

McConnell, Karen

From: Clements, Robert
Sent: 22 March 2024 12:06
To: UREGNI Electricity Networks Responses
Cc: Craig, Alan; Blythe, Adrian
Subject: FW: 20240321-RP7 Price Control Draft Determination_NIHE Observations

Importance: High

Dear UR, Alan,

The Housing Executive would like the following observations, based on intent and ambitions noted within our approved Sustainable Development Strategy, as both Strategic Housing Authority and Northern Ireland's largest residential landlord.

Here we have focused on areas of interest to the residential housing sector.

Innovation:

The Housing Executive has reviewed the [Committee of Climate Change deployment rates](#) for Low Carbon Technologies (LCT) within Northern Ireland to achieve the Stretch Ambition Pathway (93% reduction on 1990 levels by 2050). In particular for heat pumps, with 15,857 pa by 2025 and rising to 33,000 pa by 2030. Based on the working assumption the majority of decarbonised heating schemes will focus on heat pumps (including hybrids) and **subject to funding** the Housing Executive as a landlord anticipate a 'whole house' retrofitting at scale from 2026/27, with 4,500 household retrofits per year, (22,500 houses by 2030/31). This will reduce NIHE landlord 'in house' carbon emissions by 23% (from the 2019/20 baseline) and put us on the trajectory of approx. 45% reduction in carbon emissions (from the 1990 baseline) by 2030/31. We acknowledge our Sustainable Development Strategy was finalised before the current NI Climate Change Act 2022, and therefore the level of retrofitting may need refined upwards slightly to achieve the potential projected carbon reductions within the NI Climate Change Act by 2030/31.

If whole house retrofitting utilises a renewable element, which is currently part of the Housing Executive's large scale retrofit programme of 300 houses, there is potential to reduce network load and with batteries provide flexible demand, and alleviating network constraint. With the current flexible demand of approx.98MW from commercial sources, if we utilised housing for flexible demand, the NIHE landlord housing has the potential to provide significant flexible demand from on site power generation and storage.

Based on the Housing Executive's low carbon pilots and programmes the following considerations will be required before large scale LCT roll out:

1. A significant number of NIHE houses are currently have a looped electrical circuit, and to ensure each dwelling can manage the potential increased electrical loads from LCT (Heat pump, batteries and EVs) each house will need unlooped by the DNO, which is a complex expensive process involving agreement from the householder.
2. To provide the optimum conditions for rolling out heat pumps, the Housing Executive believes more 'Time of Use' tariff options should be available to capture the cheaper off peak prices for the consumer.
3. In current trials the Housing Executive have adopted a monitoring and metering system, which provides instantaneous live data stream per house and an instant householder app with key information. This system focuses on total energy use, heating source energy use, relative humidity, CO2, internal temperature and calculating carbon emissions. Our ambition is to work with academia and industry to make this a scalable product, potentially for future whole house retrofits to ensure we encourage positive householder energy use, provide early warning to potential damp and mould and provide real time carbon emission data.

The above ambitions are focused on the NIHE landlord housing, which is only 10% of NI's housing, however the Stretch Ambition Pathway from the CCC is based on all NI housing, and the Housing Executive believes a similar approach may be needed across all tenures, noting funding may require an incremental approach.

Any queries please email.

Kind Regards

Robert

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Housing
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[Corporate Sustainable Development Strategy and Action Plan \(2022-2027\) \(nihe.gov.uk\)](#)

[Home Energy Conservation Authority Annual Progress Report 2022 \(nihe.gov.uk\)](#)