

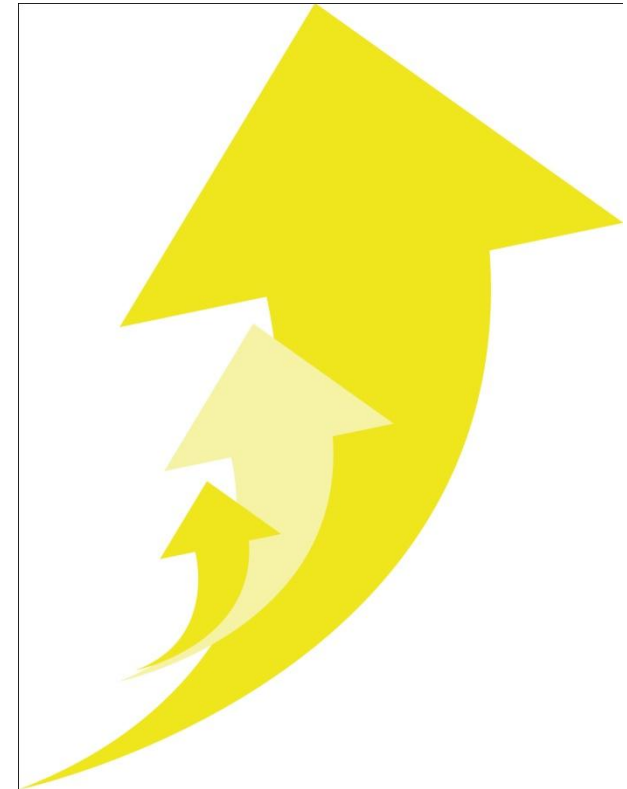


Retrofit summit

21 November 2011

Helping the West Midlands Deliver
Jobs and Growth through Housing Retrofit

Sponsored by:





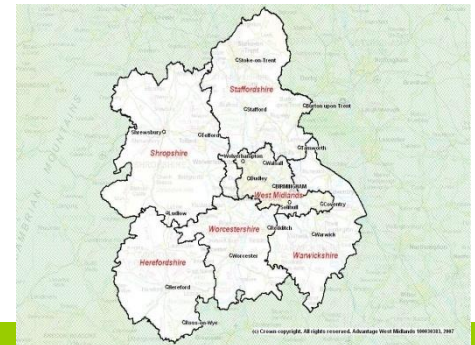
George Marsh CHAIR



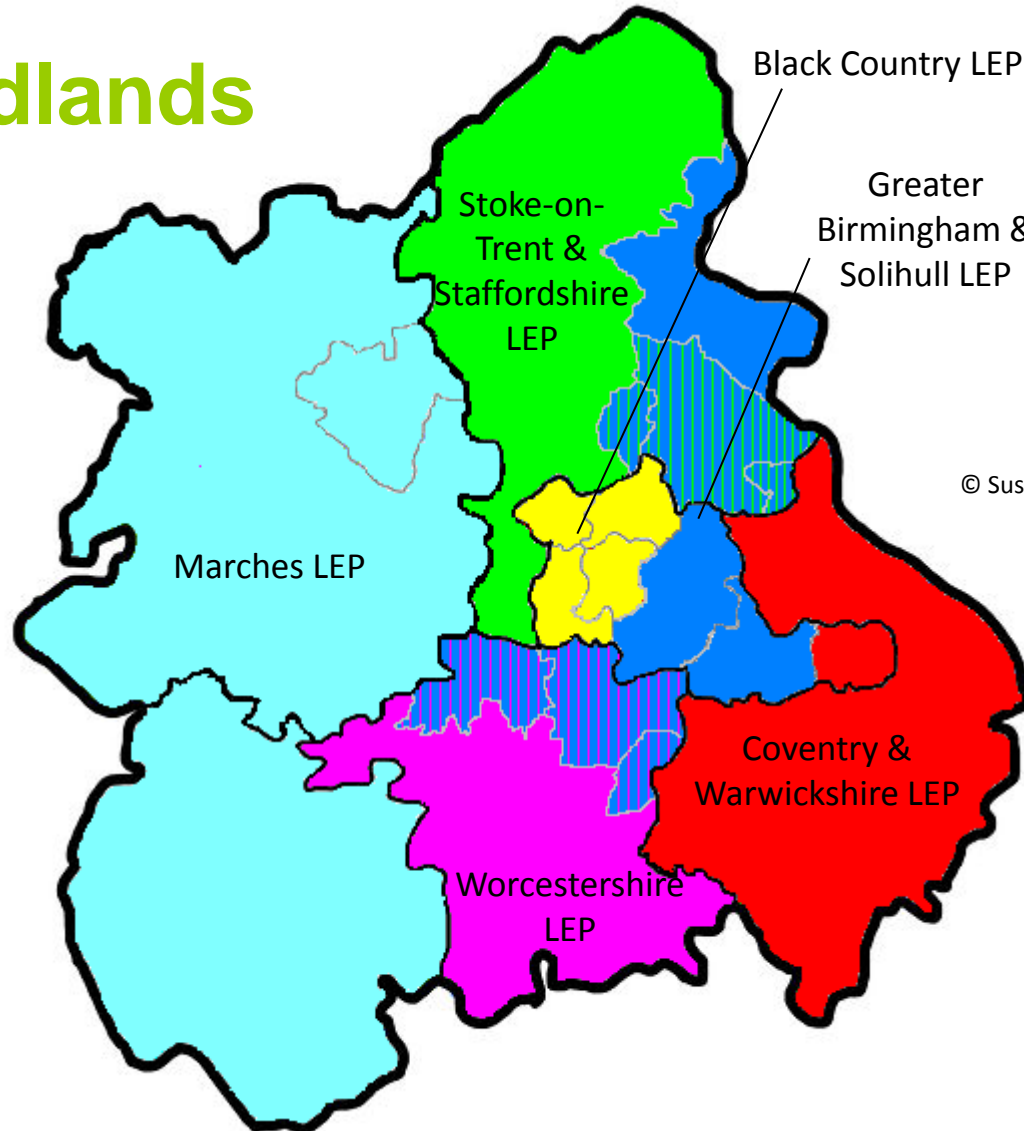
- 10.00** Welcome and Context Setting
- 10.20** DECC – Strategic policy overview
- 10.50** The Community Green Deal
- 11.10** *Refreshments, networking -meet the sponsors*
- 11.40** Birmingham Energy Savers
University Innovation and Retrofit Case Studies
Introduction to breakout sessions
- 12.00** Breakout sessions
- 12.45** Agreed actions
- 1.00** *Lunch, networking and meet the sponsors*

West Midlands at a glance

- 5.3 million population
- 2.3 million homes of which 456,069 (2007 figures) are social housing
- 80% of the region is rural
- All of the region's energy is imported
- £10/£15bn productivity gap

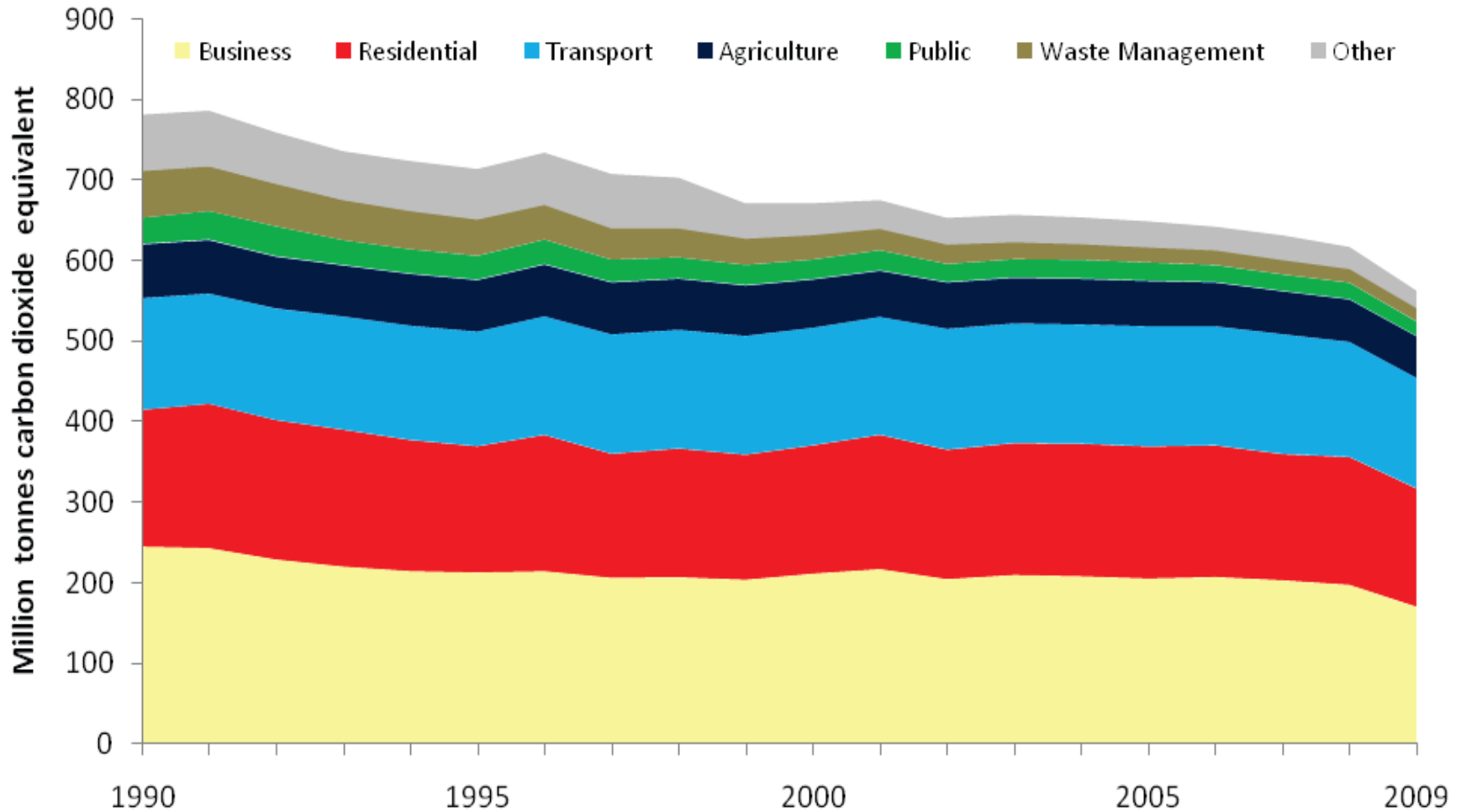


Map of West Midlands LEPs



© Sustainability West Midlands

Emissions in the UK



Source: AEA

Components of the Low Carbon Economy



Renewable energy generation

Low carbon energy – Combined Heat and Power, Carbon Capture and Storage, new nuclear.



Components of the Low Carbon Economy



Renewable energy generation

Low carbon energy

Low carbon buildings and construction

- Retrofit and new buildings
- Building design
- Materials: recycled content, insulation etc
- Technologies: micro-generation, energy metering
- Installation: construction, electrical, heating, plumbing
- Energy management
- Maintenance



Components of the Low Carbon Economy



Renewable energy generation

Low carbon energy

Low carbon buildings and construction

Low carbon transport

- electric vehicles and plug-in hybrid cars
- hydrogen fuel cell vehicles (in the longer term)
- recharging and fuel infrastructure
- biofuels
- behaviour change
- public transport



Components of the Low Carbon Economy



Renewable energy generation

Low carbon energy

Low carbon buildings and construction

Low carbon transport

Low carbon manufacturing, products and services



Components of the Low Carbon Economy



Renewable energy generation

Low carbon energy

Low carbon buildings and construction

Low carbon transport

Low carbon manufacturing, products and services

Waste / resource use efficiency – waste reduction, reuse,



Components of the Low Carbon Economy



Renewable energy generation

Low carbon energy

Low carbon buildings and construction

Low carbon transport

Low carbon manufacturing, products and services

Waste / resource use efficiency

Environmental management and pollution control – including wastewater, green infrastructure and adaptation.



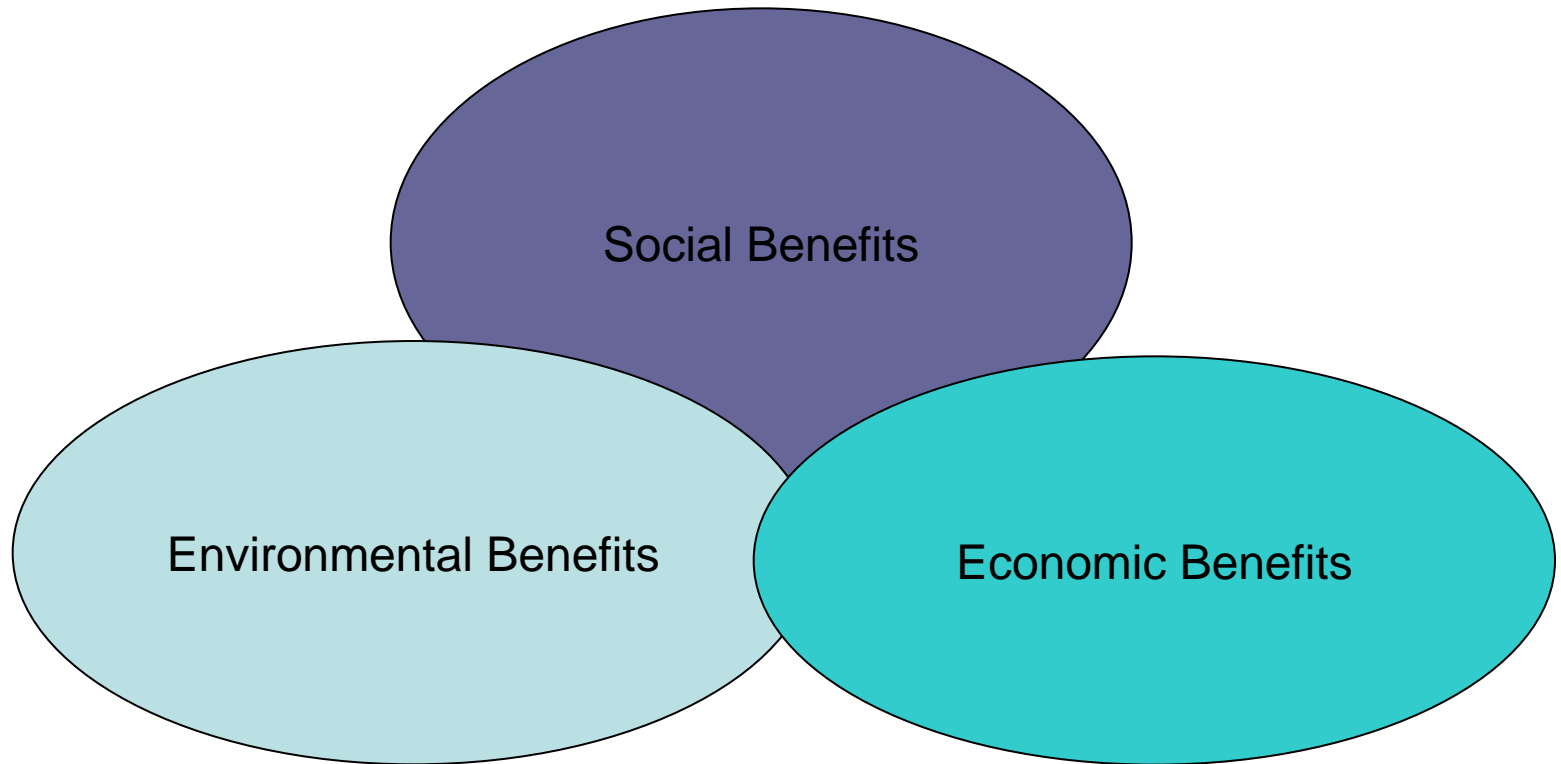
West Midlands Low Carbon Opportunities

- 74,000 people already employed in the low carbon sector
- WM has 8% share of UK market worth £15bn (8.5bn in 2009*)
- Opportunity to lead green transition of 115,000 automotive jobs
- Centre of national communication links
- Centre for world class research facilities and universities
- Leading on Green Deal delivery models – Community Green

Deal and Birmingham Energy Savers

*Data from BIS Economics Paper Number 1, July 2009

Benefits of retrofit programmes



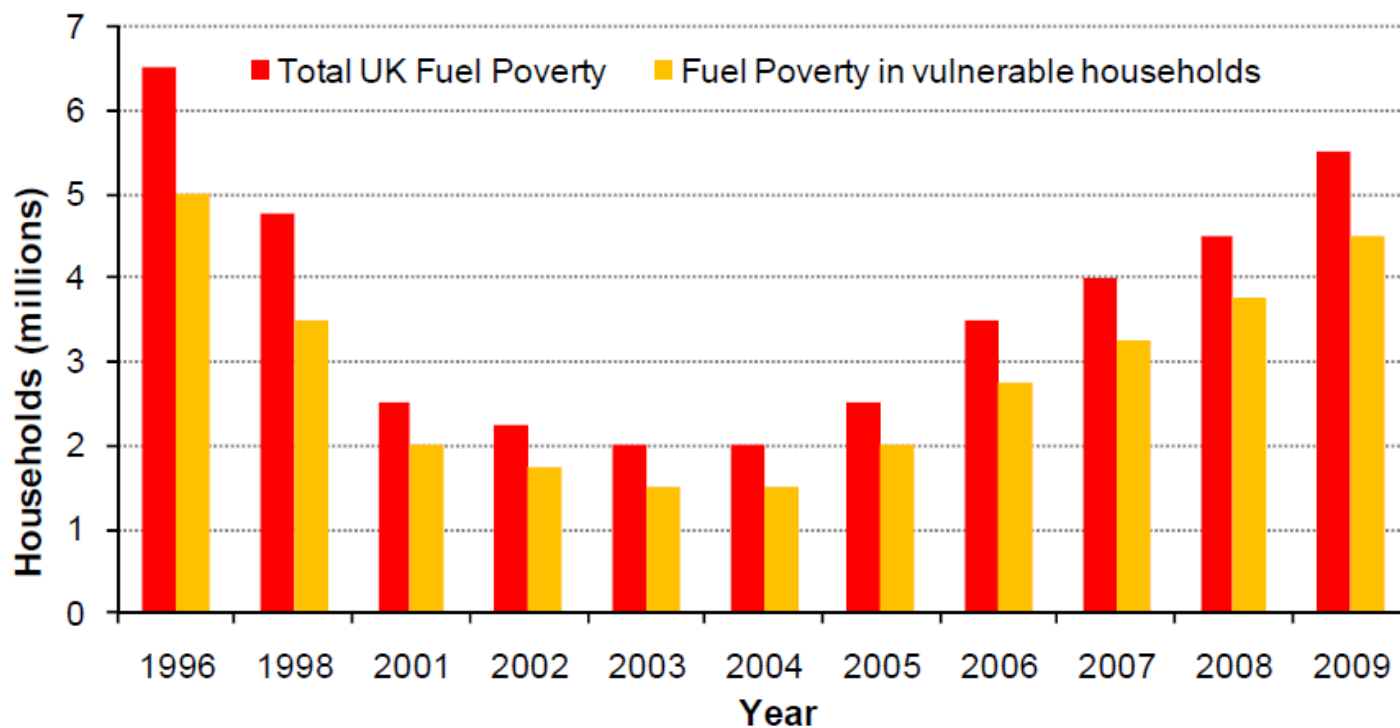
The scale of the opportunity



- 26 million dwellings in the UK – 75% of which will still be in existence in 2050 – accounting for 27% of all UK CO2 emissions
- Target: reduce our carbon emissions by **50% by 2027** and 80% by 2050
- Retrofit Sector value estimated at an additional £15 billion per annum nationally = 10% of construction market
- Between 2007 and 2008 around £2474 million was spent on refurbishments for 1,005,026 houses in the West Midlands, of this £406.9 million was spent on installing energy efficiency measures (excluding low energy light bulbs) in 554,675 households.
- The average social housing spend on energy efficiency refurbishment was £720 per household and on private housing £467.

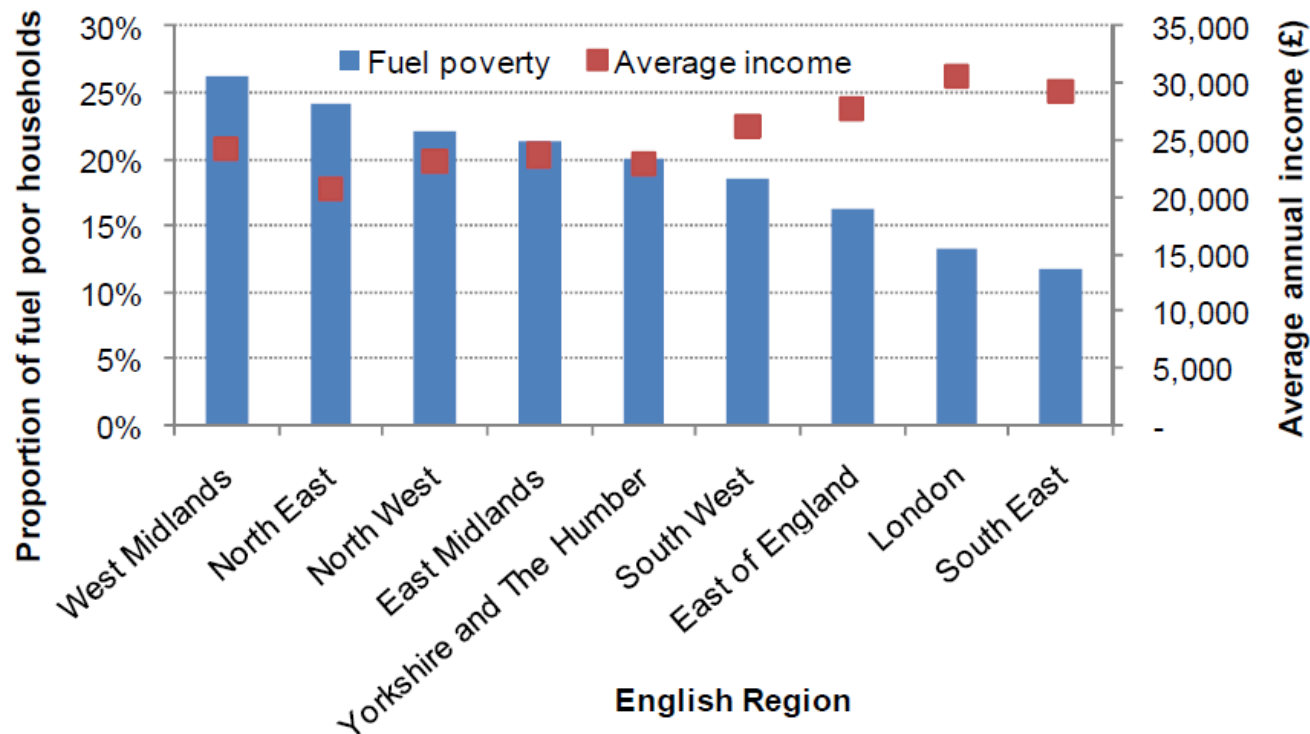
Fuel Poverty – a growing issue

Chart 2.1 – Fuel poverty in the UK, all households and vulnerable, 1996 to 2009⁵



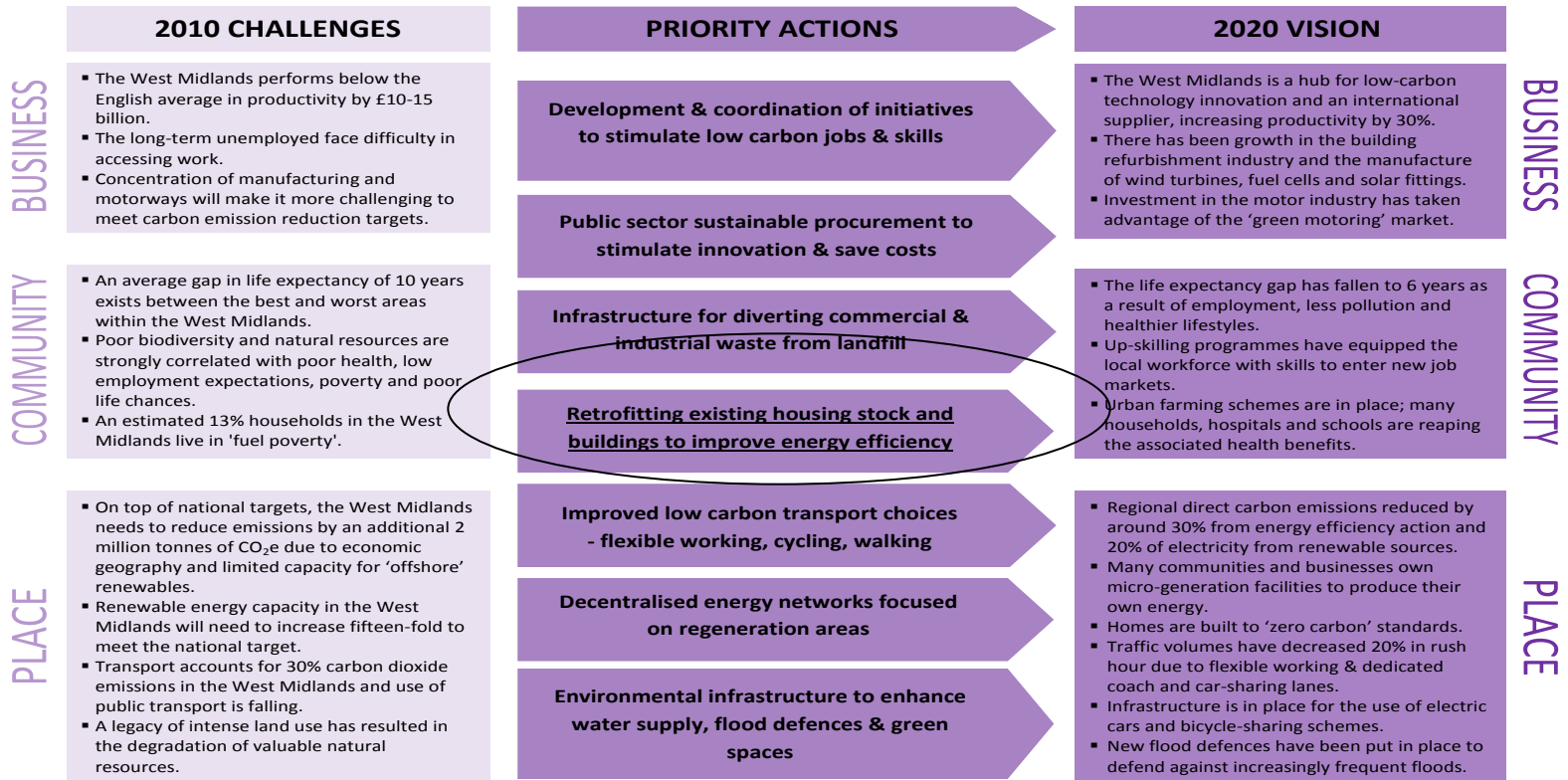
The West Midlands - highest UK fuel poverty figures

Chart 4.3 – Fuel poverty rates and average income by English region, 2009



Retrofit of Buildings – a priority action

WEST MIDLANDS ROADMAP TO A LOW CARBON FUTURE IN 2020



Leadership & perception change – civic and corporate leaders showing that work & lifestyle changes are desirable and realistic

Housing retrofit - the scale of the opportunity

Across the UK we need to be retrofitting:

- 650,000 homes/pa - 2,500/day - 5.5/minute
- 80,000 homes need to be retrofitted pa in the West Midlands

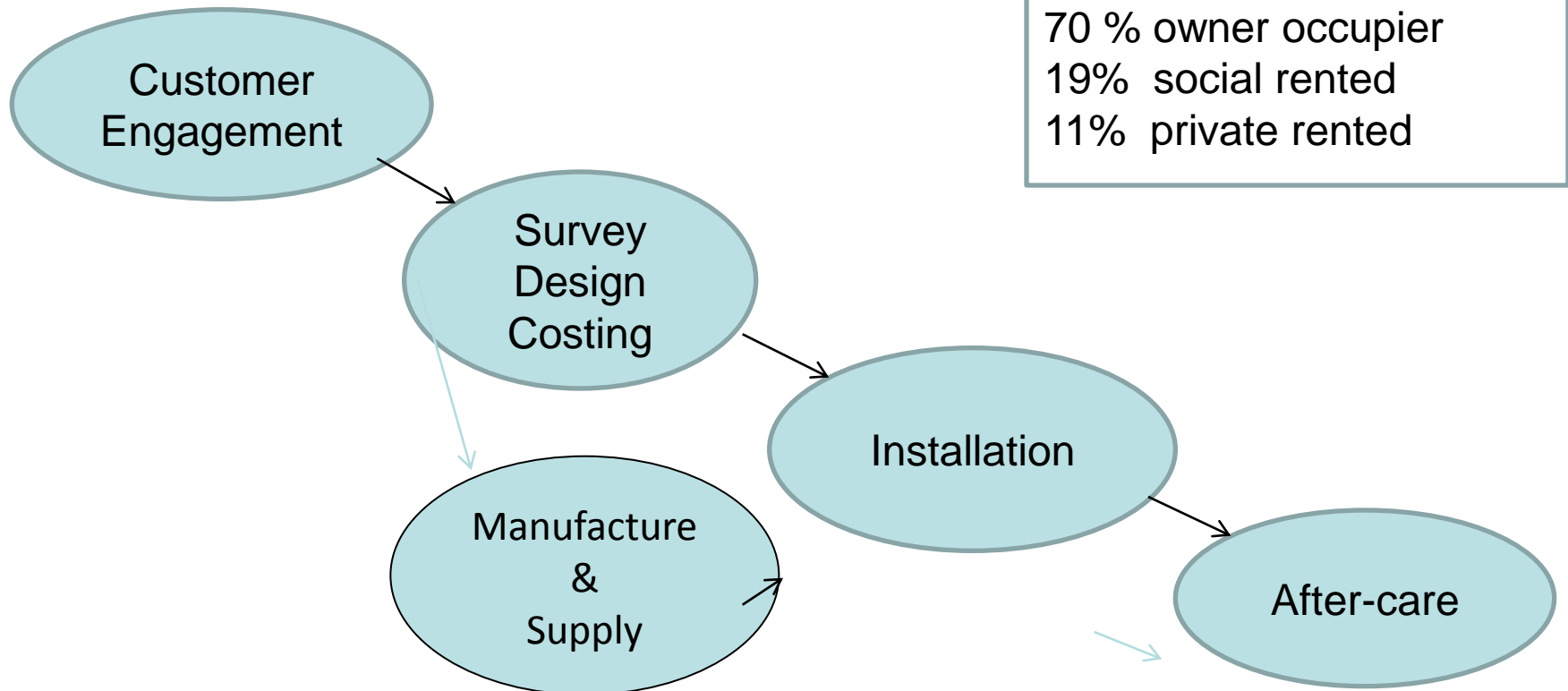
Worcestershire - 230,000 homes – retrofit rate 25 per day

Housing retrofit could add £1.5/£2bn year to the West Midlands economy by treating just our own stock

A national offer to support the Green Deal supply chain could add even more to the economy

A BIG ECONOMIC OPPORTUNITY !

Retrofit is not just about installation



The Green Deal employment opportunities

Across the board to include:

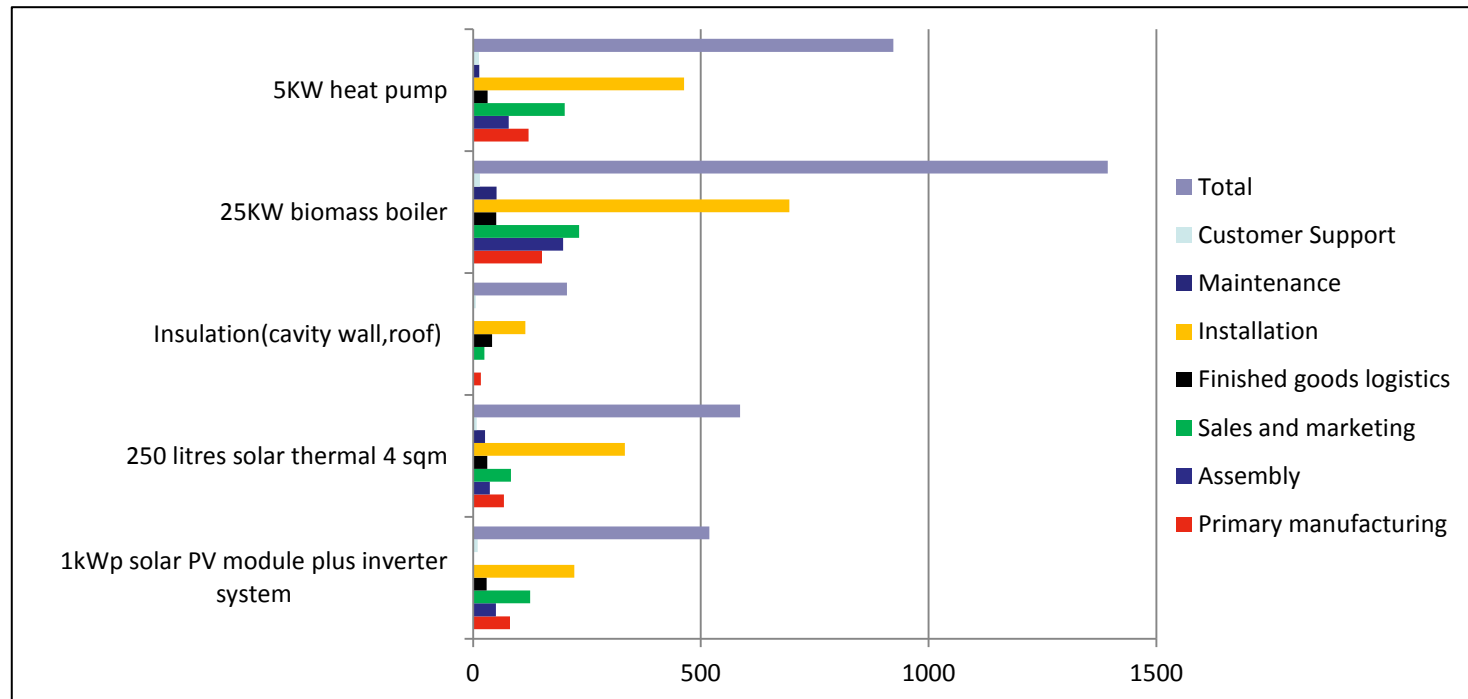
- Energy assessor
- Customer liaison
- Surveyor
- Mechanical & Elect Engineering
- Sales & Marketing
- Project Management
- Distribution and logistics
- Admin & Clerical
- Consulting & Professional services
- Installation Trades

The accredited network for
environmental technologies training

The National
Skills Academy
ENVIRONMENTAL
TECHNOLOGIES



Potential jobs by supply chain stage – 2.3 million homes + all non domestic buildings in the West Midlands

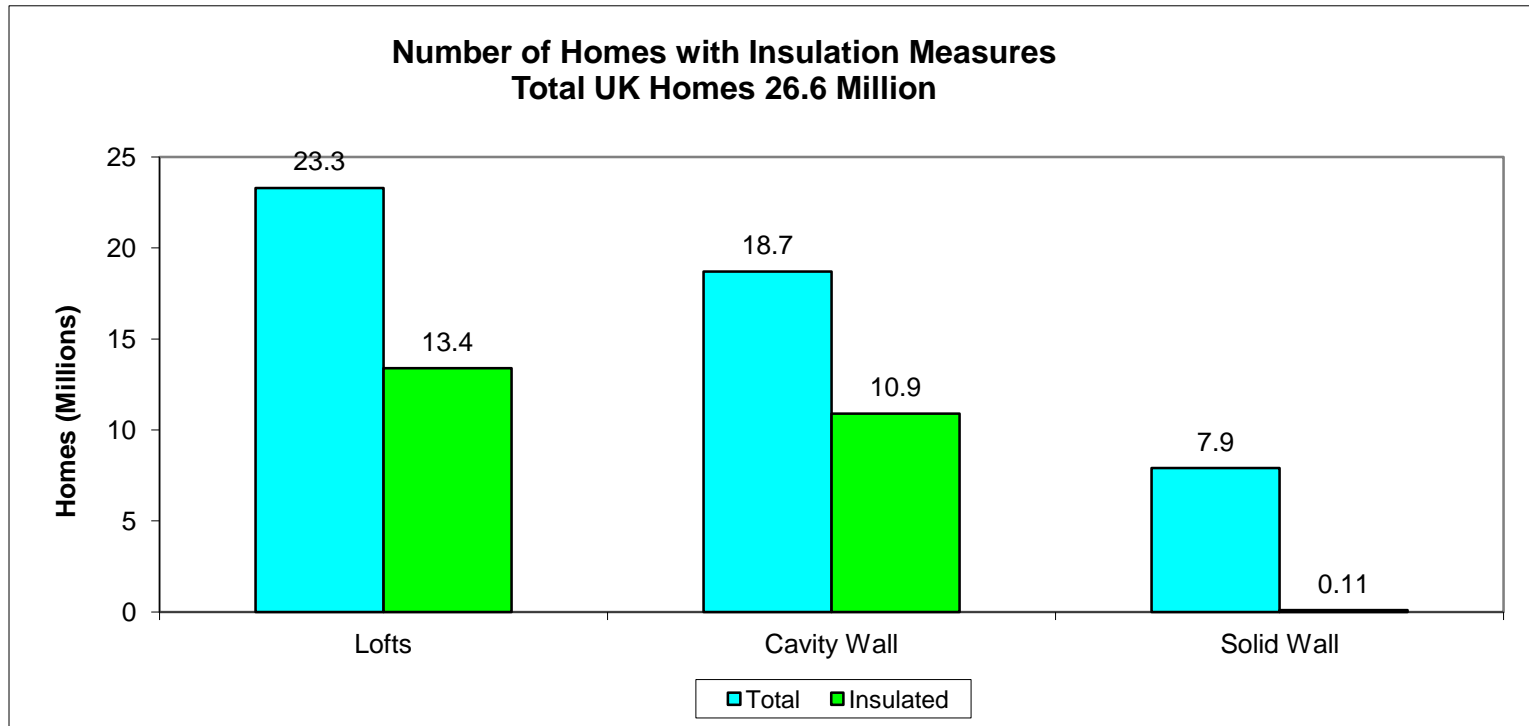


Notes

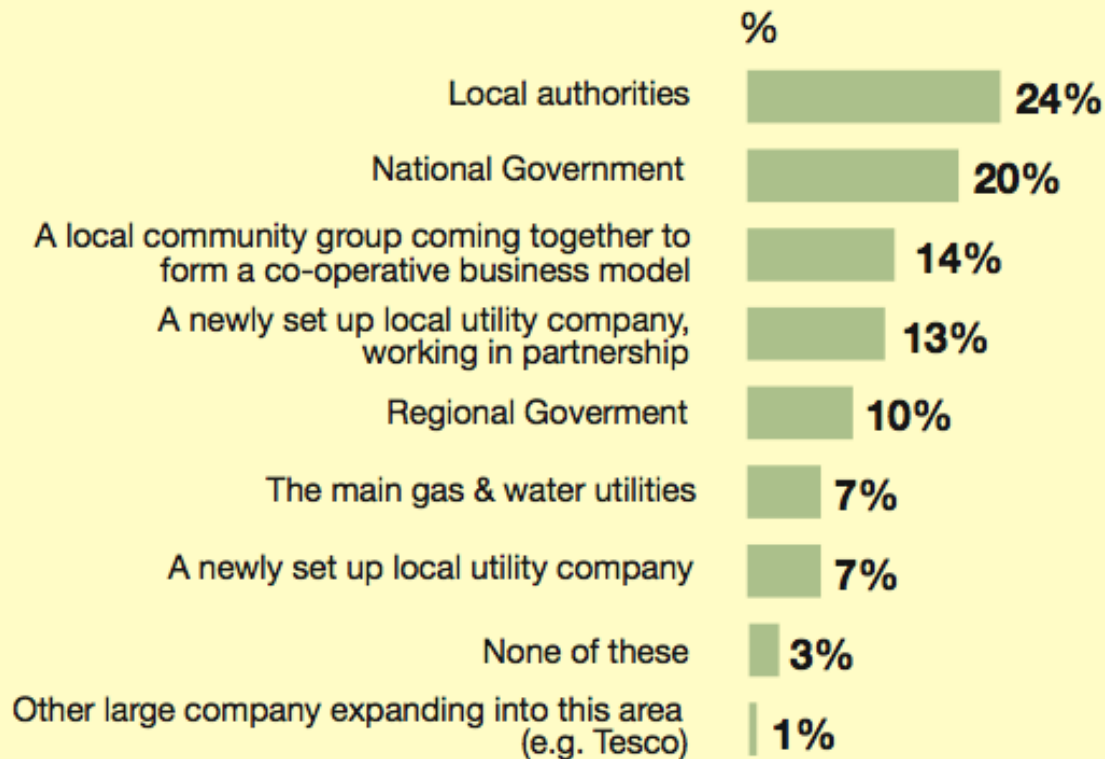
Manufacturing jobs are for continuous annual production; O&M jobs are for 15-25 years
Displacement of existing jobs ignored at this stage

Opportunity remaining in Insulation

DECC - ESTIMATES OF HOME INSULATION LEVELS IN GREAT BRITAIN: July 2011 – updated quarterly



Trust is key to gain uptake



Source: Ipsos MORI (2009)

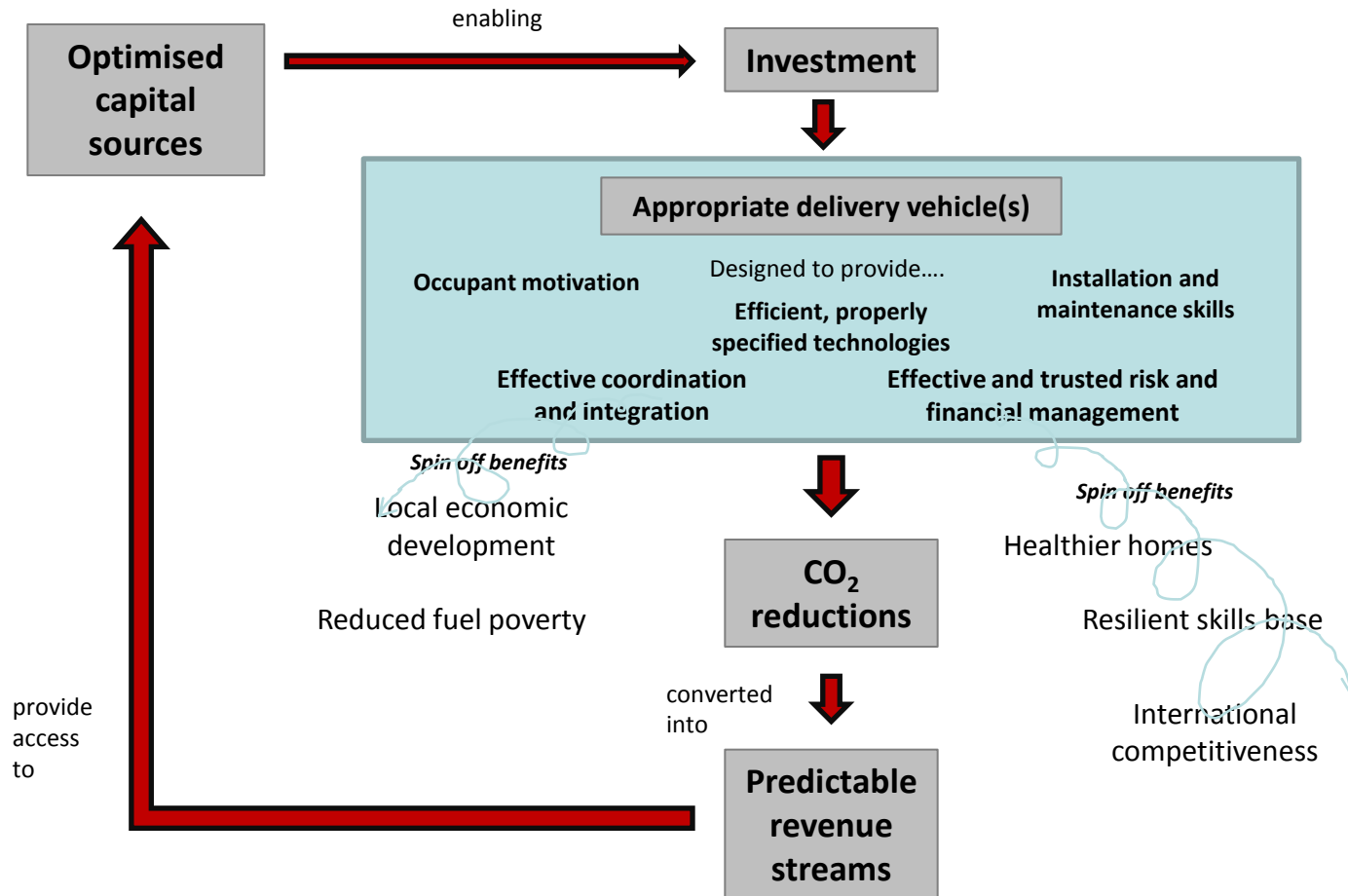
Non-domestic buildings – why should building owners retrofit?

- User (employee) comfort – cooling/warming/fresh air/daylight
- Energy reduction – whole life cost
- Reduce water consumption
- Reduce flood risk

- Maintaining value of building asset
- Insurance requirements/cost

- Client demand
- CSR – organisational credentials
- Carbon Reduction Commitment

Role of Local Authority leadership is key to getting the jobs, skills, trust, finance & benefits



The Risk of Losing the Opportunity

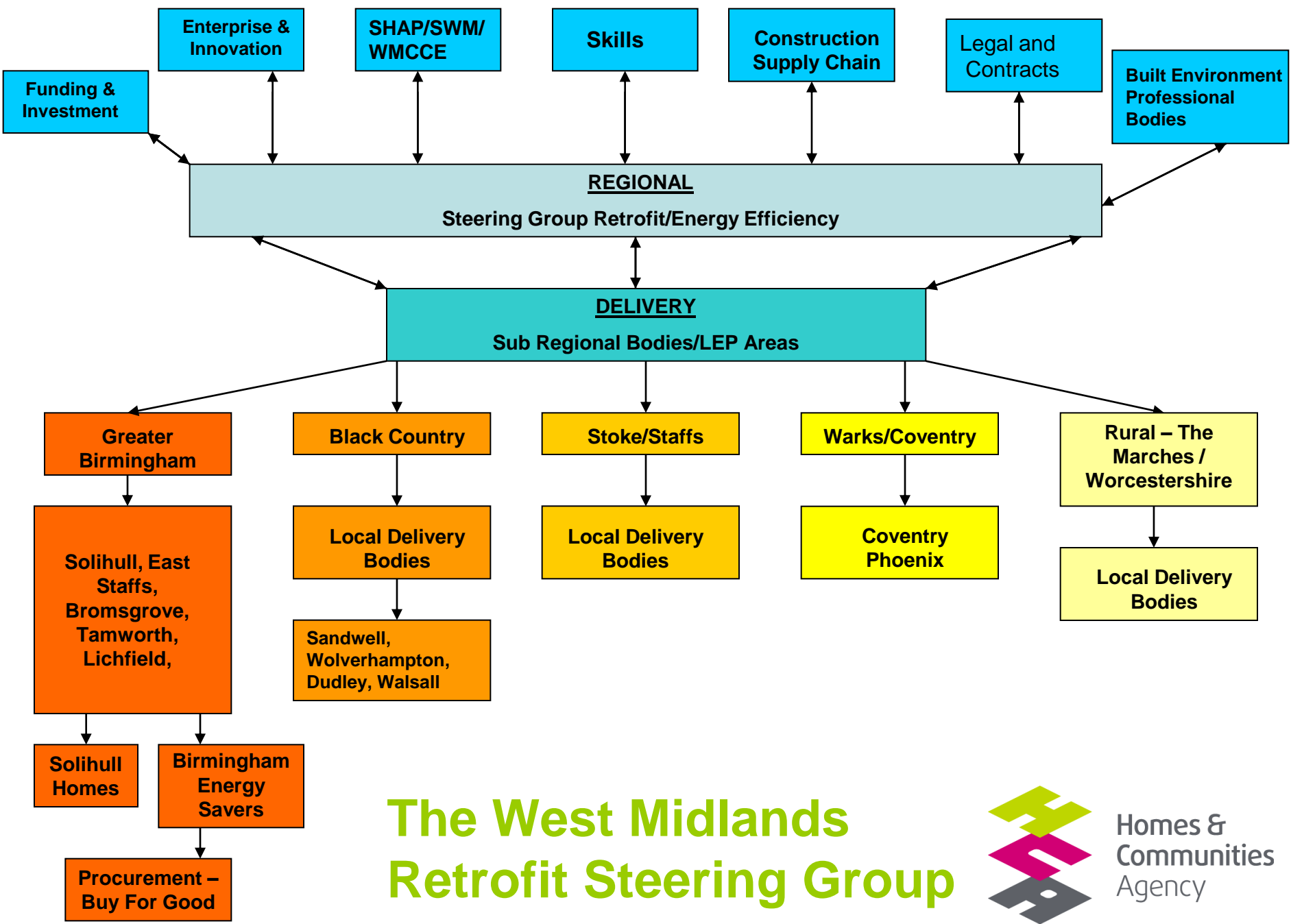
Without strong local leadership to set the framework, help build the skills and business supply chains and define the longer term outcomes...then

1. Housing schemes will **follow the latest pot of money** rather than making the money work for a longer term plan
2. **Cherry picking** of wealthy customers and easy to treat houses by large national firms and energy companies with an army of white vans – leaving the poorest households and hardest to treat for others to pick up..
3. **We can't all be national centres of excellence...** Areas that promote clear joint working, and scale, and track record of delivery will be of more interest to investors and businesses looking to set up to develop and export goods and services –



The West Midlands Retrofit Steering Group

The purpose of the Regional Retrofit Steering Group is to build on the success of the Midlands Region as a national leader in retrofit by linking key sectors, sharing emerging best practice, supporting the evolution of delivery mechanisms and encouraging innovation. The key objective is to ensure that the Midlands positions itself to maximise the benefits of the whole house retrofit agenda including carbon reduction, tackling fuel poverty, up-skilling our workforce and the creation of permanent jobs through significant investment.



The West Midlands Retrofit Steering Group





Zoe Sprigings

DECC

Project Manager

Green Deal Legislation



QUESTIONS



Alan Yates
CHAIR
SHAP Board

The Community Green Deal



Charles Yates
Grant Thornton
Associate Director
Government & Infrastructure
Advisory

Financing The Community
Green Deal



Break 10.50am to 11.20

Refreshments

Networking

Meet the sponsors



Dave Allport Programme Manager

Birmingham Energy Savers



Richard Riley

Director

Universities West Midlands

**University Innovation and
Research in the West Midlands**



George Marsh

CHAIR

**West Midlands Retrofit Steering
Group**

**The West Midlands leading the
UK in housing retrofit – case
studies**

RETROFIT CASE STUDIES

A SELECTION OF DIFFERENT BUILDING TYPES AND
RETROFIT SOLUTIONS



INNOVATION SNAPSHOT

Research and innovation projects include:

- Sustainable Building Futures—Coventry University
- Zero Carbon Retrofit - Centre for Low Carbon Research—Birmingham City University
- European Bioenergy Research Institute—Aston University
- Arbor, RETS, RESCO and CoRE—Staffordshire University
- WMCCE—Wolverhampton University

• **Skills and training in innovation in the built environment providers include:**

- Walsall College—Social Housing Retrofit Programme
- Staffordshire University—CoRE—national training centre for refurbishment excellence
- ACT UK—a pioneering form of simulation training for construction professionals with every nut and bolt on a construction project visible and real pressures and decision-making induced in trainees

WORKSHOPS

12.00 Breakout sessions

- LEP based
- Three agreed actions to take away

Return at 12.45

PLENARY SESSION

LEP action points

Next steps



THANK YOU

Lunch - 1.00pm

Networking

Sponsor displays

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