



Report to Policy Committee

Author/Lead Officer of Report: Kathryn Warrington, Sustainability Programme Officer

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Report of: Wil Stewart, Director of Investment, Climate Change and Planning

Report to: Transport, Regeneration and Climate Policy Committee

Date of Decision: 13th March 2024

Subject: Energy Generation and Storage Decarbonisation Routemap

Has an Equality Impact Assessment (EIA) been undertaken?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
If YES, what EIA reference number has it been given? 2480				
Has appropriate consultation taken place?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Has a Climate Impact Assessment (CIA) been undertaken?	Yes	<input checked="" type="checkbox"/>	No	<input type="checkbox"/>
Does the report contain confidential or exempt information?	Yes	<input type="checkbox"/>	No	<input checked="" type="checkbox"/>
If YES, give details as to whether the exemption applies to the full report / part of the report and/or appendices and complete below:-				
<i>"The (report/appendix) is not for publication because it contains exempt information under Paragraph (insert relevant paragraph number) of Schedule 12A of the Local Government Act 1972 (as amended)."</i>				

Purpose of report:

The purpose of this report is to brief the Committee on and seek approval of the Energy Generation and Storage Decarbonisation Routemap.

Recommendations:

That the Transport, Regeneration, and Climate Policy Committee approve the Energy Generation and Storage Decarbonisation Routemap at appendix 1 to this report.

Background Papers:

- [Pathway to Decarbonisation](#)
- [10 Point Plan for Climate Action](#)
- [Our Council and The Way we Travel Decarbonisation Routemap](#)
- [Annual Climate Report 2022/23](#)

Lead Officer to complete:-		
1	I have consulted the relevant departments in respect of any relevant implications indicated on the Statutory and Council Policy Checklist, and comments have been incorporated / additional forms completed / EIA completed, where required.	Finance: <i>Adrian Hart</i>
		Legal: <i>Louise Bate</i>
		Equalities & Consultation: <i>Ed Sexton</i>
		Climate: <i>Kathryn Warrington</i>
<i>Legal, financial/commercial and equalities implications must be included within the report and the name of the officer consulted must be included above.</i>		
2	SLB member who approved submission:	<i>Kate Martin</i>
3	Committee Chair consulted:	<i>Cllr Ben Miskell</i>
4	I confirm that all necessary approval has been obtained in respect of the implications indicated on the Statutory and Council Policy Checklist and that the report has been approved for submission to the Committee by the SLB member indicated at 2. In addition, any additional forms have been completed and signed off as required at 1.	
	Lead Officer Name: <i>Kathryn Warrington</i>	Job Title: <i>Sustainability Programme Officer</i>
	Date: <i>1st February 2024</i>	

1. PROPOSAL

1.1 The 10 Point Plan for Climate Action, agreed by the Cooperative Executive in March 2022, committed the Council to developing routemaps to decarbonisation across seven areas (Our Council, The Way We Travel; Our Homes; Energy generation and storage; The Way We Use Our Land; Our Business and Economy and What We Buy, Eat and Throw Away). The objectives of the routemaps are to:

- ensure the strategic thinking and planning needed to progress towards our net zero ambitions.
- define our vision and objectives for achieving net zero by 2030.
- bring together the actions and activities to be carried out by the Council during the period of the Routemap (2024-26 for the energy generation and storage chapter) to increase transparency and to enable monitoring and accountability.
- introduce actions that key partners wish to commit to part of their contribution to our transition to a net zero city.

1.2 The Energy Generation and Storage routemap is the third to be developed. The first two decarbonisation routemaps, Our Council and The Way we Travel, were approved by this Committee in July 2023. The Our Homes routemap is being incorporated into the emerging Housing Strategy which is scheduled to go to Housing Policy Committee in Summer 2024. The Way We Use Our Land, Our Business and Economy and What We Buy Eat and Throw Away are scheduled to be developed throughout 2024/25. Actions will continue to be added to the routemaps over the coming years.

1.3 Our first annual report on the progress made during 2022/23 was published last year and was provided for information and consideration of this Committee in December 2023.

1.4 Summary of the routemap

1.4.1 The Energy, Generation and Storage Routemap provides an overarching action plan of the immediate work over the next 2-year period for work required to commence the transition to smart, decentralised and decarbonised energy system that has the capacity to meet changing energy demands in the future. These actions are formed from the evidence base gathered through the Pathways to Decarbonisation study and are essentially split over 3 key objectives.

- **A** - Heat supplied to buildings is decarbonised.
- **B** - Small-scale renewable energy generation is increased.
- **C** - Large-scale renewable energy generation is increased.

1.4.2 The main action that will take place during 2024/25 is the commissioning and development of a Local Area Energy Plan (LAEP). £300k was allocated during 2023/24 from the Project Feasibility Fund. A LAEP is a data driven process to undertake spatial planning of local energy systems. The process will help to identify the lowest cost route to place-based energy decarbonisation from which business cases, funding and delivery plans can be developed and taken forward to implementation.

2. HOW DOES THIS DECISION CONTRIBUTE?

2.1 The Energy Generation and Storage routemap chapter provides an outline of the work which will be taking place over the next two years to work towards the decarbonisation of local energy generation and supply contributing to the decarbonisation of the council and city by 2030.

2.2 At the time of writing, the draft Council Plan is currently out to public consultation and if adopted will run until 2028. Respect for the planet and our ambitions to achieve net zero by 2030 are key considerations of the Council Plan and are woven throughout the plan with a commitment to work towards creating a successful, accessible city which prospers while protecting the environment for future generations. In particular, this routemap directly contributes to the fifth Council Plan strategic outcome, *A city on the move – growing, connected and sustainable* and delivers of the priority to become a leading city in the journey to a net zero, climate resilient future, creating new opportunities.

3. HAS THERE BEEN ANY CONSULTATION?

3.1 There has been some initial, informal engagement with some community, public and private sector stakeholders on some of the actions included in the routemap that are already underway rather than on the routemap document itself.

3.2 As the decarbonisation of the city will require every individual and organisation in the city to play their part, an ongoing process of consultation, engagement and partnership working will be required. Specific consultation and engagement will take place at the individual programme and project level. The development of the Local Area Energy Plan will include extensive engagement with public, private and community stakeholders.

4. RISK ANALYSIS AND IMPLICATIONS OF THE DECISION

4.1 Equality Implications

- 4.1.1 It is widely recognised that climate change will have a more negative effect on people with protected characteristics, particularly people living in poverty, people with some long-term health conditions and disabilities and people from ethnic minorities, who are disproportionately likely to both experience disability and poverty. Young people are also acutely impacted, both due to climate anxiety now, and by being more impacted by climate change throughout their lifetimes.
- 4.1.2 The transition to a net zero society is happening independently of any decision of Sheffield City Council, but the local authority has an ambition to reach net zero by 2030, well ahead of the national target, and this creates additional challenges. The Council has a key role to play in ensuring that the transition happens in a way which ensures both climate justice and social justice.
- 4.1.3 We are committed to ensuring that our action on the climate emergency is grounded in our values of promoting equality, diversity and inclusion for all. A full Equality Impact Assessment has been undertaken alongside the creation of the 10 Point Plan for Climate Action in 2022 as well as an initial assessment for this routemap. The EIA of the 10 Point Plan recommends that while many of the commitments will positively promote equality for diverse groups, further engagement and consultation is required on the specific commitments made and careful consideration will be required as individual actions and delivery plans are developed. The same is true for the decarbonisation routemaps. As decisions are made on the specific commitments, full Equality Impact Assessments will be prepared where appropriate for individual actions. We will also ensure that we monitor the overall equality impact of this routemap as it is delivered to ensure that it has a positive impact on everyone in the city and particularly on people and communities who share protected characteristics.

4.2 Financial and commercial implications

- 4.2.1 Tackling the climate emergency and responding to the national and global changes that are facing the city will require multi-billion-pound investment over many years. It was recognised in the 10 Point Plan for Climate Action published in 2022 that it will not be possible to find the necessary finance within the local authority's, or the city's, existing resources. One of the ten points in the 10 Point Plan was specifically focused on the exploration of external funding streams along with innovative financing options and this work is ongoing.
- 4.2.2 The actions within this routemap chapter are either already funded or will be the subject of subsequent business cases, funding and financing requests and committee reports. Whilst sourcing the up-front investment is challenging, the decarbonisation of local energy can provide long-term cost savings and income generation opportunities.

4.2.3 The true financial implications of the decarbonisation of local energy are difficult to quantify at this time. The Pathways to Decarbonisation study carried out by ARUP indicated that the cost of energy decarbonisation measures they recommended would cost in the region of £1,572bn. It is likely those estimated costs will have increased during that time. The routemap makes clear that this investment will need to be a mix of public, private and community investment. The actions detailed in this routemap will help with identifying specific programme and project costs and identify the best financing route.

4.3 Legal implications

4.3.1 There are no legal implications arising directly from this report. There may be legal implications arising from the implementation of proposals within the decarbonisation routemap and these proposals and their legal implications will be the subject of further reports where required.

4.4 Climate implications

4.4.1 The decarbonisation routemaps are delivery documents and implementation plans intended to drive action to address climate change in Sheffield. If implemented in full, this routemap has the potential to create large reductions in emissions over the coming years. An initial Climate Impact Assessment (CIA) has been undertaken on the routemap and full CIAs will be carried out on specific projects as they come forward.

4.4 Other implications

4.4.1 **Human resources**

All current actions within the routemap are being resourced by existing resource and some actions have budget allocations in place for additional Programme Management support. However, it is acknowledged that this area of work is under resourced, and effort will be made to increase resource to deliver this work.

4.4.2 **Public health**

4.4.2.1 The climate emergency is recognised by the Director of Public Health as a public health emergency. Climate change is the greatest global health threat facing the world in the 21st century, but it is also the greatest opportunity to redefine the social and environmental determinants of health. It threatens to undermine the last 50 years of gains in public health, intensifying heatwaves and extreme weather events, worsening flood and drought, altering the spread of infectious diseases, and exacerbating poverty and mental ill-health. However –

and crucially - the response to climate change brings immense benefits for human health in Sheffield, with the potential for cleaner air, healthier diets, and a more liveable city. The Council's Decarbonisation Routemaps will support an inclusive and just transition to a low carbon city.

- 4.4.2.2 The Energy Generation and Storage routemap will benefit the public's health for example by improving air quality by reducing the amount of individual gas boilers and moving to lower carbon heating including decentralised heat networks and heat pumps.

5. ALTERNATIVE OPTIONS CONSIDERED

- 5.1 Creating a single plan covering all areas requiring decarbonisation was considered, but to enable officers to continue to deliver projects at the same time this approach was rejected. Creating a plan which takes us all the way to 2030 was considered but given the changing technology and current shortfall in funding of several billion pounds, it was considered that creating a live and agile document that could be easily updated and added to was preferable.

6. REASONS FOR RECOMMENDATIONS

- 6.1 The recommendation to approve the Energy Generation and Storage routemap is the preferred option because it will allow progress to be made on key activity to progress the decarbonisation of energy generation and storage in the city.

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