

Energy Efficiency and Low Carbon Market Research

October 2017

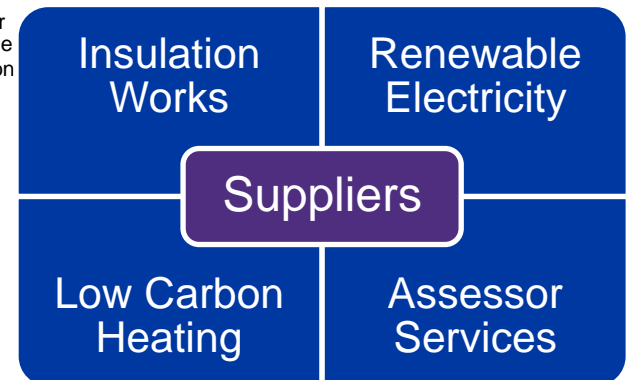
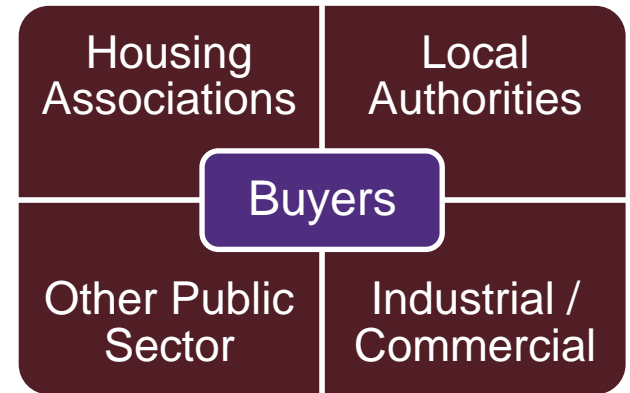
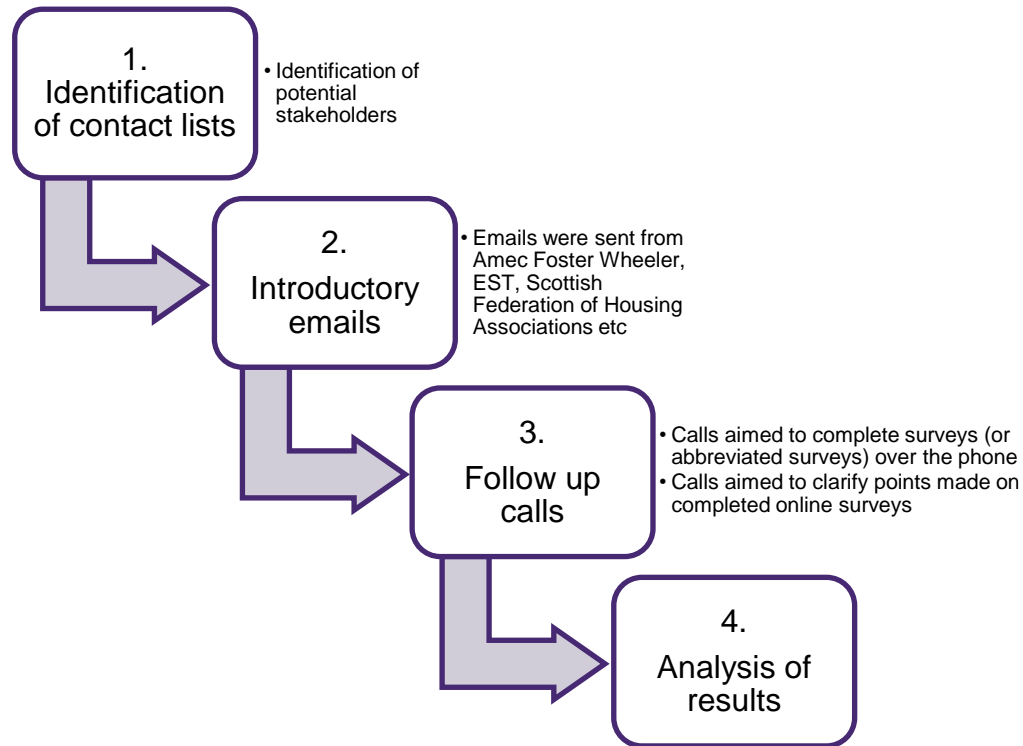


Aims and Objectives

Purpose: To create a snapshot of key insights into the energy efficiency and low carbon market in Scotland (demand & supply)

1. To identify likely future demand from key buyers in Scotland
2. To identify what the current supply chain characteristics are in Scotland
3. To provide insights to assess the supply chain's likely ability to respond to the tenders to be issued as part of Scotland's Energy Efficiency Programme (SEEP)
4. To identify any significant barriers and gaps in the supply chain's ability to meet the needs of buyers that may limit the uptake of Scottish products and services
5. To provide recommendations including specific recommendations for improving procurement processes and documents for suppliers

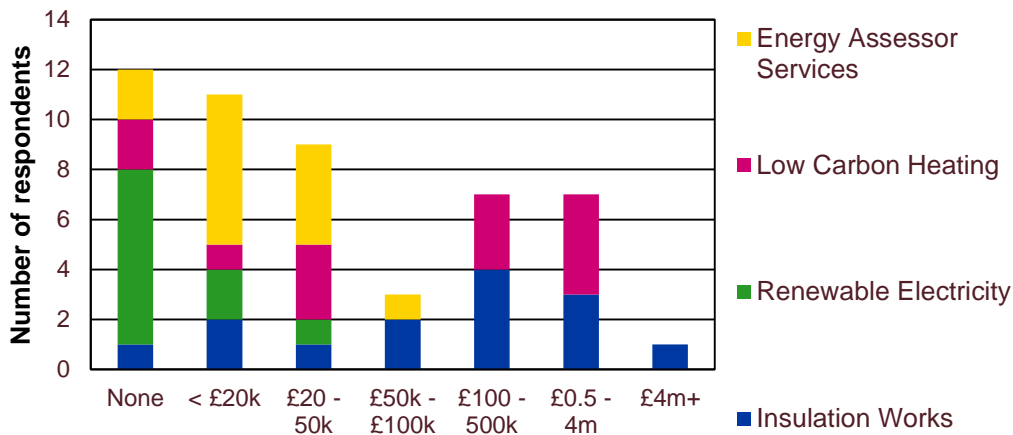
Methodology



Objective 1 - Likely future demand from key buyers in Scotland

Housing Associations – Future Works (3 yrs)

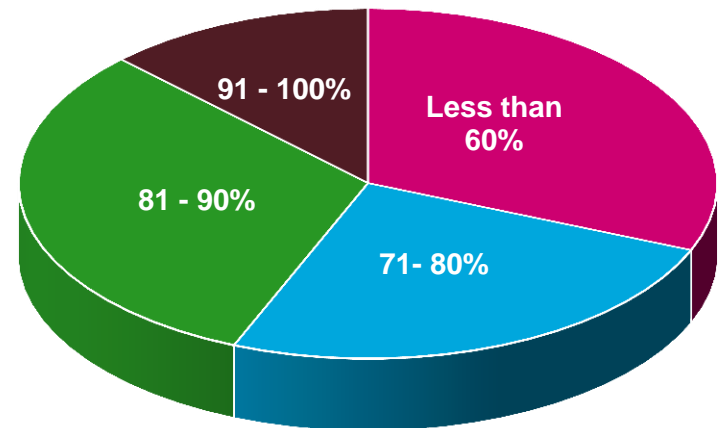
Future Value of Works



Higher target spend on insulation and low carbon heating

Average spend on all measures per Association ca. £864k

Estimated Percentage of Housing Stock that is EESSH compliant



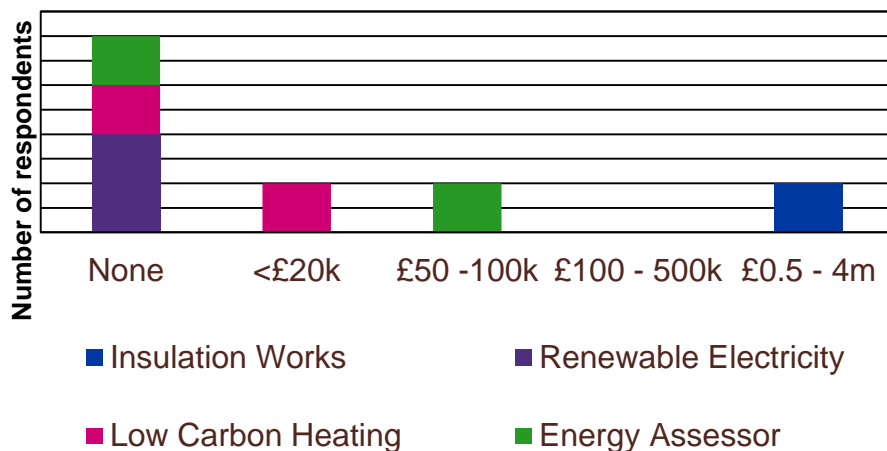
31% consider existing stock to be < 60% EESSH compliant

This translates as approx. 17% of total stock held by respondents

..though 93% have a proactive strategy in place

Local Authorities – Future Market (3 yrs)

Future Purchases (3 yrs)



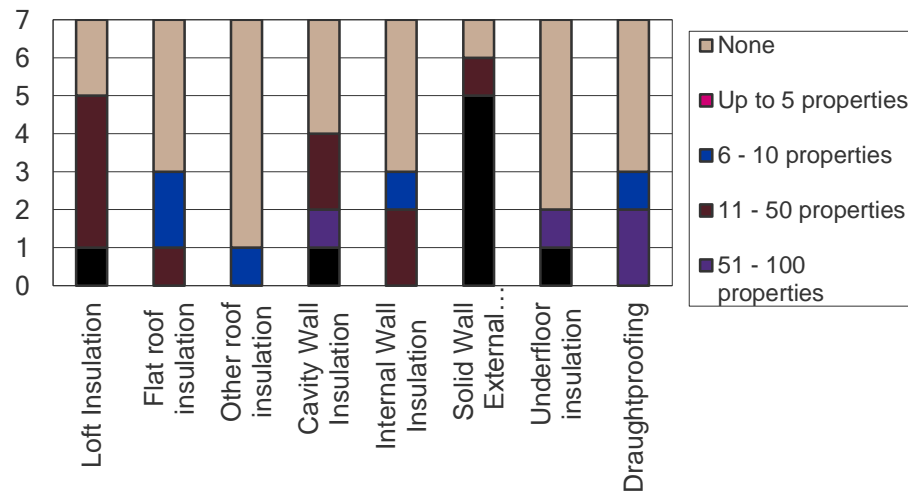
Cautious position – large none!

Expenditure in CCR for 2015/16 much higher than figures here

Average from survey would be £850k per Authority in next three years

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What are the main insulation measures you would expect to undertake in the next 1 - 3 years?



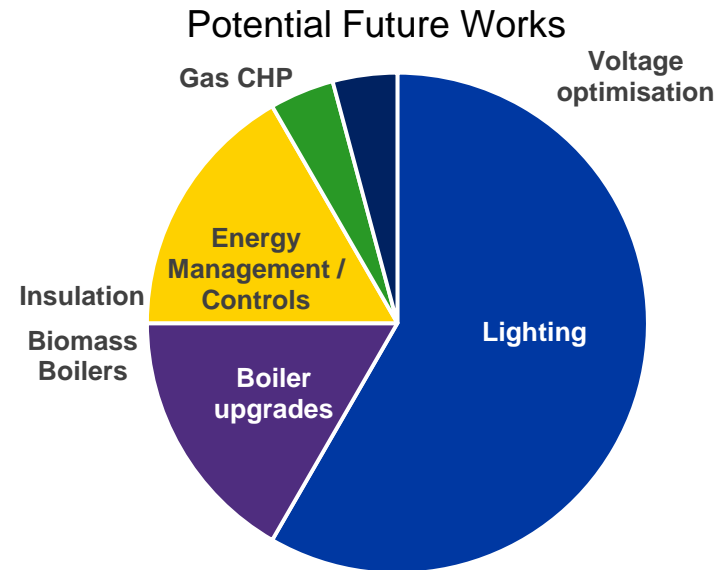
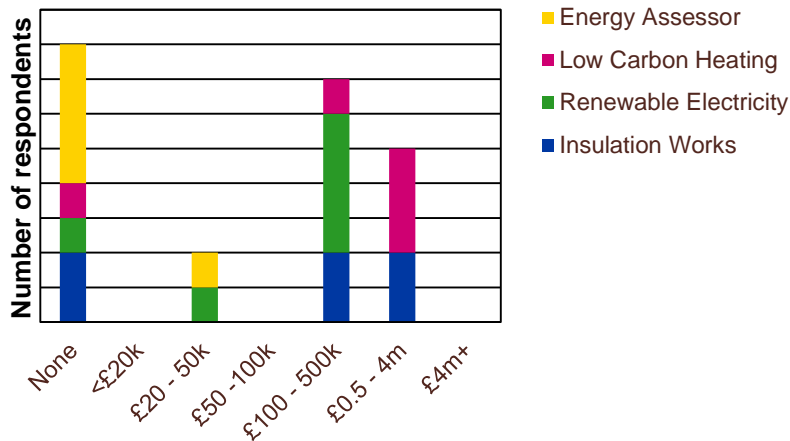
HEEPS: A BS

Scottish Government funding likely to sustain demand in all areas

Example here for insulation works

Universities / Colleges / NHS – Future Market

Future Purchase (3 yrs)



Future spending across all areas;

Lower expenditure on Energy Assessor Services

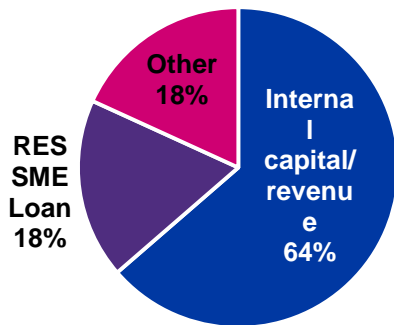
Average £550k per institution

Neither Colleges nor NHS able to use Salix funding

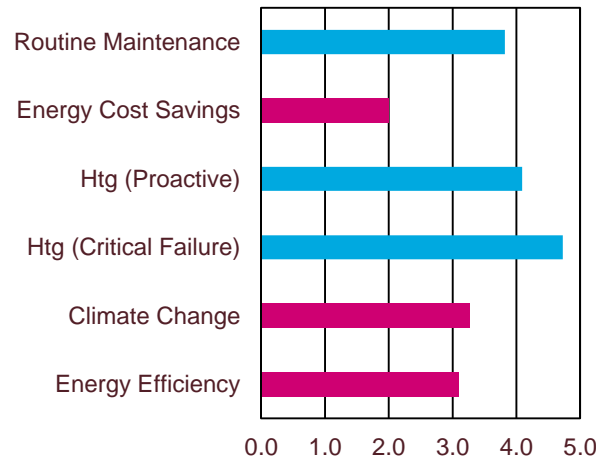
NHSScotland also spending considerable funds on lighting and boiler upgrades

Industrial / Commercial Buyers

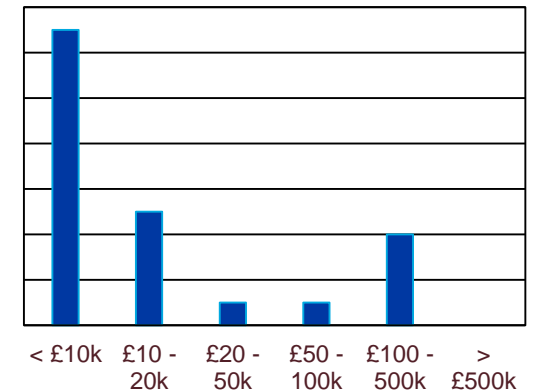
Sources of funding for works



Ranked Importance
(1 highest)

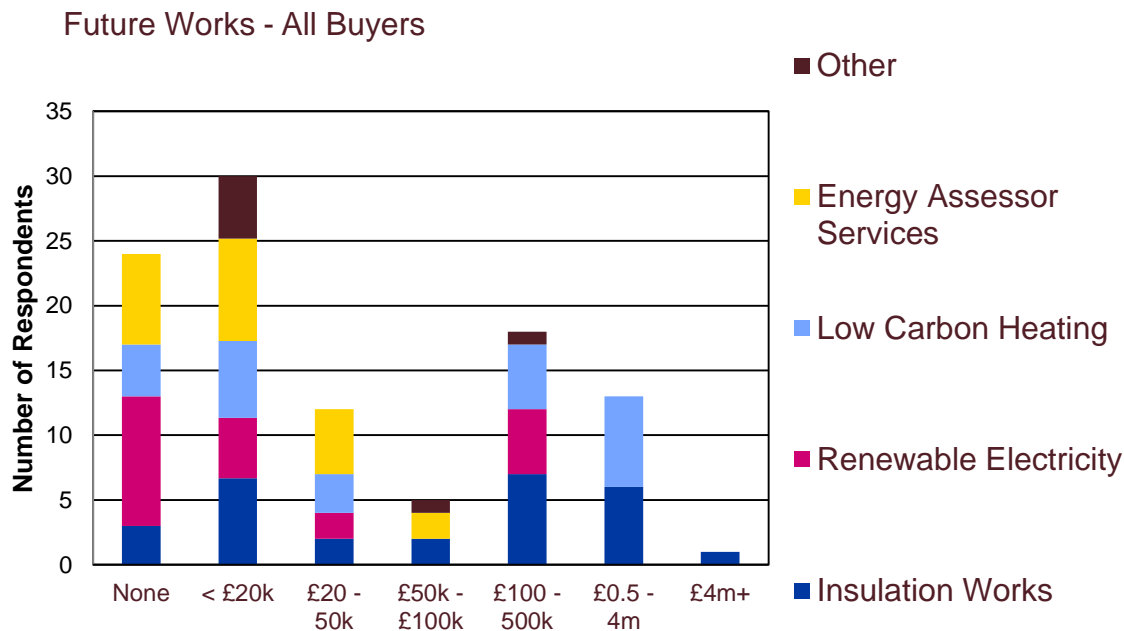


Future Works (3 yrs)



Industrial/commercial buyers continue to seek energy efficiency cost savings via low carbon works. Projected modal expenditure is modest (less than £10k per organisation)

Future demand from buyers



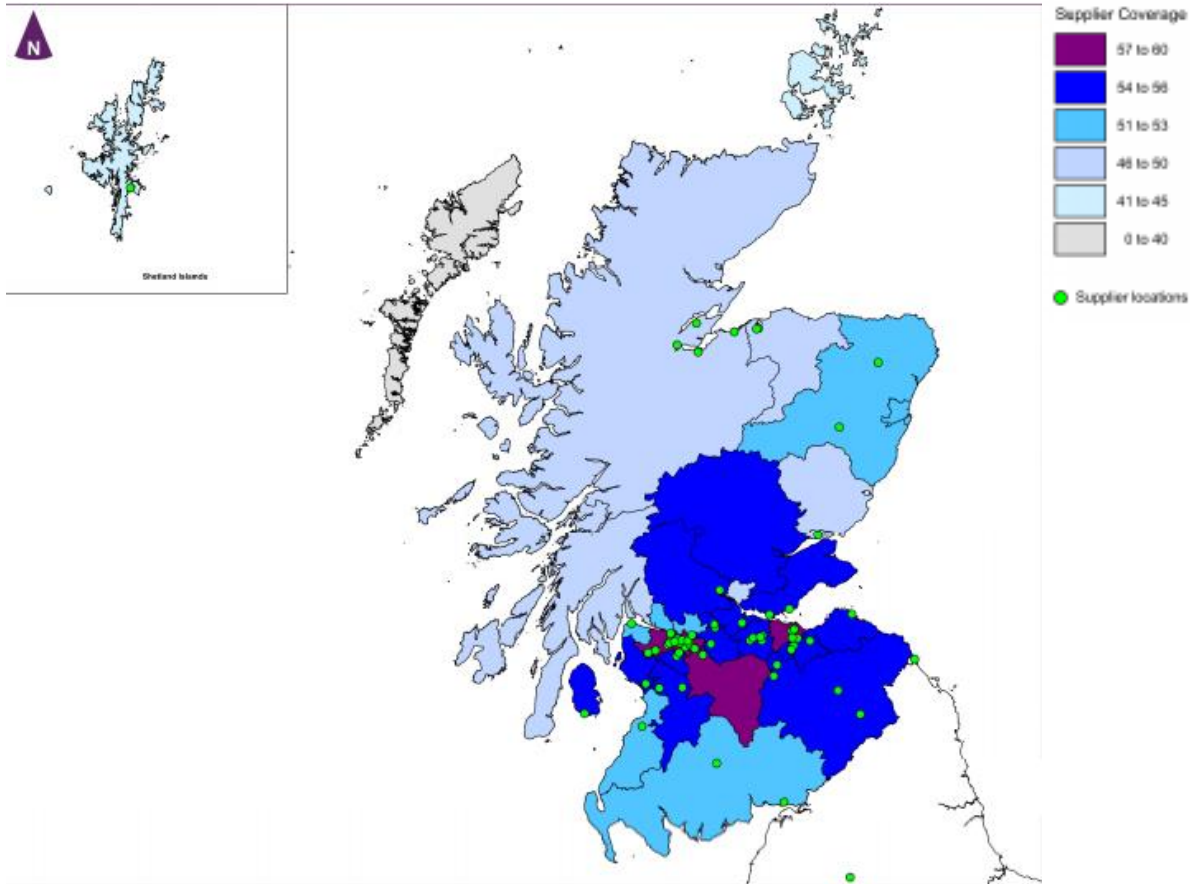
Future demand in all areas – strongest demand in Insulation Works and Low Carbon Heating

Energy Assessor services lower demand reflects variable in-house capacity among buyers

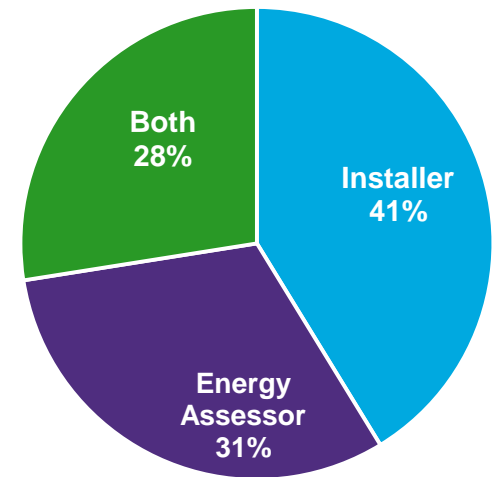
Other refers to lighting, smart meters and HVAC (commercial / industrial survey only)

Objective 2 - Current supply chain characteristics in Scotland

Suppliers



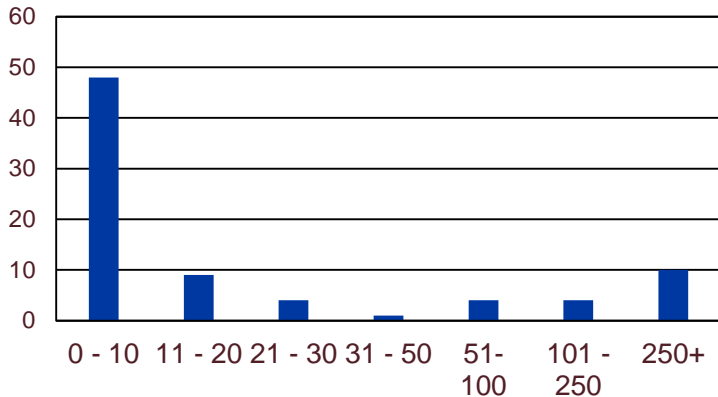
Main service areas



Suppliers – Size and target sectors

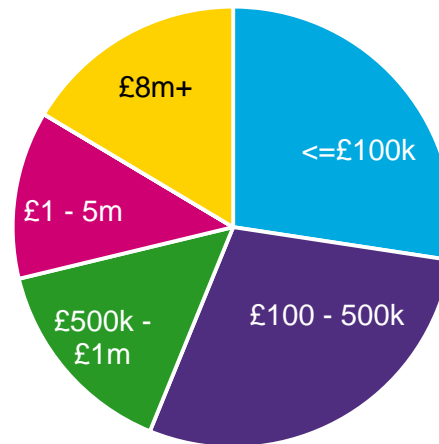
Annual Turnover

Number of Suppliers by FTE



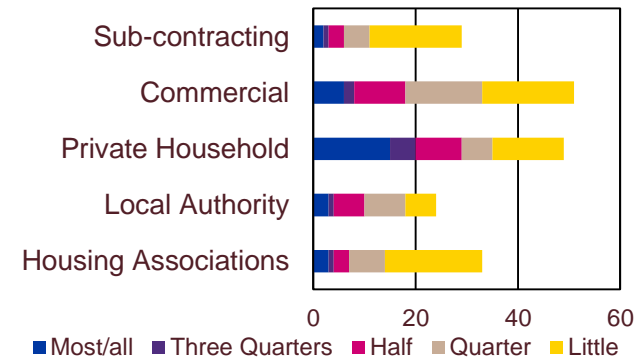
60% of respondents \leq 10 FTE

13% of respondents \Rightarrow 250 FTE



65% of respondents turnover less than £1m pa

Sectoral Sources of work

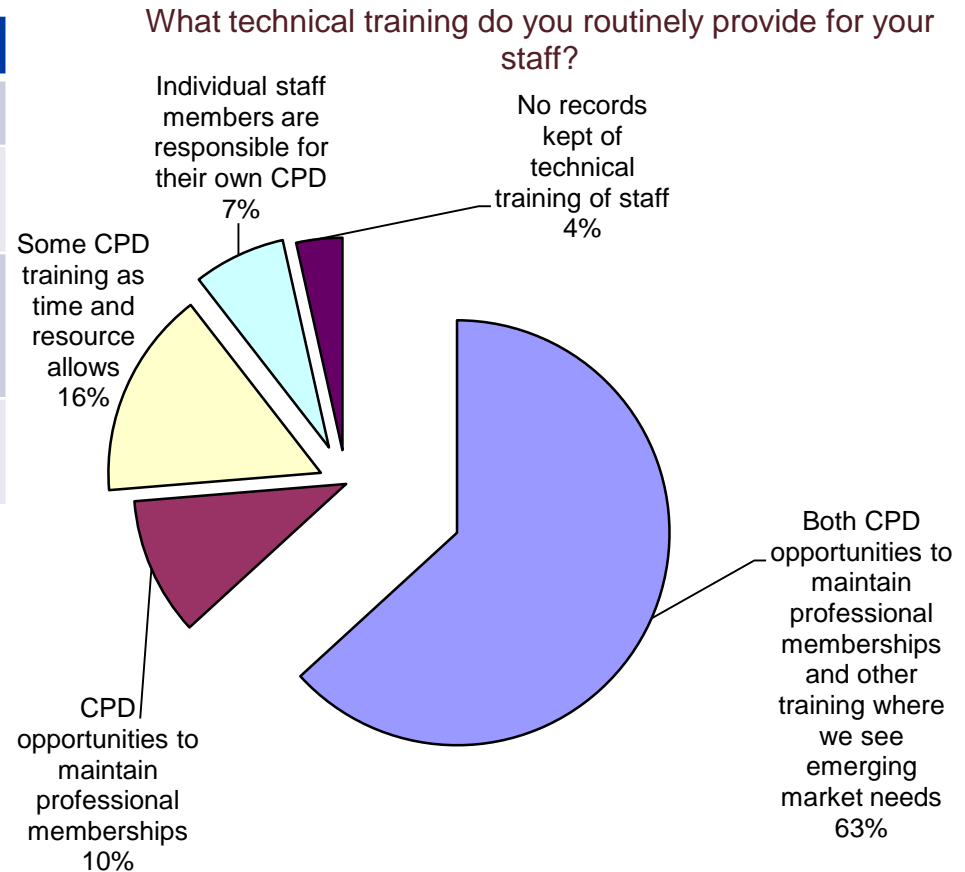


Fewer suppliers reliant on public sector clients

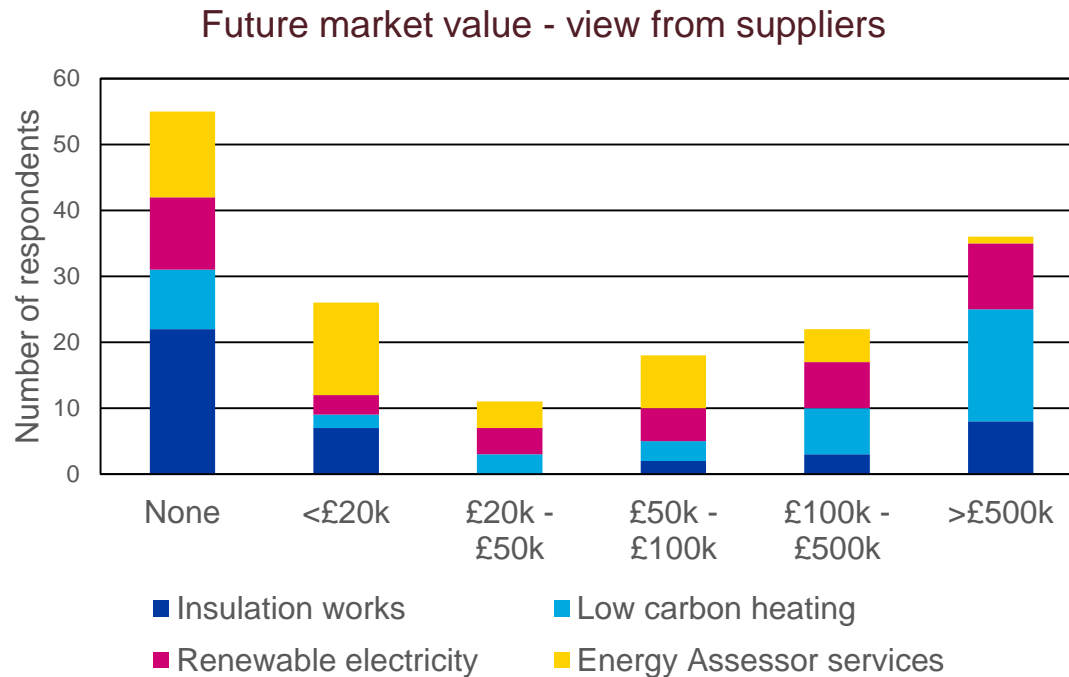
Potential barriers for smaller suppliers

Suppliers – Accreditation and training

Accreditation / Certification	% Respondents
Green Deal (PAS 2030)	62%
CIGA (Cavity Insulation Guarantee Agency)	24%
SWIGA (Solid Wall Insulation Guarantee Agency)	19%
MCS (Microgeneration Certification Scheme)	76%



Suppliers – Future Market



Mixed views and cautious view of future

Most positive views from low carbon heating and renewable electricity

Objective 3 - Ability to respond to SEEP and procurement insights

Procurement Routes / Understanding buyer needs

Public Buyers

- *Predominantly via PCS*
- *At least 50% of all opportunities in past 12 months advertised via PCS*

Industrial / Commercial Buyers

- *Single or small number of preferred suppliers*

Suppliers

- 60% registered on PCS
- 55% of respondents did not respond to any opportunities advertised via procurement portals in past 12 months
- 60% use word of mouth as primary means of attracting business
- Good overlap between views of key drivers from Buyers and what Suppliers understand are drivers for works

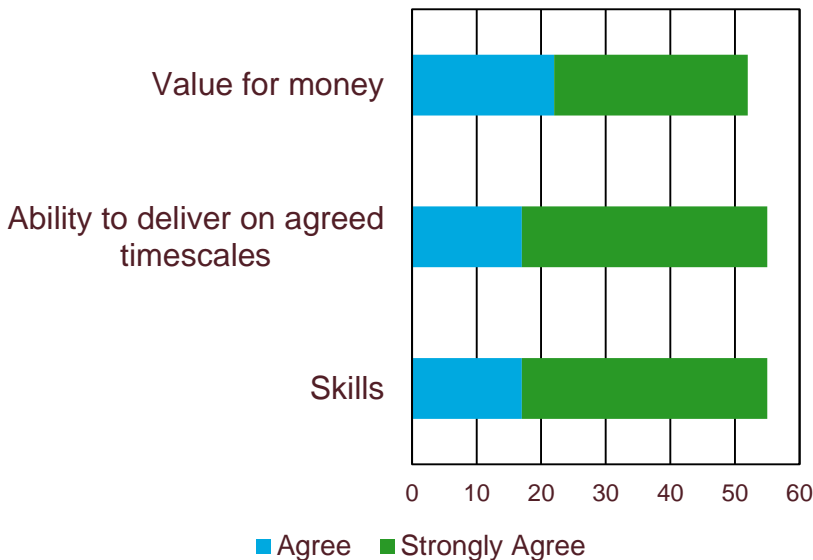
Large potential talent pool of SMEs essentially excluded from market opportunities

Portal based procurement limits dialogue

Suppliers typically have good understanding of the drivers behind Buyer requirements

Skills, Attributes, Mandatory requirements

Attributes Buyers Seek



Top three responses tie in with Buyer survey views

Suppliers

Buyers of our services ask for quality standards and professional insurance levels that are difficult to maintain

40% Disagree; 28% Neither agree nor disagree

90% hold at least one accreditation (MCS, PAS2030 etc.)

Suppliers do not consider that mandatory requirements are too onerous

Majority of suppliers hold at least one accreditation – so this is clearly seen as a benefit in engaging with buyers

Objective 4 - capacity of supply chain to meet buyer requirements

Future Market Requirements

	Buyers	Suppliers
Insulation Works	Solid Wall Insulation Loft Insulation Draughtproofing	25% of suppliers offer solid wall insulation 36% of suppliers offer loft insulation 31% of suppliers offer draughtproofing
Low Carbon Heating	Boiler upgrades District heating development	38% of suppliers offer boiler upgrades 16% of suppliers offer district heating hydraulic services 20% of suppliers offer district heating control systems
Renewable Electricity	Solar PV	71% of suppliers offer Solar PV services
Assessor Services	EPC – Existing dwellings EPC – new build	59% of assessor services suppliers offer domestic EPC services 43% of assessor services suppliers offer non-domestic EPC services

In terms of service offering – suppliers look capable of meeting Buyer needs

Note that typical size of supplier from present survey is less than 10 FTE – no view on capacity

Service Alignment

	Housing Associations	Housing Association Suppliers	Local Authorities	Local Authorities Suppliers
Insulation Works	Loft Insulation	3 (42%)	Loft insulation	2 (20%)
	Solid Wall External Insulation	3 (42%)	Flat/other roof insulation	2 (20%)
	Cavity Wall Insulation	4 (57%)	Solid wall insulation	1 (10%)
Low Carbon Heating	Boiler upgrades	5 (71%)	Boiler upgrades	1 (10%)
	Small amount of district heating and ASHP	2 (29%)		
Renewable Electricity	Little / none.	4 (57%)	Solar PV	6 (60%)
	Small amount of Solar PV			
Energy Assessor Services	EPC - Existing Buildings		Limited EPC	

Not necessarily strong alignment between supplier offering and major requirements of buyers

However, buyers did not express any problem in finding suppliers to carry out works

Significant amount of suppliers use sub-contracts – so not clear who ultimate customer is

Support Schemes Awareness

Buyers

- *Capital / revenue funding primary funding source*
- *Limited use of loans / incentives (except HAs)*

Suppliers

- *Generally good awareness of relevant schemes*
- *CT Green Business Fund less well known*
- *HEEPS equity loans and HES renewable loans too*
- *May simply reflect eligibility*

Suppliers

Scheme	Housing Associations	Local Authorities	Private Household	Commercial businesses
ECO	0/7	1/10	NA	NA
HEEPS: ABS	1/7	1/10	NA	NA
Warmer Homes Scotland	0/7	0/10	NA	NA
HEEPS: Loans and cashback	0/7	1/10	1/30	NA
HEEPS: equity loans	1/7	3/10	6/30	NA
FIT / RHI	0/7	1/10	0/30	0/18
HES Renewable loans	2/7	NA	6/30	NA
District heating loans	NA	3/10	NA	NA
RES SME Loans	NA	NA	NA	2/18
CT Green Business Fund	NA	NA	NA	6/18

Objective 5 - Recommendations

Supply chain engagement – Future Delivery

#1 Encourage consortia working among supply chain

- Offers greater capacity to scale up service offering with lower business risk
- By extension business expansion route for SMEs
- Offers aggregation of services therefore more 'holistic' service offering
- Assists in transformational change rather than piecemeal action
- Offers buyers easier access to multi-service delivery

#2 Provide procurement guidance for suppliers to engage with public sector buyers

- Encourage wider sign up for PCS and show how suppliers can set up base profiles on PCS avoiding duplication of effort in responding to opportunities
- Continue support packages around how to respond to tenders

Supply chain engagement – Future Delivery

#3 Advertising opportunities (buyers and suppliers)

- Explore use of wider social media channels to advertise opportunities and encourage more suppliers to engage with PCS

#4 Supplier services (supplier profiles)

- Use 'directory of directories' to offer recognised search route for low carbon market suppliers (e.g. dedicated SEEP page)
- Periodic networking events so buyers are aware of range of supplier offerings

Buyer behaviour

#5 Procurement (buyers)

- Provide procurement guidance and training programme for all local authority buyers
- Encourage consistent approach to engagement

#6 Communication between buyers and suppliers (soft market testing)

- Use of Forward Plan or similar gives market signals as to potential requirements
- This enables SMEs and others to plan and tailor growth to market needs
- Better understanding of drivers and nature of work required by buyers

Buyer behaviour

#7 Communication between buyers and suppliers (engagement events)

- Encourage more buyer and supplier engagement events
- Market intelligence for buyers/suppliers
- Builds supplier confidence that opportunities are real

#8 Supplier evaluation (buyers)

- Provide guidance for buyers on assessment of value for money
- Avoid poor use of price:quality ratios and associated lowest cost wins
- Need suitable KPIs to enable innovation in services and delivery

#9 Routes to market (consistent buyer approach)

- Encourage consistent procurement routes e.g. dedicated SEEP category in PCS
- Review frameworks regularly to enable market entry

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Access to funding

#10 Market funding (buyer access to funding)

- Provide buyers with clear routes to obtaining funding (particularly over the mid to long term)
- Leveraging investment means moving away from predominant revenue funding

#11 Market funding (central funding allocations)

- Avoid time constrained funding allocations
- Enables more holistic approach and greater innovation

#12 Market funding (buyers and suppliers)

- Provide suppliers with a clear view of the scale of funding available to buyers
- Confidence in scale of market moving forward (no Green Deal repeat)

Thank you