

Environment & Energy Board

Date	28 th September 2022
Report title	Net Zero Neighbourhood
Portfolio Lead	Councillor Ian Courts - Environment, Energy & HS2
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Recommendation(s) for action or decision:

The Environment and Energy Board is recommended to:

- (1) Endorse the decision to award £1.65m grant funding to Dudley MBC to deliver the first Net Zero Neighbourhood demonstrator in Brockmoor
- (2) Endorse the intention to create a NZN working group to support other constituent members to further develop their NZN plans and identify areas of particular interest where there could be potential for specific collaboration with other work and stakeholders.
- (3) Provide feedback on how members would like to be engaged or informed on specific areas of the programme, outside of any Board meetings.

1. Purpose

To provide an overview of the decision to award £1.65m grant funding to Dudley MBC to deliver the first Net Zero Neighbourhood (NZN) demonstrator in Brockmoor, and to set out the proposed approach to working with other constituent member authorities to continue to develop their NZN plans.

2. Background

- 2.1 WMCA is funding the Net Zero Neighbourhood Demonstrator programme as part of its strategy to cut regional carbon emissions to net zero by 2041. The #WM2041 strategy and its associated Five Year Plan shows that we need to retrofit nearly 300,000 homes in the region by 2026 to meet our targets. In March 2021, the WMCA Board approved £5.1 million funding from the Investment Programme to fund the development of the priority initiatives to deliver on the WM2041 Five Year Plan. The Net Zero Neighbourhood Demonstrator programme was awarded £2.1million as part of this decision.
- 2.2 The Net Zero Neighbourhood Programme - part of Energy Capital's SMART Hub home retrofit programme - aims to develop a place-based approach to retrofit, founded on extensive community engagement to generate higher rates of take up than other retrofit initiatives and generate wider benefits including: improved health and wellbeing; local employment opportunities; inclusive growth; improved quality of life and local amenities. This in turn can form the basis for a replicable finance and delivery model to scale up retrofit, creating low carbon energy communities on neighbourhood-by-neighbourhood basis.
- 2.3 While the funding made available through the Investment Programme was intended to fund the first demonstrator project, a key aim of the demonstrator phase is to develop a pipeline of Net Zero Neighbourhood projects to help attract further funding and investment into the programme in the future. Each of the seven constituent member local authorities were invited to first complete a Net Zero Neighbourhood Expression of Interest (EoI) form and then to complete a full Net Zero Neighbourhood plan by early July 2022. They were allocated £50k each for this purpose out of the £2.1m Investment Programme funding. Five local authorities submitted a plan – Birmingham, Dudley, Sandwell, Solihull and Wolverhampton (two more plans from will be submitted by Coventry and Walsall at a later date).
- 2.4 Upon review, Dudley MBCs plan for Brockmoor was the plan that best aligned with the goals of the programme, providing high confidence of successful delivery. It has been selected to receive the remaining £1.65m Investment Programme funding.
- 2.5 Dudley MBC's plan outlines the ambition to create a Net Zero Canalside community, implementing the following within the area:
 - Improvements to the existing housing stock, commercial estate and to the outdate industrial estate.
 - Several transport improvements including the potential to develop the disused railway into a cycle and walking pathways and the enhancement of canal corridors

including surfaced cycleways with links to cycling and walking routes, as well as adjacent open spaces and green spaces.

- Management of demand and grid constraints to accommodate and plan for electrification for heat and transport.
- High-quality green infrastructure which will be protected and enhanced including green spaces and parks and improved links into Fens Pool Nature Reserve/SAC, the River Stour and open countryside to the south and west of the corridor.
- Educational programmes and community engagement to help design how the NZN is delivered and raise awareness of Net Zero

2.6 Dudley Metropolitan Borough Council selected the Brockmoor area as:

- It has high levels of fuel poverty
- It is relatively close to the new metro and therefore provide opportunities for expanding sustainable transport links
- Relatively close to industrial areas, with wider opportunities for decentralised clean energy
- It has green space within it, an adjoining canal and a disused railway
- The housing mix is representative of the borough, and includes several homes where energy efficiency improvements can be made quickly

2.7 The Brockmoor Net Zero Neighbourhood project delivery is proposed to be divided into two phases:

- Phase 1 (2022-2025) — corresponds to the first phase of capital funding, focusing on the retrofit of a minimum of 50 homes - funded through £1.65m of investment from the WMCA and supported by additional funding including from DMBC housing department, Disabled Facilities Grant (DFG) and the Boiler Upgrade Scheme (BUS) – and creation of a cycle route and community garden
- Phase 2 (2025 onwards) — corresponds to the remaining infrastructure improvements and community initiatives needed to fully implement the NZN plan

2.8 The success of the project will be based on the ability to successfully engage the community and have enough households sign up for retrofit measures and to buy into the overall approach for the area. Dudley's plan sets out clearly how the project will build on existing community engagement in the area and how engagement through the project will take place.

2.9 The following project outcomes are targeted:

Essential Outputs

- At least 50 homes are retrofitted within the Brockmoor to PAS2035 standards
- There is good to excellent feedback from all households that receive the retrofit
- Energy performance data and other benefits/outcomes are captured to support the development of the finance model
- Proposed cycle infrastructure is installed
- Transport links within the area are better integrated and support uptake of low-carbon transport options
- Establishment and improvement of green spaces within the area
- Community co-design and engagement activities undertaken to support the design of Phase 2

- Scope and financial model developed for Phase 2 for Brockmoor NZN, with the intention of replicating this model elsewhere in the region to help scale up retrofit delivery

Desirable Outputs

- The community co-design process is highly effective and a pipeline of a further 250 homes for retrofit is generated for Phase 2
- High usage of cycle infrastructure resulting from community engagement activity
- Identification and funding of grid management systems to facilitate the transition to a decarbonised energy system, including vehicle to grid and neighbourhood storage
- Engagement with the supply chain helps to inform on-going market development activities for the SMART Hub
- Private finance to support Phase 2 of the Dudley Net Zero Neighbourhood and Phase 1 of the other Net Zero Neighbourhood plans is identified

2.10 WMCA will continue to work with the full cohort of LAs to develop the plans and will set up a regular working group for officers to this end. We are actively seeking further funding for other plans to ensure the work that has gone into plan development continues to progress across the region

3. Financial Implications

3.1 The total budget for this project is £2.1million, all of which is funded from WMCA's investment programme. Of this, £100k of this covers the NZN Delivery Manager post and £350k has been allocated to constituent member local authorities to develop NZN plans. The remaining £1.65m capital funding is available for the NZN demonstrator.

3.2 The £1.65m investment from WMCA into Dudley's Brockmoor NZN will be matched by £710k funding from Dudley MBC and further grant funding will be sought. It will demonstrate the feasibility of a blended finance model for retrofit applicable to multiple housing tenures and the potential to raise significant private sector investment to support WMCA's strategic retrofit aims. It will also explore opportunities to facilitate the transition to a decarbonised energy system through local grid demand management and storage.

Element	Cost
Housing retrofit (50 homes)	£1,843,553
Cycle route (410m plus cycle parking)	£400,000
Community Garden	£25,000
Project management and consultancy	£150,000
Total	£2,418,553

This will be funded as follows:

Funding source	Amount
WMCA NZN Demonstrator funding	£1,650,000
Dudley MBC	£620,000

Other grants (Boiler Upgrade Scheme, Disabled Facilities Grant etc	£148,553
Total	£2,418,553
Additional funding opportunities not yet secured (to extend scope of retrofit)	£386,447

- 3.3 The main cost component of the project is the retrofit of 50 homes. WMCA has undertaken housing stock assessment that estimates the average cost of retrofitting a home in Dudley to reach Net Zero to be £19,800, though this does not consider recent increases in installation cost and does not include the cost of enabling works, assessment, engagement and design. The budget put forward by Dudley MBC allows for approximately £36k per home. This provides confidence that either:
- Each individual retrofit can be undertaken to a high performance standard, providing increased comfort and lower bills to households
 - More than 50 retrofits can be completed (depending on the outcomes of engagement and surveys, exceeding the minimum project expectations.
- 3.4 Dudley MBC will provide match funding of £768,553, increasing the project budget by 46% over WMCA's funding allocation and is committed to finding additional funding.

4. Legal Implications

- 4.1 Funding will be administered through a grant agreement and defrayed according to expenditure incurred and deliverables achieved (e.g. number of retrofits). The Energy Capital team is currently working with WMCA legal to draft the grant agreement. Milestones and payment schedule are to be finalised, but will be developed with Dudley MBC and WMCA's finance team to ensure they are appropriate.

5. Equalities Implications

- 5.1 Effective carbon reduction actions have the potential to make a significant positive impact on the health and wellbeing of Dudley residents and on contributing to reducing inequalities on health and wellbeing. This is particularly true in areas of high deprivation, such as the two LSOAs covered by the Brockmoor NZN. The primary shared benefits on health and wellbeing from the actions to be undertaken through the NZN Demonstrator include more efficient homes an access to affordable warmth, reduced use of combustion engine vehicles, leading to cleaner air, increased levels of activity through walking and cycling.

6. Inclusive Growth Implications

- 6.1 The Dudley Net Zero Neighbourhood (NZN) programme is rooted in the principle that the design of a new approach to energy efficiency is led by the community and the community, residents and businesses, are beneficiaries of investment and the short and long-term outcomes of that investment. The goal is for economic activity to work for humans whilst being regenerative of the environment. The WMCA Inclusive Growth Framework has 8 key principles and the NZN programme will deliver against each of them, within the scope of the funding call.

7. Geographical Area of Report's Implications

7.1 The area covered by the project will be the Brockmoor area of Dudley, as detailed in Dudley MBC's NZN plan.

8. Other Implications

None

9. Schedule of Background Papers

9.1 Net Zero Neighbourhood Demonstrator Business Justification Case

9.2 Dudley Net Zero Neighbourhood Proposal (Dudley MBC)