

Energy Saving Trust: Delivering the Green Deal

Ben Frier – Local Delivery Manager

The drivers and opportunities a massive refurbishment of the UK housing stock

7million UK homes Eco-refurbished by 2020

71,880 Ox'shire homes by 2020

Average 153 Ox'shire homes per week

2011 2020

Finance set up
Consumer awareness
Supply Chain
Local Delivery Programmes

FIT Apr 2010
RHIPP Oct 2012
GD Oct 2012
ECO Jan 2013
Smart Meters
Stamp Duty ??

The housing stock challenge

Home energy use is responsible for over a quarter of UK carbon dioxide (CO₂) emissions which contribute to climate change

Ultimately, by 2050 all dwellings will need to achieve an energy performance rating in the range of a high EPC band B to band A if we are to reach our target of a 80% cut in CO₂ emissions across the entire housing stock

What is the Green Deal

A regulatory framework enabling organisations to offer **householders and SMEs**:

- Accredited **advice and recommendations**
- Home energy efficiency improvements at **no up-front cost**
- Reassurance that work is of a **high standard**
- The ability to **pay via energy bills** over the long term (for example, 25 years), making use of the money saved on fuel
- Only to pay whilst they remain in that property**
- Backed up by a new Energy Company Obligation
- The Green Deal will include owner-occupiers, the private and social rented sectors and the commercial sector.

The Green Deal process

The Golden Rule

Green Deal Repayment – illustrative only

Pre-GD: £800

With GD Finance: £430 (Energy Costs), £340 (GD Repayment), £30 (Saving)

Legend: Saving (blue), GD Repayment (red), Energy Costs (green)

Energy Company Obligation (ECO)

Affordable Warmth Target (£350million per year)

- For vulnerable fuel poor homes in private tenures.
- Provides cavity wall insulation, loft insulation and heating measures.

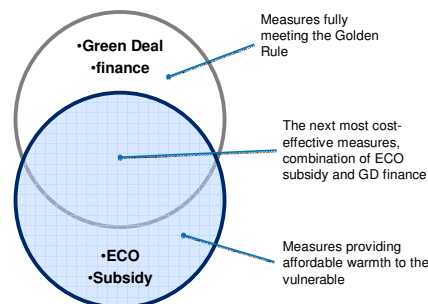
Carbon Target (£760 million per year)

- Provides internal or external solid wall insulation or hard to treat cavity walls. Likely to be split between social and private.
- Can be combined with other measures, e.g. draught proofing, double glazing

Low income communities target (£190 million per year)

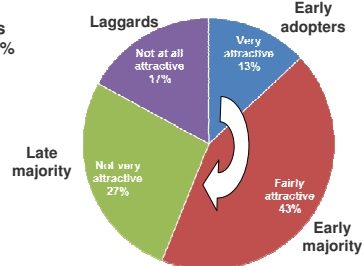
- For homes in areas of lowest income – provides insulation in all tenures

ECO objectives and interaction with the Green Deal overlap



Green Deal early adopters

Nationally early adopters can account for up to 13% of the population – first target market



Communities and the Green Deal

- They are recognised as being important and crucial to success
- Potential roles:
 - Demand generation activities
 - Help engage with vulnerable groups
 - Skills and jobs
 - Assessing
 - Join up with other groups to create critical mass
 - Provide insight through focus groups etc

What else do we know?

- CERT and CESP will finish next summer, and by December 2012 at latest – last chance for CWI and LI grants is here.
- There is no Government money with Green Deal – it creates the possibility of non government investment (i.e. private and/or Council investment)
- But, up front private sector finance is not forthcoming
- GD, RHI, FiT and ECO need to be brought together to deliver housing refurbishment
- It won't happen in areas where LAs don't make the market favourable for investment
- Local jobs, growth, energy, fuel poverty and health benefits are the drivers alongside low carbon
- Local authorities key leadership role – trusted parties, delivers broad outcomes
- Home Energy Conservation Act review
 - May 2012?
 - Green Deal requirement?

What do we need to do?

- Set up finance** – explore options, develop business case, procurement: finance, legal, operations; local programmes
- Develop supply chain** – construction and heating business support, FE colleges, training, skills, accreditation, tech support;
- Increase customer demand** – awareness raising, open homes, marketing, trusted independent advice
- Housing stock evidence base** – how many houses, types, current condition, best measures, cost, savings, GD golden rule finance assessment, heat mapping;
- Strategic opportunities** – district heating, ESCo's

Market view on financing the Green Deal

Energy suppliers and retail firms don't want to finance the Green Deal off their balance sheets

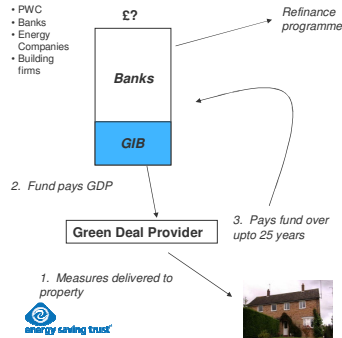
- Balance sheets committed to other programmes
- High cost of capital of 8-10%
- Challenge of providing for fixed rates for 25 years
- Confidence needed in achieving scale in order to recover start up costs
- Confidence in delivery to existing consumer base

The Green Deal is not well suited for retail banks and mortgage lenders

- Long term fixed rate finance not attractive
- High system start up costs

The Green Deal Finance Company

- PWC
- Banks
- Energy Companies
- Building firms



Key Issues:

Finance

- Will it be at scale?
- Will GIB finance?
- Will banks provide?
- What will be the cost of capital?

Green Deal Providers

- What restrictions from banks?
- Access to ECO?
- What obligations to local jobs?
- What obligation to long term service?

Householders

- What credit risk restrictions?
- Measures restrictions
 - No solar PV or RH

Operations

- Who will pay for set up?
- Who will operate?

Role of local authorities

Aligned Incentives

- Jobs
- Fuel Poverty
- CO₂ reduction targets
- Landfill reduction

Local Authority

De-risking

- Own estate contracts
- Social housing
- Marketing support
- Planning
- Waste contracts

Convening power

- Project initiation
- Procurement
- Local initiatives (LEPs etc)
- Community leadership
- Project pipeline
- Scale

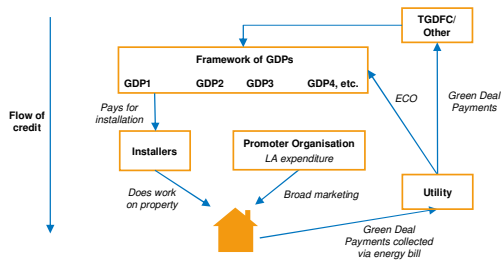
Finance provision

- Revenue accounts
- Grants – UK and EU
- Prudential borrowing
- Credit enhancements

Options for delivery

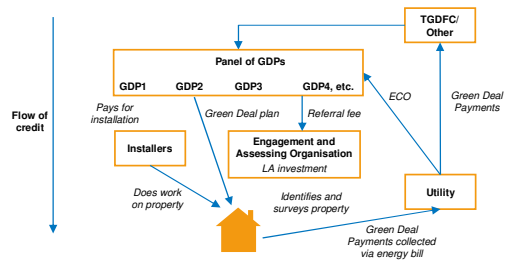
- Leave it to the Market - Promoter - advocates for Green Deal locally
- Producer – provides marketing support, working in partnership with commercial Green Deal Provider(s)
- Green Deal Provider - coordinating finance and delivery with a private sector partner to residents and businesses

General promotion of the Green Deal

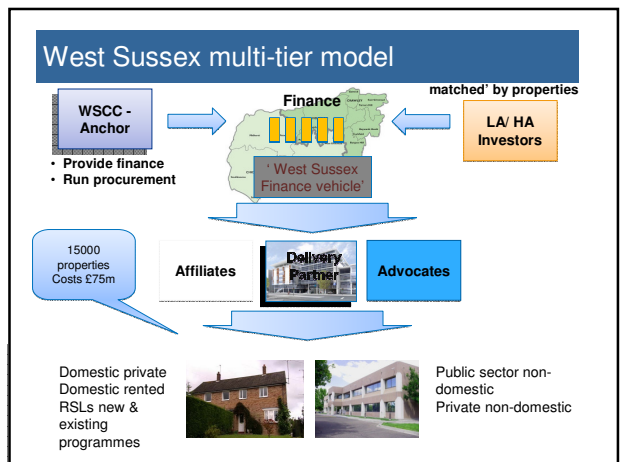
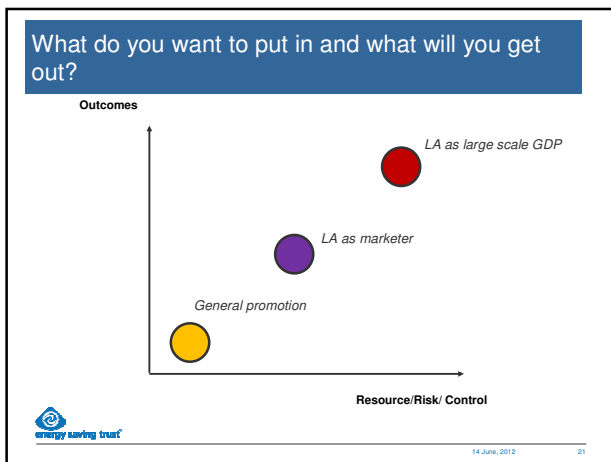
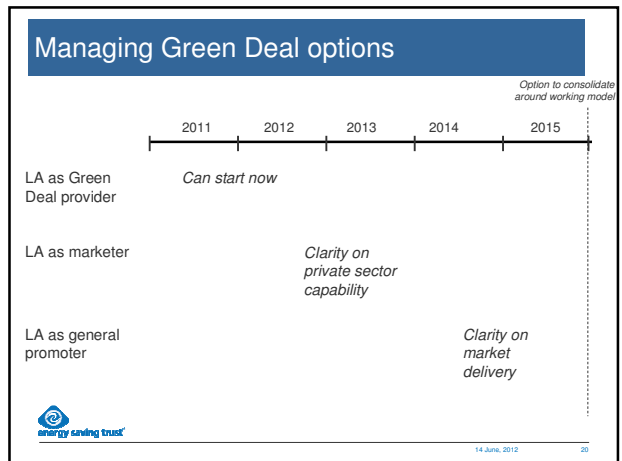
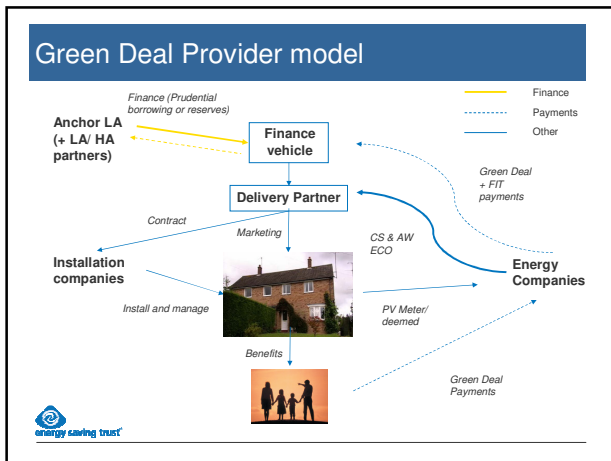


The underlying principles of this model are that Local Authorities minimise adoption risk and finance risk, but spreads delivery risk, by using a framework of GDPs and engaging in a broad marketing campaign.

Local authority as Producer



The underlying principles of this model are that the LA takes on adoption risk by investing in a pipeline production programme, but spreads delivery risk, and does not take on finance risks.



- ### EST case studies (West Sussex)
- Anchor** takes procurement risk, and finances 'affiliate' activity-lines against contracted outcomes that will benefit the programme
 - Investors** contribute finance from reserves or borrowing and achieve margin, are on the 'board', and participate in the procurement process
 - Affiliates** can benefit from referral fees, undertake activity lines contributing officer time and other resources to achieve the necessary outcomes. Are on the stakeholder group
 - Advocates** are on the stakeholder group, provide visible endorsement and other supportive actions
- Advocates and affiliates can 'upgrade' at any time or bring in others.

- ### EST case studies (GLA)
- GLA Green Deal delivery options appraisal:**
- Work with London's boroughs and other stakeholders to develop business cases to maximise Green Deal delivery in London
- EST commissioned by the GLA to:**
- Assess 3 options for delivery of the Green Deal to deliver large scale programmes across a range of desired outcomes
 - Understand and capture the requirements of boroughs based on the outputs boroughs want to achieve through a Green Deal programme and willingness to commit resources and take risks.
 - Develop business cases for each of the options assessed with 'anchor' authorities
 - Undertake housing stock modelling and economic impact analysis
 - Provide links to local, regional, national and European programmes/ stakeholders
- Progress to date:**
- Dec 2011: selection of 3 suitable Green Deal options for London Boroughs
 - Jan 2012: work with Boroughs to assess expected inputs/ outputs
 - March 2012: select 3 authorities to work up each option into a detailed business case

EST Green Finance support



Green Finance modelling

- **Readiness workshop** introduces retrofit concepts, Green Deal and ensures cross departmental buy-in
- **Capacity building workshop** builds upon specific competencies required to design and develop a retrofit programme
- Detailed **LA options appraisals** for financing and delivery of eco-retrofit programmes
- **LA Green Deal business case** to support the case for investment



EST Green Finance support



Evidence base for delivery of Green Deal

- Housing stock analysis across private and social housing to assess the potential for housing retrofit activity/ remaining measures potential
- Economic impact assessment calculates the financial savings, direct sales created, gross value added and jobs created or safeguarded for housing refurbishment programmes

Housing Stock		Householder
Wall type and insulation	Loft insulation level	Likelihood to undertake retrofit
Glazing type	Fuel type	Ability to pay
Boiler type	Property type	Trigger points analysis
Property age	Property tenure	Funding eligibility (LSOA level)
Number of bedrooms	Hard to fill cavity walls	
Solar PV	Solar thermal	
Distance to gas grid	Garden size (ground source heat pumps)	
Distance to nearest biomass supplier	m2 footprint of dwelling	
Further analysis		
Estimated fuel bills, CO2 emissions, energy use		
The optimum package of retrofit measures for each property		
Estimated fuel bill, CO2 and energy savings		
Green Deal 'golden rule' calculations		



EST Green Finance Procurement Framework

March 2011-EST issue finance consultancy support OJEU contract:

- To Local Authorities and Housing Associations to assess their finance needs and objectives, as well as structuring finance and operational solutions for them

April 2011-EST appoint OJEU contractors to:

- Deliver support on a project by project basis
- Respond to requests with proposals and costs within 5 working days

EST appointed contractors switched on subject to LAs preferences:

- Marksman Consulting
- CAMCO
- Grant Thornton
- KPMG
- ARUP



EST Green Finance activity

Finance Innovators Group (FIG)

- Forum for structured discussion on design and implementation issues for delivering finance models
- Assess common issues to develop common solutions
- Over 18 leading authorities participate

Local Energy Efficiency Partnership (LEEP)

- Supporting the development of sustainable, scalable, replicable solutions to attract commercial capital for a national eco-refurbishment programme delivered through local authorities
- Focused on 3 main areas:
 - Adoption – generating consumer demand
 - Access to finance – warehousing and bonds
 - Sustained reductions – delivery models to incentivise ongoing emissions reductions

Climate Local

- Leading development of the 'Council Framework on Climate Change', and key 'indicators'
- Resource provides a structured journey towards carbon reduction
- Allows Councils to prioritise activities and identify opportunities for action
- Provides links to more detailed support and guidance and indicators that can be used to track and communicate progress



Contact

Vicky East
Green Finance Manager
0207 654 2477

Vicky.east@est.org.uk

Ben Frier
Local Delivery Manager
07961 271587

Ben.Frier@est.org.uk

