



British Gas & Mears

Delivering greener, more energy efficient social homes in an affordable way

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Introductions

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Overview

- Background and Challenges
- New approach to partnership working
- Our vision
- Integrating energy efficiency
- Funding opportunities through FiT
- The Green Deal
- Ensuring tenants are fully involved
- In Conclusion



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The low carbon future brings both challenges and opportunities for energy suppliers...

Five key trends are becoming evident

- 1** Steady decline in gas consumption driven by energy efficiency
- 2** Growth in energy services and 'home refurbishment'
- 3** Substantial role for Government to ensure delivery of carbon targets
- 4** Rapid roll-out of technology (Smart meters, microgeneration, home automation)
- 5** Increasing role for partnerships in delivery

"The Government believes that climate change is one of the gravest threats we face, and that urgent action at home is required. We need to use a wide range of levers to cut carbon emissions, decarbonise the economy and support the creation of new green jobs and technologies."

Prime Minister David Cameron





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Energy efficiency objectives



Outcome:		Deadlines
1.	Emissions reduction target	'By 2020 we will cut non-traded emissions from homes to 29% below 2008 levels' (LCTP p.82) 2020
Outputs:		Deadlines
2.	6 million homes	'6 million homes will have been insulated under the Carbon Emissions Reduction Targets, Decent Homes, the Community Energy Saving Programme and Warm Front' (LCTP p.16) end 2011
3.	Lofts and cavity walls	'All lofts and cavity walls in Great Britain insulated where practical' and '400,000 homes will benefit from "whole house" treatments' (LCTP p.17) 2015
4.	Heat	'Around 12% of heat [in total across all sectors] is generated from renewable sources...' (LCTP p.17) 2020
5.	7 million homes	'Up to 7 million homes will have had the opportunity to take up more substantial 'whole house' changes. These packages will go beyond the simple loft and cavity wall insulation measures to include things like solid wall insulation or small scale renewable energy ' (HESS p. 17) 2020
6.	Smart meters	'By end of 2020 every home in Great Britain will have a smart meter' (LCTP p.17) 2020

This will require a step change in delivery from current rates






British Gas & Mears - A new approach to partnership working

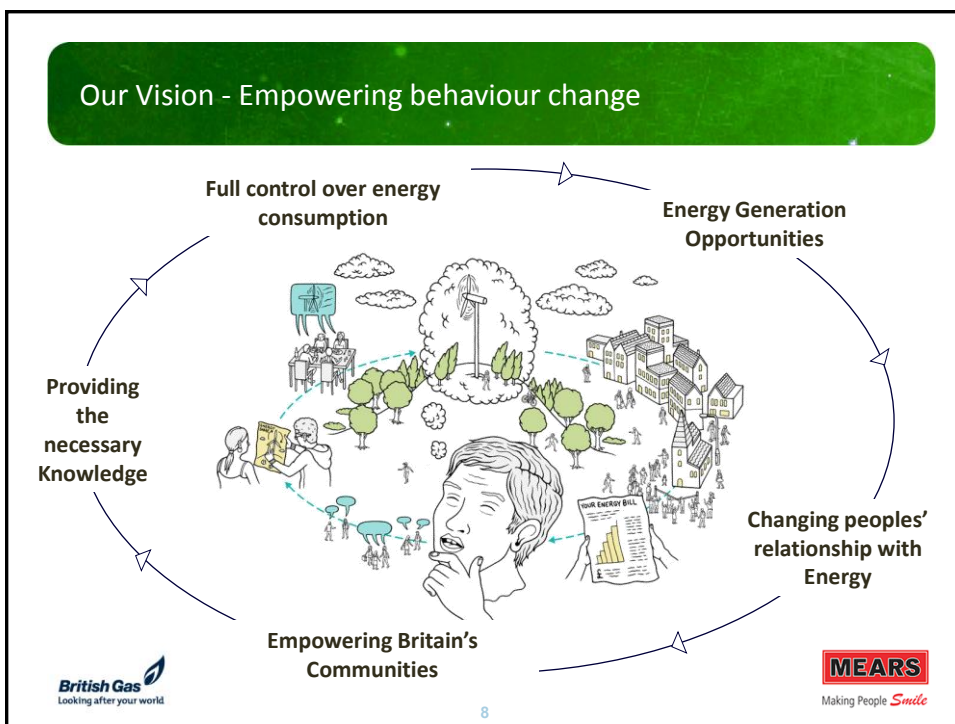
- Asset Management capability to take whole stock approach
- Design, implementation and maintenance of all energy efficiency measures
- Complete microgeneration capability
- Funding provision from current and emerging sources
- Tenant advice and support

The Partnership is ideally placed to deliver

<u>British Gas</u>	<u>Mears</u>
<div style="background-color: #ADD8E6; padding: 5px; margin-bottom: 5px;">Central Heating Installations (Over 8,000 engineers based nationwide)</div> <div style="background-color: #FF0000; color: white; padding: 5px; margin-bottom: 5px;">Service & Repair (4 million customers)</div> <div style="background-color: #ADD8E6; padding: 5px; margin-bottom: 5px;">Insulation (over 250k insulations installations completed per year)</div> <div style="background-color: #FF0000; color: white; padding: 5px; margin-bottom: 5px;">Microgeneration & Solar PV (FIT) (Over 17 years market experience)</div> <div style="background-color: #ADD8E6; padding: 5px; margin-bottom: 5px;">CERT/CESP (The largest provider of funding of any energy supplier)</div> <div style="background-color: #FF0000; color: white; padding: 5px; margin-bottom: 5px;">Energy 360® (Over 50,000 SMART meters installed in businesses)</div> <div style="background-color: #ADD8E6; padding: 5px; margin-bottom: 5px;">Void Management (Stock of over 400,000 supported by British Gas)</div>	<div style="background-color: #ADD8E6; padding: 5px; margin-bottom: 5px;">Economies of scale Supporting 600,000 Social Homes</div> <div style="background-color: #FF0000; color: white; padding: 5px; margin-bottom: 5px;">Leaders in Repair/Maintenance/Voids (3750 repairs per day)</div> <div style="background-color: #ADD8E6; padding: 5px; margin-bottom: 5px;">Mears Direct Mears Direct support to RSL's own workforce</div> <div style="background-color: #FF0000; color: white; padding: 5px; margin-bottom: 5px;">Decent Homes Refurbishment (Over 10 years experience including Environment)</div> <div style="background-color: #ADD8E6; padding: 5px; margin-bottom: 5px;">Accreditation MCS and Carbon footprint accreditation</div> <div style="background-color: #FF0000; color: white; padding: 5px; margin-bottom: 5px;">Leaders in Domiciliary Care (Ability to address fuel poverty issues)</div> <div style="background-color: #ADD8E6; padding: 5px; margin-bottom: 5px;">Tenant Engagement (TPAS and TAROE recognition)</div>
	

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Opportunities with Community Energy Initiatives are growing

Opportunities which are being driven from a number of areas:


Central Government



Local Government



Bottom up from communities





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Central Government – Community Energy Savings Programme


CESP is designed to improve the energy efficiency of communities in the lowest 10% income deciles in GB (15% Scotland and Wales); offering a range of solutions in insulation, heating, micro generation and behavioural measures.


In 2009, British Gas was the first energy supplier to announce the first ten communities to benefit from the scheme

British Gas has largest CESP funds available, 3 times greater than next largest obligated partner equalling 32% of the total

The British Gas commitment in supporting CESP projects over the 3 years is estimated around £120m

There are multiple opportunities to use CESP to bring forward projects, or marry to other grants and incentives to maximise potential in communities





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Walsall – Britain’s First CESP Scheme

Walsall Housing Group (WHG) is the borough’s biggest social landlord, with around 19,000 properties, and has invested more than £350 million in local homes and the environment

Working in partnership with Walsall Council and WHG, their residents were the first in Britain to benefit from a CESP scheme

The properties are being given external cladding and loft insulation to reduce heat loss, as well as new, energy efficient boilers

As a result, the residents are benefiting from warmer homes, lower bills and receive advice from experts about simple steps they can take to save even more energy



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Walsall Housing Group – The Transformation



From distinctively damp walls to homes that are not only appealing on the outside, but also warm and comfortable on the inside.



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Walsall Housing Group – A huge boost for the community



A very happy Mrs. York outside her newly renovated home. Mrs. York said “ I haven't had the heating on hardly since it was fitted, only for the hot water”, saving her at least £28 per month.



Mr Whittaker (centre), one of the first customers to be completed, pictured with Joan Ruddock MP, Fred Bell WHG Chairman and Gary Fulford WHG Chief Executive.



Key Challenges facing Family Mosaic

Decent Homes

- Ensure that ‘SAP 65’ targets are achieved (Average of 64.52 at present)
- Reduce responsive repairs costs using a just in time method to replace before failure
- Utilising access/survey opportunities to identify wider energy related data

Reducing Fuel Poverty

- Target the ‘SAP 65’ approach in all 23,897 Family Mosaic homes
- In tandem with effective data collation, create bespoke energy solutions for all homes
- Working in partnership to make long term commitment around CO2 Reduction

Leveraging External Funding

- Adopting a ‘right measures, right property’ approach whilst maximising funding
- Identify and ‘ring fence’ medium/long term funding commitments (CERT/CESP)
- Working collaboratively with other social housing providers across London to ensure community driven programmes
- Adapting data collation to examine suitability for renewable/emerging technologies

CO2 Reductions

- Effective collation of pre and post improvements to quantify impacts
- Analytical approach taken to identify current performance of housing stock and plans implemented to reduced levels of CO2 long term.



Stock data

- 5275 Properties surveyed to date and analysed
- Improvements/additions recommended for data collection to ensure information is fully encompassing and will aid future energy programmes. Additions will identify:
 - Accurate loft top up measures to be applied
 - Size of properties which will help identify funding levels at desktop stage
 - Fuel Type and Orientational suitability for more efficient fuel sources and renewable technology measures

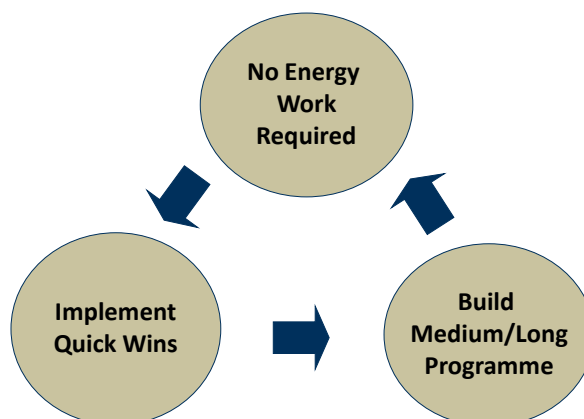
Data Analysis

- 147 Cavities not insulated
- 830 lofts not adequately insulated
- 977 Immediate (quick win) measures to be installed
- 524 estimated lofts not adequately insulated in addition



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Short, Medium and Long Term Solutions



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Henchman Street

- Case study example
 - 62 Henchman Street, London W12 0BN
 - CESP Eligible (Hammersmith & Fulham 'College Park & Old Oak')
 - House
 - 26 year old boiler
 - Loft Top up required
 - Solid Wall construction and identified as needing urgent attention

Pricing:

- Approx £9,300 to complete all
- Approx £6,000 funding from BG (65% of costs)
- Amount to pay £3,300



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Added value and community focus

- Dedicated to providing local employment, training and apprentice positions
- Utilisation of regional knowledge and expertise through strong local presence
- Tailored focus around community engagement to work with Family Mosaic and other partners collaboratively to ensure maximum impacts are achieved



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South Northants Homes/ Mears: Bridgewater House Eco retro-fit

- One of the first retro-fit of its kind to introduce this number of energy-savings technologies in a single sheltered housing block.
- Included solar thermal technology, heat pumps and photovoltaics (PV).
- FIT scheme applied to offset set up costs
- Ground source heat pumps, to supply the scheme's heating
- Partnered with British Gas on delivery
- 75 % CO2 usage reduction



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Castle Morpeth and Mears- Green Specification

Mears has worked alongside UK Green Building Council member Faithful Gould to improve a number of homes by incorporating the following systems:

- **Air Source Heat Pump and Solar Thermal**
- By utilising the sun's heat and air source heat pump technology, the complete system delivers economical, renewable energy for domestic heating and hot water year-round.
- **Micro Combined Heat and Power (mCHP)**
The mCHP unit generates 1kW of electricity per hour that can be used in the home while providing up to 24kW of thermal output for space heating and hot water.
- It has been developed to operate virtually noise free in a casing which is no bigger than a standard domestic boiler.



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Mears/ Hyde Group and the Energy Saving Trust

- Refurbishment of 2 bed 1930's semi
- Insulation, windows, PV, Air tightness
- Achieved a 94 SAP rating (57% improvement) with an 83% decrease in fuel bills
- Learnings applied to Hyde Group full environmental refurbishment strategy



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British Gas microgeneration activities



➤ Solar Photovoltaics

➤ Case Study City Hall London - The PV modules provide solar power for the building by converting light into electricity, with no waste or emissions

➤ Microgen Boilers

➤ Solar Thermal

➤ Biomass Boilers

➤ Heat Pump Trials


➤ Smart Meters

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Solar PV – Encouraging Behavioural Change for the Future

The Meadows



Residents spending £4 million a year on energy

Britain's first zero carbon zone through the community ESCO

Community hub – An Eco Cafe

Lower energy bills for residents

Llangattock Green Valleys


Improvements worth £90,000 in 39 houses.


£20,000 going to Llangattock Primary

Partnership going beyond


41 Social Houses

Biomethane scheme





Looking after your world




Making People *Smile*

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Community Benefits

Why it works for communities




It helps reduce carbon emissions

1




FiT payments built to cover costs

2




It helps tackle fuel poverty

3



Looking after your world



Making People *Smile*


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FiT – Revenue stream

- 2.5kWp Solar PV system
- Installed cost: £8,000 - £12,000
- Average house electricity consumption of 4,000 kWh

Without solar PV
Customer pays £380 p.a.



With Solar PV + FIT
We pay customer £511 p.a.



→ Generation – 2,000 kWh
Generation Tariff – 41.3p/kWh
FIT Payment - £826 per annum

→ Export – 1000 kWh
Export Tariff - 3p/kWh
Payment - £30 per annum

← Purchases – 3,000 kWh
Retail Tariff – 11.5p/kWh
Payment - £345 per annum

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What is the Green Deal?

Government proposal for householders to get energy saving improvements made to their home which will reduce energy bills

Marketed by
central/local
Gov't, energy
retailers,
others

→

Property
assessed for
energy
efficiency
improvements

→

Improvements
carried out at
no upfront
cost

→

Costs repaid
over up to 25
years via the
regular energy
bill

→

Customers
still allowed to
switch energy
retailer

This is a radically different to any other previous scheme:

- Green Deal debt is attached to the property, not the individual
- Retailers will collect Green Deal payments as if they were for energy
- Wide range of measures – insulation, heating, microgen
- Measures installed must ALL meet the Government's "Golden Rule":



Energy Bills
AFTER
Green Deal

+

Ongoing
Green Deal
repayments

<

Energy Bills
BEFORE
Green Deal





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The EnergyShare Concept

A revolutionary initiative from British Gas and River Cottage:


A price parity renewable energy product that drives funding into community projects and enables participation in generating, buying and using 100% British renewable Energy.



The illustration shows a community with various buildings, a wind turbine, and a person on a bicycle. The EnergyShare logo is prominently displayed in the center. The British Gas and River Cottage logos are at the bottom right.

Tenant engagement

- Community based "Energy workshops" working with British Gas
- Individual support through customer care team
- Free energy savings devices to kick a program off
- Support for recycling and other environmental based projects
- Direct community action involving tenants
- Leaflets and supporting material in conjunction with British Gas and TPAS /TAROE



The British Gas logo is on the bottom left, and the MEARS logo is on the bottom right.

Tenant engagement

We have set up an independent company: ASERT

- It's a 3 year partnership, with TAROE
- Tenants will be recruited to work for ASERT; Customer Service Champion, Tenant Inspectors, Energy Efficiency Champion and Dignity & Respect Champion.
- Tenants will be fully trained, able to externally assess, and independently accredit/verify our service
- We are empowering tenants at the heart of the service they receive; from Repairs to Care
- ASERT will signpost other services; training, advice, funding
- We will link up with our partners e.g. British Gas



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In Conclusion

- A time of challenges

- Uniquely positioned to overcome these challenges

- Committed to helping Britain's communities become sustainable

- Already building Sustainability:
 - Energy Efficiency
 - Revenues through FIT
 - Green Deal
 - EnergyShare
 - Tenant Engagement

- Delivering greener, more energy efficient social homes in an affordable way



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Q&A



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