>installations under Green Deal).</li> <li>• Low resources required.</li> </ul>
<b>Cons</b>	<ul style="list-style-type: none"> <li>• No 'local leadership'.</li> <li>• National GDPs 'cherry pick' most profitable projects.</li> <li>• Minimal impact on fuel poverty.</li> <li>• Local jobs in SMEs displaced or lost.</li> <li>• Potential higher costs to consumer as little / no role for SMEs.</li> <li>• Low customer take-up, resulting in low carbon savings.</li> <li>• National GDPs have little knowledge of heritage status of buildings and appropriate methods of retrofit.</li> <li>• Lost opportunities for good local advice &amp; signposting.</li> <li>• Duplication of marketing effort as many GDPs compete for the same customers.</li> <li>• Reputational risk from not taking sufficient action (to ensure Green Deal works at the local level).</li> </ul>

**Table 6: Evaluation of Conditions for success for 'Promoter' model**

<b>Evaluation against the key conditions for success – Promoter model</b>	
<b>Encouraging industry investment</b>	<ul style="list-style-type: none"> <li>• Low level of engagement with industry to promote GD, particularly from local suppliers.</li> </ul>
<b>Customer confidence and take up</b>	<ul style="list-style-type: none"> <li>• Low customer uptake as GDPs rely on national advertising routes only with no direct support from a local delivery partnership.</li> </ul>
<b>Local economic benefits</b>	<ul style="list-style-type: none"> <li>• Low opportunities for local businesses to deliver as GDPs likely to rely on in-house supply chains.</li> <li>• Local business activity limited to direct contact with national GDPs or in wider retrofit market.</li> <li>• No direct local value streams generated by Green Deal.</li> </ul>

In summary this option, although low in reputational risk, carries a high risk of non-delivery of core objectives. In this sense it does not rate strongly as a 'leadership approach' to Green Deal, and is likely to result in relatively low local benefits.

### 4.2.3 The Producer model

The basis of the Producer model is that the Cambridgeshire local authorities (LAs) invest and dedicate resources into marketing and generation of leads for Green Deal and then pass leads to a procured panel of Green Deal Providers. Cambridgeshire LAs could procure a managing agent to run the energy efficiency retrofit programme and generate leads (i.e. marketing, coordination, referrals routes, generating leads). An area-based approach could also be taken (i.e. marketing and delivery could be intensively focused on one or more geographical areas). Cambridgeshire could then procure a panel of Green Deal Providers who could operate under the county's branding to deliver good value, high quality installations with excellent customer care utilising local SME assessors and installers. The framework can build confidence in the local market by harmonising prices, carefully specifying



standards and monitoring customer satisfaction. To help cover the running cost of the programme, a referral fee from Providers back to the councils may be agreed. GD Providers will work with local GD Installers to implement the projects by fulfilling any criteria set out by Cambridgeshire, which might include generation of local economic benefits and partnership working with community groups.

In this approach, Cambridgeshire PCV uses its influence and networks to:

- Promote Green Deal and ECO (i.e. create GD market);
- Identify and access potential GD customers (generate leads);
- Ensure all parts of the community are offered Green Deal installations;
- Ensure good value pricing and good quality installations;
- Encourage Green Deal Providers to use local SMEs.

This approach could be rolled out in parallel with an ECO affordable warmth programme. An area-based energy efficiency scheme can identify householders eligible for ECO and provide a Green Deal Assessment for those households which are not eligible.

Figure 25: An illustration of the 'Producer' model

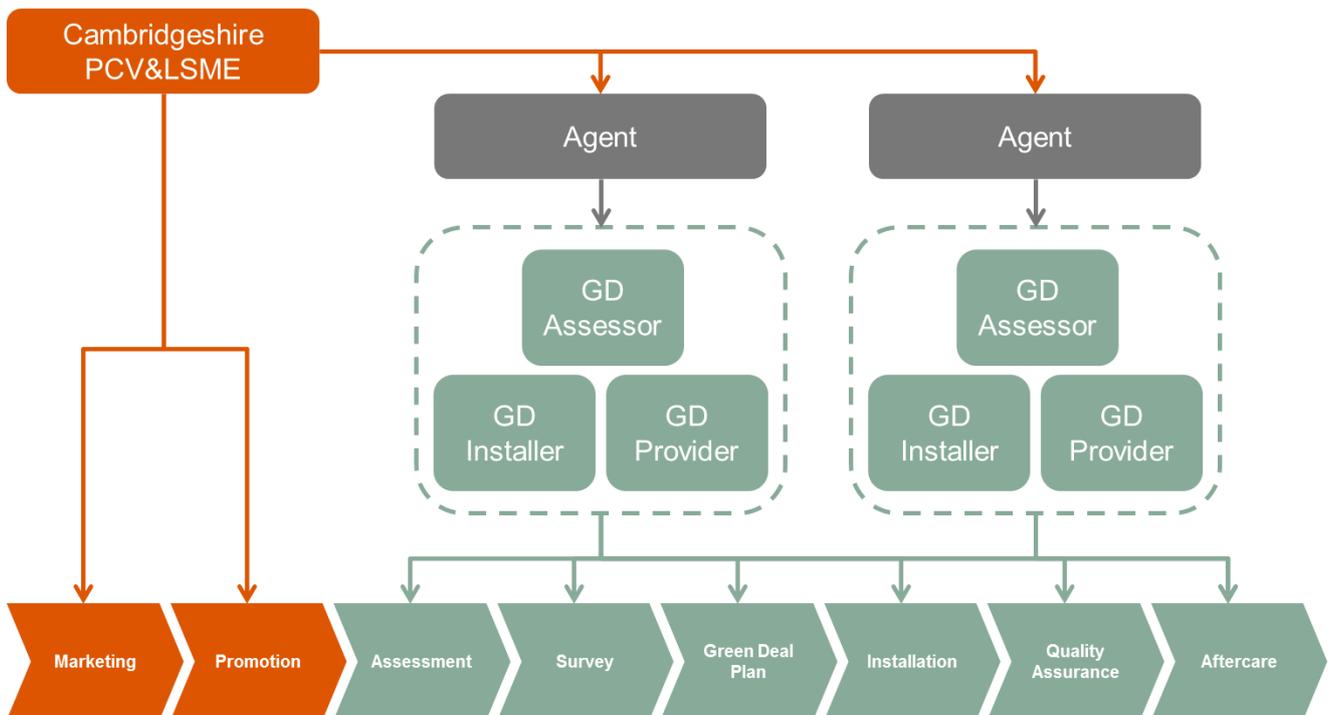


Table 7: Pros and cons of the 'Producer' model

Pros and cons of the 'Producer' model	
<b>Pros</b>	<ul style="list-style-type: none"> <li>• Promotion/ branding by councils and community groups will improve trust and help drive uptake;</li> <li>• GD promotion could be integrated with home visits undertaken for other purposes;</li> <li>• Provides opportunities to work with local community groups;</li> <li>• Could drive down prices through procurement panel;</li> </ul>



	<ul style="list-style-type: none"> <li>• Procurement process could stipulate requirement to use local companies thereby creating local jobs (note: consideration of OJEU rules may limit local control);</li> <li>• Could potentially generate income for running programme through referral fees from GD Providers</li> </ul>
<b>Cons</b>	<ul style="list-style-type: none"> <li>• High cost for public sector in investing money and time in promotion, marketing and generation of leads with residual risk of poor uptake;</li> <li>• Positive impact on local economy may be limited if local installers are not actively promoted in procurement frameworks;</li> <li>• Potentially disjointed customer journey through different organisations involved in promotion and delivery;</li> <li>• A need for roles to be clearly defined to the consumer in case of quality control issues;</li> <li>• Delivery partners (Green Deal Partners) may undertake only the most commercial projects;</li> <li>• Reputational risk for local councils if the GD Providers do a bad job.</li> </ul>

**Table 8: Evaluation of the Conditions for success for ‘Producer’ model**

<b>Evaluation against the key conditions for success – Producer model</b>	
<b>Encouraging industry investment</b>	<ul style="list-style-type: none"> <li>• Reasonable levels of engagement with industry to promote GD, particularly from local suppliers through procurement framework.</li> <li>• Cambridge PCV can tender and select preferred suppliers, and engage with them to ensure adequate levels of investment are committed to drive GD.</li> </ul>
<b>Customer confidence and take up</b>	<ul style="list-style-type: none"> <li>• Reasonable customer uptake as Cambridge PCV will promote GD to local community.</li> <li>• This will depend on the quality and duration of engagement that Cambridge PCV are willing to commit to.</li> <li>• Customer confidence may be reduced due to the lack of a continuous service (i.e. different organisations involved in promotion and delivery)</li> </ul>
<b>Local economic benefits</b>	<ul style="list-style-type: none"> <li>• High opportunities for local businesses to deliver as procurement panel can ensure local suppliers are preferred (but will need to consider any OJEU requirements).</li> <li>• Local suppliers should have a competitive edge over national providers, given the insight and brand benefits of working with Cambridge PCV.</li> <li>• Various local value streams generated by GD</li> </ul>

#### 4.2.4 The Provider model

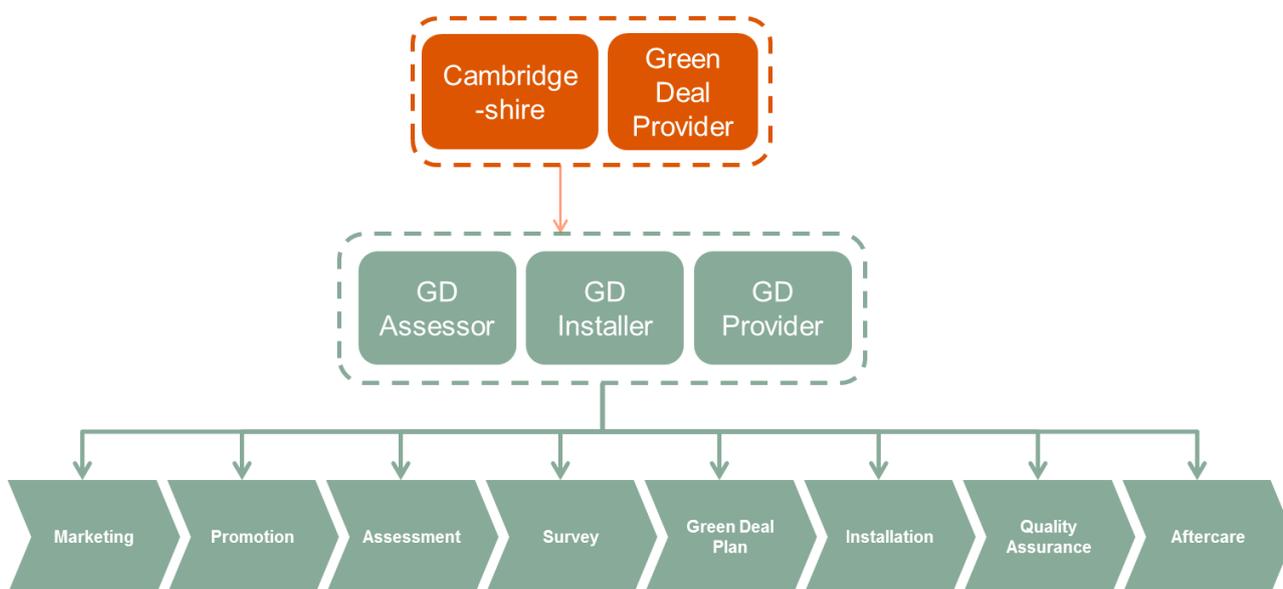
In the Provider model, the Cambridgeshire local authorities and / or community would become the Green Deal Provider by forming a Community Interest Company or a Joint Venture with a commercial Green Deal Provider. This organisation would deliver Green Deal locally aiming to maximise local benefits, such as using local business for assessment and installation, targeting homes in fuel



poverty, and providing appropriate advice and aftercare to maximise lasting carbon emissions reductions. Becoming a Green Deal Provider involves a number of responsibilities, some of which carry risks and entail activity not necessarily linked to a local authority's core business. There are also risks involved with entering a new market at such an early stage while there are still a number of policy and market unknowns.

However, a new organisation could be established – or an existing one expanded – to become a Green Deal Provider. The community basis or not-for-profit nature of this organisation would be key to gaining and maintaining public trust, and delivering high levels of customer uptake through local profile and word of mouth recommendations.

**Figure 26: An example of the Provider model – forming a Joint Venture with a commercial GD Provider**



**Table 9: Pros and cons of the Provider model**

Pros and cons of the 'Provider' model	
<b>Pros</b>	<ul style="list-style-type: none"> <li>• Maximum 'local leadership' and control over community benefits.</li> <li>• This approach will allow for the most input in terms of strategic planning for an area. Links with health and wellbeing and other agencies can be maximised.</li> </ul>
<b>Cons</b>	<ul style="list-style-type: none"> <li>• High development costs.</li> <li>• Highest risk of all options as responsible for consumer credit act, resolving complaints, technical failure, customer default, etc.</li> <li>• Long lead in time which may mean other providers are already established.</li> <li>• Reputational risk if non delivery or things go wrong.</li> </ul>

**Table 10: Evaluation of the Conditions for success for 'Provider' model**



## Evaluation against the key conditions for success – Provider model

<b>Encouraging industry investment</b>	<ul style="list-style-type: none"><li>• A locally owned GD Provider business can make the decision to invest in local delivery.</li><li>• A delivery vehicle established specifically to deliver Green Deal services in Cambridgeshire would commit investment locally.</li></ul>
<b>Customer confidence and take up</b>	<ul style="list-style-type: none"><li>• Potentially high uptake levels due to high level of control over delivery and local benefits. A social enterprise model would be particularly well placed to maximise uptake.</li></ul>
<b>Local economic benefits</b>	<ul style="list-style-type: none"><li>• High impact as can ensure local businesses are used for delivery.</li></ul>

### 4.3 Sourcing Green Deal finance

An essential prerequisite in all the delivery options outlined above is access to sufficient low cost finance. Low interest rates play a critical role in determining how much can be delivered under the Golden Rule. Studies on consumer attitudes towards Green Deal have also shown that a low cost of capital is a key influencing factor for consumer take-up<sup>13</sup>.

The Green Deal Finance Company (TGDFC) is currently under development by a consortium of private and public organisations. TGDFC is envisaged to be a not-for-profit organisation which will act as a national aggregator that can deliver low cost loan finance for Green Deal. The intention is to aggregate Green Deal loans to a level where capital and bond markets can be accessed, so leveraging billions of pounds worth of finance to Green Deal Providers at low interest rates (anticipated to be around 6.5%). TGDFC has indicated it intends to work with all Green Deal Providers regardless of scale, providing finance to all at the same cost of borrowing.

With TGDFC in place, finance for Green Deal becomes relatively simple and accessible. Without it finance becomes significantly more complex. TGDFC is currently anticipated to become operational in around April 2013, although questions around development funding and state aid clearance make the actual start date unclear.

The next chapter explains how the three models outlined above were viewed by stakeholders during the 'community connection' engagement process.

<sup>13</sup> 'Willingness to Pay' research undertaken for the Energy Saving Trust & DECC by Quadrangle in 2009.



## 5. Stakeholder involvement in selecting a suitable delivery framework

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### 5.1 Process for engaging with stakeholders

To develop local engagement and ensure 'co-production' of a preferred approach to Green Deal delivery in Cambridgeshire, more than 150 stakeholders were invited to a series of two workshops, to explore and then prioritise a range of delivery options. The stakeholders were drawn from a wide range of sectors, including local authority officers and members, local businesses involved in installing energy efficiency and renewable energy measures, local energy assessors, Green Deal providers, representatives from Cambridge University and other major institutions, social housing providers, and representatives of community and voluntary organisations involved with elderly people, fuel poverty and environmental issues and community improvements. The workshops were held on 12th June and 3rd July 2012, in the SmartLIFE centre on the edge of Cambridge. 60-70 stakeholders attended each workshop, and those who could not attend were encouraged to participate and comment through the wider communication programme. The first workshop focused on introducing the Green Deal and exploring a range of issues about delivery, while the second focused on building consensus around a preferred delivery option and identifying where there was consensus or disagreement on specific aspects of delivery. Both workshops were run in a highly participatory style, making use of small group working, plenary discussions and voting as well as formal presentations. Notes of the proceedings of both workshops, together with presentations, can be found on the project website: [www.cambsgreendeal.org.uk](http://www.cambsgreendeal.org.uk).

The project website, which can be reached through the Sustainability East website, formed an important part of the project's communications plan. Invitations encouraged stakeholders to visit the site and comment on project documents, whether or not they could attend the workshops. Publicity was sent out via Twitter and via local business and social enterprise networks, to encourage a wider range of stakeholders to visit the site, register for the workshops and comment on documents emerging from the project. In addition to engaging stakeholders at the workshops, the consultants explored issues with specific stakeholders between the workshops.

Figure 27 shows how the workshops fitted into the development of the preferred approach to Green Deal delivery in Cambridgeshire.

The workshop and communications process ensured that key players in the Green Deal market in Cambridgeshire were involved in the process of exploring the issues affecting Green Deal and identifying the most suitable framework for Green Deal delivery in Cambridgeshire.

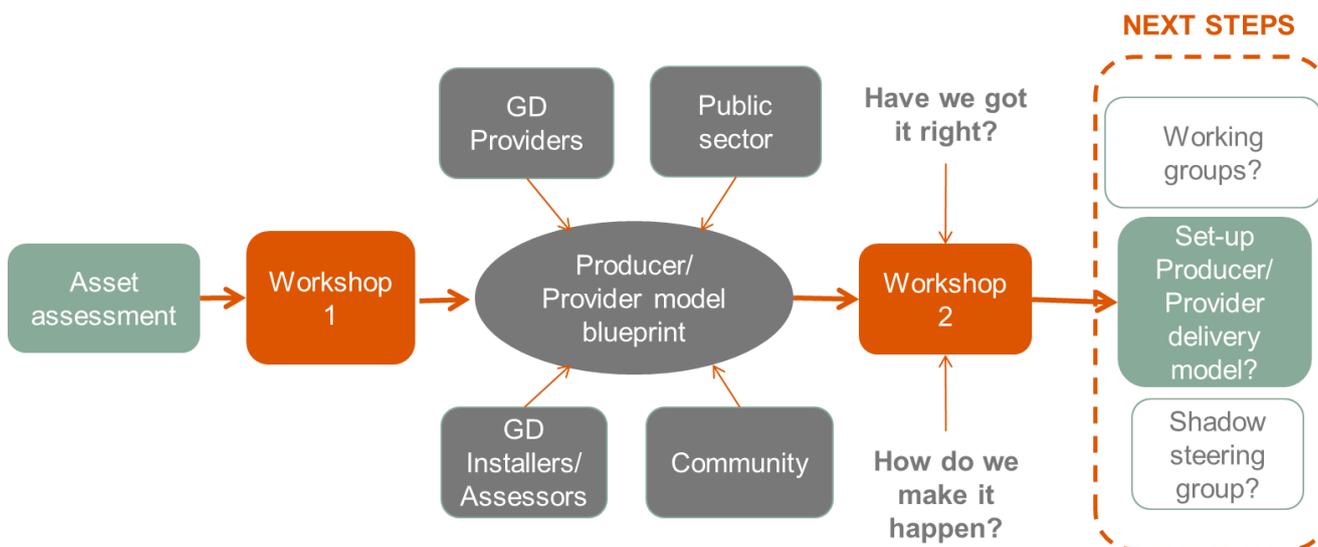


Figure 27: Process for determining the optimum approach for Cambridgeshire

## 5.2 Delivery issues discussed at the workshops

### 5.2.1 Workshop 1

Key findings from the first workshop on 12<sup>th</sup> June 2012 were that:

- There was little or no support for ‘do nothing’ option.
- Many stakeholders were cautious about developing a special purpose delivery vehicle (e.g. a joint venture or social enterprise).
- There was consensus that Cambridgeshire’s offer should go beyond the Green Deal to offer wider assistance and finance.
- There was also consensus that commitment of resources from public sector would be needed to take forward Green Deal.
- There was support for piloting the Green Deal in both domestic and non-domestic context.
- There was also agreement that information on asset potential should be made available to community groups, so that they know the Green Deal potential in their local area.

The preferred delivery model that emerged from the first workshop was that the public sector and voluntary/community groups should actively stimulate uptake of the Green Deal, and help to shape a local offer (nearest to the ‘Producer’ model).

Following the first workshop, the consultancy team explored the ‘producer’ model further with a cross-section of stakeholders, including the Cambridgeshire local authorities, several prospective Green Deal Providers, a low energy assessor business, a local installation company and two representatives of the community sector. Particular concerns raised about the ‘producer model’ were that:

- Some Green Deal Providers have more experience and expertise than local authorities in managing the ‘lead generation’ process, and may be in a better position to provide a ‘smooth customer journey’ for households interested in taking up the Green Deal and/or ECO;

- Some form of social enterprise, comprising representatives from the voluntary and community sectors as well as local authorities, could help to steer the Cambridgeshire process.

Some Green Deal providers were concerned that the Cambridgeshire offer would only stimulate significant investment interest if one Provider was contracted to undertake this lead generation/delivery role - although this view was not shared by all the potential Green Deal Providers.

### 5.2.2 Workshop 2

Small group work at the second workshop explored the following aspects of delivery, comparing the implications of the different models and developing suggestions for the way forward:

- Green Deal offer
- Lead generation
- Role of community/ voluntary sector
- Green Deal Assessment process
- Competition between Green Deal Providers
- Procurement and oversight
- Local economic benefits
- Piloting
- Non-domestic buildings

These themes built on earlier small group discussions at the first workshop. In addition, the first workshop included in-depth discussion of how the Green Deal applies to historic buildings, emphasising the importance of ensuring that Green Deal Advisors have sufficient familiarity with older buildings and the energy efficiency issues associated with them.

Summarising the conclusions of stakeholder views at the workshops, there were **several important areas of agreement** across all the groups:

- Universal support for keeping the business generated by the Green Deal local to Cambridgeshire, as far as feasible;
- Support for promotion of a single-brand for the Green Deal in Cambridgeshire, with a clear message to consumers;
- Agreement that community groups should be involved in supporting the promotion process - but differences of opinion as to whether they should be affiliated to a particular Green Deal offer;
- Agreement that how the Green Deal Assessment is funded, and how the assessor is affiliated, is critically important to take-up of the scheme - but differences of opinion as to whether assessors should be independent of Green Deal Providers;
- Agreement that any pilot process should both 'work' and also generate learning - but differences of opinion as to whether there is time for a pilot (given competition from other national Green Deal providers).



The plenary discussion explored the **Green Deal Assessment process** in more detail. It was felt that there is tension between the need for independent assessors (under a single brand, trusted by consumers) and the need for assessors employed by Providers (trusted by Providers). Prospective Providers pointed out that accountability is important as they will be taking financial risks on the back of the Assessment's recommendations. One suggestion was that independent advisers could operate under the 'Cambridgeshire' brand, but that a Provider- linked assessor could do more detailed Green Deal planning associated with the delivery of measures in a particular property. Key issues were felt to include the need to clarify the affiliation of Assessors, and uncertainty about how independent Assessors could be adequately funded. There was consensus that more work was needed on this point.

In addition to differences of opinion about the Green Deal Assessment process, a number of other **areas of disagreement** emerged from the second workshop, on which participants had differing views. These can be summarised as follows:

- Are local government ready for the reputational risk of a Cambridgeshire Green Deal brand?
- Should oversight be provided by a Community Interest Company?
- Can lead generation be carried out well by local government?
- Should community group involvement be formally linked to an offer/Provider?
- Can community groups be involved in generating leads and/or giving advice?
- How many Providers should be involved in the 'partnership model' and how much competition should there be between Providers (or should there be a time-limited contract for one Provider)?
- Where and how should pilots be located - how can you incentivise early Green Deal investors, and fund them?
- Is Green Deal a bad deal for public sector property because of asset divestment?
- Local skills and training - can we make sure procurement works locally?
- Can Cambridgeshire move fast enough, given potential competition from major Green Deal providers within and beyond Cambridgeshire?

## 6. The preferred approach - forming a partnership with one or more Green Deal Providers

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### 6.1 Key elements of the preferred delivery approach

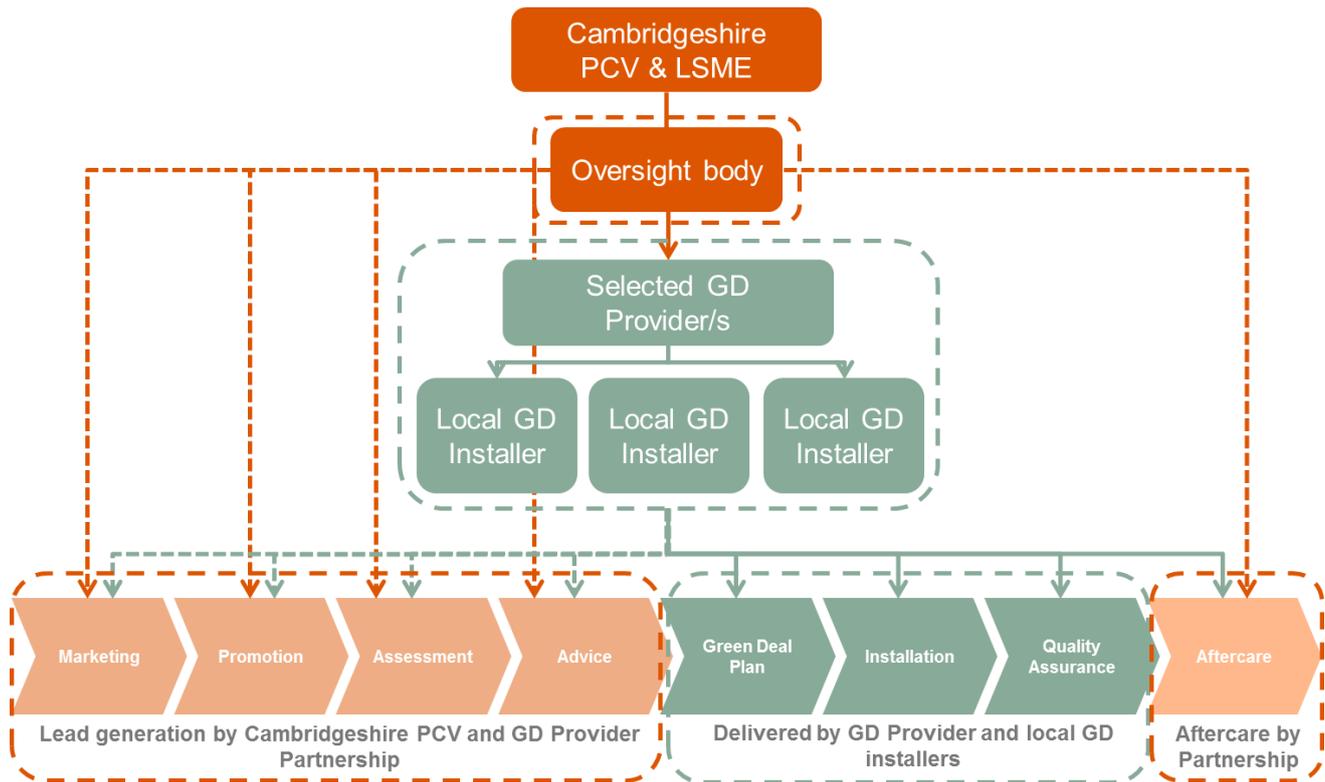
Key areas of consensus emerging from the stakeholder engagement process include:

- A Cambridgeshire branded Green Deal energy efficiency scheme is preferred in order to increase awareness, build momentum and harness trust.
- A county-level scheme is the most suitable scale for operating a branded programme so as to deliver a local feel that is responsive to local character and communities, whilst also achieving necessary economies of scale.
- A lead generation/referral process run in partnership with Green Deal Provider(s) is preferred, rather than Cambridgeshire local authorities running such a process themselves.
- A 'Partnership' delivery model has received fairly unanimous support from stakeholders. This would involve the local authorities procuring one or more Green Deal Provider partners to operate a Cambridgeshire branded scheme across the county, with the Green Deal Providers leading all elements of the programme and service delivery with support from the local authorities and the local community in promotion and lead generation
- The key objectives of this Partnership delivery structure would be that of maximising uptake through building-awareness and trust, and maximising local economic benefits by requiring Green Deal Providers to work with local businesses.
- An integrated energy efficiency (Green Deal) scheme is needed that simultaneously delivers affordable warmth and Green Deal offerings.

### 6.2 The 'Partnership' model (an adapted version of the Producer model)

As illustrated in the figure below, the main defining element of the Partnership model is that one or more Green Deal Providers are procured to run the whole Green Deal programme under a stringent set of local delivery requirements and with extensive input from the PCV sector in promoting the programme, building trust, developing referrals routes and generating leads. The Cambridgeshire LAs could set up an 'oversight body' to help coordinate the energy efficiency retrofit programme and to procure one or more Green Deal Providers to promote the programme and deliver the Green Deal measures. This oversight body may be made up of the LAs and key public sector, community and voluntary stakeholders. It would develop the Key Performance Indicator (KPI) criteria for the programme and would work in active partnership with the selected Green Deal Provider/s.

The oversight body would select the Green Deal Provider/s to benefit from the programme's branding to deliver good value, high quality installations with excellent customer care utilising local SME assessors and installers. A key requirement for the programme would be the re-investment of revenues into covering the running costs of promoting and coordinating energy efficiency activity in the county.



**Figure 28: Preferred Green Deal delivery framework for Cambridgeshire – the 'Partnership model'**

The benefits of the Partnership model include:

- Partnering with just one or a few Green Deal Providers should give these Providers the confidence to invest in supporting the marketing and promotion stages, reducing the cost burden for the public sector;
- Cambridgeshire PCV can focus on adding value to the energy efficiency programme through resident engagement with their reputable brand and community promotion, leaving the Green Deal Provider partner/s to run the scheme and deliver installations;
- Responsibilities are clearly defined through the whole customer journey with the Green Deal Provider leading on all aspects of delivery. This will aid simplicity of the programme with fewer links in the chain and potential for confusion;
- The performance criteria and terms of the contract will be key in ensuring that control is retained over how the Green Deal programme is delivered by the procured Green Deal Provider/s;
- A rigorous selection process will help ensure the right Green Deal Provider/s is selected, which will help ensure good value pricing and good quality installations.

Some of the costs and risks of this Partnership approach include:

- A need for roles to be clearly defined to the consumer in case of quality control issues;
- Green Deal Provider/s may undertake only the most commercial projects;
- Reputational risk for local councils if the Green Deal Provider/s do a bad job;

Towards the end of the second workshop, participants were asked to vote on their preferred delivery option by sticking 'dots' on a flipchart. About half of the participants voted. The favoured option was a 'partnership model involving multiple Providers', which received 24 votes. This was followed by the 'partnership model with a single Provider', which received 9 votes. Four people voted for 'other models, such as the 'promoter' or 'provider' model. Community and voluntary sector representatives particularly favoured the 'multiple-Provider partnership model' over the 'single Provider partnership model'. Local business opinion was more evenly split between the 'single Provider' and 'multiple Provider' versions of the 'partnership model', possibly reflecting concerns about the viability of a 'multiple Provider' model.

### 6.3 How does the Partnership model fare against the conditions for success?

#### 6.3.1 Will Green Deal Providers invest in Green Deal delivery in Cambridgeshire?

The partnership model allows one or more Green Deal Providers to partner with the Cambridgeshire local authorities and community/voluntary groups in promotion and lead generation, and potentially across the whole customer journey through to installation of measures and after care. By entering into a long term commercial partnership, through a negotiated process which should provide mutual benefit to both parties, Green Deal Providers should be incentivised to undertake long term investment in Green Deal activity within the local area. Some Green Deal Providers feel strongly that an exclusive contract would be required to attract significant investment from a Provider business, while others feel that Cambridgeshire is large enough to support a panel of Providers.

There are various ways in which a panel of Green Deal Providers could be managed, which would each have their own pros and cons:

Option	Pros	Cons
1 - A panel of Providers could compete to deliver Cambridgeshire's offer to customers across the county	More competition between providers (with subsequent benefits in terms of competitive pricing)	Potential confusion for consumers  May not be sufficiently attractive to stimulate significant investment by providers
2 - Centrally generated leads could be allocated to different Providers	Could allow an element of consumer choice within the Cambridgeshire offer, in addition to their choice in the GD wider market place  Fits well with the 'independent assessment' model	Really puts the responsibility back on the PCV sector (or their agent) to generate the leads - the pure producer model
3 - Providers could be selected based on their specialist offering, e.g. 'heritage Green Deal Provider'	Would ensure that differences in the building stock are adequately serviced i.e. heritage and non-domestic buildings	Could be too prescriptive for customers and remove any element of choice/competition
4 - Providers on the panel could bid to lead on specific geographic areas of focus (akin to the	Maintains some competition between providers	Areas of focus would need to be sufficiently big to justify investment by



Table 11: Four alternative approaches to allocating Green Deal Provider concessions

### 6.3.2 Consumer demand/ generating leads

A key strength of the Partnership model is that the local authority and local community work in close partnership with the Green Deal Provider to maximise the use of local networks and delivery channels whilst benefitting from the Providers expertise in customer acquisition.

The Partnership model would ensure that endorsement by local authorities and voluntary/community organisations would help to give consumers confidence. By building PCV involvement into the lead generation process, the model should also help to stimulate demand.

Consumer choice will not be restricted to the Cambridgeshire-endorsed deal, but will embrace all the deals offered by national Green Deal Providers. A key element in building consumer confidence will be to offer a low cost, independent Green Deal Assessment, or lighter weight pre-assessment, on the basis of which the consumer can either choose the Cambridgeshire offer or other routes for taking forward recommended measures.

### 6.3.3 Local business involvement

The Partnership model provides good scope for involving local businesses, both assessors and installers. Local assessors could be contracted to provide independent assessments, possibly with financial support from the public sector to keep costs down. And the procurement conditions could stipulate that Green Deal Providers need to generate local economic benefits in terms of jobs and investment in the local economy. In parallel, local businesses could be provided with information and support regarding Green Deal accreditation, for example signposting them to available training and building links between the panel of Providers and potential local suppliers.

### 6.3.4 Conclusion

The Partnership model has a number of features which suggest that it could be effective in stimulating consumer demand and in encouraging business investment in Green Deal delivery. However, the final shape of the delivery framework will be heavily dependent upon the terms of the negotiated contract with Green Deal Provider/s. Thus the effectiveness of the Partnership model will become clear when the market is tested and terms are agreed, and when Green Deal delivery takes place.

## 7. Establishing the community connection in Cambridgeshire

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### 7.1 Approaches to the heritage stock, fuel poor households and non-domestic buildings

#### 7.1.1 Specialist approach for heritage buildings

Cambridgeshire has a high proportion of heritage buildings which require specialist knowledge for the installation of energy efficiency measures. Specialist skilled contractors are required to undertake works on these properties, in terms of both the selection of appropriate measures and the sensitive installation of these measures. Mainstream Green Deal contractors may not have the relevant skill-set to identify and install appropriate measures for heritage buildings and may be reluctant in the first place to offer Green Deal services to heritage buildings. As outlined in the consideration of Green Deal potential in section 2 above, fabric and glazing measures are particularly likely to require specialist input whereas heating system improvements may not require specialist skills. Our analysis has assumed that the Green Deal potential in the heritage stock is lower than the rest of the county's building stock due to the likely higher cost of works.

As a first step, the county's heritage building stock needs to be assessed in detail to document the key archetypes, understand the main issues and to identify the key retrofit solutions. The Retrofit Cambridge project has already begun this process and is assessing low carbon retrofit options for heritage buildings. This initiative provides a useful platform for taking forward the analysis of the retrofit solutions for the heritage building stock.

An approach for ensuring that the county's heritage stock is not left behind by the Green Deal, is for Cambridgeshire to require heritage building skills when procuring for a Green Deal Provider partner as a key component of its delivery framework.

#### 7.1.2 Supporting fuel poor households

Fuel poor households are generally not suitable for Green Deal finance as they are likely to be under-heating their home in the first place so as to lower their energy bill to a level they can afford. There is therefore a risk that they would not be able to afford the Green Deal repayments under a Green Deal Plan.

ECO Affordable Warmth funding is available for low income households (with eligibility based on benefit entitlement and tax credits) and low income areas, but the ECO funding is limited and there are a lot of fuel poor households who will not fall into the eligibility criteria for this funding anyway.

Cambridgeshire needs to maximise its access to ECO funding by identifying the households which meet the eligibility criteria, particularly rural households that could benefit under the rural uplift within the ECO regulations, and making it easy for energy supply companies to target their ECO funding in the county. Cambridgeshire also needs to prepare for the ECO 'brokerage' process, to secure the best deals possible from energy companies.

In order to fill the funding gap for fuel poor households not eligible for ECO Affordable Warmth funding, Cambridgeshire could potentially establish an 'Affordable Warmth Fund' which is replenished with revenues generated from the county's Green Deal programme.

A number of prospective Green Deal Providers have stated their belief that ECO affordable warmth funding will be the main driver for industry investment in energy efficiency over the next few years as it creates reliable demand for measures (through the availability of grant funding). Green Deal on the other hand, is reliant on latent consumer demand for energy efficiency. Harnessing ECO funding into Cambridgeshire might therefore constitute the most important action for stimulating Green Deal Provider investment and activity in the county.

### 7.1.3 Developing Green Deal opportunities in the non-domestic building sector

The implementation of the Green Deal in non-domestic buildings has had less focus than for housing, and there are a number of questions regarding the likely market response and how well the Green Deal will suit the characteristics of the non-domestic sector. Nonetheless, in principle the Green Deal provides an excellent opportunity to help non-domestic customers improve energy efficiency, meet Carbon Reduction Commitment (CRC) Energy Efficiency Scheme commitments, and comply with the legal requirement for landlords to bring all rented properties up to an Energy Performance Certificate 'E' rating by 2018. Customers could include public buildings, community buildings, commercial landlords, as well as tenants for rented buildings who will also be able to access Green Deal with their landlords consent.

In the same way as for the domestic sector, the Green Deal will remove the 'split incentive' between the landlord and tenant, whereby previously it was the landlord who paid for the energy efficiency improvement but the tenant who benefitted from lower bills, a common barrier to efficiency improvements in the non-domestic sector. For the first time landlords will be able to make energy efficiency improvements without having to pay for them upfront.

The non-domestic sector is extremely varied and there are a number of specific issues affecting the implementation of energy efficiency. In considering a delivery and incentive framework for the non-domestic stock, issues for consideration include:

- **As for the domestic sector, the Green Deal could help overcome the 'split incentive' in the rented sector between landlord and tenant**, whereby previously it was the landlord who paid for the energy efficiency improvement but the tenant who benefitted from lower bills. Under the Green Deal, landlords will be able to make energy efficiency improvements without having to pay for them upfront. From April 2018, all private rented properties (domestic and non-domestic) should be brought up to a minimum energy efficiency standard rating, likely to be set at EPC rating "E". This requirement would be subject to there being no upfront financial cost to landlords (i.e. measures are viable under the Green Deal's Golden Rule).
- **Green Deal Assessments will be more complex than for housing, requiring skilled assessors.** Non-domestic buildings are typically more varied than domestic properties, so the assessment method needs to be more complex in order to provide appropriate recommendations for the property. The assessment method for non-domestic buildings will build upon the existing SBEM methodology for producing Energy Performance Certificates for non-dwellings, but will also allow the actual use of the building to be captured as part of the assessment, with results correlated to actual energy meter readings. This is important as SBEM often under predicts actual energy use in non-domestic buildings by a factor of several times, due to occupant behaviour and poor building energy management. However, attributing



gas and electricity consumption to particular end uses (such as heating, hot water and individual appliances) is a skilled job, underlining the importance of good quality assessors to ensure recommendations are appropriate and achievable.

- **Community buildings could benefit from Green Deal finance.** Many community owned buildings lack funds for investment, and are often cold and inefficient, suggesting a valuable role for Green Deal. However, they are often under occupied (with only occasional use during the day or evening), meaning that payback periods on improvement measures might appear longer and not be viable under the Golden Rule. This will depend on the final detail of the assessment process for non-domestic buildings, which is still being developed by Government.
- **Green Deal could be a good option for smaller private building landlords and SMEs.** Around half the commercial building stock floor area is owned and managed by small landlords (who make up the vast majority of commercial landlords by number). They are less likely to be aware of the 2018 minimum EPC rating, or of Green Deal, than larger landlords but Green Deal finance could suit them better. Large landlords are more likely to wrap energy efficiency improvements into existing refurbishment budgets, rather than seeking separate finance under Green Deal.
- **Green Deal may not be the cheapest source of finance for public sector buildings.** For Council owned stock, where finance is available at Public Works Loan Board rates of 4-5%, it may make more sense to finance energy efficiency improvements through this route, rather than Green Deal finance at 6.5-7.5%. Unlike the domestic sector, where properties change hands on average every 9 years, publicly owned buildings tend to stay in public ownership for longer periods of time. This reduces the key benefit of Green Deal where the loan is linked to the property, not the owner. More energy efficiency works will be financially viable under the Golden Rule at public sector interest rates, and there is potential for the council to benefit from the return on investment.

The Green Deal offering to the non-domestic stock in Cambridgeshire will need to ensure that the capacity and skills of the local supply chain cover non-domestic as well as domestic properties. The marketing and promotion for non-domestic Green Deal may well need to follow different routes to the domestic programme. These are issues which could potentially be developed and tested through running a pilot project.

## 7.2 Resourcing local authority Green Deal activity

### 7.2.1 Resourcing ECO and Green Deal activity

The Cambridgeshire local authorities already dedicate staff resources to running energy efficiency activity within their areas, as demonstrated by a range of activity across the county including, for example, the Green House Project in Huntingdonshire and the Sustainable Parish Energy Partnership (SPEP) in South Cambridgeshire.

However, the development of a Green Deal scheme in line with the 'Partnership' model will require a significant scale-up of existing energy efficiency activity and the dedication of continued and additional council resources. In order to establish a scheme that achieves the necessary scale, each local authority will need to dedicate staff resource to coordinating the Green Deal programme (covering project management, communications, procurement process, oversight body etc). Each local authority will also need to source funding for Green Deal support & signposting for local



businesses and potentially for capacity building within community/voluntary groups to create networks that drive uptake and lead generation.

### 7.2.2 Potential revenue sources from the Green Deal value chain

The ‘Partnership’ delivery model involves Cambridgeshire’s public and community sectors delivering key elements of the Green Deal value chain, particularly in terms of generating customers for the Green Deal Provider/s. During negotiations with a Green Deal Provider partner, or partners, the public sector may therefore be able to secure a revenue stream related to the use of the county brand and the generation of leads. This revenue stream could take the form of a referral fee that is paid by the Green Deal Provider/s for each successful lead or customer that the Cambridgeshire programme generates.

This revenue stream may be significant enough to cover the cost of local authority resources required to run the scheme. The total Green Deal investment opportunity in Cambridgeshire is estimated at £830 Million. 10% of this total potential (i.e. £83 Million) could be considered a realistic (and not too ambitious) market opportunity for local authorities and local business to target in the short to medium term. As outlined in the schematic in Figure 29, if Cambridgeshire’s local authorities could in turn secure 5% of the value of this market through a referral fee process then approximately £4 million would be available to cover their resourcing costs. Figure 29 illustrates how this revenue stream could be divided across Cambridgeshire’s councils if allocated based on their estimated Green Deal potential, with just over a £1Million for Huntingdonshire and South Cambridgeshire and nearer £0.6Million for Cambridge, Fenland and East Cambridgeshire.

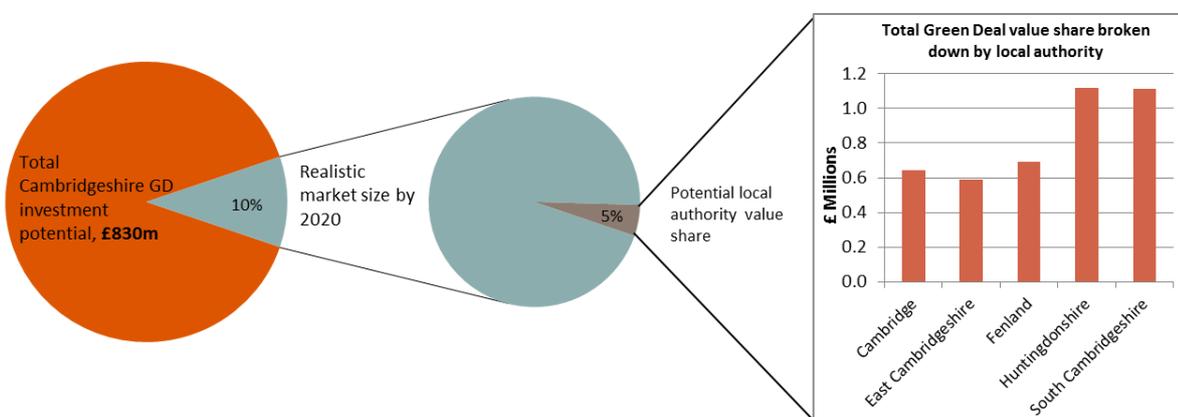
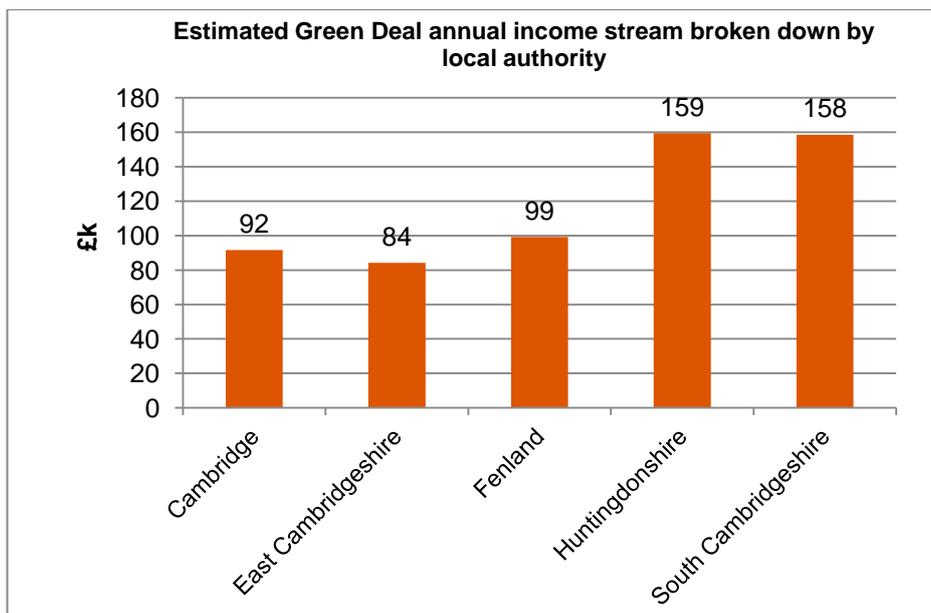


Figure 29: Acquiring a share of the potential Green Deal value chain

Assuming a Green Deal programme at this value/ scale runs from 2014 to 2020, then the annual budget available to Cambridgeshire local authorities would amount to £0.6 million per year, which would give average annual revenues for each local authority of approximately £120k. There is a risk that this hypothetical revenue figure could be smaller if a large number of Cambridgeshire residents were to opt for Green Deal Providers offering products outside of the county branded scheme, so that a large proportion of the Green Deal market does not flow through the branded scheme. Figure 30 illustrates how this revenue stream could alternatively be divided if allocated based on the estimated Green Deal potential of each district.



Figure 30: Illustrative annual revenue stream for each local authority if allocated on Green Deal potential



**7.2.3 Actual revenue streams will depend upon negotiation with Green Deal Provider[s] and success of Green Deal programme**

The illustrative example outlined above provides an indication of the level of revenue stream that it might be possible for local authorities to acquire to cover their resourcing costs in supporting a Green Deal programme. The Green Deal programme business plan will also need to cover marketing costs and assessment costs in order to develop a viable and commercial scheme. In practice, the revenue streams that the local authorities manage to agree will be determined (tested) through a negotiation process as part of the procurement exercise with prospective Green Deal Provider businesses. In turn the actual revenue streams obtained will depend on the success of the scheme, the number of customers that are acquired, and the management and control of a wide range of delivery costs.

**7.3 Action plan for the successful local delivery of ECO and Green Deal in Cambridgeshire**

**7.3.1 Timeline**

The Green Deal soft launch date of 1st October 2012 is fast approaching. During August 2012 the first round of companies formally applied to become Green Deal Providers. These Green Deal Providers are already developing partnership relationships with local authorities in preparation for the first Green Deal projects potentially going live from January 2013 when Green Deal finance is expected to become available. Although there has been a slight delay in the finalisation of ECO regulations, it will replace CERT as the energy company energy efficiency obligation from 2013 onwards, and energy suppliers will be keen to develop their ECO compliance strategies from this point onwards.

Cambridgeshire needs to set up its delivery framework over the next 12 months so that the county branded scheme is ready to launch in the Autumn of 2013. The local authorities will need a plan for the Green Deal in the intervening period, as they may wish to take the opportunity of marketing the Green Deal to residents to warm them up, and also will need a strategy for handling Green Deal

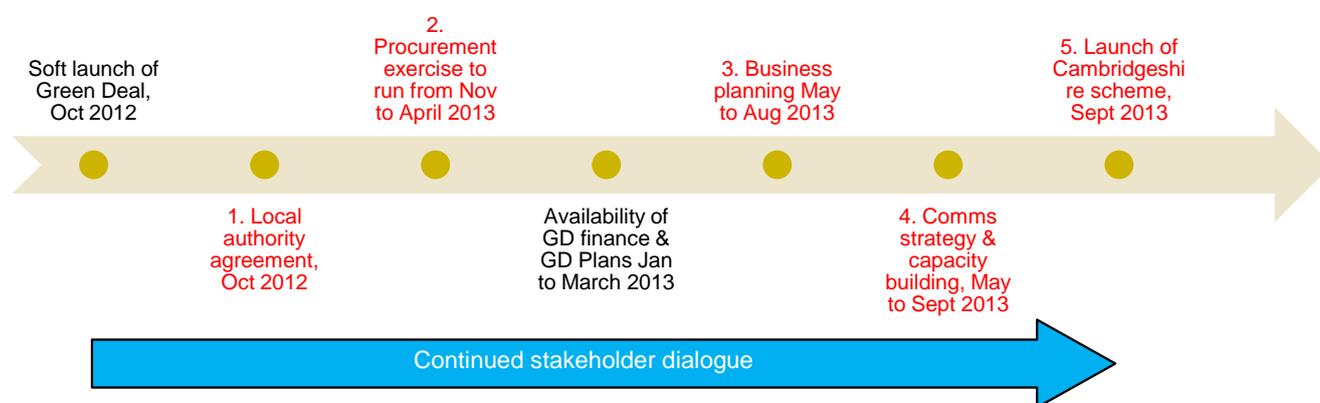


Providers who offer products to residents and businesses within Cambridgeshire before the county scheme is established.

The Cambridgeshire action plan needs to identify and prioritise short and longer term actions over the next 12 months. A suitable target date for launching the Cambridgeshire scheme is September 2013 as this provides enough time for obtaining agreement on a common approach across the districts and undertaking the procurement process whilst not taking so long as to lose the initiative within a mature market.

**Cambridgeshire needs to set out a clear timeline for preparing for the Green Deal and establishing the delivery framework.**

Figure 31 set outs the key dates for the national Green Deal mechanism and proposed milestones for putting in place the Cambridgeshire scheme.



**Figure 31: Green Deal timeline and Cambridgeshire preparations**

### 7.3.2 Inter- and intra-local authority decision-making

A common approach and common agreement across all the Cambridgeshire local authorities is key to the development of a county branded ECO and Green Deal programme. All the local authorities need to proceed with internal decision-making processes during summer 2012 so as to develop an agreed shared course of action for next steps by end of October 2012.

### 7.3.3 Continue the dialogue

The local authorities will need to continue to involve local community groups, voluntary organisations, local businesses and Green Deal Providers in the design of the delivery framework to ensure it has their buy-in, is designed to meet their needs and adequately incentivises them to invest in Cambridgeshire.

Key next steps should involve:

- Maintaining engagement with PCV and SME stakeholders
- Convening another meeting of interested parties.
- Setting up MOUs for the key interested parties



- Setting up working groups to take forward different elements of the delivery programme, and to consider some of the key issues in more detail (for example, the funding of Green Deal Assessments and the structure/ membership of an oversight body etc).

### 7.3.4 Procurement of Green Deal Provider[s]

The best approach to procuring Green Deal services will need to be established, with a committed local authority managed procurement schedule to commission a formal working arrangement (concession-type) with a Green Deal Provider or Providers. The procurement exercise could run from November 2012 to April 2013, so that the local authorities (and local stakeholders) have time to develop the detailed business plan with the selected Green Deal Provider/s ready for a launch in autumn 2013. A detailed procurement timetable will need to be defined prior to the process.

The procurement process will need to balance and match the local authorities' objectives with the objectives of commercial Green Deal Providers so as to establish a [financially] sustainable ECO and Green Deal programme which continues to re-invest revenue streams in the delivery of the programme to cover marketing costs, Green Deal Assessments, management costs and affordable warmth support.

In establishing a formal partnership with Green Deal Provider[s] the procurement and negotiation process will need to:

- Identify the optimum number of Green Deal Provider businesses for Cambridgeshire and secure this number in the Cambridgeshire market;
- Select Green Deal service offering[s] that most closely match Cambridgeshire's requirements in terms of stock characteristics (e.g. prevalence of rural and of heritage stock), local geography and community governance structures;
- resolve how to cover the cost of Green Deal Assessments, such as through a 'pre-assessment survey', as they are the first step in the process and will be key to the uptake of Green Deal in Cambridgeshire;
- provide financing solutions for marketing and programme management of the local Green Deal scheme;
- identify how best to programme manage a Green Deal/ energy efficiency programme for Cambridgeshire. For example, should a scheme be geographically focused (with resources focused sequentially in an area-by-area approach) or open to all (promoted to all households across the county), or both?
- Determine an approach to the 'letting of concessions' for Green Deal Providers in Cambridgeshire. Should the procured Green Deal Providers operating under the Cambridgeshire Green Deal brand offer services to:
  - Any home within the whole county in competition with the other scheme Providers?
  - Specific geographical areas within the county (with exclusive access to these areas)?
  - Specific house types across the county (for example, procuring a specialist 'heritage Green Deal Provider' and a 'mainstream Green Deal Provider')?



### **7.3.5 Strategy for attracting ECO funding into Cambridgeshire**

Cambridgeshire needs to develop a strategy for attracting ECO funding into the county so that it obtains its fair share (or more than its fair share) for fuel poor households and so that it obtains funding to subsidise the insulation of solid walled properties. The key elements of the ECO funding strategy will need to include:

- identifying households that meet the ECO affordable warmth criteria – if Cambridgeshire can show that it has good links and access to these households then it will be an attractive proposition for energy suppliers wishing to meet their ECO obligations with the minimal fuss and cost;
- identifying rural households that meet the ECO affordable warmth eligibility criteria who could benefit from the ECO's focus on rural households – Cambridgeshire has a large number of rural communities who could benefit from this targeted ECO obligation; and,
- compiling data on the number and location of solid walled stock and hard to treat cavities across the county – having direct access to solid walled households who are interested in insulation would be a real strength for both attracting ECO and also implementing an effective energy efficiency programme.

This data should be compiled quickly so that Cambridgeshire is on the front foot for ECO negotiations with energy suppliers or their intermediaries and the data would be extremely useful to help frame (and strengthen) the procurement process for a Green Deal Provider. Oct 2012 – December 2012.

### **7.3.6 Business plan for the energy efficiency retrofit programme**

The business planning process for the Cambridgeshire ECO and Green Deal programme can take place with the selected Green Deal Provider[s] and other key stakeholders following the procurement exercise. This business planning will need to include the development of the structure for the oversight body and Green Deal marketing plan. The business plan for the preferred delivery programme in conjunction with the Green Deal Provider/s can be developed during May-July 2013 so that the programme is ready to launch in early autumn 2013.

### **7.3.7 Green Deal communication strategy**

A Green Deal communication strategy for Cambridgeshire will need to be developed, including both the interim message for the next year and the branding for the longer term delivery programme once this is launched. The communications strategy will need to be developed as soon as possible so that some form of messaging is available for the time of the national soft launch of the Green Deal in October 2012. The development of the long-term communications strategy for the main Cambridgeshire programme can then be worked up in conjunction with all partners ready for a launch in September 2013.

### **7.3.8 Local business capacity-building**

A strategy needs to be compiled to build the capacity of the local supply chain and community groups in the delivery of Green Deal including signposting/ training support for SMEs and community groups. A key first step in this process is to undertake a thorough assessment of the current business and community capacity so that a support programme can be developed that meets the local need. The forum of community and business groups that has been put together through the 'community

connection' project constitutes an excellent gathering of key stakeholders for undertaking this assessment. The initial capacity-building activity can run through the summer of 2013 in preparation for the launch of the Cambridgeshire scheme. However, some form of Green Deal training support may be required on a permanent basis through the life of the programme to ensure local businesses have the skills and capacity needed.



## 8. Appendix 1 - Technical and financial modelling assumptions

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Packages of measures that would satisfy the Green Deal 'Golden Rule' for each of the archetypes and sub-archetypes were assessed through use of the Navitas Green Deal finance model. The 'Golden Rule' requires that the Green Deal annual payment should not exceed the projected associated cost savings from energy efficiency measures for the duration of the Green Deal Finance arrangement. The tool uses discounted cash flow analysis to generate the net present value (NPV) of the investment taking into account the capital cost for work packages and the value of the energy savings over a 25 year repayment term.

The capital costs used in NAVITAS are based on the EST Housing Energy Model and are the total installed costs for the measures. These costs reflect national cost averages.

For the purpose of the modelling it has been assumed that 95% of the value of energy savings is used to pay back the capital investment with 5% going to the householder through reduced bills. However in the 'Provider' scenario sensitivity analysis has been performed to assess the impact of a higher (10%) proportion of value share with the householder.

The analysis is based on a private sector cost of capital of 7%, although sensitivity analysis has been carried out to assess the impact of a relatively lower (5%) or higher cost of capital (9%).

No energy price inflation is factored into the Golden Rule calculations, meaning that the householder retains all the benefits of energy bills rising more slowly within an energy efficient home.

The distribution of each archetype and sub-archetype in the social and private housing datasets have been used as the basis to extrapolate the dwelling level results to the wider housing stock. The overall impact of Green Deal has then been worked out based on the number of households that are likely to take up Green Deal plans from now until 2035.

## 9. Appendix 2 - List of Green Deal Qualifying Measures

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The following list of qualifying measures was published in the Government's response to the Green Deal Consultation in June 2012.

1. Air source heat pumps
2. Biomass boilers
3. Biomass room heaters (with radiators)
4. Cavity wall insulation
5. Chillers
6. Cylinder thermostats
7. Draught proofing



8. Duct insulation
9. External wall insulation systems
10. Fan-assisted storage heaters
11. Flue gas heat recovery devices
12. Gas-fired condensing boilers
13. Ground source heat pumps
14. Heating controls for wet central heating systems or warm air systems
15. Heating ventilation and air-conditioning controls (including zoning controls)
16. High performance external doors
17. Hot water controls (including timers and temperature controls)
18. Hot water cylinder insulation
19. Hot water showers
20. Hot water systems
21. Hot water taps
22. Internal wall insulation systems (for external walls)
23. Lighting systems, fittings and controls (including roof lights, lamps and luminaires)
24. Loft or rafter insulation (including loft hatch insulation)
25. Mechanical ventilation with heat recovery systems
26. Micro combined heat and power
27. Micro wind generation
28. Oil-fired condensing boilers
29. Photovoltaics
30. Pipework insulation
31. Replacement glazing
32. Radiant heating
33. Room in roof insulation
34. Roof insulation



- 35. Sealing improvements (including duct sealing)
- 36. Secondary glazing
- 37. Solar blinds, shutters and shading devices
- 38. Solar water heating
- 39. Transpired solar collectors
- 40. Under-floor heating
- 41. Under-floor insulation
- 42. Variable speed drives for fans and pumps
- 43. Warm-air units
- 44. Waste water heat recovery devices attached to showers.
- 45. Water source heat pumps

#### **Measures Definitions**

Micro combined heat and power means a combined heat and power system with an electrical capacity of 50 kilowatts or less.

Micro wind generation means a wind turbine or turbines with a nominal output between 300W and 50kW measured at a wind speed of 11m/s.



## 10. Appendix 3 – Workshop agendas and outputs

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### 10.1 Notes from workshop 1: Tuesday 12<sup>th</sup> June

#### 1. Background

The workshop held from 9am to 1pm at the SmartLIFE Construction Centre in Cambridge, as part of the 'Community Connection' project. This project has been commissioned by South Cambridgeshire District Council, on behalf of all the local authorities in Cambridgeshire. It is being funded by Sustainability East, on behalf of Improvement East, using funds from the Climate Change Skills Fund. The project is being delivered by Verco, CAG Consultants and public-i.

The workshop on 12<sup>th</sup> June was the first of two workshops: the second will be on 3<sup>rd</sup> July 2012, from 12 noon to 4pm.

The first workshop was attended by at least 65 participants, from a wide range of backgrounds, including local businesses, Green Deal providers, local authorities, social housing providers, community groups and voluntary organisations. A list of participants is available in the Downloads section of the project website: [www.cambsgreendeal.org.uk](http://www.cambsgreendeal.org.uk)

#### 2. Introduction to the workshop

Richard Hales from South Cambridgeshire District Council welcomed everyone to the workshop and explained the purpose of the project: to build partnerships and action on the Green Deal in Cambridgeshire, for the benefit of local residents and businesses.

Daniel Archard from Verco then made a presentation explaining the basics of the Green Deal and how this new energy efficiency initiative is expected to work when it is introduced by the Government in autumn 2012. The overheads from this presentation are available in the Downloads section of the project website: [www.cambsgreendeal.org.uk](http://www.cambsgreendeal.org.uk)

#### 3. Stakeholder perspectives

A cross-section of different participants then outlined their particular vision for what the Green Deal could achieve in Cambridgeshire. A summary of their contributions is given below:

**Local Authority:** Chris Jablonski, from Huntingdonshire District Council set out his vision for a single, local-authority led Green Deal Scheme, covering the whole of Cambridgeshire. He proposed that such a scheme, trusted by local residents, could have the greatest impact on carbon savings, energy savings and creation of local jobs.

**Community:** Peter Bates, from the 80percentcompany, supported Chris's broad vision and emphasised the important role of the community in helping to make this vision happen. He also highlighted the need to encourage behaviour change, as well as the installation of energy efficiency measures.

**Social housing:** Nigel Howlett, from the CHS Group, explained that the Green Deal will be complex for social housing providers to manage, given that tenants could choose to take up Green Deal offers

by themselves, in addition to any initiatives proposed by the landlord. But he emphasised the social importance of energy efficiency initiatives in the light of rising fuel prices and increasing fuel poverty.

**Green Deal provider:** Garry Worthington, from Climate Energy recommended that the Green Deal should not be seen isolation from other sources of funding for energy efficiency measures (e.g. the ECO, local authority loans etc). He felt there was a role for community champions in taking forward the Green Deal on a street by street or parish by parish basis.

**Green Deal provider:** Ewan Jones, from the Energy Services Cooperative, referred to community-based work in Oxfordshire and elsewhere, and emphasised the importance of bringing together community players in Cambridgeshire.

**Energy assessor:** Peter Thom from Green Heat Ltd expressed concern about the high cost to small companies of obtaining Green Deal accreditation, and explained that there was a lack of trust within his industry about repeated changes in Government policy. He also expressed concern that the ‘big 6’ energy suppliers could dominate delivery of the Green Deal.

**Installer:** Christ Whitehall, from Projects4Roofing echoed Peter’s concerns about recent policy changes (e.g. the uncertainties created by changes in the Feed-in-Tariff for solar-PV installations). But he felt that the Green Deal is potentially a major opportunity for the construction industry. Local pilots would be a good starting point.

#### 4. Potential for the Green Deal in Cambridgeshire

Dan Archard and Duncan Price from Verco then presented the findings of their preliminary analysis of:

- a) The scale of the opportunity for the Green Deal across Cambridgeshire, including the locations and types of housing and types of measure which appear to offer the greatest opportunity;
- b) The range of delivery options that could be developed in Cambridgeshire, and how the business, public sector and community/voluntary sector could be involved in these different options.

This presentation outlined four main delivery options, for discussion during the workshop:

1	<b>Do nothing</b> – just leave the Green Deal market in Cambridgeshire to its own devices
2	<b>‘Promote’ - Promote Green Deal</b> – simple marketing and promotion of the Green Deal to Cambridgeshire residents and businesses;
3	<b>‘Produce’ - Produce leads and procure a framework of Green Deal Providers</b> – procure an agency/ agencies to identify and refer potential customers to a panel of Green Deal Providers to deliver the works;
4	<b>‘Provide’ - Establish a joint venture</b> with a Green Deal Provider or <b>establish a social enterprise</b> for the purpose of local Green Deal provision.



The full overheads from this presentation are available in the Downloads section of the project website: [www.cambsgreendeal.org.uk](http://www.cambsgreendeal.org.uk)

## 5. Plenary discussion

The following points arose in plenary discussion following these presentations:

Question / comment	Response
What was the assumed interest rate used in the analysis? The calculations on the rate of return will be very sensitive to the assumed interest rate and the terms of the loan.	7%
There seems to be little overlap between areas with a high incidence of fuel poverty and those areas with high Green Deal potential?	There is some overlap. But also need to realise that Green Deal is not expected to have high take-up with the fuel poor because the energy efficiency savings will be taken in comfort meaning. ECO is likely to be more appropriate for this group.
Are bungalows included in the analysis?	Yes, but not pulled out as a separate house type
Do the figures show what percentage of households are not currently taking up existing offers (e.g. free cavity wall insulation under CERT)?	The analysis looks primarily at what measures would meet the 'Golden Rule'. <i>[And Verco's analysis includes an assessment of the size of the market if 10% of those eligible under the Golden Rule took up the Green Deal]</i> More detailed take-up issues go beyond this analysis.
How will behaviour issues/types be looked at in the analysis?	Verco's experience is that take-up is driven more by local action than by socio-demographics. For example, a project with Affinity Sutton used a scattergun approach to marketing and achieved 4% take-up. Whereas a focused area-based initiative by Gentoo achieved an 85% take-up rate.
Will there be Green Deal Assessors <u>and</u> Green Deal Advisors?	Yes
There seem to be several bodies who will be involved in accrediting Green Deal advisors. Will there be one central list of qualified Green Deal advisors?	There will be one overall accreditation. Not clear whether there will be one central list. Could possibly be EST who hold this – they have just won the contract to provide advice.
Update is difficult even when measures	Trusted names, brands and schemes are very



Question / comment	Response
<p>are offered for free. How can take-up be driven under a complicated framework like Green Deal? How can we simplify things? Should we be building on existing schemes?</p>	<p>important. Householders will need a certain level of trust/comfort/ The Gentoo Pay-as-you-save pilot is a really powerful example of how it can be done. Householders were told that accepting the measures would lead to a £4pw cost – but 85% said yes because Gentoo were trusted and respected</p> <p>Richard Hales: It's why we are here today. We want to support a 'community connection' in Cambridgeshire. We can take it on if we get organised and it also opens the door to other sustainability issues with people – it's an opportunity to get back out there to people and make connections</p>
<p>How do we address practical barriers to take up e.g. cluttered lofts</p>	<p>Concierge-type services can help, which handle the removal of 'clutter' from lofts etc as well as the insulation</p>
<p>Can we see some examples of refurbished properties that could be done under Green Deal?</p>	<p>There are some illustrated on the workshop display boards</p>
<p>There is a good opportunity when the property is empty for a landlord to refurbish it. Is it possible for a landlord to enter into a Green Deal arrangement when a property is void and then pass on or assign the costs to the new tenants?</p>	<p>Yes, it is possible, although it might be a challenge to carry out the works quickly enough – landlords don't generally want a property empty for long</p>
<p>The Green Deal assessment could be attractive if it was seen as a useful free service to householders to allow them to understand what measures need doing. They will then decide at a later date whether they want work done. But if it costs £150 for the assessment, it will act as a barrier to householders even considering using Green Deal.</p>	<p>Assessors/providers need to factor in a drop-out rate.</p>

## 6. Topic group discussions



For the next session, participants were assigned to groups focusing on the following topics. Each group had a mix of stakeholders from the business, community and public sectors. The topics were as follows:

Group(s)	Topic
1, 2	<b>How area-based and community-led approaches might work?</b> <i>Can community organisations help to deliver or market local area-based Green Deal initiatives? Are intensive area-based approaches the best way forward?</i>
3, 4	<b>Maximising opportunities for local businesses</b> - <i>what can businesses do and what training/standards/processes would help them?</i>
5	<b>Making sure the Green Deal works to alleviate fuel poverty</b> - <i>how can the ECO combine with the Green Deal to help those in fuel poverty?</i>
6	<b>Green Deal issues for older/heritage buildings and how to overcome them</b> - <i>how can older buildings be properly assessed for Green Deal measures?</i>
7, 8	<b>How can the Green Deal be marketed most effectively to householders and tenants?</b> <i>What will help take-up?</i>
9	<b>How can the Green Deal be marketed most effectively in non-domestic properties?</b> <i>What are the main opportunities and how could they be pursued?</i>

Each group was set three tasks:

- Task 1: What are the opportunities and barriers for the Green Deal in Cambridgeshire relation to your topic?
- Task 2 - What are the pro's and con's of the different options for delivery of the Green Deal in Cambridgeshire (options 1-4 as outlined above)?
- Task 3 - How should we work together to develop the 'Community Connection' for the Green Deal in Cambridgeshire?

The findings from each group were recorded on flipcharts, and conclusions from Task 3 were fed back verbally to the whole workshop. These findings are summarised in Appendix 1, for each group in turn. As the flipchart comments were often written in shorthand, points of interpretation have been added in *italics*.

## 7. Summary of findings from topic groups

We have prepared a brief overview of key issues identified by the topic groups. For a fuller understanding of the issues identified by each group, please see Appendix 1.

### Task 1 - Overview of opportunities and barriers for the Green Deal in Cambridgeshire



Opportunities	Barriers
<p>Potential leadership role for public, community and voluntary sector</p> <p>Public, community and voluntary sector can help to generate awareness and trust amongst consumers (e.g. through community workshops, local champions)</p> <p>Opportunities for local businesses and supply chain - trusted by consumers</p> <p>Go beyond the Green Deal - signpost people to finance/assistance from the most appropriate source, including Green Deal and the Energy Company Obligation (ECO)</p> <p>Public-sector can also lead on non-domestic buildings, kick-starting the market</p> <p>Could have a 'bank' of local assessors, with information on their affiliations/ independence</p> <p>Could develop a mechanism to help with the cost of assessment (e.g. cashback or voucher, with some contribution from public sector?)</p> <p>Could have lists of accredited local installers, possibly linked to Cambridgeshire Trading Standard's 'Buy with Confidence' scheme, and possibly encourage coops of installers</p> <p>Could be useful to develop local case studies/pilots</p>	<p>Cost of assessment may be a barrier to householders - who pays this?</p> <p>Red tape may be a barrier for local businesses (and cost of getting accreditation)</p> <p>Apathy (as illustrated by low take-up of current offers for cheap or free insulation)</p> <p>Competition from larger Green Deal providers</p> <p>Reputational risk for local authorities and community/voluntary groups</p> <p>To achieve the greatest carbon/energy savings, need to change occupants' behaviour on energy use - not just install measures</p> <p>Cold calling may be less acceptable for the Green Deal, which involves householders taking out loans, than for previous highly-subsidised energy efficiency schemes (e.g. CERT, CESP)</p> <p>Need for specialist assessors for non-standard solutions/buildings (e.g. historic buildings), with appropriate training</p> <p>Need for assessors who take a wider view of fuel poverty and understand the issues involved</p>

## Task 2 - Overview of pro's and con's of Green Deal delivery options

Delivery option	Pro's	Con's
1. Do nothing	<p>No reputational risk</p> <p>No resources required from public sector</p>	<p>Lower take-up of Green Deal</p> <p>Risk of mis-selling, and local authorities having to pick up the pieces</p>



<p>2. 'Promote'</p>	<p>Public/community sector helps to promote the Green Deal, using their trusted status and local contacts to increase take-up</p> <p>Public/community sector remains impartial but signposts people to accredited list of providers</p> <p>Fewer resources and lower risks than options 3 and 4</p>	<p>Replicates issues from past schemes - if the local authority is impartial, they cannot steer the householder to particular deals, and therefore the process for customers is less smooth and people may drop out</p> <p>Some costs and reputational risks for the public sector/local authorities</p>
<p>3. 'Produce' (e.g. produce leads and procure framework of suppliers)</p>	<p>Public/community sector leads on promotion, as for Option 2, but can also set criteria and control delivery of the Green Deal by suppliers on their own framework</p> <p>This can produce a smoother process for the customer, and lead to establishment of a trusted local Green Deal brand</p> <p>This brand/process could include Green Deal and other finance options, and involve other agencies beyond GD providers where needed</p>	<p>Would the public/community sector still be seen as 'honest brokers', if they had contracted particular agents/suppliers to deliver the scheme?</p> <p>Reputational risk if framework suppliers do not deliver well</p> <p>Public/community sector must prove their ability to contribute to the Green Deal marketing process, to attract good Green Deal provider(s)/suppliers</p> <p>Greater resources would be required</p>
<p>4. 'Provide' (e.g. joint venture or social enterprise)</p>	<p>A social enterprise could potentially have the most significant impact on local jobs</p> <p>Build on existing social capital, within community/voluntary groups</p>	<p>A joint venture with one Green Deal provider might be too restrictive, limiting choice?</p> <p>Establishing a joint venture or social enterprise would be complex and resource-intensive</p> <p>A social enterprise might work to social objectives, but would still need to compete with larger, commercial Green Deal providers</p>

### Task 3 - Recommendations



## Preferred delivery option

There was consistent support from the topic groups for variants of the 'producer' or 'promoter' model. **Most groups described their preferred option as 'option 3' or '3 minus', or '2 plus'.** There was no support for the 'do nothing' option (option 1), and there was considerable caution about developing a joint venture or social enterprise (option 4), although it was not clear whether this was because of lack of knowledge of how this could work.

## Recommendations for how this might work

Suggestions from the topic groups included:

- An approach that goes beyond the Green Deal, and signposts customers to other sources of assistance or finance for energy efficiency if these are more appropriate
- Commitment of money, time and resources by the public sector and other players, to take forward the Green Deal in Cambridgeshire
- A role for the public/voluntary/community sector in local marketing and acting as 'honest broker'
- Make local data on Green Deal potential and building stock available to community and business players, across Cambridgeshire
- Develop an approach which builds trust, between the players and with potential customers
- Develop standards of good practice for marketing the Green Deal (e.g. whether cold calling is allowed)
- Develop a bank or panel of local assessors, and some mechanism to help customers with the cost of assessment
- Develop a bank or panel of trusted local installers, possibly accredited through the County's 'Buy with Confidence' scheme
- Develop local case studies or pilots
- Pilot the Green Deal in public sector non-domestic buildings, to help kick-start the wider non-domestic market.

## Further investigation

The topic groups identified a wide range of issues that need further investigation. These included:

- How the public/community sector could best develop relationships with Green Deal agents or providers, and what this relationship would look like?
- Could the public sector and community in Cambridgeshire develop their own procurement framework and still retain independence?

- How would a Cambridge Green Deal initiative relate to and compete with the offers from commercial Green Deal providers?
- How would promotion and assessment costs be covered? Where would funding and resources come from?
- What does the Green Deal actually offer to consumers, and how can this be communicated clearly to different user groups?
- Is there adequate training for assessors? Will there be enough assessors?
- Will there be proper monitoring of effectiveness (e.g. actual vs predicted energy use)?
- How will DECC's 'soft launch' of the Green Deal work in October?
- Will DECC be publishing guidance for local authorities?

### 8. Other comments

A flipchart and a map of Cambridgeshire provided participants with the opportunity to make other suggestions or to identify existing initiatives which are relevant to the Green Deal in Cambridgeshire. The comments recorded were as follows.

Existing initiatives	<ul style="list-style-type: none"> <li>• Cambridge Carbon Footprint</li> <li>• Transition Cambridge - Energy group</li> <li>• Cambridge Home Insulation Scheme - heat seekers</li> <li>• Rampton Drift - Willmott Dixon and S.Cambs DC - free insulation; solar thermal</li> <li>• Institute for Sustainability, London - FLASH programme - Green Deal Providers</li> </ul>
Other comments	<ul style="list-style-type: none"> <li>• There is no such thing as a 'free assessment'!</li> <li>• How will we know if there are sufficient assessors?</li> <li>• Will it actually start in October?</li> </ul>

Further information on existing initiatives within the County were gathered through the 'profile' forms completed by most participants. These will be used to develop a database of the organisations and individuals interested in taking forward the Green Deal in Cambridgeshire. Entries in the database will be held confidentially and used only for the purposes of this project, but will be available for checking at or after the next workshop, consistent with the requirements of the Data Protection Act.

### 9. Next steps



At the close of the workshop, Duncan Price from Verco and Catherine Howe from public-i reflected on the issues raised during the day. Catherine emphasised the need to build trust between the different players involved in the Green Deal, including trust in DECC. She also highlighted the need to clarify thinking on what the Green Deal actually offers customers - it's irrelevant to talk about the right structure if the 'offer' is not clear.

Mary Anderson outlined the next steps in the 'Community Connection' project:

- Proceedings and presentations from the workshop will be made available on the 'Download' section of the website - [www.cambsgreendeal.org.uk](http://www.cambsgreendeal.org.uk)
- Participants are actively encouraged to continue the debate on their topics, and on the pro's and con's of different delivery options, through Twitter (using hashtag #cambsgreendeal) or through the Forum topics on the website
- **The project team will reflect on messages from the workshop and take these forward before the next workshop;**
- **The next workshop will be held from 12 to 4pm on Tuesday 3rd July (NOTE REVISED TIMING).** This workshop will discuss and prioritise potential ways forward, and begin to develop plans for action on the Green Deal in Cambridgeshire by the public, community, voluntary and business sectors.

If you have any questions about the next workshop, or any comments to add to these notes of the workshop proceedings, please contact Mary Anderson, Denny Gray or Tim Maiden at CAG Consultants: [greendeal@cagconsult.co.uk](mailto:greendeal@cagconsult.co.uk)

## 10.2 Notes from workshop 2: Tuesday 3<sup>rd</sup> July

### Background

The workshop was held from 12 noon to 4pm at the SmartLIFE Construction Centre in Cambridge, as part of the 'Community Connection' project. This project has been commissioned by South Cambridgeshire District Council, on behalf of all the local authorities in Cambridgeshire. It is being funded by Sustainability East, on behalf of Improvement East, using funds from the Climate Change Skills Fund. The project is being delivered by Verco, CAG Consultants and public-i.

The workshop on 3<sup>rd</sup> July was the second of two workshops: the first was held on 12<sup>th</sup> June 2012.

The second workshop was attended by more than 70 participants from a wide range of backgrounds, including local businesses, Green Deal providers, local authorities, social housing providers, community groups and voluntary organisations. A list of participants is available in the Downloads section of the project website: [www.cambsgreendeal.org.uk](http://www.cambsgreendeal.org.uk)

### Introduction to the workshop

**Richard Hales from South Cambridgeshire District Council** introduced the workshop, welcoming all the delegates and explaining how this workshop built on the previous workshop in June. He emphasised that Cambridgeshire could use the Green Deal (GD) to generate benefits for residents and businesses in the county. But he compared the Green Deal itself to a bare 'bicycle frame' which provides a basic framework but still needs two wheels, handlebars, pedals and a saddle if it is to be driven successfully. He explained that the 'Community Connection' process should help to identify these additional parts, in terms of how the public sector, voluntary sector, local businesses and Green Deal providers can take forward the Green Deal in Cambridgeshire.

**Daniel Archard from Verco** recapped key points from the analysis of Green Deal potential presented at the first workshop. He then explained that the first workshop had broadly supported the 'producer' model for the Green Deal (see below), and that variants of this model had been tested with a range of stakeholders between the two workshops. He outlined a further delivery option, the 'partnership' model, which had emerged from discussion with stakeholders. This is intermediate between the 'pure producer' model and the 'provider' model, as summarised below.

Further detail on the pro's and con's of these different Green Deal delivery models can be found in Richard and Dan's presentations which are available in the Downloads section of the project website: [www.cambsgreendeal.org.uk](http://www.cambsgreendeal.org.uk)

### Summary of delivery models emerging since 1<sup>st</sup> workshop

0	<b>Do nothing</b> – just leave the Green Deal market in Cambridgeshire to its own devices. Not favoured by workshop 1 on the grounds that it would have too little impact.
1	<b>'Promoter' - Promote Green Deal</b> – simple marketing and promotion of the Green Deal by the public, community and voluntary sectors to Cambridgeshire residents and businesses. Feedback from workshop 1 was that this would have less impact than other models, because it does not enable local authorities/others to provide



	handholding and guidance to customers on which offers to take up.
2	<b>‘Producer’ - Produce leads and procure a framework of Green Deal Providers</b> – the public and community/voluntary sector identifies and refers potential customers to a panel of Green Deal Providers to deliver energy efficiency measures (or procures an agent to fulfil this role). There was considerable support for this model at the first workshop, but the practicalities of the public/community sector generating and managing leads was questioned by stakeholders between the two workshops.
2+	<b>NEW MODEL: ‘Partnership – Procure a Green Deal Provider and work in active partnership with the Provider to generate leads’</b> - the public and community/voluntary sector employs a single Green Deal Provider to identify and refer potential customers (in partnership with the public and community/voluntary sector) and to deliver energy efficiency measures. The provider could be supervised by an ‘oversight’ body, possibly a ‘Community Interest Company’ or social enterprise. Some stakeholders felt that this model would be simpler to operate, would provide a smoother ‘customer journey’ and would encourage a provider to contribute effort and investment to the county.
3	<b>‘Provider’ - Share the risk of providing the Green Deal.</b> This could involve the public and community/voluntary sector establishing a joint venture with a Green Deal Provider or establishing a social enterprise for the purpose of local Green Deal provision. There was not much appetite for this model at the first workshop, owing to the risks and resources involved.

## Plenary discussion

The following points arose in plenary discussion following these presentations:

Question / comment	Response
Why not have a partnership of several GD providers? (a hybrid of the ‘pure producer’ and ‘partnership’ model)	This could be considered - but would this be sufficiently attractive to encourage GD providers to bid for and invest in the Cambridgeshire scheme?
What % of Cambridgeshire’s 25,000 households are likely to take up the Green Deal?	Verco looked at 10%. But set up costs would be absorbed by the GD provider.
How big a market is viable for Green Deal?	The scale of the market in Cambridgeshire (Verco’s estimate is £83 million) is about right.
If loft and cavity wall insulation is being paid back, does the Green Deal legislation provide for transparency in the costings?	Yes



Question / comment	Response
<p>As a potential GD provider, we much prefer the 'partnership' model to the 'pure producer' model. From a provider's point of view, would get more investment and effort from a single provider. Other issues are:</p> <ul style="list-style-type: none"> <li>- How the 'pure producer' model would be managed?</li> <li>- ECO will be managed through weekly e-bay-style bids. This lends itself to a single GD provider.</li> </ul>	n/a
How much income generation from referral fees?	Possibly a few £100 per property? A provider suggested that income depends on the scale of work being done and whether work goes ahead on a particular property. Initially £50 might be good going for a referral fee.
A concern of voluntary groups is that Cambridgeshire/UK needs to go way beyond the Green Deal to meet UK Energy Act targets. So which model is most likely to facilitate other funding sources (e.g. FiTs)?	Possibly the 'partnership' model, rather than the 'pure producer' model, because of its simplicity?
In the partnership model, how would the oversight body interact with a single provider?	<p>Procurement is key - and the structure of the oversight body will also be important.</p> <p>The value balance will be important: the public, community and voluntary sector will need to define what they are bringing to the table.</p> <p>For example, Birmingham is spending £1.2 million on the GD procurement process alone, and companies may be paying several hundred thousand to put together their bids.</p>
Could we have more information about the ECO auction process?	See DECC's website

### Working group discussions



For the next session, participants were assigned to groups focusing on different aspects of Green Deal delivery. The working group topics were designed to examine areas of difference between the delivery model options. Each group had a mix of stakeholders from the business, community and public sectors.

The working groups were asked to think the key **conditions for success** for any delivery model:

- **Optimise conditions for investment** (develop confidence of GD Providers, local SMEs i.e. assessors and installers to invest in energy efficiency delivery in Cambridgeshire)
- **Ensure consumer confidence** (build trust and confidence within the community and households in the measures and service provided by a Green Deal programme)
- **Maximise local economic benefits** (ensure that local businesses have a significant share of the Green Deal market/ value)

These 3 conditions for success all involve **building confidence** in the Green Deal.

Each group was asked to focus on a specific set of issues, exploring differences between the delivery models. For each set of issues, they were asked to record:

1. Areas of agreement within their group
2. Areas of disagreement within their group
3. Proposed actions to be taken forward after this workshop (up to and beyond the launch of GD in October) - what, by whom, by when, resources

The issues assigned to each workshop group were as follows:

Description	Detail
1. GD offer	<ul style="list-style-type: none"> <li>• How to make GD attractive to domestic customers?</li> <li>• How to overcome the assessment cost barrier?</li> <li>• How to ensure wider social/sustainability benefits?</li> <li>• What messages to emphasise in promoting GD?</li> <li>• Should Cambridgeshire develop its own 'brand'?</li> <li>• Will local authorities be willing to take the reputational risk?</li> </ul>
2. Lead generation/	<ul style="list-style-type: none"> <li>• Who should undertake targeting, marketing, promotion and lead generation: the public sector, a social enterprise or GD provider</li> </ul>



Description	Detail
<b>referral process</b>	<p>(or a combination of these?)</p> <ul style="list-style-type: none"> <li>• Should this process acts as a gateway to other sources of finance, beyond GD?</li> <li>• How can a smooth customer journey be achieved?</li> <li>• How should lead generation/promotion be funded? (public sector/referral fees/GD provider investment?)</li> <li>• How aggressive should marketing be (e.g. cold calling)?</li> </ul>
<b>3. Community and voluntary sector role</b>	<ul style="list-style-type: none"> <li>• How should community/voluntary groups be involved (e.g. marketing/promotion/lead generation/after care)?</li> <li>• Could they be involved in a pre-assessment process?</li> <li>• What are their motivations and how does GD fit with these?</li> <li>• What is the capacity of community/voluntary groups to help?</li> <li>• What can other districts learn from S.Cambs/Cambridge City?</li> </ul>
<b>4. Assessment process</b>	<ul style="list-style-type: none"> <li>• Should local GD assessors be independent of or employed by GD provider(s)?</li> <li>• What would be the role/affiliation of GD advisors?</li> <li>• How could cost of assessments be reduced (e.g. public sector contribution? Cashback scheme?)</li> </ul>
<b>5. Level of competition</b>	<ul style="list-style-type: none"> <li>• Should the delivery model encourage competition between GD providers, or can this be left to the external market?</li> <li>• Is it feasible to have a panel of providers, rather than a single provider, and still attract GD provider investment?</li> <li>• How would this affect the customer journey?</li> <li>• Would a time-limited contract for a single provider be adequate to ensure a continuing good deal for residents?</li> </ul>
<b>6. Procurement and oversight</b>	<ul style="list-style-type: none"> <li>• What body should undertake the oversight/procurement of GD provider(s) (e.g. public sector or a social enterprise/community interest company?)</li> </ul>

Description	Detail
	<ul style="list-style-type: none"> <li>• How could the oversight/procurement role be funded?</li> <li>• What conditions can/should be attached to procurement of providers/installers? (e.g. Using local installers)</li> </ul>
<b>7. Local economic benefit</b>	<ul style="list-style-type: none"> <li>• What support do local companies need to access GD opportunities?</li> <li>• Is it helpful to use local accreditation schemes (e.g. Buy with Confidence) in addition to national accreditation?</li> <li>• Can anything be done to help smaller companies with the cost of training and accreditation?</li> </ul>
<b>8. Piloting</b>	<ul style="list-style-type: none"> <li>• Can we identify opportunities for early schemes/piloting?</li> <li>• How useful is an intensive area-based approach?</li> <li>• Should initial targets be those areas with greatest GD potential or those with greatest community capacity?</li> </ul>
<b>9. Non-domestic GD</b>	<ul style="list-style-type: none"> <li>• Should management and lead generation for the non-domestic GD be procured separately?</li> <li>• What are the barriers to early roll-out of GD in public sector property and how could these be overcome?</li> </ul>

In summary, there were **several important areas of agreement** across all the groups:

- Universal support for keeping the business generated local to Cambridgeshire, as far as feasible;
- Support for promotion of a single-brand for the GD in Cambridgeshire, with a clear message to consumers;
- Agreement that community groups should be involved in supporting the promotion process - but differences of opinion as to whether they should be affiliated to a particular GD offer;
- Agreement that how the GD assessment is funded, and how the assessor is affiliated, is critically important to take-up of the scheme - but differences of opinion as to whether assessors should be independent of GD providers;



- Agreement that any pilot process should both ‘work’ and also generate learning - but differences of opinion as to whether there is time for a pilot (given competition from other national GD providers).

The plenary discussion explored the **assessment process** in more detail:

- There is tension between the need for independent assessors (still under a single brand, trusted by consumers) and the need for assessors employed by providers (trusted by providers);
- Accountability is important - providers will be taking financial risks on the back of the assessor’s recommendations.
- Perhaps an independent adviser can have the brand association, but then a provider- linked assessor could do the nitty gritty GD bits?
- A key issue is clarity on affiliation of assessors.
- Another key issue is how the assessor gets paid? Can independent assessors make enough money?
- Agreed action: review how independence of assessors can be funded.

The plenary discussion then explored the **areas of disagreement** highlighted by different groups. These were summarised as follows::

- Can lead generation be carried out well by local government?
- How many providers and how much competition should there be (or whether there should be a time-limited contract for one provider)?
- Where/how should pilots be located - pilots are very important. How can you incentivise early GD investors, and fund them?
- Is GD a bad deal for public sector property because of asset divestment?
- Should householders pay for advice? But cost of assessment is only 1 part of the financial picture. What level of self-assessment is possible? What assessment data already exists? (Assessor needs to be trusted by both the home owner and the GD provider)
- Should community group involvement be formally linked to an offer/provider?
- Can community groups be involved in generating leads and/or giving advice?
- Are local government ready for the reputational risk of a Cambridgeshire GD brand?
- Local skills and training - can we make sure procurement works locally (ie SMEs, the Best Value bid is not necessarily the cheapest)?
- Can Cambridgeshire move fast enough, given potential competition from major GD providers within and beyond Cambridgeshire?



- Should oversight be provided by a Community Interest Company?

### Action plans

Each working group was asked to propose actions to take forward the Green Deal in Cambridgeshire, after this workshop. Their suggestions are listed in full in Appendix 1 and summarised below:

1. Understand the current market for Green Deal, within and outside Cambridgeshire - as context for Cambridgeshire's offer
2. Possibly develop an interim strategy for early Green Deal promotion, while a wider scheme is established/procured, to avoid losing the market to national GD providers?
3. Secure local authority support (e.g. funding; cabinet proposals; member engagement on energy efficiency across all portfolios - whether through GD or not)
4. Possibly set up a social enterprise or community interest company, wider than the local authorities themselves, to provide oversight (and undertake procurement?)
5. Define Key Performance Indicators for procurement of provider(s) and installers (e.g. using local SMEs as installers)
6. Support SMEs in accessing GD training and accreditation
7. Review how to fund the assessment process (e.g. referral fee), and whether independent assessors can be funded
8. Define the role of the GD advisor
9. Define branding and simple marketing messages
10. Use a mix of marketing routes for different target audiences (domestic, non-domestic)
11. Identify alternative sources of funding to GD for both domestic and non-domestic customers, as part of the broader energy efficiency offer
12. Engage with community groups, including non-energy community groups
13. Build partnerships with voluntary groups (e.g. Care and Repair network; Cambridgeshire ACRE)
14. Establish early examples of success (e.g. show homes; incentives for pioneers). But possibly have 'areas of focus' for learning/monitoring, rather than pilots per se.

### Preferred delivery option

Having explored areas of difference between the delivery models, participants were asked to vote on their preferred delivery option by sticking 'dots' on a flipchart. These included the 'multiple provider'



version of the ‘partnership model’, which was not included in the presentation but was suggested during the plenary discussions. About half of the participants voted, as shown below.

<b>Model</b>	<b>Community/ voluntary sector votes</b>	<b>Public sector/university votes</b>	<b>Business sector votes</b>	<b>Total votes</b>
‘Pure producer’ model	0	0	0	0
‘Partnership model - 1 provider	1	2	6	9
‘Partnership’ model - multiple providers	13	6	5	24
Other (e.g. Promotion)	1	0	3 (‘Social enterprise’)	4

The results suggest that the most favoured option was a ‘partnership model’ involving multiple providers. Community and voluntary sector representatives particularly favoured this model over the ‘single provider partnership model’, presumably on the grounds that competition between providers would help to keep costs down for customers. Business opinion was more evenly split between the ‘single provider’ and ‘multiple provider’ versions of the ‘partnership model’, possibly reflecting concerns about the viability of a ‘multiple provider’ model.

Overall, the ‘partnership model’ was clearly preferred over the ‘pure producer’ model: this implied that participants felt that the public, community and voluntary sectors should support a lead generation/referral process run by GD provider(s), rather than running such a process themselves.

### **Final discussion and next steps**

Richard Hales from South Cambridgeshire District Council and Duncan Price from Verco presented the findings from the voting process, and outlined the way forward. The consultancy team, led by Verco, will prepare a final report on the ‘Community Connection’ process during July. This will set out the findings of the GD analysis and make recommendations for the way forward. South Cambridgeshire DC will then work with the other Cambridgeshire local authorities to take forward the recommendations and suggested actions. This is likely to include proposals to cabinet which would seek backing for the approaches outlined here.

In their recommendations, the consultancy team and local authorities will consider further the tensions between ‘single provider’ and ‘multiple provider’ versions of the partnership model. While the



community, voluntary and public sector representatives at the workshop tended to support a 'multiple provider' model, opinion amongst the business community and GD providers was more split: some providers felt that a 'multiple provider' model was feasible, while others felt that it would not generate sufficient interest and investment from providers. The way forward will be influenced by conditions in the wider GD market, as well as by Cambridgeshire's objectives for the Green Deal.

### **Feedback from participants**

On leaving the workshop, participants were asked to complete a feedback form giving comments and indicating whether they would like to be involved in later stages of the 'Community Connection' process. These comments will be fed into the final reporting process, and passed to South Cambridgeshire DC.

Participants were also asked to indicate, on wall charts, how useful they had found the workshops. The findings were that all participants had found the workshops either 'very useful' or 'fairly useful', both for themselves and for the Green Deal in Cambridgeshire. Photographs of the charts will be posted in the Gallery section of the project website.

If you have any questions or comments on these notes of the workshop proceedings, please contact Mary Anderson at CAG Consultants: [greendeal@cagconsult.co.uk](mailto:greendeal@cagconsult.co.uk)

## 11. Appendix 4 – Examples of energy efficiency activity in Cambridgeshire

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### 11.1 Sustainable Parish Energy Partnership

South Cambridgeshire District Council (SCDC) set up SPEP in 2009 to support parish councils to make their parishes more sustainable. It has grown from an initial nine parishes and now numbers 25. Nearly a quarter of the district's 104 parish councils are signed up to SPEP. The Partnership is supported by a Parish Energy Project Officer, who organises a programme of workshops and visits, project resources and a newsletter.

Joining SPEP is free of charge, and parish councillors can get involved and organise events and activities as much or as little as they wish. Joining SPEP gives access to a network of commitment and experience plus a menu of support including:

- electricity monitors which can help residents save electricity, and can be lent out in the village
- support for setting up and running village 'energy events' to bring people together
- loan of a thermal imaging camera, and training, to do home surveys
- a village Living Sustainably booklet with helpful information, photos and local examples of what really works to save energy and save money.
- workshops, on subjects such as Improving the Energy Efficiency of your Community Buildings, Promoting Lift Sharing in your Village and Making the most of Feed in Tariffs
- visits to sustainable initiatives, e.g. to the Rampton Drift Retrofit project and to the Gamlingay Ecohub, and further afield to the Hockerton Housing Project and the Beddington Zero Energy Development.
- updates on new developments, grants, subsidies and other opportunities.

The Sustainable Parish Energy Partnership is currently looking at how the villages can make the most of the new Green Deal and ECO grants. An information leaflet is provided on their website.

<http://www.scams.gov.uk/Environment/SPEP/default.htm>

### 11.2 Rampton Drift Project

South Cambridgeshire District Council (SCDC) won grant funding in 2010 to retrofit 12 houses built between the 1950s and 1970s in Rampton Drift, a small ex MOD housing estate near Longstanton, Cambridgeshire. The aim of the project was to identify and monitor the costs, effects and benefits of installing a range of low-carbon, sustainable technologies.

Initial interest in the project was generated by inviting all residents living on Rampton Drift to public meetings, where the scheme was explained in some detail. It was very quickly recognised that it would be essential to the success of the project to ensure that the 12 households who signed up remained fully engaged throughout each stage of the project.

The project focused on the most cost effective solutions but ones that would bring the greatest benefits to each property; this led to the project team taking a fabric first approach. The Golden Rule in the Green Deal supports exactly this approach when selecting the sequence of low carbon measures to be installed.



The households are being monitored for a two-year period. Information gathered includes data relating to energy usage, as well as softer data for thermal comfort levels and behaviour change. This information will assist in establishing cost effective ways of improving existing housing stock and help promote behavioural change in the way people use energy in their homes. It is intended that the lessons learnt on the Rampton Drift project, together with the monitoring data collected over a two year period, will inform SCDC's rollout of a wider low-carbon refurbishment programme in the South Cambridgeshire district.

This project has provided valuable information to benefit the wider industry and has useful lessons for investigating the prospects for the Green Deal. Much more time and effort than was originally anticipated was required by the whole project team and the following lessons have been learned:

- There is a need to clearly identify the condition of each property before work commences. This is essential to identify hidden defects, and manage the costs of repairs and refurbishment. While extensive survey work was carried out before and during the works, retrofit work must programme for unforeseen problems – e.g. expect delays and difficulties on site
- High level of engagement with householders was essential to help manage expectations and relationships and ensure project progress and overall success. It enabled the project to move forward despite the emergence of some major stumbling blocks such as the discovery of existing faulty 'DIY' workmanship in the houses, which could have proved costly to the project without the commitment of the residents and their efforts to resolve the problems themselves.
- A whole team approach is key to a successful retrofit project. The project has demonstrated the importance of all partners, stakeholders and consultants working together in order to overcome barriers and ensure long-term success.

### **11.3 The Green House Project**

As part of Huntingdonshire District Council's (HDC) commitment to reduce carbon emissions and tackle climate change, the local authority launched Project Green House and purchased two properties, which were sustainably refurbished and were opened up to the public as demonstration homes. The aim of the project is to show how such properties can be refurbished affordably and easily, not only to reduce carbon emissions but to provide healthier homes that are cheaper, comfortable and more efficient to run.

HDC worked with the Building Research Establishment (BRE) to provide the specifications for the improvements, which were based around the results of extensive thermal and acoustic testing undertaken in both of the houses. The Green House Project took a 'whole house' approach to refurbishment, starting with the building fabric and insulation, windows, heating systems, ventilation, water efficiency measures and the installation of renewable energy technology including solar thermal for hot water and solar photovoltaics (PV) for energy.

A website summarises the retrofitting process with detailed narrative, photos and videos of the works (<http://www.greenhouseproject.co.uk/>). Over 30 project partners are listed and visits to the houses can be booked. The Green Deal may face the challenge of a low uptake as residents and contractors may be wary of undertaking low carbon retrofitting works. The Green House project provides an excellent forum to mitigate this challenge. Both properties provide an essential demonstration and educational resource for home owners, housing providers, tradesmen, local suppliers and educational establishments. The project promotes the importance of sustainable refurbishment, and provides easy



access to advice, products, technologies and information to those planning on making improvements to their own properties. Furthermore, the informative blog of the current residents tells their story of green living and encourages a 'low carbon lifestyle'.

## 12. Appendix 5 – Higher resolution maps

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Provided separately.



## Outline Business Case

<b>1 Project Name</b>	Cambridgeshire Green Deal Partnership
<b>Project Manager</b>	
<b>Version</b>	1
<b>Date</b>	21 <sup>st</sup> December 2012
<b>Report To</b>	Development and Transport Committee

### 2 REASON FOR PROJECT

The Green Deal (GD) is the Government's new energy efficiency policy, for householders and property owners to have their properties and energy use behaviour assessed and for key measures to improve energy efficiency to be identified, financed and installed.

It is recognised by Central Government (formalised in the new Home Energy Conservation Act guidance) and the commercial players that Local Government has a key role to play in effective GD delivery. This is because of its position of local trust, impartiality, and their well-established communication and engagement channels with the local residential and business communities.

It has been established through the Cambridgeshire GD Community Connections study that local authorities stand to secure most benefit from the GD by closely partnering with one (or maybe two) formal GD Providers.

It was also established that, in order to provide sufficient catchment and scale for such a partnership to operate effectively, district level local authorities should work together to procure the partnership relationship for Cambridgeshire as a whole and come together under a single Cambridgeshire GD brand. This would also aid communication.

To this end officers from the Cambridgeshire district authorities (East Cambs DC, South Cambs DC, Hunts DC, Cambridge City, and Fenland DC), with County Council support, have been working to put in motion the necessary procurement mechanism. The first step is to ensure that the individual Cambridgeshire LAs are signed up to this shared approach.

Each is therefore currently seeking approval to enter into a joint procurement process, subsequently returning to Committee with recommendations from the process prior to entering into a formal partnership arrangement with an appropriate accredited Green Deal delivery partner.

### LINK TO CORPORATE AND SERVICE OBJECTIVES

1. To run an efficient and effective Council to deliver best value for its residents.

By becoming a partner of a Green Deal Provider, rather than leaving development solely to the market, the Council can ensure that the customers experience of the Green Deal is one that delivers residents the most appropriate energy saving measures, from a provider who has been robustly assessed. It presents little initial investment in the scheme by the Council, but presents the potential to generate additional income

2. To build the foundations for the growth of the economy of East Cambridgeshire supporting job and wealth creation and improving quality of life.

As part of a procurement exercise the Council would seek to ensure that their chosen provider would use, and offer training to locally based installers, assessors and advisors. There is the potential to create jobs within Cambridgeshire. By enabling people to improve the energy efficiency of their home, fuel poverty will be reduced, comfort and wellbeing with homes will increase, having a positive impact on quality of life.

## **BUSINESS BENEFITS TO BE GAINED FROM PROJECT**

From a partnership point of view, the suitability of an external GD Delivery agent to partner with would depend on them being able to deliver following benefits:

- securing the maximum take-up of Green Deal measures across the building stock of all Cambridgeshire's districts to reduce fuel poverty, carbon emissions and improve the building stock;
- ensuring good value, high quality energy efficiency installations with outstanding quality of work and customer care;
- boosting the local economy (employment, skills and learning, expansion and development of the energy efficiency and microgeneration business sector);
- supporting local community groups and voluntary sector organisations working on sustainable energy-related issues;
- establishing a financially sustainable energy efficiency/ Green Deal programme which continues to re-invest referral returns in the delivery of the programme to cover marketing costs, Green Deal Assessments, management costs and affordable warmth support.

Additional benefits for East Cambridgeshire would include:

- building upon and making the most of many years of Council work meeting the requirements of the Home Energy Conservation Act (1995);
- ensuring that the Council has a leading profile in meeting the 2012 revised requirements of the Home Energy Conservation Act;
- the District Council has traditionally been the first contact for those seeking independent advice on energy and insulation matters, by partnering with a service provider, we can continue to offer this service to our more vulnerable residents, rather than allowing them to be at the mercy of the market.
- Despite many attempts to simplify the framework, Green Deal by its nature remains a complicated programme. The district council is in the perfect position to help offer advice and guide residents through, and give confidence in, the scheme.
- Benefits to the local economy including creation of just under 3800 jobs, and securing inward investment of up to £117 million by 2030.

## HOW ARE THE BENEFITS GOING TO BE REALISED

These options for local delivery in Cambridgeshire include;

**1. Do nothing** – just leave the Green Deal market in Cambridgeshire to its own devices.

Response: This position means that LAs are unable to use existing networks to help their residents and businesses to understand GD. As a new approach to tackling deep-seated problems, effective communication and awareness-raising will be essential to getting GD off the ground.

**2. Promoting Green Deal**– simple marketing and promotion of the Green Deal to Cambridgeshire residents and businesses.

Response: This will help get the GD message out across the local area but does not provide for any means of helping residents and businesses get the best deal from the Green Deal or of ensuring that those in greatest need are prioritised. LAs would also miss out on the potential benefit to business that our support might bring. With GD investment potential estimated at £107m for the domestic market and £10m for the non-domestic market the local economic incentive to maximise take-up across both individual properties and the district is very significant.

**3. Producing leads and procuring a means of referring these to a GD Provider partner** – partner shares the Council's GD delivery principles

Response: This position allows for both effective LA supported marketing and also input into GD engagement and delivery but without carrying any of the financial, installation and aftercare risks. The partnership principles would revolve around GD Provider use of a shared LA supported GD Brand, LA established communication channels and community access routes and a local knowledge of the area and its issues in return for working in a manner that has the greatest potential to secure the best deal from the Green Deal for local residents and businesses and the economy as a whole.

**4. Establishing a joint venture with a Green Deal Provider (Provider model)** or establish a social enterprise for the purpose of local Green Deal provision.

Response: From this position the LAs would become the Green Deal Provider. This organisation would deliver Green Deal locally aiming to maximise local benefits, such as using local business for assessment and installation, targeting homes in fuel poverty, and providing appropriate advice and aftercare to maximise lasting carbon emissions reductions. Becoming a Green Deal Provider involves a number of responsibilities, some of which carry risks and entail activity not necessarily linked to a local authority's core business. There are also risks involved with entering a new market at such an early stage while there are still a number of policy and market unknowns. Highest cost and highest risk of all the options (responsibility for consumer credit act, resolving complaints, technical failure, customer default, etc.).

**Option 3 (Producer) is the one that is preferred** (in the consultation exercise) as it allows LAs to genuinely input and shape a specific GD provision route to best meet local priorities, issues and circumstances whilst also avoiding exposure to the risks associated with financing, installing and guaranteeing GD measures.

### 3 COST AND TIMESCALE OF PROJECT

The procurement costs for East Cambridgeshire DC include officer time spent on developing tender specifications. Each district shall be contributing equally, and the County Council has agreed to contribute £4,000 towards procurement costs.

Action	Date
Final Draft of <i>Community Connection</i> project report released (asset assessment, community consultation and preliminary LA option analysis)	11 <sup>th</sup> October 2012 <b>Completed</b>
GD cross-authority officer project group meet to discuss putting the group on more formal footing: reporting process to Exec Mgt, procurement issues, timescales, etc.	23 <sup>rd</sup> October 2012 <b>Completed</b>
Update <i>Green Deal: Community Connection in Cambridgeshire</i> website	w/c 29 <sup>th</sup> October 2012 <b>Completed</b>
Market testing – telecon & questionnaire to potential GD Providers and other co-ordinating GD players (e.g. GD Advisory Services)	w/c 29 <sup>th</sup> October 2012 <b>Completed</b>
Series of meetings between the officer project group and potential GD Providers to further develop market testing	7 <sup>th</sup> -8 <sup>th</sup> November 2012 <b>Completed</b>
Report to Development and Transport to update on progress and seek support to continue partnership working on the project	6 <sup>th</sup> November 2012 <b>Completed</b>
SCDC/City host meeting to discuss procurement options (project officer team and LA procurement officers).	w/c 12 <sup>th</sup> November 2012 <b>Completed</b>
Submit bid to DECC under the Green Deal Pioneer Places Fund stream of the Local Authority Competition 2012-13	30 <sup>th</sup> November 2012 <b>Completed</b>
Formulation of outline sustainable GD business case options to procure robust relationship with key GD delivery player(s) – e.g. GD Providers or GD Advisory Services.	30 <sup>th</sup> November 2012 <b>Completed</b>
District agree objectives that should be achieved as part of procurement	December 2012
Prepare report on outline business plan for consideration of Members	December 2012
Each LA secures necessary internal approvals to proceed with GD business plan to procure agreed partnership arrangement	January 2013
Run GD Pioneer Places project (200 GD Assessments) if bid for funding from DECC successful	January-March 2013
Preparation of detailed tender brief documents (PQQ & ITT)	February 2013
Release of PQQ	March 2013
Release of ITT to short-listed tenders	June 2013
Tender assessment, interviews and award	August 2013
Launch of Cambs GD single brand with GDP partner	September 2013

### 4 INVESTMENT APPRAISAL (Return on Investment/Value for Money)

A full investment appraisal will not be possible until the tender assessment process has been completed. However the following potential investment issues have been raised to date:

- Total GD investment potential in East Cambs estimated at £107m for the domestic market and £10m for the non-domestic market.

- From soft market testing with seven potential GD providers see a relationship with local authorities as a significant asset. Indeed their past experience has shown that the rate of conversion of initial contacts with householders through to installation of an energy efficiency measure is increased from 1%, when operating independently, to 5-10% when co-branded with an Authority.
- Opportunity cost of procurement, financial, legal and officer input to procurement are the only initial implications.
- The running of the contract once procured will be as a minimum at no net cost to the Authority but there is some potential for income generation or staff resource contribution to the partnership. This will form part of the assessment criteria against the procurement specification.
- Soft market testing carried out has identified potential referral fees ranging from £25 - £150 per lead dependant on quality and level of information and commitment. £150 would likely be an assessed lead carried through to installation. Potential lead generation is still a matter of conjecture and the reality will only emerge as roll-out develops nationally from February 2013 onwards, but 2500+ leads per annum across the County has been put forward as deliverable, 500 of these to be from East Cambs.
- Some Green Deal providers interviewed would offer dedicated staff commitment to the County partnership in lieu of referral fees and / or a percentage of profit.

Help Notes:

- Information for the Business Case should be derived or influence the following:
  - Project Plan (costs and timescale)
  - Customer/Department (business benefits/reasons for project)
- Quality Criteria
  - Can the benefits be justified?
  - Ensure the costs and timescale match your Project plan.

Are the reasons for the project consistent with the corporate or departmental programme strategy?