



West Midlands  
Combined Authority

## Environment and Energy Board

<b>Date</b>	26th September 2023
<b>Report title</b>	WMCA Energy Programme Update
<b>Portfolio Lead</b>	Cllr John Cotton, Portfolio Holder for Environment, Energy and HS2
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### Recommendation(s) for action or decision:

#### 1. The Environment and Energy Board is recommended to:

- Note the progress across the WMCA energy programme
- Endorse the principles of retrofit devolution that will be used to guide negotiations with Government, set out below
- Endorse the expansion of WMCA Strategic Partnerships to include partnerships with energy infrastructure providers
- Identify topics for future updates at the Environment and Energy Board meetings

#### 2. Purpose

To provide a six month update for the Board on the progress of the energy programme by the Energy Capital team at the WMCA, following approval of the 2023 /4 work programme by the Environment and Energy Board in March 2023.

#### 3. Background

##### 3.1 The Energy Programme

Building on the foundations of the Regional Energy Strategy adopted by the WMCA in January 2019, and the subsequent highly acclaimed WM2041 Strategy and Five-Year Plan, the West Midlands's regional energy priorities are now fully integrated into WMCA operations. Through Energy Capital's national reputation for excellence in innovation and the teams' deep roots into the sector

through the Energy Capital Partnership, the team have made huge strides since their incorporation into the WMCA.

The energy team's vision is 'a just energy transition, where investment is appropriately channelled to meet the needs of our diverse communities – enabling timely decarbonisation and creating a thriving market for clean-tech innovation and economic growth.' The programme is now deeply integrated into the objectives of directorates across WMCA, including transport decarbonisation, zero carbon housing, green skills and fair and green growth.

The current energy programme breaks down into three core areas set out below, with a full summary in the appendix. In March it was agreed that the Energy Team's top priorities would be to:

1. Establish Local Area Energy Planning as a mechanism to remove barriers to low carbon infrastructure investment across the region
2. Deliver high quality retrofit solutions and technical support to member authorities and housing providers to reduce fuel poverty
3. Demonstrate Net Zero Neighbourhoods as an effective mechanism to attract investment into local communities
4. Lobby Government, OfGEM and National Grid to empower the West Midlands to influence the energy system across the region

Theme and lead	Aim and objectives	Workstreams	Key milestones met to date
<p><b>Energy Infrastructure</b></p> <p><i>Led by Kate Ashworth, Energy Infrastructure Lead</i></p>	<p><b>Aim</b> - To ensure our energy infrastructure facilitates the timely and cost-effective, decarbonisation of our industry, businesses, homes and transport systems and supports economic growth.</p> <p><b>Objective</b> - To remove barriers and enable investment in clean energy assets, by facilitating a smarter, place-based approach to investment in energy efficiency, renewable energy and storage.</p>	<ul style="list-style-type: none"> <li>- Local Area Energy Planning</li> <li>- Smart Local Energy Systems</li> <li>- Heat Network delivery and zoning</li> <li>- Non-domestic energy solutions, including energy efficiency, renewables and storage</li> <li>- Infrastructure for Zero Emission Vehicles</li> </ul>	<ul style="list-style-type: none"> <li>- A region wide <b>Local Area Energy Planning Co-ordination Group</b> is now operational, following some initial engagement workshops. It has been agreed that the WMCA can add value by focusing on providing expertise and insights from learning elsewhere, with a programme targeted at the provision of a sound data foundation and using their relationships and reputation with energy infrastructure providers to establish a useful governance structure to support region wide decision making on energy infrastructure investment.</li> </ul> <p>Following the successful delivery of Project PRIDE phase 1 in June, a <b>funding application</b> has recently been approved for the second phase of this work through the OfGEM Strategic Innovation Fund. This will provide enable the data foundation for local area energy planning for each local authority. This includes incorporation into a digital tool called <a href="#">LAEP+</a> that will provide approved access to the data for all interested parties.</p> <ul style="list-style-type: none"> <li>- Innovation <b>Project Equinox</b> is underway. It is a Network Innovation Competition collaboration with National Grid Electricity Distribution, SP Energy Networks (SPEN), Octopus Energy, PassivUK, Welsh Government, Sero, Guidehouse and ourselves. The project will test new billing</li> </ul>

			<p>schemes to reward households for temporarily altering their heating choices without compromising on comfort. This will pave the way for a smarter energy system where DNOs will be able to leverage <b>flexibility from heat</b>, to manage increasing network demand, and will enable us to employ an additional team member to work on flexibility.</p> <ul style="list-style-type: none"><li>- Energy Capital is developing a <b>heat network programme</b> in response to a changing market for heat network development to reflect the governments ambition for 20% of heat demand to be connected to a heat network by 2050 and the current legislation going through Parliament on Heat Zoning (of which there are pilots in both Birmingham and Coventry), which will require businesses in designated zones to connect to heat networks. This is being informed by working closely with each Local Authority to identify where the WMCA can add value. The WMCA is currently sponsoring the Walsall Heat Network which is scheme which is being investigated for feasibility.</li><li>- Energy Capital are also supporting the economy team in the development of a <b>Business Energy Advisory service</b> looking to support the Industrial and Commercial sector with decarbonisation and energy security. This programme is part of the</li></ul>
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			<p>funding secured through the 2023 Devolution Deal. The ambition is to provide 4000 businesses with energy audits with a complimentary grant scheme for energy efficiency measures. This will help to alleviate immediate impacts of energy cost volatility as well as provide much needed data to help further target initiatives in future.</p> <ul style="list-style-type: none"> <li>- The findings of the <b>Infrastructure for Zero Emissions Vehicle (IZEV)</b> work as reviewed by the Prime Ministers Business Council are being incorporated into the refresh of the WMCA's EV Strategy, currently being updated by CENEX. This should be available from October 2023 and will help to ensure the planning of the underlying energy infrastructure to support the decarbonisation of transport is built into our wider processes. In the meantime, we are supporting colleagues delivering the EVCATS (ultra-rapid charging) and LEVI (community charging) programmes as well as the ZEBRA bus programme and All-Electric Bus Coventry.</li> </ul>
<p><b>Domestic retrofit (SMART Hub)</b> <i>led by George Simms</i></p>	<p><b>Aim</b> – To prove that we can reduce fuel poverty and create warmer homes through area-based solutions whilst securing net zero and economic growth</p>	<ul style="list-style-type: none"> <li>- Domestic retrofit delivery</li> <li>- Retrofit market development</li> <li>- Net Zero Neighbourhood demonstrator</li> </ul>	<ul style="list-style-type: none"> <li>- <b>Wave 1 of the Social Housing Decarbonisation Fund (SHDF)</b> programme valued at £6.7m grant &amp; £7.6m match funding, total project cost of £14.34m has been successfully delivered by Rob Johnson, Retrofit Consortium Manager and the</li> </ul>

	<p>through supply chain development.</p> <p><b>Objective</b> - To support LAs to access funding, intelligence and expertise to retrofit homes, reduce carbon emissions and work with partners to develop and deliver projects that tackle fuel poverty in the region.</p>		<p>SMART Hub team, to time and budget, resulting in a range of retrofit measures being installed to 513 properties across the West Midlands. Funding for Wave 2 has also been secured and programme set up is underway, with the Consortium Agreement having now been signed by all 13 member partners. The programme valued at £17.7m grant &amp; £34.4m match funding, achieving a total project cost of £52.18m delivering cost efficiency measures to 2076 homes across the West Midlands.</p> <ul style="list-style-type: none"> <li>- The contract has now been signed between Dudley MBC and their delivery partner EQUANS to take forward the <b>Brockmoor Net Zero Neighbourhood pilot</b>, where the WMCA is investing over £1m in demonstrating a neighbourhood approach to retrofit.</li> <li>- A <b>monitoring and evaluation framework</b> based upon the WMCA Inclusive Growth Framework has been developed to ensure we are able to demonstrate impact and maximise learning from this initiative.</li> <li>- Under this programme the region's LAs have come together to share knowledge, lessons learned on delivery and get access to industry expertise through the <b>Net Zero Neighbourhoods Working Group</b> and <b>LA Retrofit Officers Group</b>.</li> </ul>
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			<ul style="list-style-type: none"> <li>- A <b>funding application</b> for further £5m of funding to support the next cohort of Net Zero Neighbourhoods across the region to move forward has been submitted to Innovate UK. This project is called CAMPOS (Creating a Market for Place-based OutcomeS). At a minimum an additional £150k will be secured through this route.</li> </ul>
<p><b>Policy and positioning (energy)</b></p> <p><i>led by Director Cheryl Hiles</i></p>	<p><b>Aim</b> - To give the West Midlands power and influence in the energy system, as a national pathfinder and to attract investment into energy infrastructure across the region.</p> <p><b>Objective</b> - Develop policies and projects to ensure the energy infrastructure of the region supports competitive, clean and inclusive growth.</p>	<ul style="list-style-type: none"> <li>- Lobbying for place-based energy solutions</li> <li>- 'Partner of choice' for government and private sector; innovation; and green finance</li> <li>- Embedding energy across WMCA programmes</li> </ul>	<ul style="list-style-type: none"> <li>- The outputs of our Regional Energy Systems Operator (RESO) innovation project have proved hugely valuable in influencing OfGEM to see the value in taking a place-based approach to energy system planning. We have responded to a host of consultations and workshops on their concept of <b>introducing a Regional System Planner</b> to the currently highly centralised energy system, and an announcement is expected at the end of October 2023, that this model will be adopted.</li> <li>- OfGEM are considering hailing our newly established regional energy governance structure, including the <b>Net Zero Infrastructure Delivery Panel</b>, which we have set up to support regional energy planning, as a national pilot to support and inform their development of a new Regional System Planner role.</li> </ul>

This paper provides deep dives on a selection of WMCA energy programme initiatives from the above programme areas for discussion at the Environment and Energy Board.

### **3.2 Deep Dive 1: Devolved Retrofit Funding**

Through the 2023 West Midlands Devolution Deal, a commitment from Government to provide a single funding pot with a multi-year settlement that includes funding for retrofit directly from Treasury, has been agreed.

Work has begun, developing some key principles to base our negotiations upon. These have been explored with net zero officers within WM Local Authorities through the LA Retrofit Bi-Monthly group.

The principles which have been agreed with officers are as follows:

1. Build and maintain capacity to develop and deliver retrofit projects in the region through the Local Authorities, Combined Authority and Registered Providers
2. Improve the investment case for retrofit to reduce reliance on grant funding
3. Use grant funding as leverage to bring in additional investment and grow scale in retrofit activity
4. Stimulate demand in the willing to pay market
5. Support innovation to overcome market and financial barriers
6. Balance value for money with actions that are harder to fund
7. Develop skills provision and supply chain capacity to meet rising demand
8. Improve the quality of retrofits and customer satisfaction
9. Measure real world impact where possible to show what works and what provides best value
10. Deliver and measure wider benefits of retrofit beyond carbon and fuel bill savings (e.g. health)
11. Link into the outcomes of Local Area Energy Planning and Place Based projects as they develop.

The main issues that will have to be overcome through negotiations with Government are:

- whilst the single settlement opens the door to agreeing a deal directly with Treasury to potentially allow us to widen the scope of the funding, the Department for Energy Security will likely still want some oversight / control given their statutory objectives relating to carbon reduction and fuel poverty alleviation.
- whilst the region wants certainty of funding, Government wants certainty of delivery, and to be sure that there will not be large underspends which will put their targets at risk, so we need to agree a funding formula which works for the region and also allows us to balance ambition against capacity increases over time.

The quantum of funding is currently uncertain, as a funding formula will need to be agreed with Government. A starting point for negotiations will be a percentage of departmental budgets based on the proportion of English fuel poor households that are in the West Midlands area, which currently stands at 7.5%. Based on an estimated £6bn budget for Home Upgrade Grant and Social



Housing Decarbonisation Fund, this would give the region @£450m over 5 years - @£90m per year, compared to an estimated £4.1m per year secured from previous allocations.

The funding structure currently under consideration would be broken down into 3-5% for capacity building across local Authorities and the Combined Authority, providing a minimum of 4 FTE's per local authority; 20-25% for market development, including pipeline development and innovation and 70-75% for retrofit delivery by local authorities, housing associations and communities.

### **3.3 Deep Dive 2: Strategic Partnership for energy infrastructure**

The WMCA has entered into strategic partnerships with a variety of businesses to support the development of housing schemes across the West Midlands. A process for establishing Strategic Partnerships has been tried, tested and approved, which we would now like to extend to support our collaboration with energy infrastructure providers.

Pressure on our electricity infrastructure is increasing. The Government's commitment to decarbonise by 2050 is meaning that much of our built environment, including our transport system, is switching to electricity, away from fossil fuels such as petrol, diesel and gas, either to use directly or to generate hydrogen. However, the main focus of national investment into the electricity grid is to connect new large scale green energy generation, such as offshore wind. Government policy is also encouraging investment into new infrastructure, such as heat networks, to supply low carbon heat to homes and businesses. There is an important role for the WMCA, identified in the devolution deal, to ensure that investment is appropriately channelled into our energy infrastructure to support our economic growth, new development and decarbonisation.

Whilst it will be local authorities who will procure many of the solutions directly, the WMCA is seeking to work at a strategic level with technology agnostic partners who will help us to assess barriers to growth and identify solutions that are right for the place, including establishing when it will be necessary to challenge the decisions of incumbent network operators.

We have therefore sought to identify which companies in the market:

- have Board sign off to invest and own energy assets
- take a technology agnostic approach to find the right solutions for a place – which could include energy efficiency/ smart controls, generation and storage solutions to overcome grid constraints by an independent network operator (IDNO); the development of heat networks; the installation of charging capacity or electrolysis to produce hydrogen; or a fully integrated smart local energy system solution
- a commitment to working in the West Midlands and helping us to achieve our wider social, environmental and economic objectives.

The first company that has come forward which meets these three criteria is SSE Energy Solutions. We have been building this relationship for 18 months

and are now in a position to sign a 'Memorandum of Understanding' (MOU) with them setting out our commitment to working collaboratively to develop the region's first Strategic Energy Partnership.

Teams from both organisations will commit to work together to review a potential pipeline of opportunities with engagement and collaboration formalised through an MOU, building on the strong track record of establishing strategic partnerships with key development and growth partners, such as Legal & General, Segro and Keepmoat.

It is hoped that the model will attract other partners to take a similar approach and partner with us to unlock further benefits.

### **3.4 Deep Dive 3: The New Regional System Planner function**

Since its inception, Energy Capital has been actively lobbying for a greater voice for the region in energy system planning.

To support our position, we undertook an Innovate UK funded innovation project with Coventry City Council entitled Regional Energy System Operator or RESO, which was completed in December 2021 and provided solid evidence of the value of taking a place-based approach to whole energy system planning. A value of @£720m NPV over 30 years was identified for a place such as Coventry.

This evidence has been hugely valuable and used to support our national lobbying position. We have responded to multiple consultations and calls for evidence from the Department for Energy and OfGEM and have held a series of workshops with OfGEM as they explore the potential for a new Regional System Planner (RSP) model. An announcement from OfGEM on their preferred direction of travel regarding the RSP is expected in early November 2023, marking a fundamental change in policy direction in our favour.

We are continuing to maintain our position as leaders in local energy system governance nationally and have established a new governance structure to support the region to influence how energy infrastructure investment is channelled in the West Midlands. It is hoped that this will again provide valuable insights to shape OfGEMs policy and regulation. This work is funded by the OfGEM Strategic Innovation Fund as is called Project PRIDE – Planning Regional Infrastructure in a Digital Environment, led by National Grid Electricity Distribution (formerly WPD). The project brings together three key elements; a data foundation to support regional energy system planning - a digital twin tool to aid local engagement with energy system planning – and a governance structure to bring together all parties involved to support collective decision making that provides the best outcome for the place in question. This governance structure is now live and is beginning to explore whole system energy solutions for places, starting with an examination of UK Central.

#### **4. Financial Implications**

There are no immediate financial implications from this update report.

#### **5. Legal Implications**

None from this report. The legal team are already supporting the team with the completion of the Strategic Partnership MOU.

#### **6. Equalities Implications (\*)**

Energy costs are increasingly exacerbating inequalities across the WMCA area, increasing the importance of action to be taken in this area.

#### **7. Inclusive Growth Implications**

The team have been working closely with inclusive growth colleagues to ensure the development of all programmes support our inclusive growth objectives and have recently found the inclusive growth framework hugely valuable in helping to shape the monitoring and evaluation framework for the NZN programme.

#### **8. Geographical Area of Report's Implications**

The whole WMCA geography, including non-constituent authorities will benefit from various aspects of the Energy programme set out in this paper.

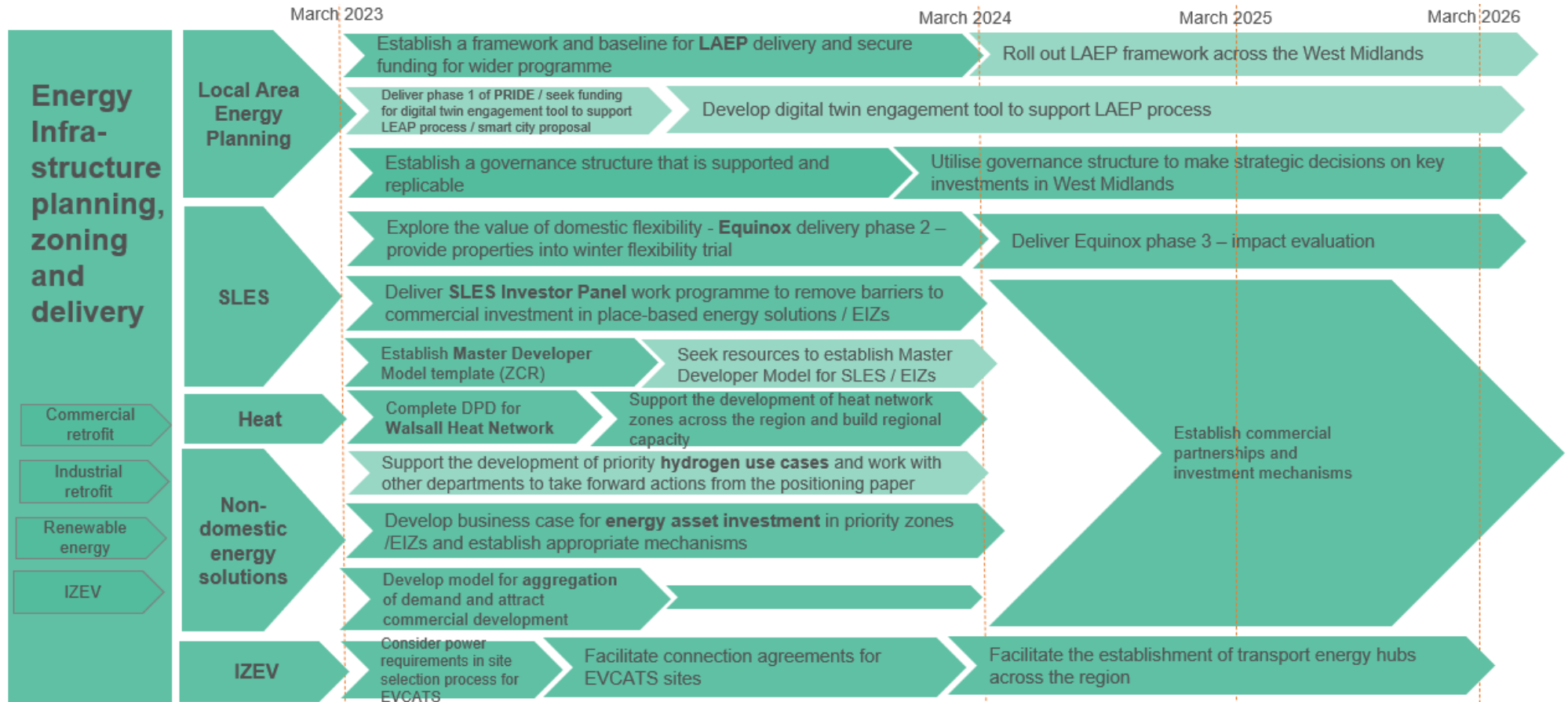
#### **9. Other Implications**

None.

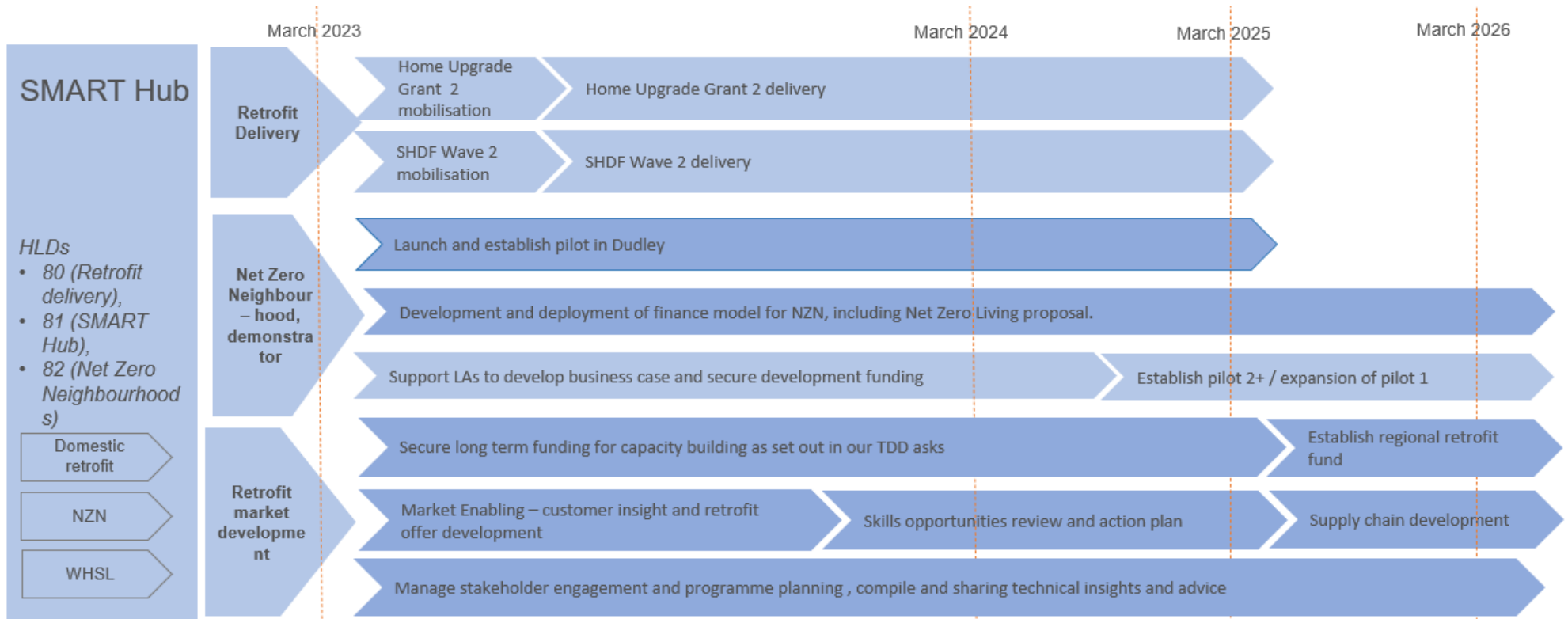
#### **10. Schedule of Background Papers**

Programme slide deck will be presented at the Energy and Environment Board meeting.

# Appendix 1: Energy Programme

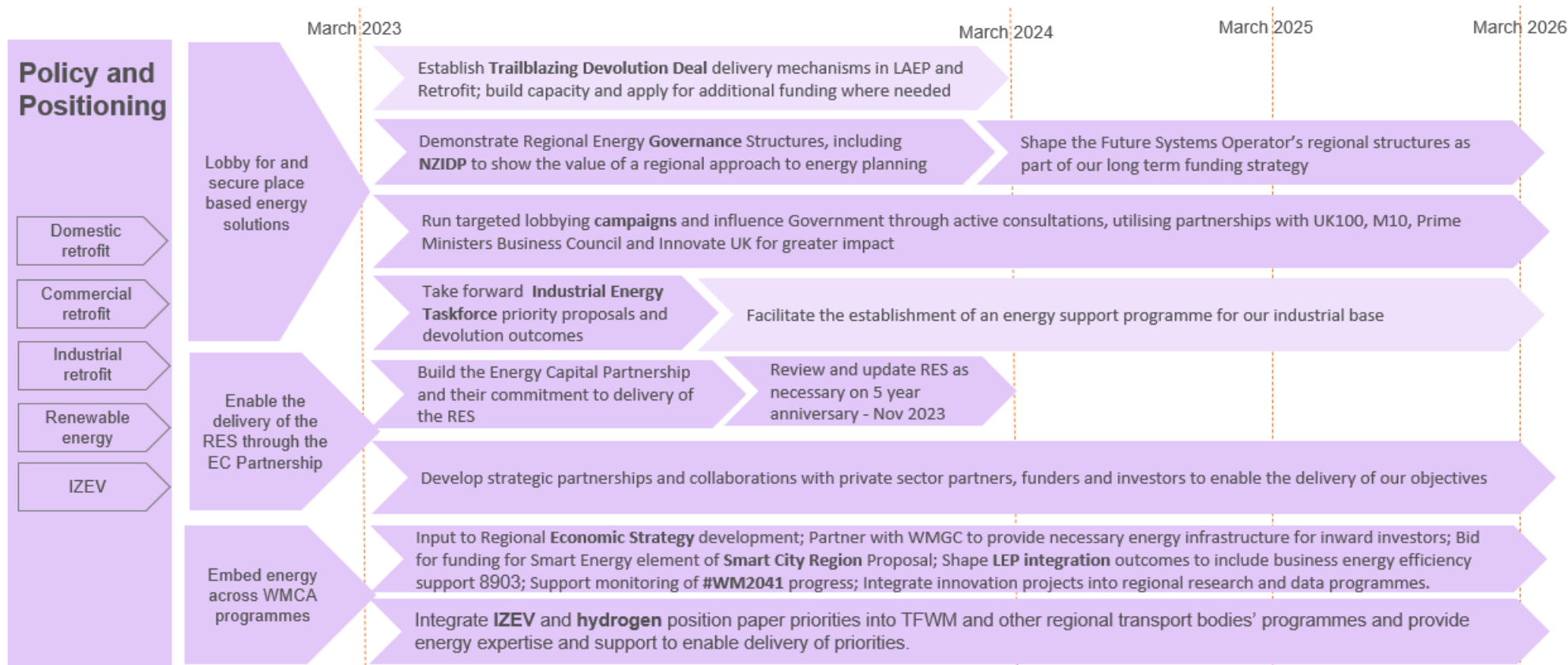


HLD: Remove barriers and enable investment in clean energy assets, by taking a smarter, place based approach to energy investment (energy efficiency, renewable energy and storage)



### HLDs:

To support LAs to access funding, intelligence and expertise to retrofit homes and reduce carbon emissions and work with partners to develop and deliver projects that tackle fuel poverty in the region



HLD: Develop policies and projects to ensure the energy infrastructure of the region supports competitive, clean and inclusive growth