

## Communicating Microgeneration

### Proposed government-industry microgeneration communications framework

#### Aim

The aim of this document is to identify and outline a clear set of necessary actions for government, industry and consumer groups to jointly work toward in order to improve the way in which microgeneration is communicated. Specifically, the aim is to ensure consistency of messaging across all key stakeholders in order to both promote the benefits of microgeneration and to provide consumers with more faith in the systems. To achieve this aim, the document covers the topics of consumer messaging, consumer protection, microgeneration data and advice and information. Proposed deliverables on each topic have also been included.

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#### Background

Communication is an overarching workstream within the [Microgeneration Government-Industry Contact Group \(MGICG\) Action Plan](#). Its core objective is to achieve consensus within the industry on core messaging, and to promote a collaborative approach to dissemination, enabling greater reach. In January 2012 two workshops were held; one focussed on consumer messaging and the other on warranties and consumer protection. Both sessions' debated themes related to communication such as what the key messages should be, who should own/manage them, how they should be disseminated and what the next steps in making sure consumer messaging is both useful and consistent. Each of the workshops were summarised in two separate reports<sup>1</sup> prepared by the Energy Efficiency Partnership for Homes which outlined under 'Action Planning' what needs to happen next to start to tackle the issues.

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<sup>1</sup> MGICG Consumer Messaging Workshop: a report prepared for the EEPH, January 2012 and MGICG

In late September 2012, the communication actions within the [MGICG Action Plan](#) were tabled at a MGICG roundtable and it was agreed a sub-group should be formed to galvanise action. The primary remit of the sub-group is to review progress made to date toward the all communication related elements of the action plan, including messaging, data and consumer protection. This document seeks to aid this review by condensing both the MGICG communication related action plan items, as well as the outcomes from the previous workshops and other research. In addition, the sub-group will be expected to feed in to DECC's Heat Strategy by sharing its work with DECC's Consumer Insight team.

## Core consumer insight - *what makes them tick?*

There have been numerous studies carried out<sup>2</sup> over the years to gain insight into consumer behaviour in relation to energy and sustainability. The most recent in-depth study specifically relating to microgeneration is believed to have been carried out in April 2011 by the Energy Saving Trust who commissioned research<sup>3</sup> to better understand consumer attitudes and behaviour towards adopting microgeneration technologies. Over 1,200 householders were included in the study with different stages of the consumer journey analysed. The findings were also shared with Consumer Focus and included in their 'Getting FIT' report. **Table 1** gives an overview of the householders studied in terms of their responses, their stage in the consumer journey and their profiles. **Table 2** shows the key levers and barriers of this research. Whilst this research has been singled out, it is believed it covers most, if not all, of the key points from previous research. For example, the levers and barriers relating to high up-front capital cost are well known.

The responses	Stage in the consumer journey	% of target group *	Profile
I don't know much about these kinds of technology or...	Pre-consideration	14%	Typically aged 45-64 Smaller homes in urban location Not particularly environmentally friendly Superficial awareness of renewables Apathetic – renewables considered unsuitable and unaffordable
I'm aware of these kinds of technology but have not considered installing any in my home	Pre-consideration	38%	

<sup>2</sup> For example; Ipsos MORI, British Gas, Environmental Change Institute and Element Energy

<sup>3</sup> Uptake Of Renewable Heat And Energy – The Consumer Journey Prepared for the Energy Saving Trust, Purple Market Research, May 2011

I would consider installing these kinds of technology in my home but so far haven't done anything about it	Consideration	37%	Typically aged under 55 Medium sized homes in urban location Fairly environmentally friendly Higher awareness of renewables Open minded about renewables – but not yet prepared to install
I intend to install this kind of technology in my home and have started actively looking into it	Preparation	7%	Typically aged under 45 Medium to large sized homes in urban location Fairly environmentally friendly Very interested in renewables and informed However only one third will <u>definitely</u> install
I have already installed this kind of technology in my home or am in the process of doing so	Installed	4%	Typically aged over 55 Large detached homes in rural location Very environmentally friendly Passionate about renewables and informed Confident self-starters Able to take a long term view

Table 1 - consumer profiles

## Levers and barriers

	Financial	Non-financial
<b>Barriers</b>	High up-front cost of installation Long payback period Lack of savings / access to money Awareness / knowledge of FITs / RHI Complexity of FITs / RHI	Awareness / knowledge of technologies Perceptions that renewables are not suitable for homes Concern about installers (skills, experience, costs) Apathy – renewables not perceived to be needed
<b>Levers</b>	Financial support (FITs / RHI) & making them more transparent and comprehensible Finding way of reducing up-front costs (to £5k) and payback period (to 5 years) Focus on investment rather than cost Focusing on value added to home by installing renewables	Promotion (advice & information) for renewables,, including applications & benefits Taking advantage of trigger points (moving home, refurbishing, replacing heating system) Development of specific guidance at household level (surveys, EPCs, etc.) Installer guidance / training Reinforcing environmental / sustainability messages

Table 2 – levers and barriers

These barriers are not necessarily complete but they do highlight the main ones. Maintenance, warranties, “hassle factor” etc may be others.

## What prompts interest in microgeneration?

The same research identified the top five motivations for prompting an interest in microgeneration which were (first being highest):

1. Rising price of fuel
2. Environmental concerns
3. Desire to be self sufficient
4. Concern about availability of oil
5. Seeing installed elsewhere

Other reasons cited included the need to replace heating system, recommendations from friends/family, approaching retirement, moving into a new home, knowing the right installers and building new home.

Almost all of these motivators are well founded and have been identified previously within other similar bodies of research<sup>4</sup>

## Who should be targeted?

The information presented above is very generalised and undoubtedly the consumer journey in reality is much more complex. However, it may be argued that the group with the greatest potential is the 'consideration' group, particularly given that 37% of those studied fall into this category. If this group was targeted well then it may shift them to the preparation stage, which is a pre-cursor to actual installation. The key perceived barriers for this group are:

- Lack of detailed knowledge of technologies
- Inability or unwillingness to pay up front capital cost

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<sup>4</sup> Ipsos MORI et al (2009) Understanding Consumer Attitudes to "Sustainable Community Infrastructure" – national survey of 1,074 adults aged 18+; British Gas (2010) national survey of 2465 adults.

## Core consumer messages

Any consumer messages need to tackle the identified barriers (real or perceived) head on, for example in relation to the understanding the financial benefits of installing. Therefore, it is of paramount importance that any messaging is easy to understand and highlights the support available. Taking the financial and non-financial levers and barriers into account, and given the potential of those consumers in the consideration stage, it is **proposed** that the key messages to convey are:

### 1. Microgeneration allows you to be more self-sufficient

With energy bills rising, microgeneration can help insulate you from rising fuel costs.

However, before installing any microgeneration technology you should ensure you have all the appropriate energy saving measures in place. The UK government's Green Deal can help with this.

### 2. Microgeneration is an investment

A good investment is hard to come by nowadays. Microgeneration technologies allow you to get paid for what you generate, both for renewable heat and electricity. It is possible to get a greater return on your investment when compared with more conventional investments such as a cash ISA.

### 3. Support is available to assist with the up-front capital cost

The UK government's Green Deal programme can help part finance the cost of installation with the amount determined by individual circumstances and the technology proposed. In addition there are interest free loans available for consumers in Scotland.

### 4. Replacing your heating system is a good time to install microgeneration

If you're looking at replacing your boiler then now is a good time to consider alternatives such as microgeneration. There are a number of options open to you include heat pumps, wood fuelled heating and solar hot water systems.

### 5. Ensure you install the right technology

Which technology you install will depend on your individual circumstances including property, current fuel use and lifestyle. You should ensure the technology is appropriate for your needs before going ahead with the installation. An installer should be able to assist with this.

### 6. Do your bit for the environment

Microgeneration technologies are also low carbon technologies which mean they emit less greenhouse gases than conventional fossil fuelled technologies and therefore help mitigate the effects of Climate Change.

## 7. The technologies work and there is consumer protection in place – MCS and REAL

The Microgeneration Certification Scheme (MCS) was set up by the UK government to ensure quality assurance of microgeneration technologies: both in terms of the products and the installers which have to comply with rigorous standards. In addition, installers have to comply with the REAL Consumer Code which means further consumer protection in areas relating to pressure selling and deposits.

## 8. Independent and impartial advice is available

There are a number of sources for independent and impartial advice in relation to microgeneration including, but not limited to:

- The Energy Saving Trust who have a dedicated phone line for enquiries: 0300 123 1234. You can also visit their web site: [www.energysavingtrust.org.uk/Generating-energy](http://www.energysavingtrust.org.uk/Generating-energy)
- Which? Offer its subscribers an in-depth analysis of the options available. [www.which.co.uk](http://www.which.co.uk)
- YouGen for information on renewable energy including energy expert blogs. [www.yougen.co.uk](http://www.yougen.co.uk)

## Who should we engage with?

Based on the EST research, the following graph (**figure 1**) was created by Consumer Focus for its 'Keeping FiT' report<sup>5</sup> which illustrates the trusted sources of advice by stage in the consumer journey.

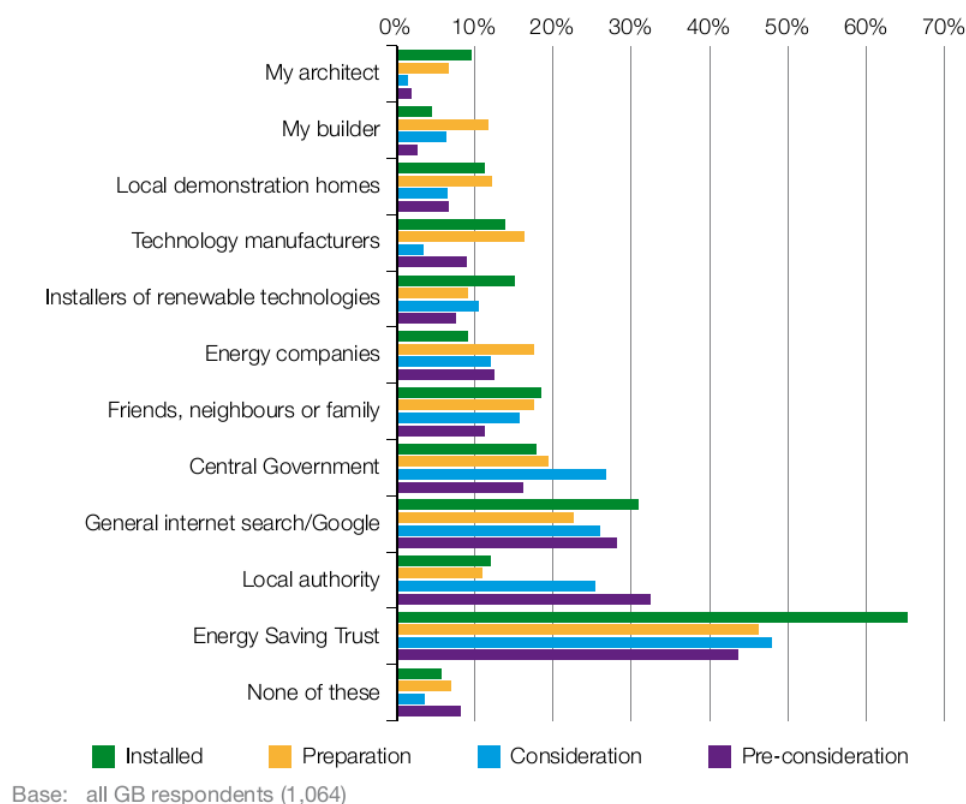


Figure 1: trusted advice sources per stage of the consumer journey (Consumer Focus/EST)

<sup>5</sup> Consumer Focus et al (2011) Keeping FiT: Consumers' attitudes and experiences of micorgeneration

There appear to be no other bodies of research that have specifically asked this same question in the context of microgeneration. However, on the subject of installation, day to day management and maintenance of sustainable infrastructure, an Ipsos MORI<sup>6</sup> study identified the following;



Base: 1,074 GB adults aged 18+, interviewed online, Ipsos MORI, October 2009

Figure 2: Ipsos Mori research

It may be concluded, therefore that there are three target groups: local government, householders who have installed (“word of mouth”) and property professionals. However, the convenience and breadth of the web should not be underestimated, though its ability to be a trusted source of information is open to debate.

## Deliverables: consumer messaging

Task	Key stakeholders and channels	How will success be measured?	Delivered by
Core messages agreed, finalised and distributed to organisations that consumers trust.		<p>Core messages agreed by MGICG.</p> <p>Messaging communicated to relevant groups as part of wider communication which includes ‘advice tree’ (see advice and information)</p> <p>Commitment from providers of advice to disseminate the agreed messages</p>	

Table 3 – deliverables and milestones for consumer messaging

<sup>6</sup> Ipsos MORI et al (2009) Understanding Consumer Attitudes to “Sustainable Community Infrastructure” – national survey of 1,074 adults aged 18+

## Consistency of data

The data provided to consumers can often be confusing to understand and contradict other information they receive, differing from installer to installer, manufacturers, consumer groups and even government. When referring to data we are referring to quoted figures, in particular saving figures which relate to estimated performances based on assumptions/real data e.g. field trials with a certain methodology applied e.g. RdSAP. With the advent of the Green Deal and the increased importance of Energy Performance Certificates (EPCs), there is a risk that consumers will become even more confused. Therefore it is important to understand where the data comes from, how it is calculated, what point the consumer receives it and the inter-relationship between all sources.

There are at least four sources of information that consumers will come across when considering the purchase of a microgeneration system. The prime concern relates to savings with each group using different methodologies. **Table 4** summarises the groups and methods used for data.

Source (from consumer perspective)	Data			
	Savings	FITs/RHI	Cost	Financial appraisal e.g. ROI
<b>Green Deal Assessor</b>	RdSAP 2009 v 9.91  <i>Note some techs are "discounted" using performance factors.</i>	Unknown	Cost, emission and primary energy figures are obtained using weather data for the region	Simple payback?
<b>MCS installer</b>	SAP 2005 except heat pumps (MCS specific), wind (NOABL based), biomass (SAP, CIBSE, HHIC), microCHP (manufacturer)	Beyond scope of MCS though MCS will estimate annual kWh figure to calculate FITs.  RHI still under consultation but may rely on installer to estimate deemed heat.	Installer's own quote.  <i>MCS has potential hear to capture average cost data through MCS database.</i>	Varies. Some will factor in RPI, fuel cost inflation etc etc. Risk of inconsistencies.
<b>Manufacturer</b>	Lab tests	Unlikely due to global market	Not presented to consumers	Unlikely
<b>Energy Saving Trust</b>  <i>Also quoted by installers, energy companies and manufacturers</i>	Heat pumps and solar thermal based on field trials. Wind based on 5kW turbine @5.3m/s. Solar PV based on PVGIS platform using 3.5kW system MicroCHP – no saving figures calculated to date	Solar Energy Calculator (figures based on PVGIS)  Non solar PV techs based on Cashback Calculator.  RHI tool will be developed in time for summer 2013	RHPP data  Scottish loan data  Data from REAL  Pellet prices from the Biomass Energy Centre	Only simple payback.  <i>Have considered presenting data in terms of IRR but would challenges over assumptions.</i>  <i>Clearance was given by the FSA to provide investment information (it's only a problem if the technology is owned communally)</i>

Table 4 - overview of current data provision (November 2012)

There are many others who may also publish figures including universities, Which? Consumer Focus, YouGen, regional charities such as CSE, Local Authorities, and various other organisations.



## Ensuring a “joined up approach”

The Energy Saving Trust and MCS already work closely together in relation to acting on the evidence obtained “in the field” in order to feed in to the MCS standards. A good example of this was the heat pump field trials. However, it may be prudent for EST and MCS to discuss in more detail consistency of saving figures to help ensure that householders get consistent information. Further to these discussions, the issue with RdSAP for Green Deal Assessors will need to be addressed. It may be the case that assessments for say, heat load, can be resolved, particularly given the fact that there will always be a difference between a pre-site survey estimate and an actual bespoke calculation based on site-survey. Perhaps where commonality is needed is in the assumptions made to come up with the savings e.g. assumed cost for fuel displaced e.g. oil prices.

Whilst ‘implicit’ manufacturers’ data and guidance may be useful, consumers should be cautious and take into account the fact that overall performance has as much to do with system design than individual product performance. The same goes for data and guidance provided by suppliers and installer.

On the subject of cost data, this is something the Energy Saving Trust currently publishes though longer term this is something MCS and/or Ofgem should be able to capture. A decision needs to be made in terms of who captures the cost data, who “number crunches” and who publishes, and how frequently?

Given the importance of the financials as part of consumer messaging, it would make sense to agree a common approach to financially appraising microgeneration systems. Two standard methods in existence are:

- BS EN 15459 “Energy performance of buildings — Economic evaluation procedure for energy systems in buildings”
- VDI 6025 ‘Economy Calculation Systems for Capital Goods and Plants’.

The Solar Trade Association has developed a solar energy calculator for their members use which carries out a financial appraisal based on assumptions for fuel cost inflation and RPI to come up with a Return on Investment (ROI) figure.

## Proposed deliverables: consistency of data

Task	Key stakeholders and channels	How will success be measured?	Delivered by
MGICG to agree on consistency of saving calculations		<ul style="list-style-type: none"><li>• Document produced to show consistencies. Where there are inconsistencies then there needs to be a reason cited.</li><li>• Cross referencing between identified conventions and the assumptions on web site and tools</li></ul>	

Establishing the process for collecting and publishing cost data		<ul style="list-style-type: none"> <li>• MCS database amended to collect cost data when registering installations</li> <li>• Data published no less frequently than quarterly</li> <li>• Cost data to be made accessible and thus consistently published.</li> </ul>	
Ensuring overlap with GD assessments		A footnote/caveat added to the assessments to indicate that installer estimates may vary.	
Group set up to “sign off” data		Group to meet quarterly to “sign off” on all microgeneration data.	
To agree common methodology for presenting financial appraisal information		Guidance produced showing agreed methodology, guidance on use and caveats	

Table 5 - data deliverables and milestones

## Consumer protection

When promoting the positive benefits of microgeneration there is a risk that the work could be done in vain if there is not adequate consumer protection in place. Negative stories in the media could do much harm to the industry and depending on the severity it may take years for the industry to recover. Therefore it is of paramount importance that consumers are aware of their rights before, during and after installation of a microgeneration technology. Again, consistency of messaging is also crucial. For example, BPVA have announced they plan to roll out a [“National Energy Card”](#) based on loyalty rewards. In addition to rewarding householders for their loyalty, they also benefit from extended warranties and insurance for solar PV systems, access to latest price and product information along with a member’s magazine.

## Core consumer rights

As noted earlier, consumers should ensure they only choose MCS products and installers who are also signed up to the REAL Consumer Code. This will provide them with some levels of protection along with the manufacturer’s warranty. As such the consumers’ rights may be summarised as follows:

### 1. You can report companies you believe are miss-selling

If you believe a company is falsely advertising then you can report them to the Advertising Standards Authority. If you believe the company is using heavy handed sales tactics then you can report them to either the REAL Assurance Scheme or Trading Standards

### 2. You have the right to cancel a contract within 7 days with no penalty

Make sure you don’t waive this right by signing a waiver

### **3. Your deposit is protected and never pay more than 25%**

You should always check your deposit is protected with your installer.

### **4. Your system must be fit for purpose by law up to 6 months after purchase**

According to the Sale of Goods Act 1979<sup>7</sup> your installer (equivalent to a retailer) is responsible in the first instance for the products assembled within a system. The act mandates that an installation has to be "fit for purpose" (i.e. in working order) and typically covers products for 6 years, but does not specifically mention installations (or combinations of products). If not 'fit for purpose' then in the period up to 6 months, the 'seller' has to prove that the original product offer (in many cases system) was fit for purpose, durable, safe and of satisfactory quality. Beyond 6 months, the customer has to prove fault at time of handover and not due to wear and tear. For microgeneration we can accept that 'fit for purpose', 'satisfactory quality', 'durability' and 'safety' means the successful delivery of a service as promoted by the 'seller' and required under MCS and the REAL Code.

### **5. Most products have a warranty, typically 1 - 2 years**

Most products within an installation (or 'assembly' of products to form a system service) have a product warranty. Extensions can be purchased by customers (or these may be offered free as part of a product package) but you should always remember that they have a statutory protection for a period of up to 6 years (see above point). For many mechanical systems, annual servicing is a requirement to keep warranty cover.

### **6. You can raise technical complaints with the Microgeneration Certification Scheme (MCS)**

The first port of call for a technical complaint should always be with your installer. However, if your situation cannot be resolved directly with the installation company, you can contact the relevant MCS certification body. They will then review all the evidence and may send an inspector to assess the work. If the complaint is upheld the MCS body will usually issue the company with a rectification notice to put the work right. If this work is not put right then the company jeopardises their MCS registration.

### **7. If the MCS company has gone out of a business another company will be instructed to carry out the work**

So long as the original company was MCS certified then their certification body will instruct another member to carry out the work.

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<sup>7</sup> Amended in 1994 and 2002

## Proposed deliverables: consumer protection

The following actions have been identified to progress on the areas relating to consumer protection.

Task	Key stakeholders and channels	How will success be measured?	Delivered by
Agree the above consumer rights		List of consumer rights agreed and group consensus on the best approach moving forward in light of existing consumer protection material.	
Assessing the impact of Green Deal on consumer rights		Amendment/additions made to core consumer rights outlined	
Publish consumer rights on MCS web site		Publication on key stakeholder web sites and communicated to “trusted” organisations	
Set up an easy way to report rogue installers		A straightforward link on MCS/REAL home pages to report rogue installers	
Develop a glossary of terms in relation to consumer protection		Publication and dissemination of key terms in relation to consumer protection. Issued to key stakeholders involved with consumers (installers, GD assessors, EST, Which? Consumer Focus etc.)	

*Table 6 - consumer protection deliverables and milestones*

## Advice and information

Core messaging (including consumer protection) and accurate data relating to performance income, savings, and cost are at the heart of good advice and information. However, there is still a need for householders to get good advice in relation to technology type, site suitability, planning, finding an installer and maintenance to name but a few. Above all, it is important that householders have access to independent and impartial advice before committing their finances, particularly given the conflicting messages they may receive from manufacturers, installers and Green Deal Assessors. There is a wealth of information already available to householders including (but not limited to and not necessarily in this order):

- Manufacturer and installer brochures
- Installers
- Green Deal Assessors and Providers (relates to first point too)
- Consumer organisations (EST, Money Saving Expert, REAL, YouGen, Which? etc)
- Local Authorities (including planning departments)
- National governments
- Ofgem
- Energy Companies (retail and distribution i.e. DNO)
- Trade Bodies
- Microgeneration Certification Scheme
- Friends/Family/Neighbours (“word of mouth”)
- Research organisations (BRE, universities etc.)
- Property professionals (architects, surveyors, estate agents)
- Consultants (advice, feasibility studies etc.)

Each may have their own vested interests, some may not be impartial and others may not be interested in giving bespoke advice.

## What do consumers want/need to know?

This will depend on what stage they’re at in the journey which will dictate if they need initial/generic advice or bespoke advice. Referring to the different journeys earlier then this may be:

### **Pre-consideration (initial advice)**

Basic awareness of the benefits of installing microgeneration technologies and insights into whether or not the technologies would be suitable for them i.e. site suitability basics

### **Consideration (initial advice perhaps including initial bespoke estimates using online tools)**

More detailed knowledge of the technologies and finances including:

- How they work
- More specifics on site suitability including planning

- Maintenance
- Bespoke income and saving estimates. Cost estimates
- Further details on FITs/RHI
- Importance of MCS/REAL
- Finance options including Green Deal, loans, “rent-a-roof” type schemes

### **Preparation (in-depth)**

Taking the practical steps to go ahead with an installation

- Products – *which product is right for me?*
- System configurations – *which configuration is right for me? SHW good example*
- Guidance on approaching installers – *asking the right questions*
- Planning applications – *I need help with my planning application?*
- Building regulations
- Getting a GD assessment – *where do I go to get one? How much does it cost?*
- Applying for FITs/RHI – *what are my options? How do I apply?*
- Grid connection – *what is G83? G59?*
- Bespoke saving and income estimates
- Finance – *securing the financing for the installation. Should I access Green Deal?*

### **Installed (in-depth)**

In process of installing or have installed. Some overlap with above

- Planning appeals
- Grid connection issues and appeals
- Issues with installation – *report to MCS cert body etc*
- Warranties, guarantees including insurance backed schemes
- Knowing how to operate system
- Replacing products in near future – *e.g. replacing PV panels due to performance drop*
- Selling property and advice on how to market the technology
- Green Deal financing/loan repayments
- System monitoring including any smart metering developments
- Sharing experiences with others

# Who can provide advice at the different stages?

The chart below helps illustrate those who have a stake in providing advice and where in the customer journey the advice is likely to be given.

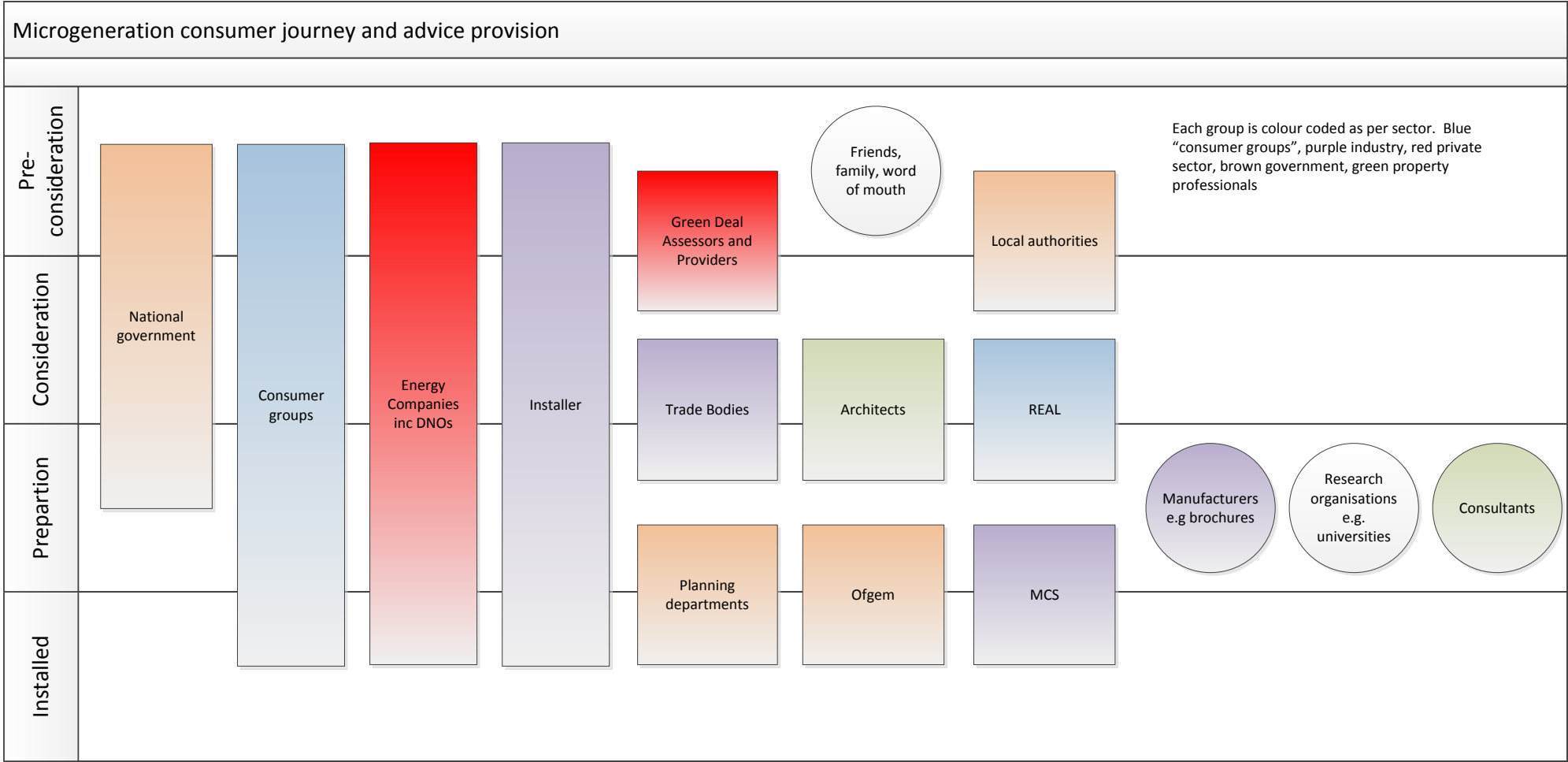


Figure 3: microgeneration consumer journey and sources of advice provision

## Proposed deliverables: advice and information

The resource required to develop consumer advice should not be underestimated, particularly if in-depth. However, there is vast amount of information already available and it may be the case that it needs to be channelled more effectively for consumers to access. In addition, it would be sensible to have subject specific groups updating/creating/signing off on advice and information. This could either be done through proactively engaging with existing groups (either feeding in to a central “hub” that brings it together or developing as part of group) or creating new ones.

Task	Key stakeholders and channels	How will success be measured?	Delivered by
Subject specific groups set up to review and develop advice and information		Establish/tap into existing subject specific groups e.g. STA solar PV working group	
Investigate whether FITs/RHI income can be included in EPCs		FITs/RHI incomes included in future EPCs	
Agree on consumer advice providers and create a lattice of web sites		List of web sites published and shared with key “trusted” organisations. Lattice produced with organisations agreeing to link to each other’s web sites.	

*Table 7 - advice and information deliverables and milestones*

## Next steps

The information presented in this document will be presented to members of the MGICG consumer messaging group on 22 November. An objective of the meeting will be to agree:

- The tasks proposed in this document (or to delete/amend/add)
- Key stakeholders for carrying out the tasks
- Relevant communication channels to use

END