

GM GREEN CITY REGION PARTNERSHIP

Date: 20th January 2020

Subject: GMCA Led Energy Programmes - Inter-relationships

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PURPOSE OF REPORT

The purpose of this paper is to present the inter-relationships between current GMCA Low Carbon Projects across the spectrum of:

1. Informed;
2. Projects; and
3. Optimised.

RECOMMENDATIONS:

The Green City Partnership is asked to:

- Note and comment on the contents of the paper and presentation.

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1.0 Background

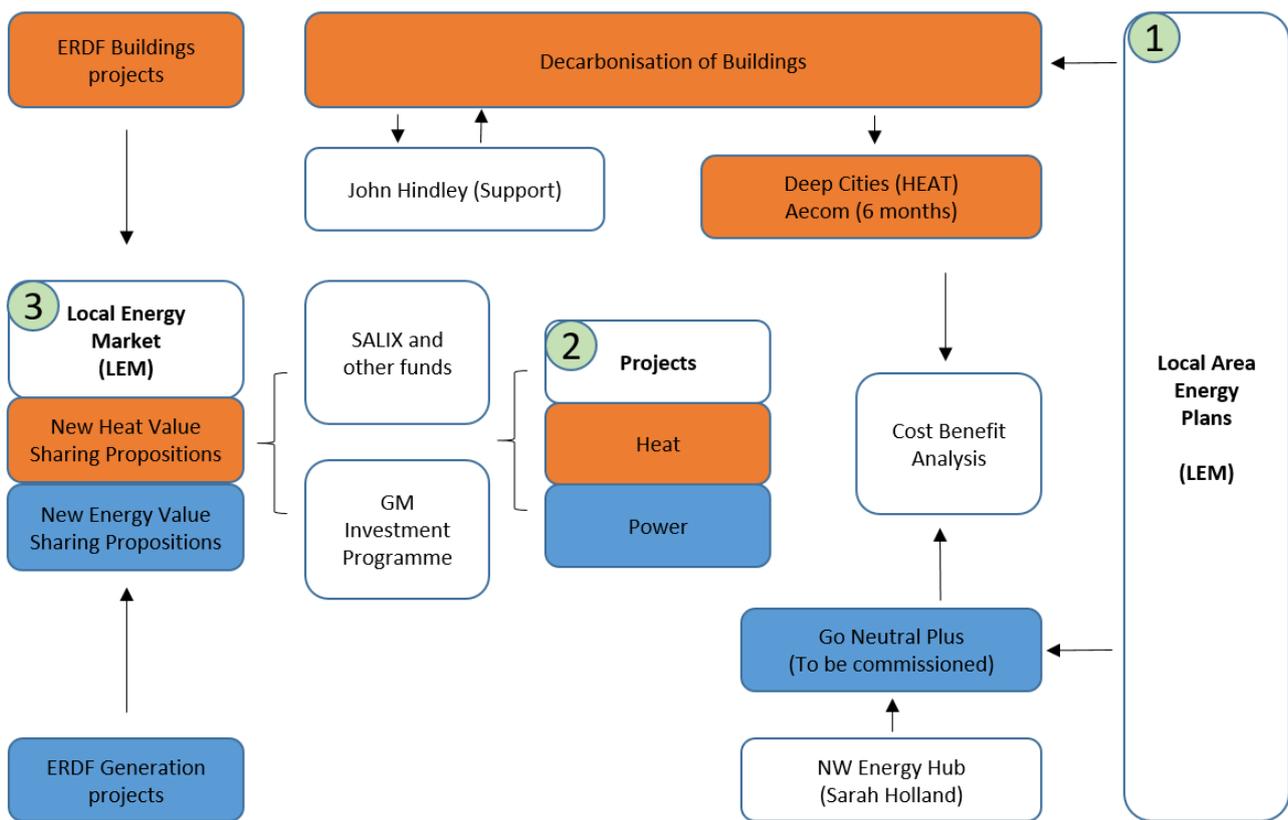
- 1.1 The GM Green Summit, held in March 2019, provided further detail on Greater Manchester's aspiration to be carbon neutral by 2038, meeting the challenge of climate change and supporting the transition to a smarter and cleaner future whole energy system.
- 1.1. One of the Green Summit outcomes was the launch of the 5yr Environment Plan for Greater Manchester, detailing what we need to do as a region over the next 5 years. 'Our Energy Supply', under Priority 2 stated the need to 'Decarbonise how we heat our buildings, adding at least 10.2TWh of low carbon heating by 2024' and under Priority 3 the need to 'increase the diversity and flexibility of our supply, adding at least a further 45MW of diverse load and flexible load by 2024'.
- 1.2. As part of the region's drive to meet the challenge outlined within the Plan, a range of approaches are required, including leadership through our own estates and supporting enabling measures across commercial, industrial and domestic properties. This will require a programme of activity, across GM, providing regional and district Local Energy Area Energy Planning, policy change, project pipeline development and delivery and the development of new services, which will need to be flexible, optimised and aggregated across all 10 districts, domestic (RSL), commercial and public estates.

2.0 Current GMCA Led Low Carbon Programme

2.1 The current proposed programme adopts a 3 stage approach:

- 2.1.1 **Informed** – Complete Local Area Energy Planning across the GM region, with 10 individual districts plans/layers.
- 2.1.2 **Projects** – Focused on the twin axis of decarbonisation of Buildings and Energy
- 2.1.3 **Optimised** – the development of a Local Energy Market, providing new value sharing proposition and services to support project delivery and viability.

This paper outlines each of the current GMCA projects/initiatives and the diagram below attempts to show how they are intended to inter-act.



3.0 Informed

- 3.1 The creation of **Local Area Energy Plans**, which are consistent in their design and methodology will provide an informed base with which to deploy low carbon interventions at the least cost across the GM region.
- 3.2 The respective plans will inform both project axis, heat and power, providing a whole systems approach, which is informed and consistent.

4.0 Projects

- 4.1 **Decarbonisation of Buildings:** John Hindley (contractor) is providing support to the GM districts to collate and identify opportunities for decarbonisation and cost reduction, across publically owned and directly influenced building stock.
- 4.2 In turn, this will support the **DEEP Cities** project underway with Aecom (BEIS funded), identifying low carbon heat related projects across the GM region. The DEEP Cities project remit includes all archetypes and asset classes pertaining to heat, fabric, Air/Ground Source Heat Pumps, Heat Networks (high and low temperature).
- 4.3 **NW Energy Hub** is supporting GMCA to develop a tender scope capable of reviewing c500 'Go Neutral Plus' sites. **Go Neutral Plus** compliments the heat related projects above, by identifying land and assets which are capable of hosting renewable generation and storage assets.

4.4 **Cost benefit analysis** of both project axis enables informed investment decisions and accelerated deployment of heat and energy related projects to follow via either traditional funding routes and or new finance mechanisms e.g. PWLB, Salix Finance, a blend of both or new service led approaches.

5.0 Optimised

5.1 An optimised **Local Energy Market**, across the 10 districts would provide the GM region with the following opportunities:

5.1.1 Develop new domestic and commercial value sharing propositions, services, which will encourage the wider uptake of generation, storage, decarbonised heat and flexibility.

5.1.2 Supported by and optimised through smart cloud based aggregation and optimisation dispatch platform, responding to market signals, from local and national network operators.

5.2 Wider projects inclusive of ERDF funded and proposed schemes will test and design early iterations of domestic and commercial services/value sharing propositions. New revenue streams developed as a result will support deployment of the projects otherwise deemed to be non-viable.

6.0 Recommendations

6.1 The Green City Partnership is asked to:

- Note and comment on the contents of the paper and presentation.