



Environment Scrutiny Committee

11th September 2012

“The Green Deal”

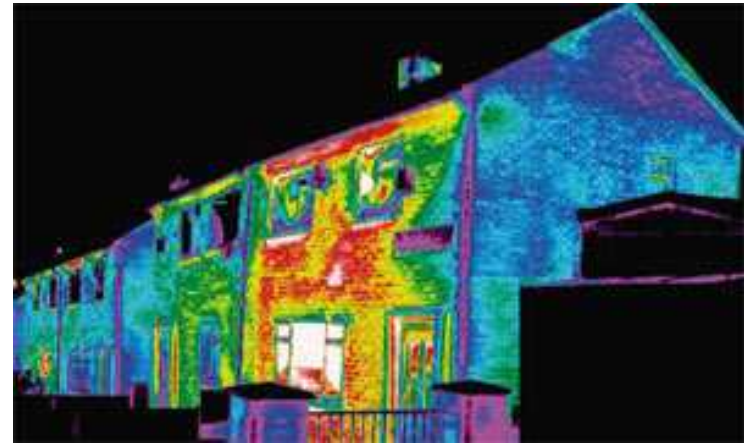
David Thorogood
Environmental Strategy & Development Manager

Aims

- Introduction to the Green Deal
- How GD is being progressed across Hertfordshire
- Discussion

What's happening in Herts?

- History of partnership working across Herts/Essex authorities in relation to energy efficiency
- GD progressing through HSF – specific member task group, with support from East Herts
- HSF looking at options/potential partners – using Marksman Consulting
- Will produce/report recommendations in Autumn



Introduction to the Green Deal

Dr Tim Wood
Marksman Consulting

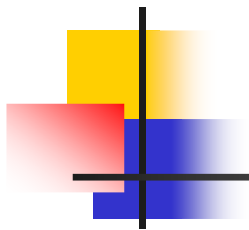


A core policy

'Local Authority involvement in the Green Deal is an example of localism which runs through the heart of this Government. That is, empowering local councils to take the initiative, and drive the agenda in a way that is optimised to suit the needs of local communities and businesses.'

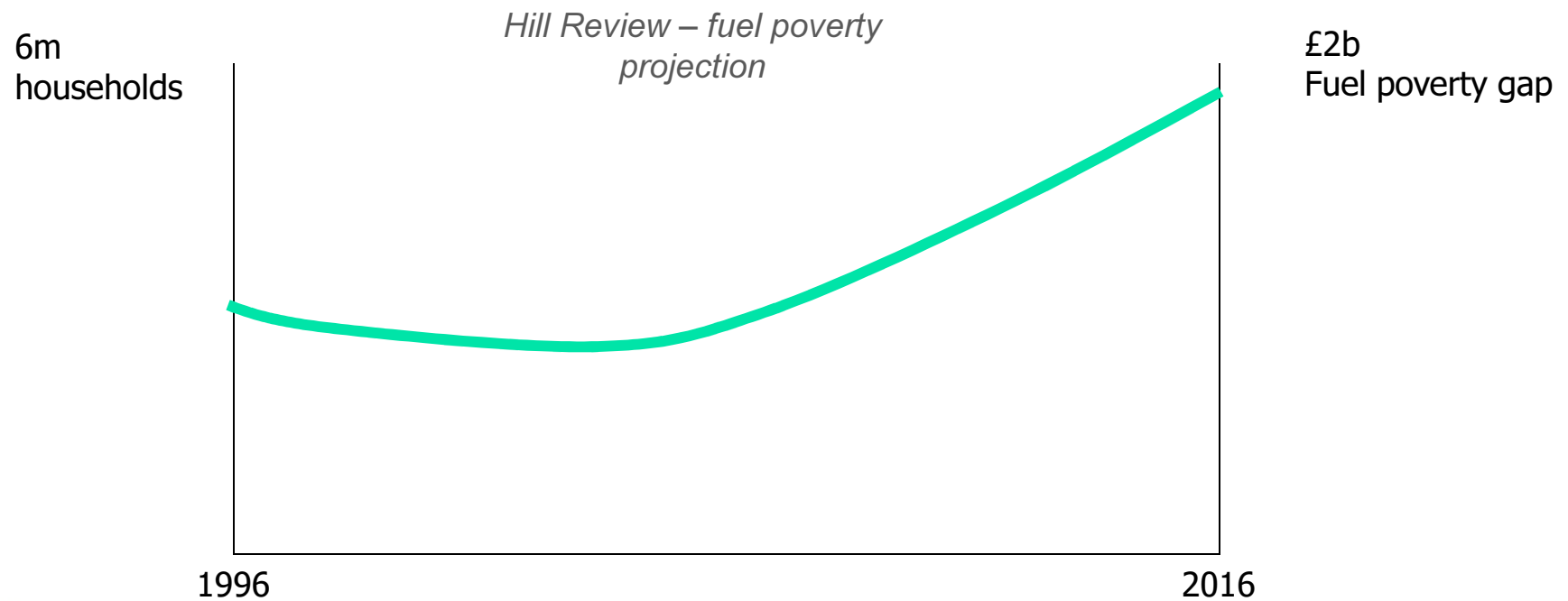
'I would like to see all local authorities use this position to grab the opportunities with both hands and help your local residents realise the benefits'.

Greg Barker, 24 May 2012



Challenge No. 1 Fuel poverty

The Hill Review – ‘We predict a deteriorating, and therefore profoundly disappointing, situation by 2016.’





Impacts of fuel poverty

- Increased risk of cardio-vascular, respiratory and rheumatoid diseases, as well as, hypothermia and poorer mental health
- More visits to doctors, pharmacists and hospitals, as well as, increased number of absent days (school and work)
- Cold housing negatively affects children's educational attainment, emotional well-being and resilience (Marmot 2011)
- Dampness and mould are associated with mental ill-health among children, whereas dampness, mould and cold indoor conditions are associated with anxiety and depression
- Children living in cold homes are more than twice as likely to suffer from a variety of respiratory problems as children living in warm homes
- What can be done about this?



Challenge no 2 - Carbon

- Greenhouse gas emissions must be reduced by 29% by 2017, 35% by 2022, and 50% by 2027
 - for buildings this means a reduction between 24% and 39% lower than 2009 levels by 2027
- By 2020 to have insulated all cavities and lofts, where practical
- by 2030, to have installed between 1 – 3.7m additional solid wall installations and between 1.9 - 7.2m other energy efficiency installations
- by 2030, 1.6 - 8.6m buildings will have low carbon heat installations such as heat pumps (Government modelling suggests that 21 - 45% of heat supplies to buildings will need to be low carbon)
- by 2050 emissions from UK buildings will be “close to zero”
- How to achieve this?



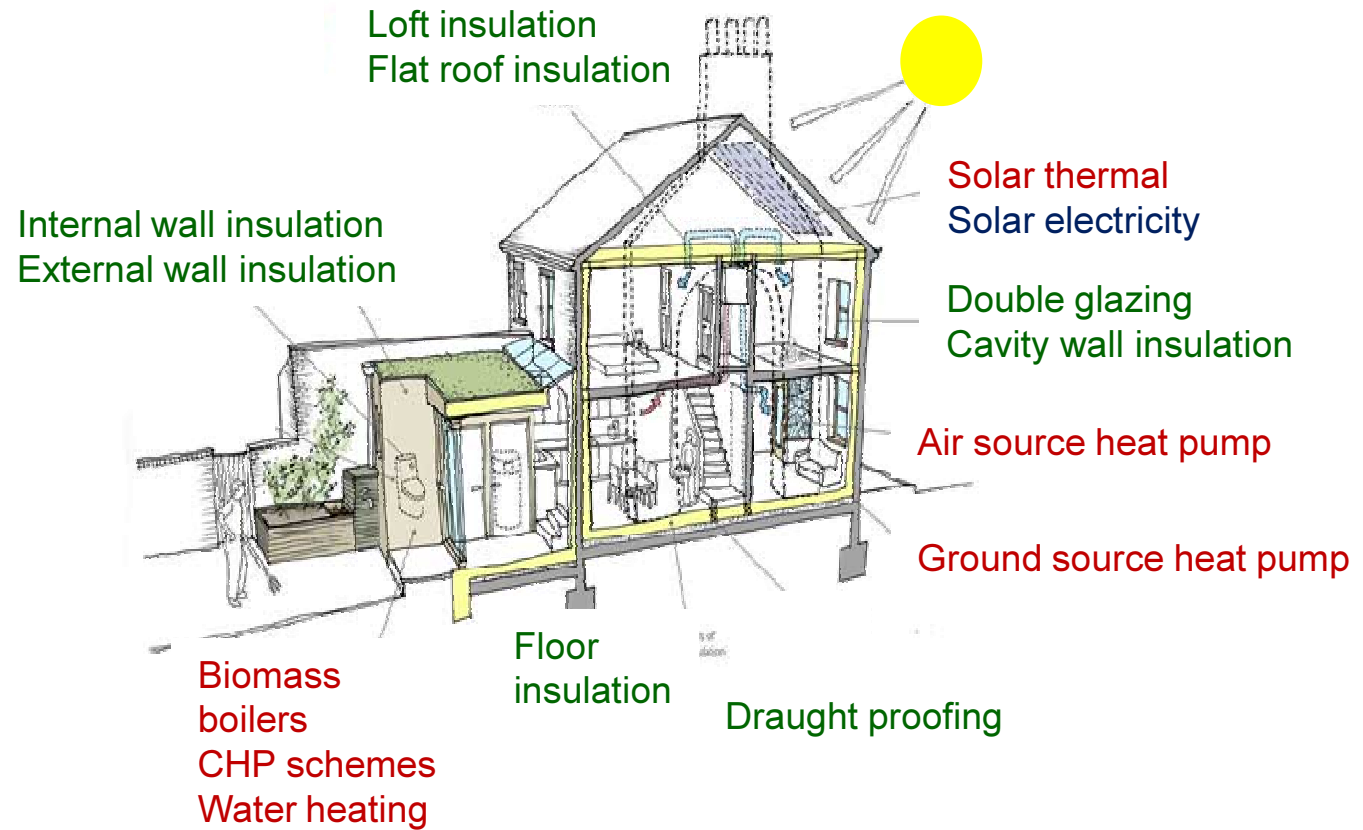
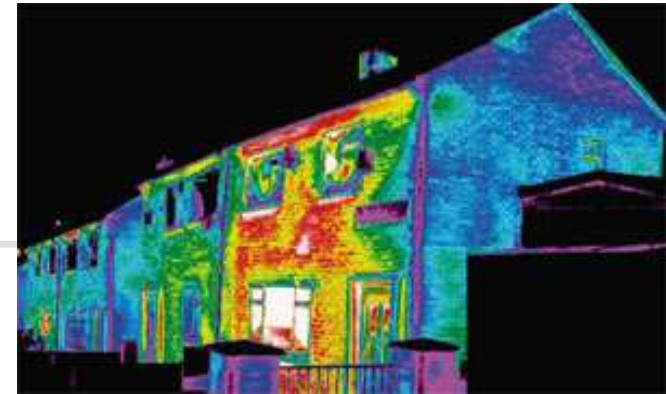
Challenge no 3 – economic growth

- The UK economy is in a double-dip recession
- The Green Economy is the fastest growing sector of the UK[1]
- A low carbon economy is one where economic growth is:
 - **durable**, through minimising energy costs and developing the low carbon sector,
 - **sustainable** by meeting long-term energy targets, and
 - **ethical** by meeting long-term carbon targets.
- Meeting the carbon targets will require a typical county to require >12000 new jobs over the next 20 years
 - This is an opportunity not a cost.

[1] 5% growth. Trade surplus of £5.4b, employing almost 950,000 people in the UK and worth £3.3t worldwide, the 6th largest market.

The opportunity

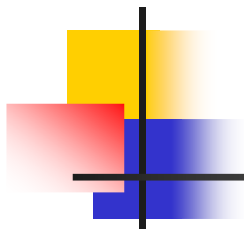
- Energy efficiency (green)
- Renewable Heat measures (red)



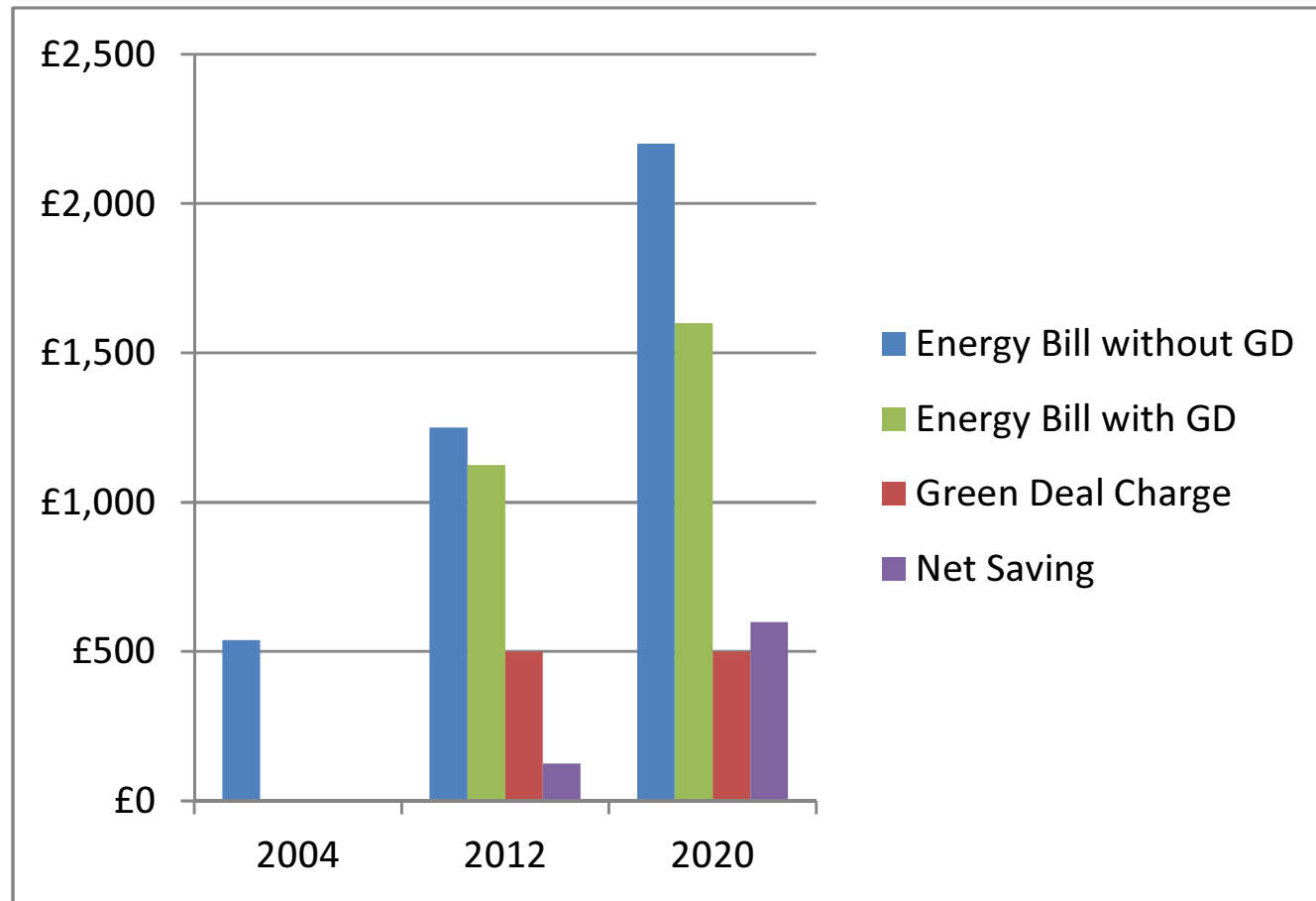


How the Green Deal makes this possible

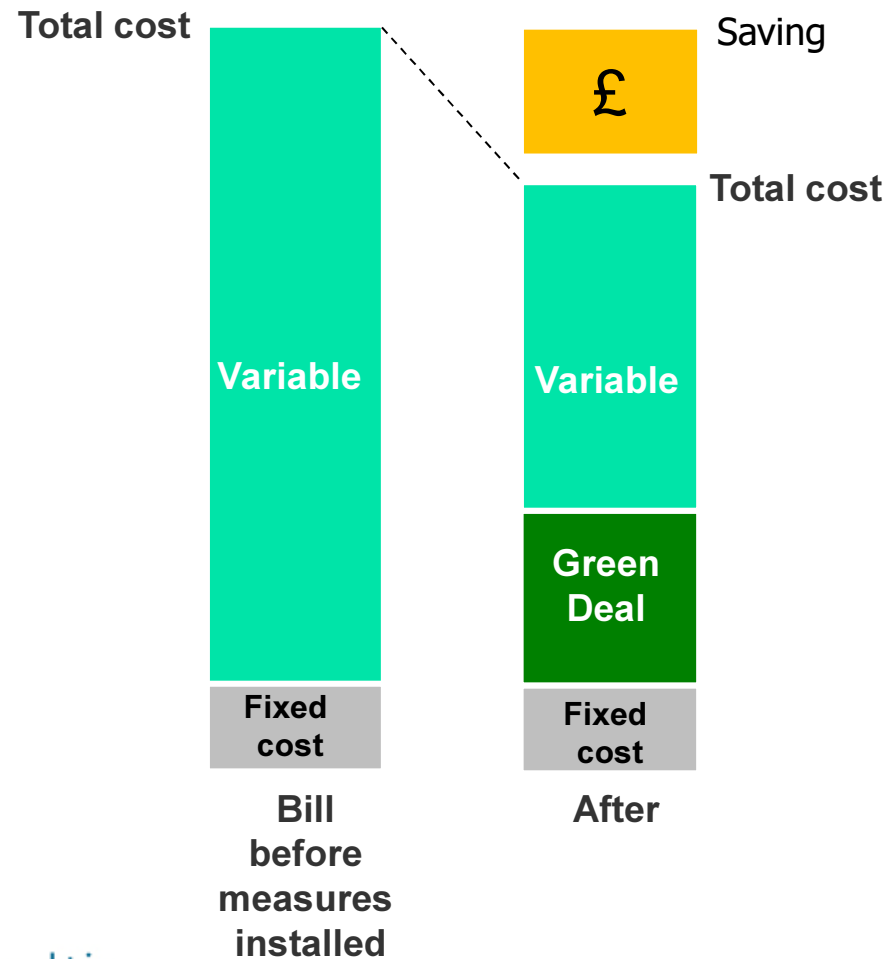
- The cost of energy saving measures is applied as a charge to the property and repaid over 25 years (or less)
- The Green Deal 'Golden Rule' specifies that the charge for the energy efficiency measures installed must be less than the savings
 - Obtaining a loan requires a comprehensive Green Deal Assessment
- The loan is tied to the home and not the person. The charge is passed on to the subsequent home occupants, together with the savings
 - No personal debt
- The loan repayment will be collected monthly by energy companies via the electricity bill
- Home occupants remain free to switch suppliers.



Financial savings illustration

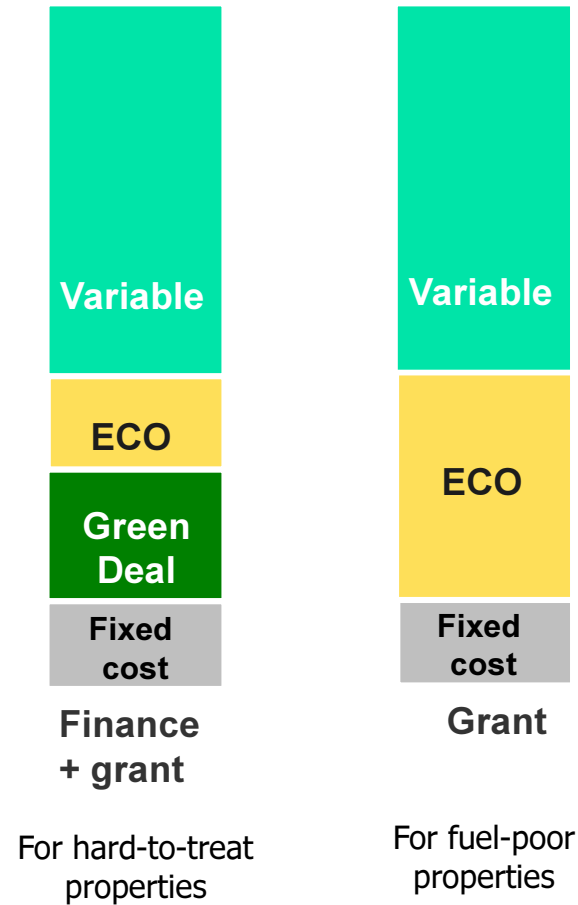


What is the Green Deal 'golden rule'?

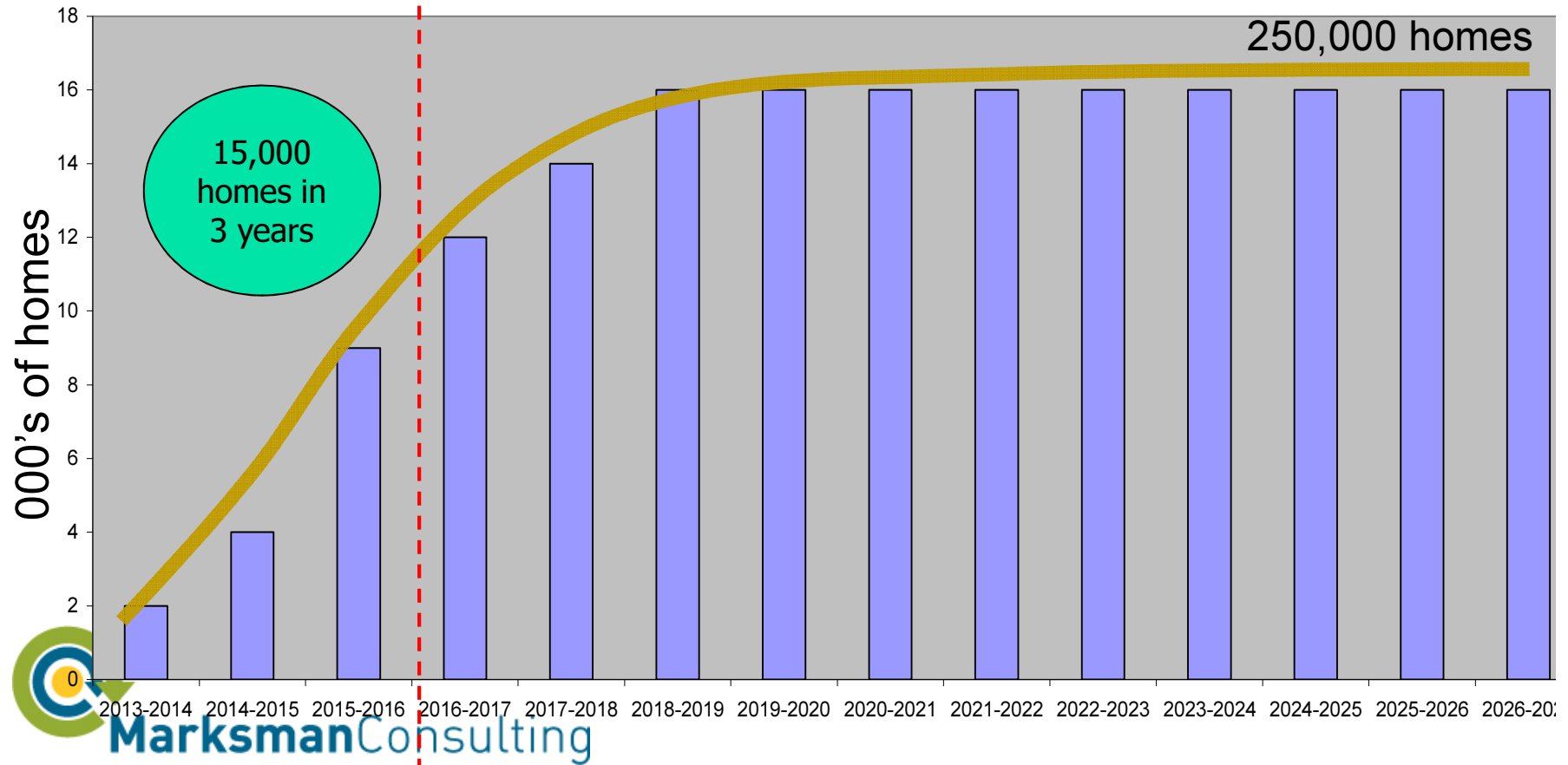
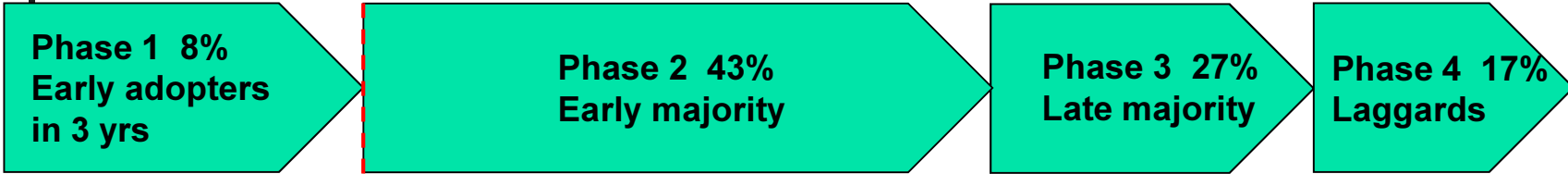


What is ECO?

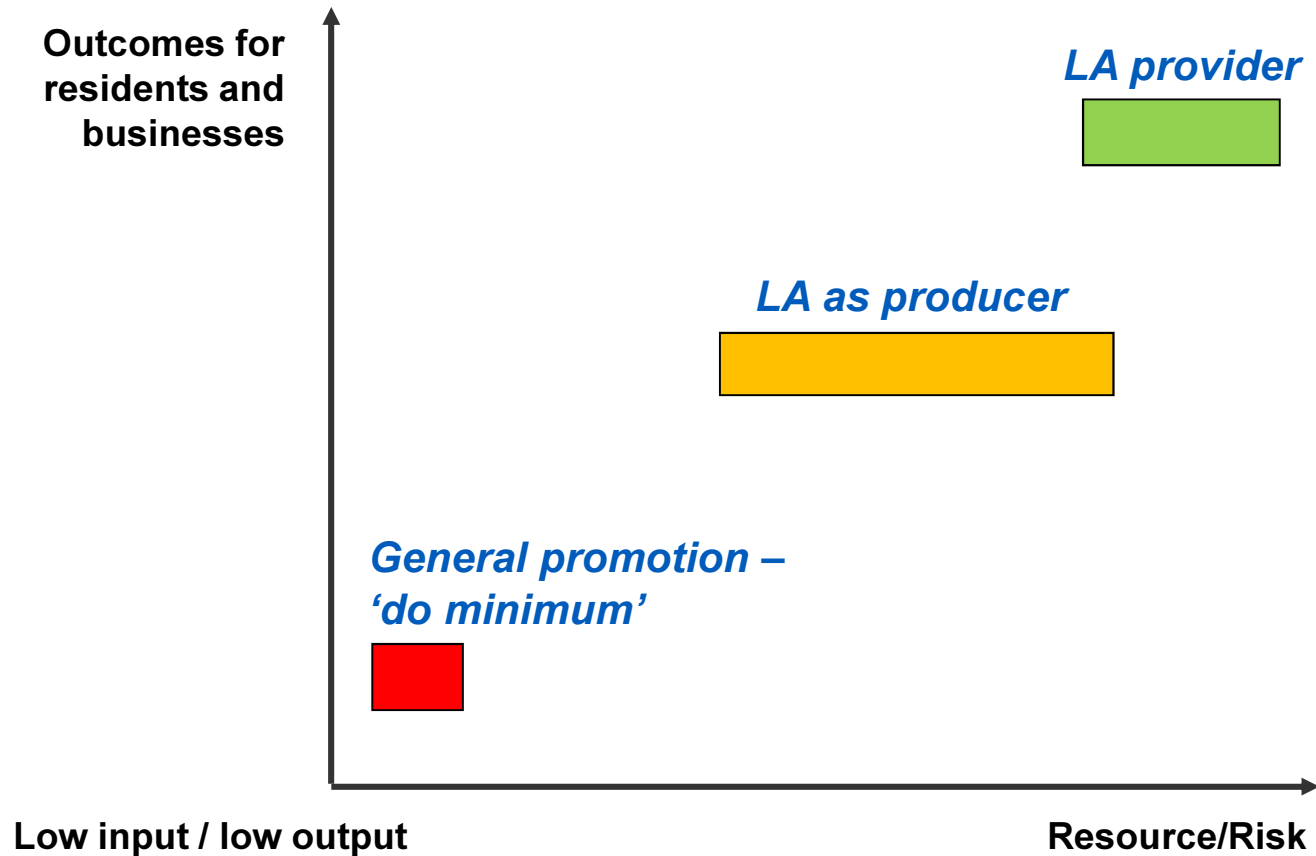
- Energy Company Obligation
- £1.35b per year
- To help 'hard to treat' properties meet the golden rule (60%)
- For treating fuel poor properties (40%)



What would need to happen in a typical county

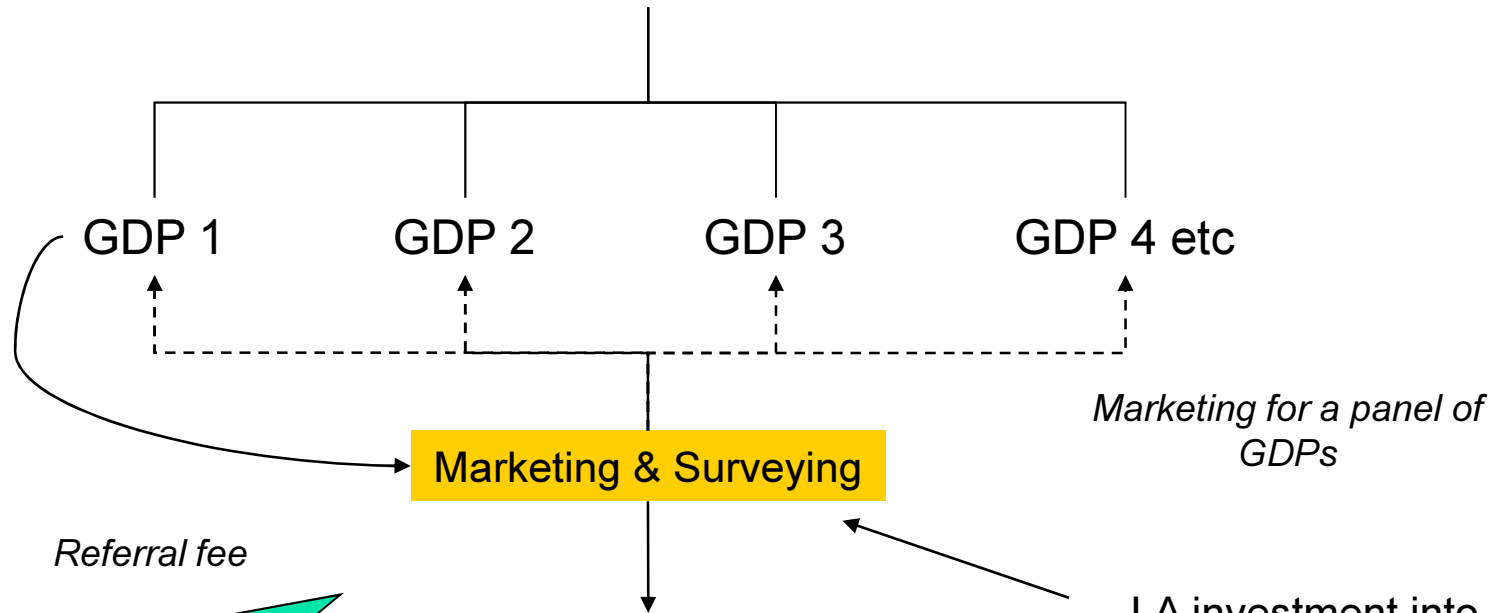


Role of the local authority – 3 broad options



LA as a producer

The Green Deal Finance Company



Marketing for a panel of GDPs

Referral fee

LA investment into own programme or third party vehicle

- Marketing costs could be £2-3m
- Providers can bypass the producer for the accessible market
- No strong incentive for any individual Provider
- No contracted targets



The provider model – West Sussex example (phase 1)

- Provide finance
- Run procurement
- Other local authorities
- RSLs
- Private landlords

Anchor authority

Other Investor authorities



Finance

Advocate authorities

Affiliate authorities

Delivery Partner

Properties
Offices, schools
Training & jobs

All investment is 'asset matched' by properties



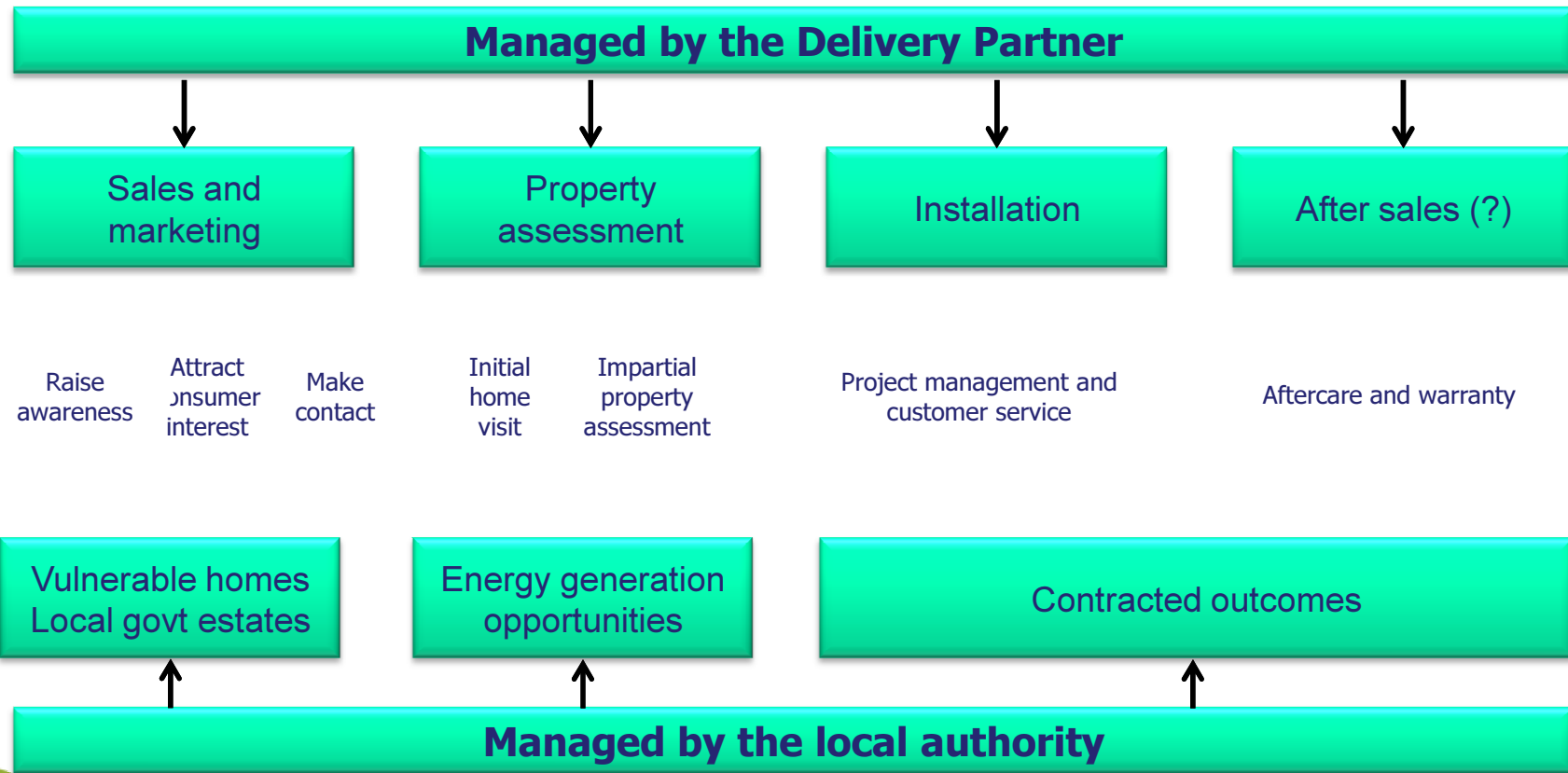
Domestic private
Domestic rented
RSLs

- Procurement cost £1.5m
- Strong incentive for one individual Provider
- Contracted targets
- Acting with scale, pace and ambition

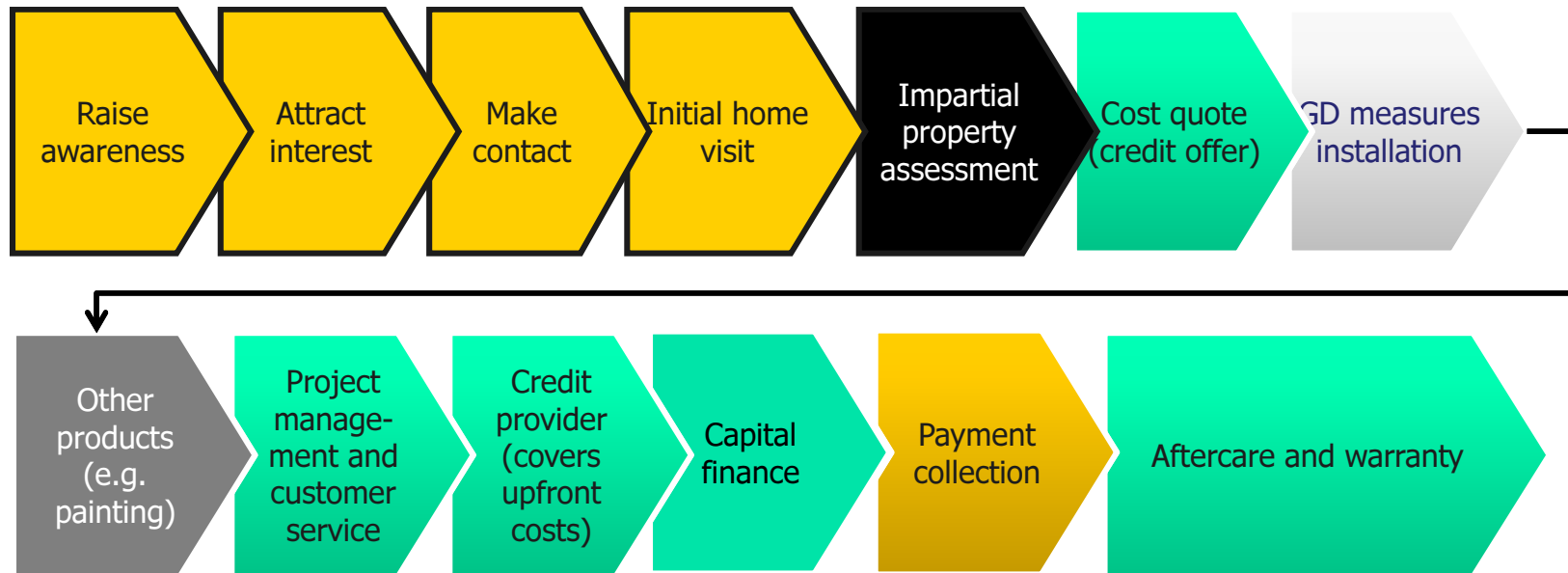
- Phase 2 -
- Producer?





The delivery partner




How to grow the **local** supply chain?




 LA services & Delivery Partner (when appointed)

 Needs assessor accreditation to do this function - local jobs

 Delivery partner

 Needs installer accreditation to do this function - local jobs

 Must be performed by energy companies through electricity bills

 Investors

 Local jobs

Based on: *The Green Deal and Energy Company Obligation – Consultation Document – November 2011*



West Sussex total market potential with local supply chain - illustration

Impact of 256,000 house programme over 25 years

GVA ^[1,2] £950m

Full Time Equivalent jobs 13,000

Business value ^[3] £3.2b

Assumptions

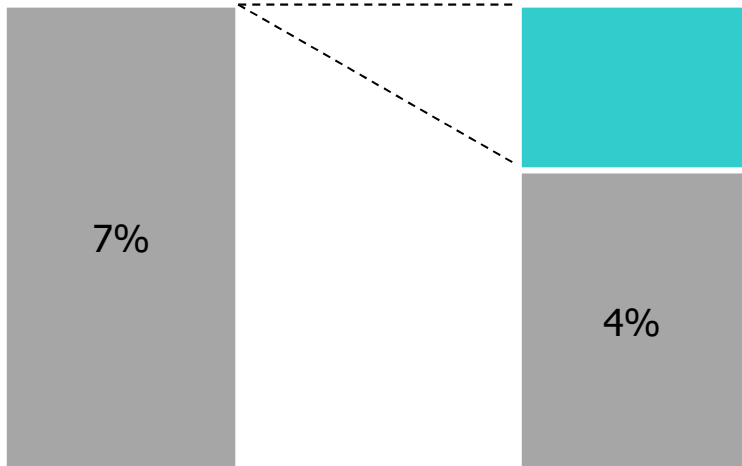
1. Calculations include further economic activity (jobs, expenditure or income) associated with additional income, purchases and longer term effects
2. The householder will receive 10% of the total financial savings from the measures installed
3. The total value of all equipment, labour and margin

Financing the delivery partner

Market APR to consumer ($5.5 + 2\%$ p.a.) set by TGDFC

Borrow from TGDFC

Prudential Borrowing



LA costs for communications & behaviour change programme

- Procurement
- Officer time

LA broader outcomes

- Jobs
- Fuel poverty
- Special areas

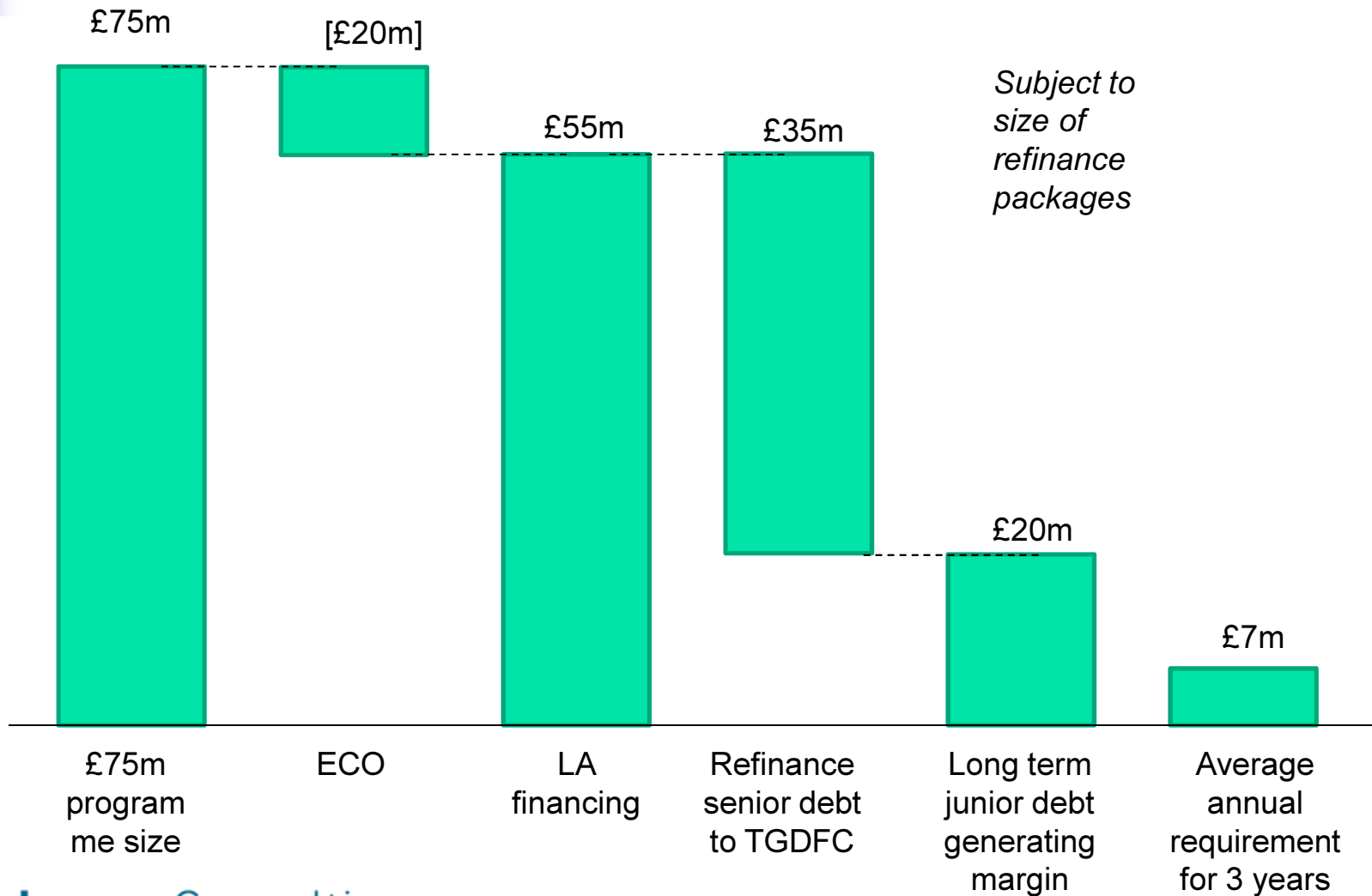
LA support to householders

- Cost of measures
- Incentives

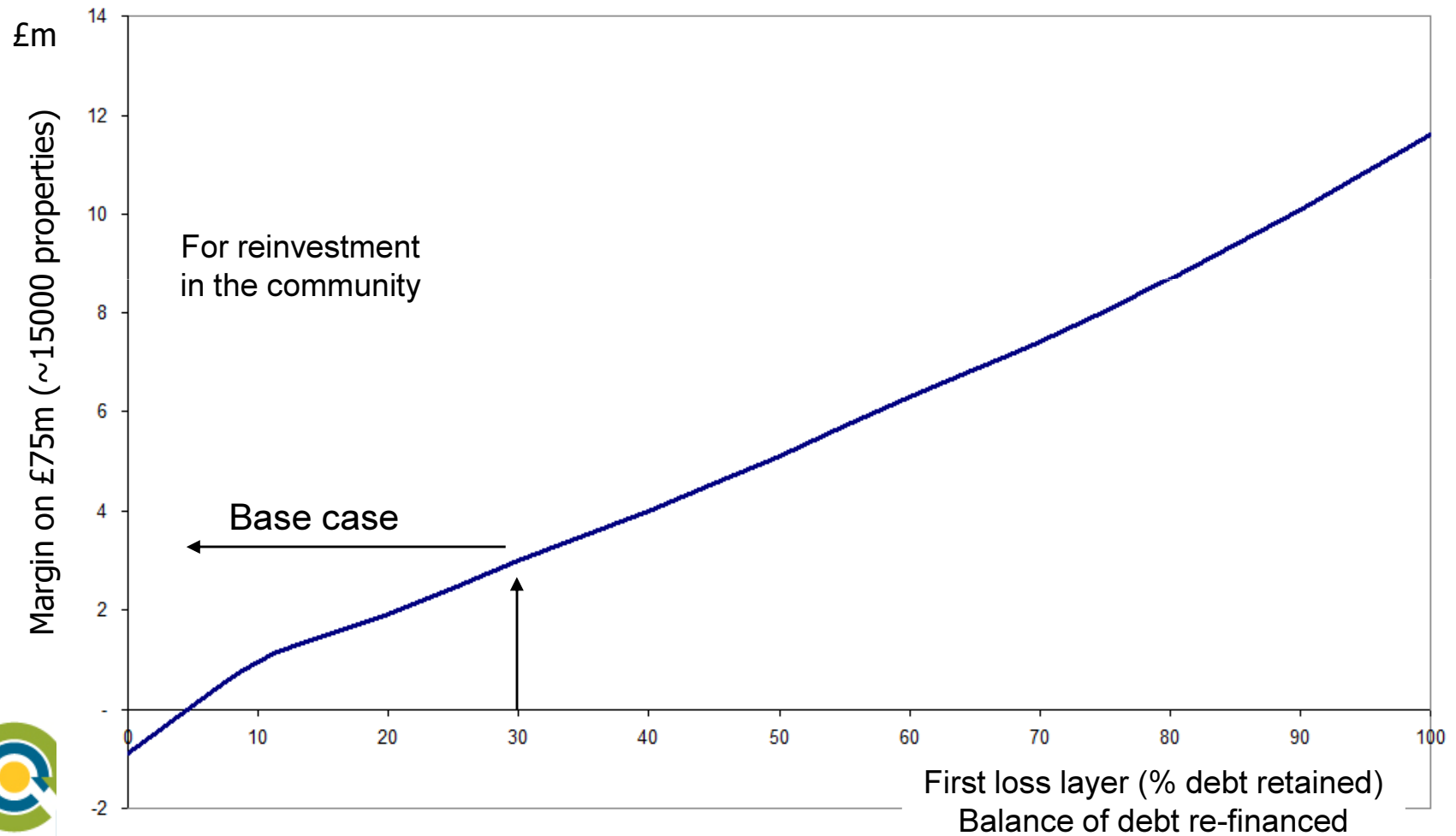


- GIB 'First Loss' to TGDFC is 3.85% over Gilts
- PWLB is 0.8% over Gilts
- Current Gilts rate is 3.2%

Sources of finance for provider model



What does it cost? - **nothing**





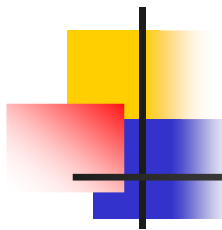
What are the financial risks with each route?

Provider model

- Debt default
 - 2% on electricity bills (usually transients)
 - Model assumes 4%
- Level of borrowing
 - Set up costs & procurement
 - Nothing else borrowed until the first house
 - All borrowing is asset matched
- Set-up costs
 - £1.5m procurement
- Mobilisation costs
 - £0.5m
- Outcomes
 - Contracted

Producer model

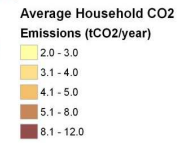
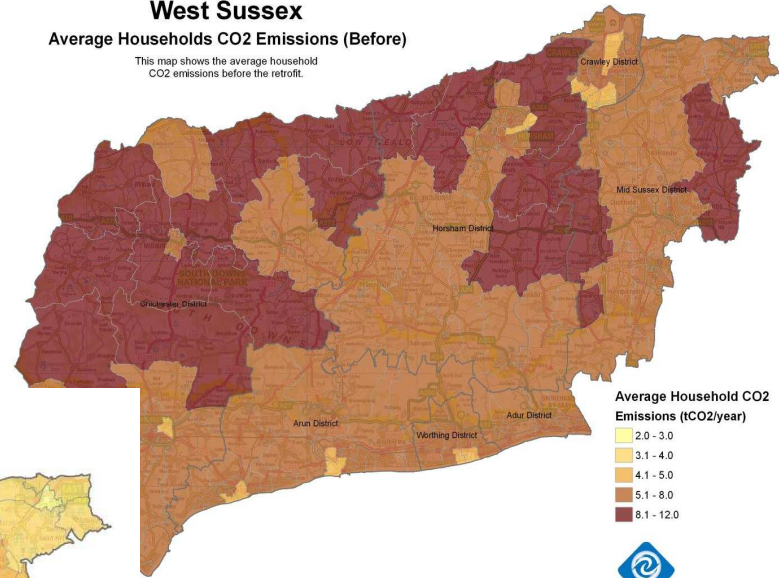
- Debt default
 - With providers
- Level of borrowing
 - Set up costs
 - Marketing costs up-front
- Set-up costs
 - £2-3m marketing / brokering
- Mobilisation costs
 - £0.5m
- Outcomes
 - Lack of provider commitment
 - Unattractive market nationally



Vision, scale and pace

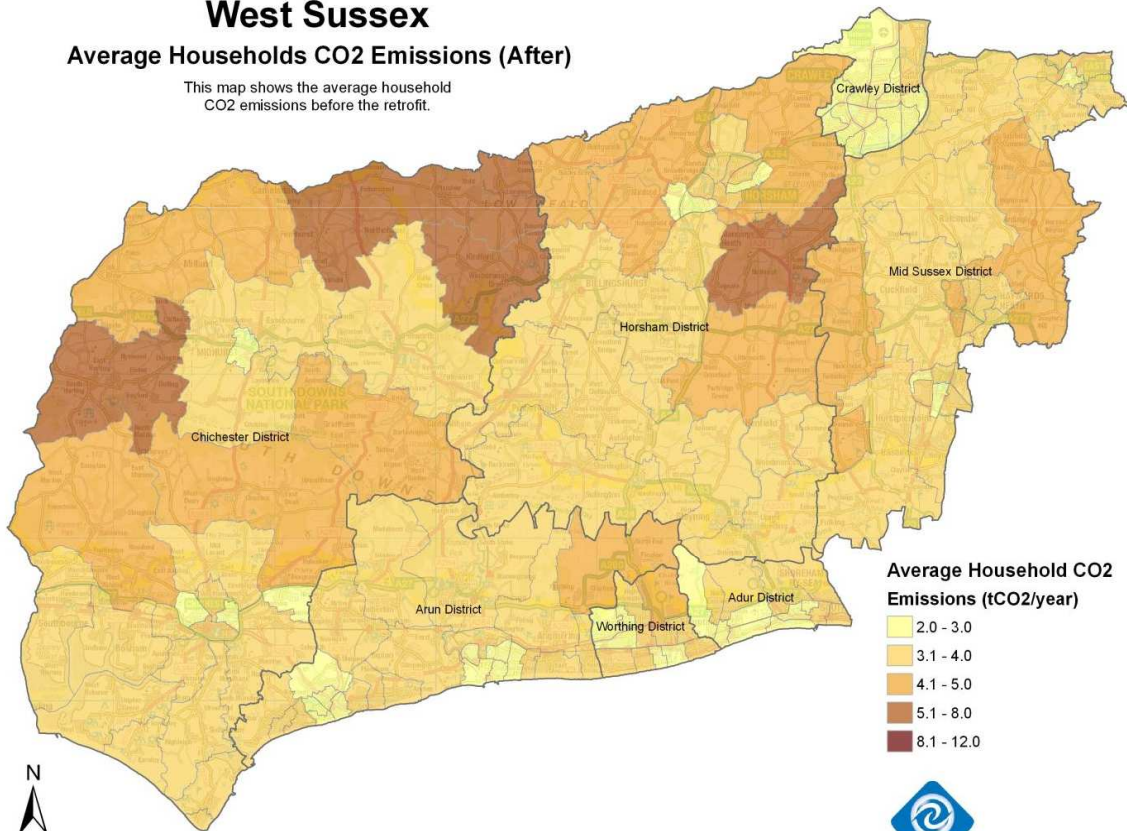
West Sussex
Average Households CO2 Emissions (Before)

This map shows the average household CO2 emissions before the retrofit.



West Sussex
Average Households CO2 Emissions (After)

This map shows the average household CO2 emissions after the retrofit.



Average Household CO2 Emissions (tCO2/year)

