



Pwyllgor Newid Hinsawdd, yr Amgylchedd a Seilwaith /
Climate Change, Environment and Infrastructure Committee
Datgarboneiddio'r sector tai preifat / Decarbonising the private housing sector
DH2P_30
Ymateb gan / Evidence from The Property Institute (TPI)

The Property Institute (TPI) response to the Climate Change, Environment and Infrastructure Committee consultation “Decarbonisation of housing: decarbonising the private housing sector”

23rd August 2022

Terms of Reference:

- the current approach to decarbonising housing in the private rented and owner-occupied sectors in Wales, including the effectiveness of existing programmes and support for retrofit;
- the role of sector specific retrofit targets to help drive change;
- actions the Welsh Government should take to progress a programme of retrofit for these sectors in the short, medium and long term;
- the key challenges of delivering a programme of retrofit within these sectors, including financial, practical and behavioural, and action required from the Welsh Government (and its partners) to overcome them;
- how the right balance can be struck between influencing/incentivising homeowners and private sector landlords to retrofit their properties and regulating to increase standards to drive progress;
- how effective the Welsh Government is influencing decisions on reserved matters to support decarbonisation of these sectors.

TPI members are involved in the management of private sector leasehold and ‘Build to Rent’ (BTR). TPI operates in England and Wales for leasehold and our BTR activity also extends to Scotland. TPI will consider those two sub-sectors of the Welsh private housing sector only in this paper. The majority of this report will focus on the peculiar challenges that leasehold will present in terms of legislation, incentives and implementation, along with some ideas as to how to improve matters to enable decarbonisation to be carried out effectively.

This response will be split into four parts:

E: info@tpi.org.uk
W: www.tpi.org.uk

Corporate Memberships:
3rd Floor, 2-4 St George's Road,
London
SW19 4DP
T: 0207 978 2607

Professional Memberships:
71 Gloucester Place,
London
W1U 8JW
T: 020 3319 7575



- 1) Heat Networks – generation and distribution of heat and hot water in the communal areas
- 2) Heat Networks – heating and hot water efficiency within the flat demise
- 3) Within-flat heat generation
- 4) Building improvements

1) Heat Networks – generation and distribution in the communal areas

- As this is in the communal area it is something that Managing Agents (MAs) can help manage and propose improvements to the building owner, Residential Management Company (RMC), Right to Manage company (RTM) or Commonhold Association. The key is to understand the energy consumption in these areas through effective monitoring and control.
- New builds should not present so much of a difficulty, as legislation can determine carbon zero equipment during the construction phase. However, new builds need to be designed correctly to prevent oversizing of equipment which leads to the delivery of inefficient networks. Plant and equipment should be selected on their performance in delivering low carbon solutions and the system needs to be effectively monitored and maintained to ensure performance is maintained.
- It is the legacy stock that will prove problematic, and improvements are readily achieved through the introduction of modern control systems and ongoing monitoring of performance with payback in reduced energy bills achievable
- However, leasehold leases usually (but not always) stipulate that only repairs and maintenance can be charged to the Service Charge. Improvements cannot be charged this way. Therefore, what determines a repair and what is deemed an improvement will be key and will, in all likelihood, be challenged through the Tribunal.
- Given the current and likely mid-term high energy costs, there is a huge incentive for landlords/leaseholders to improve system performance to reduce their bills, and thus reduce carbon emissions. This may be done with capital costs spread over time paid for by reductions in energy bills. Typically, a reserve fund will be built up over time (where allowed by the lease) to carry out such works, but if the Welsh Government would like to speed up the process grants/loans should be considered.
- Currently, the capital and operating cost of replacement technology (e.g. heat pumps) will be prohibitive, leading to leaseholders understandably objecting to the costs and taking matters to Tribunal on the basis of reasonableness. Most systems being retrofitted with heat pumps will need considerable additional

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work – it's not simply a case of plugging in the heat pump to where the boiler used to be. The operating temperatures are different, the electrical load, the delivery mechanism (distribution pipe sizes, underfloor heating vs radiators) may be different, where to physically locate the external units (weight, noise, maintenance and theft must be considered). According to initial consultations with industry, heat pump manufacturing costs are already at scale (they are effectively air conditioning units in reverse) and so reliance on longer term capital cost reductions should not be made. Consideration should be given to alternatives to heat pumps in the short to medium term, due to capital cost and the lack of availability of sufficient electrical supply. Hybrid systems combining heat pumps and gas boilers and gas absorption heat pumps are an effective alternative.

- Heat pumps could provide scope for cooling and when coupled with local photo-voltaic production could represent an economic way forward.
- Projects will likely be subjected to the argument that conversion from gas to heat pump is an improvement, not a repair or replacement

Possible ways forward:

- Introduce legislation (with controls against abuse) to permit the lease to be over-riden in terms of green agenda items
- Capital subsidy for replacement plant (but note that heat pumps are more expensive to run as well unless local Photo Voltaic electricity generation is added)
- Welsh Government to finance a pilot site, to demonstrate effectiveness of control system upgrades to a current block – both at the central plant and within the flats levels. Such data can be used in communications with leaseholders to help them decide whether to invest in such systems
- Introduce capital subsidies in the first instance for current systems to maximise the efficiency of the system as currently installed. This can improve network efficiency from typically 30% up to 60%, reducing carbon emissions by 1 tonne per household, and reducing energy costs by around £500 per household.
- Consider tax incentives on installation of green heat generation plant – Subsidies are to become available for system improvements under the

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Heat Network Efficiency Scheme. Welsh government could provide additional support in this area

- Making gas boilers illegal in replacement projects is likely to prove highly unpopular, if costs are not tempered. Making gas boilers illegal may not be practical as the costs of replacement will go beyond just the replacement of the boilers. Other plant like pumps, storage capacity, pipework and HIU's may also need replacing if boilers are replaced by heat pumps. Also, the need for increased electrical supply into these buildings may not be possible or financially viable
- Retain gas boilers but implement hydrogen/hydrogen-mix as an alternative fuel. Also consider the use of "Hybrid" systems combining heat pumps and gas boilers as is common in other countries like the Netherlands
- Install/promote better control and maintenance systems on communal boilers to increase current efficiency (e.g. return temperature). This should be examined as a potential "quick fix" regardless of longer-term fuel switching options. The introduction of better controls within apartments to improve efficiency and reduce carbon emissions would also be helpful (see next section).
- Improve insulation in the distribution network
- Examine switching block generation where possible to wider heat networks (i.e. multi-building systems) where feasible. This could give economy of scale and reduced operating costs
- The costs of undertaking improvement works do not necessarily have to be excessive, typically less than £1,500 per apartment. Providing some sort of support to cover the capital costs of improvement would encourage residents to agree to supporting the improvements.
- Developing clear communication tools by government, TPI and industry to help leaseholders understand the challenge and the proposed solution from a technical practical and financial perspective. A culture change is needed in the public eye about the need for carbon reduction.

2) Heat Networks – efficiency within the flat demise

- As this is within the demise of the flat, under current leasehold legislation the landlord/managing agent has no authority to act or expend money
- By contrast the Build to Rent sector has control of these spaces but the incentive to reduce bills can have differing effects. For example, where utility

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bills are included in the rent – the landlord may have an incentive to invest but the actual user (the resident) will be financially indifferent and potentially wasteful of energy. By contrast where the utility bills are paid by the renter they will have only a limited time horizon investment appetite covering their expected period of occupation, whereas the landlord will have no financial incentive to invest. One solution to the latter would be to obligate the landlord (via mandatory EPC rating requirements or green legislation) but the pressure on the private landlord sector has been progressively mounting over recent years (removal of tax incentives; shifting of rental agreement/check in/out to landlords; local licencing schemes) and the danger is the collapse of that sector, throwing renters, particularly the vulnerable, onto the social sector which may not be able to cope.

- It would make sense for many improvements not to be done piecemeal, by individual flat owners but rather in a co-ordinated fashion. Examples include double/triple glazing installation, zone temperature controls, etc. The system as a whole needs to be addressed, as leaving out some apartments will lead to poor performance
- Schemes to review buildings as a whole should be introduced – for example moving heat from hotter sides of the block to cooler sides, Mechanical Ventilation Heat Recovery (MVHR) systems can optimise heat distribution, save energy, heat in winter, cool in summer and provide ventilation to avoid moisture build up. But they are invasive and expensive to install.
- Minimum EPC requirements to either sell or rent will exacerbate tensions in situations where the landlord cannot legally fund the required improvements via the service charge, but similarly the flat owner does not have the capability to do so (e.g., double glazing) in a coherent and cost-effective manner.
- An additional advantage of within flat communal heating controls would be to calculate actual usage and reimburse/charge against the lease service charge amount paid. This will incentivise owner/occupiers to reduce consumption and renters who pay for their share of utilities.

Possible ways forward:

- Introduce legislation (with suitable controls to avoid abuse) meaning that green projects can over-ride the limitations of a lease
- Incentivise flat owners (via their service charge) to introduce heat management and consumption systems within their flats

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- Consider how to manage EPC requirements against what each stakeholder can reasonably be expected to achieve under legislation
- Provide support for whole system improvements
- Build effective communication tools to help leaseholders understand the benefits of network improvement
- Consider how to implement policies 'through' Buy-To-Let (BTL) flat owners to their short-term tenants, to educate/encourage/control the way they use energy

3) Within-flat heat generation

- Leasehold Managing Agents would typically not get involved in the choice of boiler/heating system, as this refers to within flat boilers or Heat Interface Units (HIU's) on communal systems. However, where those systems impinge on the building structure (e.g. boiler flues) or the communal areas (heat pump location) Managing Agents would be involved, at least in the permission side.
- Natural attrition of boilers over time will mean replacement technology will not fall foul of leasehold law
- However, if flat owners (as indeed house owners) find heat pumps to be far more expensive to install and run, they naturally will resist the change

Possible ways forward:

- Incentives to replace boilers with green solutions
- Consider whole block incentives rather than flat by flat over time e.g. grants, subsidies, tax breaks This is particularly relevant to communal systems using central plant and HIU's
- Look at provisions to allow block-wide improvements (such as control systems) to over-ride the restrictive lease mechanisms
- Retain gas boilers, but implement hydrogen/hydrogen-mix as an alternative fuel or other hybrid solutions as an interim improvement

4) Building improvements

- Topics here will include cavity wall insulation, roof insulation, double/triple glazing refits and air handling/heat recovery systems

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- Leasehold law will mean, as per section '1) Heat Networks – generation and distribution' of this response, that projects will be affected by reasonableness and improvements vs repairs arguments, which will be tested in Tribunal
- Projects will be interleaved – reducing heat loss via air leaks could lead to an increase in moisture levels, leading potentially to mould, etc. as ventilation is reduced.

Possible ways forward:

- Introduce legislation (with controls against abuse) to permit the lease to be over-ridden for net-zero causes
- Capital subsidy on insulation (Green Deal)
- Tax incentives on installation of green projects
- Consider diverting funding from large scale electricity generation projects to building efficiency projects - spending on insulation will reduce the generating capacity required
- Develop “whole building” approaches rather than piecemeal. The Welsh Government has pioneered this approach in the safety arena via a Building Passport and should ensure that carbon reduction is similarly viewed as a whole building project. Look at the building envelope, heat re-distribution (both summer and winter) to other flats or passive heat sinks, insulation, local electricity generation as a package.

Note: The provision of Electric Vehicle (EV) charging points has not been addressed in our response, as this is not specifically related to decarbonising housing stock. Should the committee wish to consider this aspect, it remains that the limitations of funding via leasehold legislation will make this difficult, particularly for leaseholder managed developments with dormant companies. Under this scenario, the option for the landlord to fund the required works outside of the service charge by raising funds from shareholders will be difficult and recovering capital and operating costs without losing the cost-efficient status of a dormant company is hard to envisage.

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