

Environment and Energy Board

Date	9 th March 2022
Report title	SMART Hub Update
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Recommendation(s) for action or decision:

- To note the work of the SMART Hub in supporting retrofit across the WMCA area.

1. Purpose

This paper is to update on progress on the Energy Capital team's SMART Hub (Sustainable Market for Affordable Retrofit Technologies) programme, which focuses on home retrofit.

2. Background

- Homes account for around 28% of carbon emissions in the WMCA area. To meet the aims of making the West Midlands net zero by 2041, the vast majority of the region's 1.2 million homes will all require some degree of retrofit to reduce energy demand for heat, power and cooking and install low carbon heating systems. Based on a 40 hour working week, this means that to meet the 2041 target and interim targets set out in the Five Year Plan, one home every two minutes will need to become net zero. In June 2021 Investment Fund approval was secured for the SMART Hub programme for an initial period of two years with the aim of creating a core capacity in the region to unlock funding and support the development of a sustainable retrofit market. At the same time, funding was secured for the £2m Net Zero Neighbourhoods demonstrator.

- 2.2 The aim of the SMART Hub programme is to build capacity across local authorities and other partner organisations in the West Midlands region and to lay the foundations for longer term growth in the market for home retrofit.
- 2.3 To establish the SMART Hub and Net Zero Neighbourhoods programmes, the Energy Capital team has recruited three officers:
- SMART Hub Lead (George Simms)
 - Net Zero Neighbourhoods Programme Manager (Becky Lane)
 - Affordable Warmth Delivery Manager (joining April 2022)
- 2.4 The activities of the SMART Hub can be grouped into three headings:
- Capacity building: leading and coordinating bids with Local Authority (LA) and Registered Provider (RP) partners to make sure the region gets the most out of the available funding; Helping partner organisations acquire the knowledge and experience needed to deliver high-quality retrofit; taking opportunities to represent the region's retrofit needs to government
 - Demonstrator projects: developing and delivering demonstrators in partnership with LAs/RPs, for example the Net Zero Neighbourhoods programme; ensuring that demonstrator projects provide high quality outcomes for households; gathering useful learning to inform the direction of subsequent activity
 - Market development support: engaging supply chain and finance providers to understand opportunities and needs; understanding housing stock and customer needs; gathering learning and market intelligence and undertaking data analysis to identify key opportunities and issues; identifying and supporting the necessary innovation to remove market barriers to long-term customer demand and supply chain growth

The current activities under each of these headings are set out in more detail below.

Capacity building update

- 2.5 To date, the SMART Hub has helped to secure £26.6m funding for retrofit activity across the region, through the BEIS funded Sustainable Warmth Competition and Social Housing Decarbonisation fund, and is also providing technical advice and expertise to help partners develop and deliver retrofit projects
- 2.6 Sustainable Warmth Competition: WMCA worked with local authorities across the region and the Midlands Energy Hub to submit a successful consortium bid for this competition, which includes two funding streams – Local Authority Delivery Phase 3, which covers retrofit funding for low-income homes with poor energy performance that are connected to the gas network and the Home Upgrade Grant, which covers retrofit funding for low-income homes with poor energy performance that are not connected to the gas network. The business case for this project has gone through

the Single Assurance Framework and has been formally approved by the Statutory Officers. The allocation of funding within the region is as per the table below:

Local authority	LAD3 (£)	HUG (£)	SWC total (£)
Birmingham	6,935,500	2,013,000	8,948,500
Solihull	352,000	913,000	1,265,000
Sandwell		137,500	137,500
Dudley	55,000	220,000	275,000
Walsall	319,000	1,298,000	1,617,000
Wolverhampton	456,500	1,364,000	1,820,500
Coventry	275,000	1,908,500	2,183,500
WMCA	2,860,000		2,860,000
TOTAL	11,253,000	7,854,000	19,107,000

2.7 LAD 2 technical support: The Midlands Energy Hub is currently funding the SMART Hub team to provide technical support and advice to local authorities delivering phase 2 of BEIS' Local Authority Delivery programme

2.8 Social Housing Decarbonisation Fund: WMCA led a consortium of seven Registered Provider (RP) partners to bid successfully for £7.5m funding for retrofit measures in 622 social housing units across the region. Each partner is also providing match funding, making the total size of the project £14.7m, as per the table below. This funding will also cover the costs of consortium management and support from the SMART Hub team. The business case for this bid is currently being assessed through the Single Assurance Framework and will formally go to WMCA Board in March for approval.

Partner name	SHDF grant (£)	RP match funding (£)	Total costs (£)
Sandwell MBC	3,073,895	1,517,888	4,591,783
Wrekin Housing Group	464,480	232,240	696,720
Orbit	854,981	2,511,955	3,366,936
Midland Heart	2,060,262	2,411,646	4,471,908
Community Housing Group	299,211	149,605	448,816
Wolverhampton Homes	139,500	69,750	209,250
Solihull MBC	619,019	309,510	928,529
Total	7,511,348	7,202,594	14,713,942*

* Does not include £399k non-recoverable VAT costs incurred by Midland Heart

2.9 Net Zero Neighbourhoods programme: SMART Hub has been working with the seven constituent member authorities to support them in developing expressions of

interest to host the first Net Zero Neighbourhood demonstrator. We are currently in the process of awarding grants of £50k to each local authority for them to develop a more detailed plan. We anticipate awarding £1.65m funding to the first Net Zero Neighbourhood in April 2022, but expect that the development plans will provide a pipeline of investable projects to form the basis for subsequent phases of the programme. The plans will:

- identify the decarbonisation pathway for the neighbourhood
- identify all investment opportunities
- match the investment opportunities to current funding opportunities and develop partnerships with private sector partners
- identify the first phase for the Net Zero Neighbourhood project

Demonstrator projects update

- 2.10 Sustainable Warmth Competition: Following engagement with local authority partners, we have identified two areas to invest WMCA's £2.86m share of SWC funding; Foleshill in Coventry and Elmdon in Solihull. These fit the criteria for the SWC funding and will also help us to demonstrate the place-based principle of the Net Zero Neighbourhood programme.
- 2.11 We are now mobilising for delivery of the funding, which will be used to support 300 owner-occupied low-income homes, through the installation of a range of retrofit measures including: solid and cavity wall insulation, loft insulation, floor insulation, draught proofing, windows and doors, solar PV and ventilation. The works are due to be completed by the end of March 2023.
- 2.12 Procurement and legal teams have been engaged and a grant funding letter with Midlands Energy Hub has been signed, which will release the first 10% of funding. Midlands Energy Hub. Midlands Energy Hub have procured customer support partners on behalf of every local authority in the region, to help process applications to the scheme and provide additional energy advice and support to householders. The customer support partner for Coventry and Solihull is Act on Energy, and we are working with them and the respective councils to develop a plan to engage households in the two areas.
- 2.13 Social Housing Decarbonisation Fund: As consortium lead, we are currently mobilising partners to initiate this project. WMCA will manage the consortium, ensuring that deadlines and reporting requirements are met and providing technical advice and expertise. To help with this, we are in the process of recruiting a retrofit consortium manager and Retrofit Coordinator who will support our partners to undertake the works to which they have committed.
- 2.14 The project will see retrofit work undertaken in 622 homes across the region, with a focus on reducing energy demand to a level of 90 kWh/m²/year. This will be achieved

through a range of measures, but external wall insulation (EWI) and improved ventilation are likely to be the most common measures installed. The project will cover a range of measures and housing types, which should enable us to gather a large amount of learning and best practice to inform how future projects are undertaken. The works to the homes must be completed by the end of March 2023. However, it should be noted that there are some potential issues relating to this deadline; retrofit assessment and design work will need to be undertaken on each home, and in many cases these services will need to be procured, in addition to a contractor(s) to undertake the work. This means that work may not commence until summer 2023, but external works are dependent to a large extent on good weather.

2.15 A Business Justification Case setting out how the project will be delivered is being prepared, and legal support has been engaged. The grant Memorandum of Understanding with BEIS has been signed, and a consortium agreement with our partners is currently being prepared.

Market development support update

2.16 Housing stock assessment: the SMART Hub team has identified a preferred delivery partner to undertake analysis of the region's housing stock, which will build a shared evidence base to support funding applications across the region and develop realistic pathways to net zero. We will be working with West Midlands local authorities to help steer this work and make it as useful as possible. As well as helping identify opportunities for future funding bids, the project will build up a picture of likely supply chain needs and help to inform development of future demonstrator projects by revealing specific opportunities (e.g. likely readiness for heat pump installation). The work, which is likely to be complete by mid-May 2022, will:

- Analyse the energy performance of every single home in the West Midlands (constituent member authorities only) using a broad range of datasets. This will also consider healthcare and fuel poverty data to build up a picture of vulnerability.
- Assess the likely best pathways to reach net zero for each home in the region, setting out required measures and costs.
- Create a database that can be accessed by local authority partners, providing detail on the above.

2.17 Programme plan: we are currently exploring other opportunities to help accelerate retrofit market development in the region, including engaging with private sector partners. In addition to public sector funding (e.g. SHDF and SWC), we are aiming to develop opportunities to engage owner-occupied households, improve skills and business support provision and develop customer offers that can help expand market activity rapidly. These opportunities will be informed by the stock assessment work and engagement with public and private sector partners and will be set out in a medium-term programme plan. This plan will set out planned activities and funding

requirements under each of the three headings set out above, and how these will contribute to meeting targets set out in the 5-year plan and WM2041 strategy. We aim to complete a first draft of the plan by summer 2022.

3. Financial Implications

- 3.1 There are no immediate financial asks within this paper, as the purpose is to provide an update on the SMART Hub programme.
- 3.2 The projects outlined above do not require WMCA funding, as they are either fully grant funded (Sustainable Warmth Competition) or are match funded by consortium partners (Social Housing Decarbonisation Fund).

4. Legal Implications

There are no legal implications as a result of this paper.

5. Equalities Implications (*)

The work that undertaken through the SMART Hub programme is central to the addressing the challenges related to climate change. However, we have been clear from the outset that WM2041 must also have significant social and economic benefits for the region. Home energy consumption is an area where there are currently clear inequalities due to the variable quality of housing stock and where the effects of fuel poverty amplify health and welfare issues. These inequalities will increase due to current energy price rises. For the last 50 or more years, natural gas has provided the majority of the UK's home heating demands, relatively cheaply. The transition to net zero will involve significant costs, which have the potential to increase existing inequalities unless careful consideration is given to allocation of the costs of upgrades and the running costs of new technologies. The work that we will be taking forward will look to address this, using the market intelligence and data available to us.

6. Inclusive Growth Implications

This report links to a number of the WMCA's eight inclusive growth priorities, which are identified as 'a catalyst for improved and sustained outcomes for people place, co-designed with partners and beneficiaries'. Improving the energy performance of homes will support outcomes around:

- reduction of health inequalities by making homes warmer, more comfortable and better ventilated
- addressing climate change and climate resilience by reducing emissions and ensuring that retrofits deal with overheating risks and improve ventilation
- increasing job opportunities by supporting growth of the retrofit supply chain

- equality (reducing the numbers of people living in deprivation, which includes lifting people out of fuel poverty).

7. Geographical Area

The SMART Hub programme covers all constituent local authorities of the West Midlands Combined Authority and delivery will also involve non-constituent members, for example through the SHDF project.

8. Other Implications

None.

9. Schedule of Background Papers

None