Stroma Certification: PAS 2038 Consultation Draft Response

0.1 Context

Stroma Certification welcomes the ambition and drivers behind PAS 2038, and the focus on Quality Assurance via Certified Individuals is the correct approach.

The main eight objectives outlined in the draft appear to cover the necessary aims of achieving ‘net zero emissions’ and improving existing buildings.

0.2 Non-domestic buildings

Stroma Certification agrees with the main categories for the building types/uses of non-domestic buildings. However we would like to point out municipal buildings within the Education and Health sectors are also big contributes to the total floor area of buildings in the UK, tend to be highly occupied buildings and therefore have a high impact on the total emissions and energy usage.

0.3 Retrofit Projects

Stroma Certification would welcome some consideration for retail units that when vacated, are stripped back to the original shell (in between tenancies) and are then fitted out by the incoming tenants/occupant to their needs. We feel that point 2) this process should be understood that it is the responsibility of the incoming incumbents to ensure the building in its new format/use case meets MEES and in some cases the building regulations.

0.4 The Retrofit Process

When considering performance, are we simply looking at the energy performance of the building or the ‘Performance’ of the building in its current use case i.e. does it appear to be suffering from overheating, is the space the being used effectively?

Also, does ‘valuation of improvement options’ mean the cost of the measures proposed, or does this also consider ‘pay back periods’ in this assessment? The rest of the process is very logical.

3. Terms and Definitions

3.9 - We should consider reference to the government guidance documents around the definition of commercial and domestic buildings. For example, a commercial building which was designed as a domestic building; this may not be used as a domestic building but could be assessed as such when required. Likewise, a domestic dwelling can exist inside commercial buildings, such as a flat above a pub, this is considered part of the commercial building and is currently assessed as a commercial building as a whole.

4.1 Qualification of project team members

Accredited Energy Assessor – L5 LCEA (Low Carbon Energy Assessor). This specifies a standard which only exists with one certification body (CIBSE), of which there is no nationally recognised occupational standard, which would significantly impact on the industry and the energy assessor who currently practice.

The term energy assessor in commercial strands, applies to NDEA L3, L4 and L5 and this is based upon an existing NOS/Qualification and Certification process, set by government and overseen by certification schemes in line with the Scheme Operating Requirements.

Each level increment relates to an assessment complexity level, so the more complex a building is, the higher the level of knowledge/understanding/competency and capability the assessor must possess before being certified by a scheme.

In addition to this, NDEA L4 assessors are also permitted to perform New Build assessments.

In addition, if the assessment is to be done via Dynamic Simulation Modelling (DSM) then the assessor must also be certified to NDEA L5. For most schemes, this can only follow once the assessor has achieved NDEA L4 and has sat an upskill to use the DSM tool/software correctly.

Stroma Certification believes that the above routing is robust and ensures that only highly competent individuals can perform DMS modelling at all assessment levels required for all buildings.

Therefore, we believe that it is right and proper for NDEA L4 and L5 assessors to be included in the PAS. NDEA L4 assessors can assess the energy performance of any building via SBEM methodology, and if desired or required an NDEA L5 assessor is required if DSM is necessary (i.e. where overheating, specialist lighting, solar radiance calculations are needed etc).

The NDEA qualification only covers the energy assessment of the building to obtain the asset rating, recommendations and typical occupancy and savings.

Therefore, we recommend that the DEC qualification should hold some weight, where the assessor is also NDEA L4.

However, where necessary, training is required to upskill assessors(such as looking at occupancy, consumption data, pay periods, and condition), a course for required knowledge can be provided, similar to the requirements needed for Section 63 assessors in Scotland and PAS 2035 retrofit of domestic buildings.

4.2 Additional qualifications

Having attended and reviewed the qualifications available for traditional/protected buildings, Stroma Certification feels this qualification covers mostly considerations for domestic buildings and the course would need to be adapted or changed/separated for commercial considerations.

We are also concerned that currently there is only a single provider offering one of the qualifications (L3 Award in Energy Efficiency and Retrofit of Traditional Buildings), which is a major limiting step in ensuring enough capacity in the industry. The other two qualifications, whilst are an option, are not currently available from any provider that we can see online.

4.3 Retrofit Lead Professional

Stroma Certification would welcome consideration that a Retrofit Coordinator could fulfil this role. Retrofit Coordinators, particularly those who hold NDEA L4 and/or L5 would be even more suitable.

These individuals already exist and are becoming experienced in leading a retrofit project on domestic dwellings. As this is project management, where the core principle is that the coordinator only performs roles that are in their competency, in such case where they don't hold competency for a particular role, they can lead the project **only,** and employ various experienced, qualified practitioners to perform key roles and produce necessary reports for a specific project.

This role should be certified to ensure that projects are quality assured, insured etc due to the variety and complexity of retrofit projects possible.

5.1 Requirement of assessment prior to retrofit

Firstly, we need to consider the assessment methodology options derived from NCM (National Calculation Methodology);

- SBEM – For L3/4 buildings and when there is no need to consider the overheating, impact of solar radiance on lighting, heat gain and PV etc via enhanced modelling techniques.
- DSM – an enhanced modelling methodology using dedicated software
- DEC – used for modelling energy consumption of a buildings via analysis of the building and the occupancy levels of the building.

The most appropriate methodology should be selected by the Retrofit Lead Professional or Lead Assessor, at the 'Context' stage of assessment, or in the discovery (triage) phase.

Stroma Certification is concerned by the lack of reference to these methodologies within the PAS – for reference PAS 2035 refers to SAP and RdSAP as appropriate methodologies that can be used, and it is the responsibility of the Retrofit Coordinator to decide which is the most appropriate methodology to sue. This process should be replicated in PAS 2038.

DSM and SBEM calculations are used as a basis for many Government regulations, such as EPC and MEES, and should be recognised within this PAS.

In addition, many NDEAs, who use these recognised methodologies are also DEC assessors, and have a working knowledge of how to measure and assess occupancy, whilst Schemes have experience in launching and running NDEA Green Deal and Section 63 schemes (and any training or upskilling required) to incorporate occupancy into the existing methodologies or to run alongside these.

5.2 Scope of Assessment and 5.3 Estimate of Annual Energy Use
As per our comments for 5.1, the methodologies that already exist for NDEA (SBEM and DSM) and DEC will cover the vast majority for the assessment requirements, with exception of the condition aspects.

Many commercial buildings, and particularly those that are well managed, will usually have a whole raft of data that NDEAs are experienced in obtaining from building managers, such as consumption data, asset registers, plant documentation and the may also be BIM related data that can be used as part of the assessment process.

6.0 Evaluation of improvement options
Stroma Certification has, within this consultation response, identified currently approved and widely used methodologies, performed by certified and competent energy assessors to assess the buildings energy performance and actual usage (SBEM, DSM and DEC).

These methodologies should be referenced in this section as a means to achieve the calculated outcomes listed in points a) through to c)

It is also worth noting that the software that exists to assess energy performance (SBEM and DSM) and operational ratings (DEC) produces outputs which are portable, which should result in a smooth transition from assessment to evaluation to compiling a medium-term improvement plan.

12.4 Handover and 12.5 Fine Tuning
Whilst the draft PAS refers to the production of a DEC after one year of occupancy, which will allow the building owner to understand the impacts of the improvement measures on actual energy use, there is no indication of the asset rating improvements. Therefore, Stroma Certification strongly recommends that an EPC is produced as part of handover process.

This would also update the data held on the EPC register and allow government and ONS to regularly evaluate and understand the impact of the PAS on UK’s property portfolio. This would be incredibly valuable when considering strategy, future targets and direction and reporting.

Summary

The current draft of PAS 2038 has many aspects that will improve the process of retrofit for commercial buildings.

However, there are key areas where the existing approved and trusted methodologies for producing energy assessments and occupancy assessments have been overlooked in favour of CIBSE technical documents/methodologies which are not widely adopted. In doing so, over a 1,000+ trained, competent and certified professions risk being side-lined, which if included could be mobilised to produce assessments within the PAS.

PAS 2035 allowed the similar recognised methodologies of RdSAP, SAP and Passive Haus to be used where suitable/required by the project. This flexibility should be afforded to SBEM, DSM and DEC within PAS 2038, which can be used in combination as deemed necessary for the specifics of each project.

With some further consideration, these methodologies and related software's can be improved to benefit PAS 2038, and existing professionals can do any necessary upskill training where required as has happened in the past for PAS 2035, Green Deal and Section 63 in Scotland.