

Report to: Cabinet Meeting - 6 December 2022

Portfolio Holder: Councillor David Lloyd, Strategy Performance & Finance

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Report Summary	
Type of Report	Open, Key Decision
Report Title	Local Area Energy Planning
Purpose of Report	To inform Members of plans for Local Area Energy Planning (LAEP) across the East Midlands (East Midlands Mayoral Combined Authority geographical area) and ask for a member decision on investing in a Local Area Energy Plan for Newark and Sherwood, as part of the wider work of the region.
Recommendations	That Cabinet endorse progress with the LAEP to enable a focus on district wide carbon emissions across Nottinghamshire and Derbyshire.
Alternative Options Considered	The alternative option is to do nothing. In this situation the work will continue in partnership across the East Midlands without NSDC input, and NSDC will need to gather this information independently, as required, likely for a greater cost.
Reason for Recommendations	To help the Council deliver against its Carbon reduction target of net zero (direct emissions) by 2035, and to gather information to help the district determine potential pathways, technologies and scenarios, to achieving carbon net zero across the district. The Council have already made the commitment to reducing its own emissions. This is an opportunity to focus on the whole district and work towards a carbon net zero Newark and Sherwood.

1.0 Background

- 1.1 One of the biggest sources of carbon, at a district level, is energy. This includes the use of energy (gas and electric) in homes and energy (fuel) in vehicles. Therefore, reducing and/or decarbonising Newark & Sherwood's energy is an important step in reducing the carbon footprint of the district.
- 1.2 The work of the Climate Emergency Strategy, and associated Greening Newark & Sherwood Action Plan, lays out how the Council will reduce its carbon footprint. It outlines what it will do within the district within its direct control. For example, installing

solar panels on Council buildings, planting trees on Council land and working towards electrifying the Council's fleet.

- 1.3 Whereas the work of the Local Area Energy Plan (LAEP) is about identifying potential pathways, considering a range of technologies and scenarios, to achieving carbon net zero across the district in terms of energy consumption. A LAEP is a place-based data set outlining the district's current carbon energy usage, and a comprehensive plan outlining how to decarbonise the district's energy.
- 1.4 This LAEP forms a key focus point of the East Midlands Devolution Deal which features net zero ambitions at the forefront. This deal was supported at Cabinet and Full Council in October 2022. The ambition is that an East Midlands wide plan can be used as evidence to attract additional investment, funding, and powers so more decisions can be made on carbon reduction locally.

2.0 The Proposal

- 2.1 We want to do this in partnership with the other Local Authorities within the future 'East Midlands Mayoral Combined Authority area' because there are economies of scale in terms of procurement, and we can identify opportunities for connected/joined up services or provision. This has the potential to unlock the cost savings associated with joint/larger procurement activities. Analysis completed by PwC for InnovateUK found that taking a place-based approach to decarbonisation could reduce the investment required by as much as 70%.¹

2.2 What does a LAEP look like?

The Local Area Energy Plan is a pathway broken down into components that show the district's route to achieve net zero. It will list the interventions and where they will have the most impact, for example, heating system installations in this area and public electric vehicle chargers in this town.

The LAEP will focus on three areas;

- Retrofitting of existing housing to improve energy efficiency of homes (private and Council owned homes)
- Switching to low carbon road transport (private and Council owned)
- Deployment of renewable generation (on Council owned land/properties)

2.2.1 Retrofit Housing

The plan will identify which homes in the district are currently in bands D to G. Then identify which of these are most suitable for fabric retrofit improvements and/or low carbon heating systems. The plan will also look to prioritise areas for early action based on suitability of the technology, cost effectiveness and the potential impact of these works in terms of tackling fuel poverty. Based on an initial assessment around 90% of the East Midlands housing stock has the potential to reach the regional target of EPC band C.

This will allow us to decarbonise energy in the district through the implementation of the 'right technology' in the right place, certain retrofit solutions may not be suitable for the entire district, this could be air source and ground source heat pumps for NSDC

¹ Page 6, Accelerating Net Zero Delivery: Unlocking the benefits of climate action in UK city-regions, March 2022, Innovate UK (www.ukri.org/wp-content/uploads/2022/03/IUK-090322-AcceleratingNetZeroDelivery-UnlockingBenefitsClimateActionUKCityRegions.pdf)

but may be more cost effective for other Councils such as Nottingham City to extend the District Heat Network already in place.

2.2.2 Electrification of Transport

Whilst households make individual decisions on the type of car or cars they own and operate we, as a local authority, can help to unlock electrification of private vehicles by enabling the installation of public charge points. This LAEP will assist with scoping out potential locations and areas of land where electric vehicle charging could possibly take place and consider the intricacies involved in on street charging for households without private off-street parking.

As a local authority, we can have a direct influence on our carbon emissions and operational costs as well as help to improve local air quality through switching Council owned vehicle fleets to low carbon alternatives. Whilst it is highly likely that cars and vans will follow the route of electrification to decarbonise which we have already begun exploring through the purchase of two electric vehicles, the technology options for medium and heavy-duty vehicles are less clear and something which currently hasn't been explored directly by Newark and Sherwood.

In the longer term, both electrification and hydrogen are options for reaching net zero. These technologies, for medium and heavy-duty vehicles, are still in the research, development and demonstration stages. For Newark and Sherwood due to the rurality and vast size of the district using and purchasing electric refuse vehicles may not be a feasible option, potential options for larger vehicles will be explored as part of the LAEP.

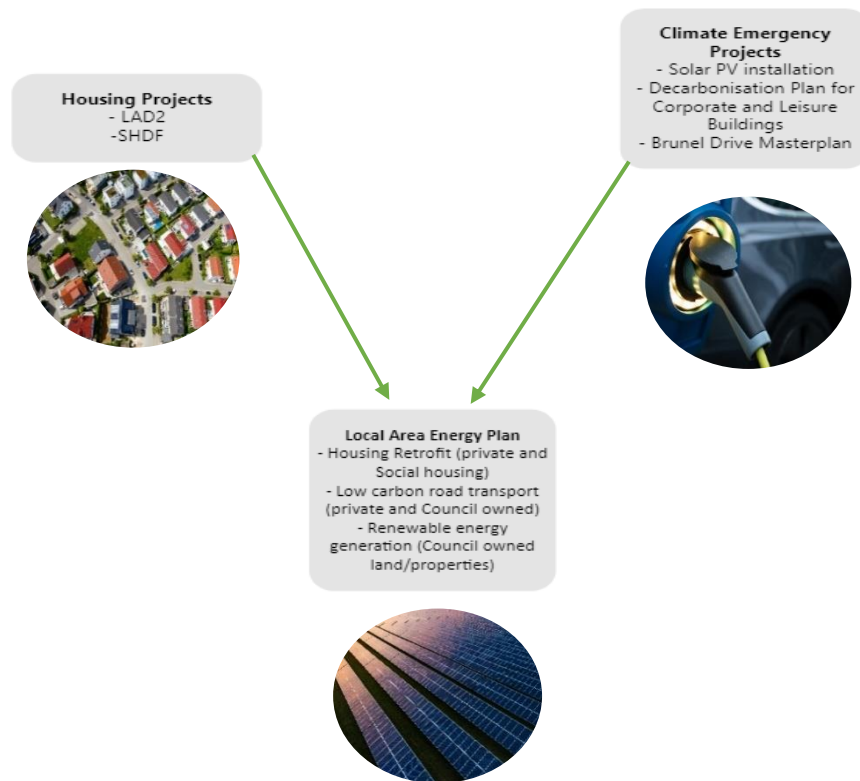
LAEPs can be used to understand the impact on energy demands resulting from vehicle decarbonisation and plan the provision of associated infrastructure optimally, considering vehicle charging alongside other aspects that will also impact the energy system (particularly heat decarbonisation). LAEPs can be used to highlight and prioritise areas for public charging points and hubs in addition to home/workplace charging infrastructure.

2.2.3 Renewable Energy Generation

Identification of local opportunities for renewable generation such as solar panels and wind turbines. The LAEP will also consider where we, as a local authority, can provide more direct intervention, for example, installing solar panels or charging points on Council land. The LAEP will also consider where there are economies of scale or shared infrastructure feasible for the planned developments, such as the combined electrification of local authority fleets.

2.3 **How does the LAEP link with our pre-existing work?**

The implementation of a LAEP will compliment our existing ongoing projects and work streams, this included housing specific projects which focus on energy efficiency improvements in the private and Council owned sectors. This is also aligned with our Climate Emergency Projects and our overall direction of travel in relation to becoming net carbon neutral. This also will give us the opportunity to consider each of the included aspects at a district level in combination with our direct emissions.



2.4 Associated Benefits

Undertaking the works outlined in the LAEP would realise considerable associated benefits, both socio-economic and health benefits, as undertaking this carbon reduction work across the East Midlands would likely lead to:

- The creation of new 'green' jobs as a result of low carbon investments in local areas,
- Benefits to health and comfort from warmer homes and improved air quality,
- A reduction in fuel poverty through lower cost warmth, and
- A lower delivery cost due to economies of scale with mass procurement and the opportunity for more grant funding.

The opportunities to obtain further grant funding will be extremely beneficial in meeting our individual net zero targets and making strides in carbon reduction at a district level. The LAEP will also enable the creation of an interconnected work stream between housing, energy generation and electrification of vehicles internally and at a district level.

2.5 Newark & Sherwood's LAEP

A LAEP is a complex document, so rather than create a single document covering all 17 Local Authorities within the East Midlands Mayoral Combined Authority area, there will be 8 LAEP's completed. Grouping geographical neighbours into 8 groups also allows economies of scale in terms of data analysis and stakeholder engagement.

Being able to adopt a collaborative approach to each of the focus areas has the potential to lead to joint procurement advantages, these are something which is already taking place in relation to current housing retrofit funding pots made available by national government.

Locally we are making progress in understanding what works best for Local Authorities in relation to carbon reduction, this LAEP enables us to do this on a greater scale, but from a position where we are more intelligent about what works as a result of progress to date.

2.6 Delivery of the LAEP

The aim is to deliver the LAEP over the next two years in partnership with other East Midlands Mayoral Combined Authority areas. The LAEP will be developed by specialist consultants and project managed by an advisor (over the two years) funded by the East Midlands Mayoral Combined Authority areas. This individual would coordinate and oversee delivery of the plan.

The aim is that in 2 years, once we have the plans, we will look to, at a combined authority level, pull in central government funding as part of Devolution to fund the rollout of these works. The aim is to go to the market in the early new year to undertake the LAEP work and procure a contractor by the start of the new financial year. Once this is in place work to produce the LAEP will begin. This is expected to be completed by autumn 2024, and at this point the outcome and suggested route to net zero for the district will be presented to Members.

2.7 Governance

In terms of governance, the development of the LAEP will be overseen by the 'D2N2 Low Carbon Board' which is managed by the D2N2 LEP attended by a blend of Local Authority, Business and Academic. This will be fed by information from the 'Environmental Strategy Working Group' (which covers the Nottinghamshire Local Authorities) and the 'D2 Energy Group' (which covers the Derbyshire Local Authorities). NSDC is already a member of the Environmental Strategy Working Group, both the strategic group and its supporting operational group. The progress on the LAEP will be reported to NSDC members as part of the Climate Emergency annual update report.

The Council have already made the commitment to reducing its own direct emissions. This is now an opportunity to focus on the district as a whole and offers the Council the opportunity to act as a catalyst for change in supporting the shift to a carbon net zero district.

3.0 Implications

In writing this report and in putting forward recommendations' officers have considered the following implications: Data Protection, Digital and Cyber Security, Equality and Diversity, Financial, Human Resources, Human Rights, Legal, Safeguarding, Sustainability, and Crime and Disorder and where appropriate they have made reference to these implications and added suitable expert comment where appropriate.

3.1 Financial Implications (FIN22-23/88)

There would be a one-off spend of £75,000 to commission the creation of the LAEP. This spend would be £37,500 in 23/24 and £37,500 in 24/25.

There is the opportunity for the funding to be covered by a grant, and funding streams are currently being assessed, should this be successful then this expenditure may be part or fully refunded by a grant.

There would also be a further commitment of £7,000 for the LAEP advisor for a 2-year contract. This advisor will be employed by Nottinghamshire City and funded by all the authorities involved in the LAEP. This will be for the co-ordination of the data collection and development of the LAEP, with the role expected to start from April 2023.

	2023/24	2024/25
LAEP creation	£37,500	£37,500
Contribution to co-coordinator role	£3,500	£3,500
Total	£41,000	£41,000

The above £82,000 will need to be added to the revenue budget as a growth item for the two years as shown.

Background Papers and Published Documents

None