PEPA draft document for standard for the delivery of (home) energy advice for Retrofit Assessors

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Introduction

This document sets out the scope for a standard for the provision of advice on the use of energy in the home by retrofit assessors, and in particular advice on making improvements to the energy performance of the home.

Making energy improvements to homes (retrofit) is a key aspect of the need for appropriate energy advice through the customer journey, other aspects include usage patterns and user behaviour, monitoring and managing consumption, supply and payment choices and issues, with particular respect to the difficulties faced by low income households and the impact of fuel poverty. Closely related matters include health and comfort in relation to the indoor environment, ventilation and avoiding the risk of condensation damp and mould growth.

Objectives

The main objective of the standard is to provide a framework for the delivery of good quality in energy advice, to support households and landlords in achieving improvements in the energy performance of their homes, with benefits in terms of health, comfort, environmental impact and financial well-being.

This will complement standards for all other roles defined within PAS2035 and PAS2030 e.g. retrofit co-coordinators, retrofit designers and retrofit installers

Scope

Energy advice activities

Energy advice will be based around the retrofit assessment process and may take the form of responses to one off queries, clarifications on activities undertaken, and general energy efficiency advice requests from the owner/occupant.

Subject matter

Broken down into elements, subject matter might include (not exclusively):

a) Technologies, such as:

- Fabric insulation
- Equipment for the provision of heating and hot water
- Household level renewable energy generation (microgeneration)
- Lighting, laundry, refrigeration, ICT and other household electrical appliances
- Controls and equipment for monitoring of consumption, including smart technologies

b) Retrofit considerations, such as:

- Choice of products and technologies
- Efficient use of equipment
- Costs and savings of improvements
- Finance for improvements, including grants
- Understanding the customer journey through the TrustMark/PAS framework

c) Behavioural issues, such as:

- Use of heating and hot water equipment and controls
- Use of electrical appliances
- Use of equipment for monitoring of consumption, including smart technologies
- Making the most of passive solar gains and retaining heat in the property
- Making the most of on-site renewable energy generation

d) RdSAP/SAP and Occupancy Assessment Appreciation

- Understanding the Methodologies for Energy Assessment of a home
 - Awareness of methodologies and calculations
 - Explaining the ratings, fuel predictions and recommendations
- Understanding the Occupancy Assessment
 - Awareness of methodology and calculation
 - Explaining the recommendations and savings predicted

e) Consumer and services issues, such as:

- Consumer rights in relation to energy supply, energy efficiency and microgeneration
- Regulations, rights and responsibilities in the rented sector
- Choice of suppliers and tariffs, and switching suppliers
- Any Policy/Grants available such as Feed in Tariffs and Renewable Heat Incentive
- Understanding energy bills and payment options
- Understanding energy usage and costs
- Fuel debt, repayments and disconnection
- Services for vulnerable households, including support for installation of measures
- Details of impartial, non-commercial energy advice services in their area, where these exist, to allow the customer to verify advice if they wish to or seek further advice at a later date
- Fuel related benefits
- Securing redress when things go wrong in relation both to energy supply and retrofit

f) Related issues, such as:

- Health and comfort in relation to the indoor environment
- Ventilation
- Avoiding condensation damp and mould growth
- Affordability of energy services

Delivery methodology and level of advice

The standard will cover delivery methodology appropriate to the different levels of advice required for different target groups and intended outcome(s) e.g. lower fuel bill, warmer home, reduction in emissions etc.

Competency Matrix Table

Within PAS framework there are the following main 'roles' of persons who will interact with consumers.

All will be required to give energy advice, this document only describes the requirements for the Retrofit Assessors.

Retrofit Advisors – a person who is giving generic energy advice to consumers helping them with options and how to progress through the retrofit journey, these are discussions likely to be before any decisions are made in terms of installs. A person who is qualifies to deliver retrofit advice to clients and householders

Retrofit Assessors: a person qualified to carry out a retrofit assessment

Retrofit Co-ordinators – a person qualified as a specialist retrofit project manager, taking overall responsibility for the overseeing he assessment of dwellings, the identification, specification and evaluation of energy efficiency measures for installation at a given dwelling as a single project, and their subsequent monitoring and evaluation

Retrofit Designers: a person qualified to prepare a retrofit design. In essence they design the chosen retrofit measure(s) for the property to ensure that the solution is correctly designed.

Retrofit Installers: a person who installs the measure(s) according to the design.

Level of Competence:

The following table indicates the required competencies of the retrofit assessor:

| Element | Scope | |
|--------------------------------|--|--|
| Technology | | |
| Fabric (Thermal) Insulation | Understand nature of different parts of the property which can be thermal improved such as walls, roofs, floors; and the generic techniques to achieve better performance | |
| Heating & DHW | Understand current heat and hot water provision and potential alternative retrofit solutions and the impact on energy, warmth, cost and emissions. | |

| MicroCon | Understanding of surrent mission constinue solutions |
|------------------------------|---|
| MicroGen | Understanding of current microgeneration solutions available that can be modelled in the methodologies |
| Household electrical | General understanding of typical household |
| appliances | appliances and their impact on energy use |
| Monitoring consumption | General understanding of how occupants can monitor |
| | energy usage and benefits of doing so |
| Retrofit | |
| Choice of products/tech | General advice around energy retrofit measures, |
| | based on standard products as defined in RdSAP and |
| | OA outputs. (Independent of manufacturers) |
| Use of equipment | General advice around use of energy efficient |
| | products |
| Cost and savings of | Using the outputs of RdSAP and OA software |
| improvements | advising consumers on what costs and savings are |
| | predicted |
| Finance | General knowledge of any grants and finance and |
| | where to signpost consumers towards for |
| | independent advice |
| Explaining the customer | Understanding of the other roles within PAS |
| journey through the PAS | framework and the customer journey. |
| framework | |
| Behavioural Issues | |
| Use of heating, DHW and | How to use controls effectively to manage energy |
| controls | efficiency of the home |
| Use of electrical | How to effectively use and manage energy efficiency |
| appliances | of the appliances around the home |
| Use of monitoring | How and why to monitor use of energy in the home, |
| equipment | including current bills and smart meter technology |
| | etc. |
| Using Passive Solar and | General understanding of passive solar gains in the |
| retaining heat | home and tips surrounding retaining heat in homes |
| On site renewables | Making the most of any on site renewable |
| | technologies |
| Consumer and Services | |
| Consumer rights – energy | General understanding of consumer rights with |
| supply, energy efficiency | regards to supply of energy, the journey through the |
| and MicroGen | PAS, and consumer rights under TrustMark and any |
| | additional rights in regards to Microgen |
| Regulations, rights in | Understanding of all current regulations on landlords |
| rental sector | and tenants e.g. MEES/PRS, in order to help these |
| | consumers make informed choices around the energy |
| | efficiency of the home |
| Choice of suppliers and | General understanding of consumer bills, |
| tariffs (& switching) | understanding tariffs and the process of switching |
| | supplier(s) |
| Awareness of Grants and | General understanding and awareness of current |
| Funding for energy | grants, subsidies and polices in energy efficiency such |
| efficiency measures | as FiTS |

| Understanding energy bills and payment options | Good understanding of reading energy bills and different payment options, with advice around alternative options |
|--|--|
| Understanding energy usage and costs | Linking the bills to total energy usage and costs within the property including use of heating, hot water, lighting and appliances |
| Fuel Debt | Understanding of what fuel dept is and how to manage it |
| Services for vulnerable households | Understanding energy efficiency implications for vulnerable households |
| Details of impartial advice | Ability to point consumers towards further independent energy advice (retrofit advisors) |
| Fuel related benefits/grant | Knowledge of any current fuel related benefits of grants available |
| Redress for energy supply & retrofit | General understanding of redress for energy supply and also for all the component parts of the TrustMark/EHC process |
| RdSAP & SAP and Occupancy Assessments | |
| RdSAP Appreciation | In-depth knowledge of the RdSAP Methodology, with ability to advice consumer's around inputs and calculation results |
| RdSAP Outputs | In-depth knowledge on recommendations and all results from RdSAP |
| OA Appreciation | In-depth knowledge of the OA Methodology, with ability to advice consumer's around inputs and calculation results |
| OA outputs | In-depth knowledge on recommendations and all results from Occupancy Assessment |
| SAP Appreciation | Understanding of SAP methodology in order to deal with any queries relating to the methodology or outputs |
| Related Health Issues | |
| Health and comfort in | General understanding of health and comfort in the |
| relation to the indoor environment | home, adequate temperatures, appropriate ventilation etc (build tight, ventilate right) |
| Ventilation | Good understanding of ventilation issues and requirements to allow for a healthy home |
| Avoiding condensation damp and mould growth | Good understanding of techniques for avoiding condensation, damp and mould growth in homes |
| Affordability of energy services | General understanding of cost and affordability of potential energy efficiency measures |

Illustration 1:

For a potential 'Cavity Wall Insulation' retrofit, the competencies required by the different roles would be different:

- Retrofit Assessors need general knowledge in order to give appropriate advice e.g. how cavities work, what is the benefit, when it is unlikely to be suitable, what are good U-values, what are general risks, to be able to identify on site the presence of cavity walls and any current condition implications etc.
- The retrofit Co-coordinator, Designer and Installer will all need their own specific knowledge in order to give their appropriate levels of advice e.g. wall ties, rubble fill, exact product standards, building regulation implications, junction detailing etc.