Energy Efficiency Update

Homes and Landlord Services – June 2023

Energy efficiency - update

- HRA Business plan went to cabinet in January and full council in Feb £64m for energy efficiency works up to March 2031.
- Further grant funding bid likely (but not yet confirmed) in Autumn 2024.
- Energy Efficiency Strategy went to Cabinet in on 6th Feb sets out our approach to reaching at least EPC C across all BCC homes.
- In addition to existing energy efficiency projects we will:
 - Expand our programme of 'deep retrofit' (insulation measures for solid wall and non-standard construction properties to cover ~1500 homes by March 2031).
 - Introduce a 'light retrofit' programme targeting properties that need low-cost measures such as draft proofing, energy efficient lighting, loft insulation top-ups to reach EPC C.
 - Begin installing solar PV alongside our cyclical roof replacement programme where technically feasible to do so.
 - Develop an approach to reduce bills (and improve EPC ratings) for homes with storage heaters:
 - o Additional of thermal batteries to replace existing hot water cylinders
 - Pilot project to identify a long-term alternative to direct electric heating



Current projects

- Established pipeline of ~600 properties:
 - 112 'easiform' flats in the Stockwood / Knowle area
 - Several high-rise blocks including Littlecross House (pictured)
 - 7 low-rise blocks at the Ledbury Road site in Fishponds
- Measures to include external wall insulation, cavity wall insulation, replacement windows/doors and improved ventilation.
- £9.1m of grant funding awarded via the Social Housing Decarbonisation Fund.



Deep retrofit

- Several thousand homes with solid wall or non-standard construction e.g. pre-form concrete
- Many of these are below EPC C because of the poor thermal performance of the building fabric
- We will upgrade windows, doors, roofs as well as installing external wall insulation and modern ventilation systems
- This will improve thermal comfort (in summer and winter) as well as lowering energy bills, reducing carbon emissions and improve internal air quality



Light retrofit

- We estimate that 4000-5000 of our homes are only marginally below the EPC C standard.
- These properties tend not to need major interventions.
- Instead, they can be improved through low-cost measures such as draft proofing, energy efficient lighting, loft insulation top-ups.
- This can lower energy bills, reduce emissions and improve thermal comfort within our homes.



Solar PV

- Our Energy Efficiency Strategy makes a commitment that we will begin installing solar panels alongside our cyclical roof replacement programme.
- We will look to install PV where technically feasible, so this is likely to rule out some roofs where 'yield' would be low as well as some communal roofs.
- Over the next 12 months we will develop our specification and identify a delivery model.
- Or aim is to begin delivering this programme from April 2025.



Direct electric heating – thermal storage

- We are currently in a 10-year programme of upgrading old storage heaters to high heat retention equivalents.
- From April 2024 we will also upgrade hot water systems, replacing cylinders and immersion heaters with thermal storage heaters.
- These are much smaller than hot water cylinders, store heat much mor efficiently and will give mains pressure hot water for showers, baths and washing up.
- No legionella risk (so no annual servicing requirement)







