

DECISION TAKER: Councillor Kelsie Learney – Cabinet Member for Climate Emergency Decision Day

REPORT TITLE: CARBON NEUTRALITY ROADMAP AND REPORT OF THE WINCHESTER DISTRICT CLIMATE ASSEMBLY 2022

16 JANUARY 2023

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WARD(S): ALL

PURPOSE

This report provides the background and supporting information to support the decision to adopt the Roadmap to Carbon Neutrality for Winchester District by 2030 (referred to as Carbon Neutrality Roadmap) that has been developed by consultants WSP. The final Carbon Neutrality Roadmap is an extensive and comprehensive piece of work that advises the council, its partners and stakeholders on the nature and scale of interventions that would be required to help the district reach carbon neutrality. It shows the need to go greener faster and to priorities high impact actions, scale up actions and increase the pace of delivery. The Carbon Neutrality Roadmap is provided in Appendix 1

In addition, the report of the Winchester District Climate Assembly 2022 has been presented to the council by WinACC and Winchester Together for our Planet. The Assembly seeks to have the report findings and recommendation taken into account by the council, businesses and residents when planning the action needed to become a carbon neutral district. Therefore is asking the council to accept the report.

The Assembly saw around 70 people come together on 22nd October 2022 to debate “*what changes would they support to enable a fair transition to a cleaner, greener, more affordable District?*” Topics discussed included energy, transport, reversing our throwaway culture and food. The Assembly concluded with six prioritised calls for action:

1. Increasing local supply of renewable energy
2. Enabling active travel: less vehicle traffic
3. Encouraging a circular economy

4. Eating local seasonal food and cutting food waste
5. Greener homes and buildings
6. Enabling active travel: better buses

RECOMMENDATIONS:

1. That the Carbon Neutrality Roadmap (October 2022), used as the evidence base from which to develop future carbon reduction strategy, be adopted.
2. That the Winchester District Climate Assembly 2022 report of WinACC/Winchester Together for our Planet, be received and noted.

IMPLICATIONS:

1 COUNCIL PLAN OUTCOME

- 1.1 The Carbon Neutrality Roadmap has been produced in direct response to the council's focus to be Greener Faster and to help achieve the carbon neutrality targets. It also support the vision for a climate resilient district and in particular:
- a) Changed lifestyles with local people, organisations and businesses enabled to share their ideas and work together to create a carbon neutral future.
 - b) The air is clean to breathe.
 - c) The natural and built environment is protected, maintained, sustained and enhanced.
 - d) People can move around the place easily and prefer to travel on foot, by bike and using public transport.
 - e) The district is broadly self-sufficient in renewable energy.
- 1.2 The Roadmap also support Living well and Vibrant Local Economy because of the opportunities it presents to increase active travel, local community engagement and business investment in, and costs savings from, energy efficiency and generation and sustainable transport, both public and private. The Roadmap links closely with the implementation of the Green Economic Development Strategy.

2 FINANCIAL IMPLICATIONS

- 2.1 The council has invested significantly, both in terms of finance and staff resources, to become a carbon neutral authority and district. It has also attracted grant funding from government and external agencies to help invest in carbon reduction measures. It was known that in order to make the transformational change needed to reach carbon neutrality, large scale investment would be needed and not just by the council. The Carbon Neutrality Roadmap has helped to demonstrate the scale of investment and phasing that is required.
- 2.2 For context a 2020 report by government advisory group, the Committee on Climate Change found:
- “that effectively eliminating all emissions by 2050 would require investment of 1 to 2 per cent of GDP per year – with the switch to renewable energy and better insulation for buildings costing between £20 and £40 billion a year.”
- 2.3 The Roadmap (p43 to 46) estimates the capital cost for the interventions for 2030 targets to be in the order of £350m-£650m in total over the next eight

years and proposes the potential owners of the interventions. A funding strategy is needed to consider who the delivery agency is and therefore has responsibility for making investments, the availability of finance and routes to grants and who can access these.

- 2.4 Whilst a considerable capital investment from stakeholders is required, some interventions such as renewable energy generation also present an opportunity to make ongoing income and/or savings. Furthermore, some actions that require a change in behaviour or adopting new ways of working may be at little or no cost.

3 LEGAL AND PROCUREMENT IMPLICATIONS

- 3.1 There are no direct legal and procurement implications arising from adoption of the Roadmap. The interventions identified within the Carbon Neutrality Roadmap will be subject to legal and procurement review at their time of implementation when necessary, and in particular where they require consideration of the council's Financial Procedure Rules, Contract Procedure Rules and Public Contracts Regulations 2015 (PCR2015).

4 CONSULTATION AND COMMUNICATION

- 4.1 Oversight of the creation of the Carbon Neutrality Roadmap was provided by the council (internal) Carbon Board which comprises senior officers and the Leader of the Council, Cabinet member for Climate Emergency and Cabinet Member for Community and Housing.
- 4.2 To develop the Roadmap the consultants WSP held a series of stakeholder workshops. This included a workshop with Winchester Action on Climate Change (WinACC), in-depth interviews with Hampshire County Council officers and Wessex Green Hub and a session with a wide range of stakeholders including Cycle Winchester, Friends of the Earth, Sustrans, Hampshire & IoW Wildlife Trust, BID and many more. A questionnaire was also used to engage with officers across the council to build knowledge of specific initiatives already happening or planned. Feedback from stakeholders is summarised in Chapter 2 (Table 2.1) of the report.
- 4.3 The Health & Environment Policy also considered the report at its meeting on 6th December 2022 (HEP030). Comments made include the need to do more and quickly and to work in partnership with residents, business and organisations to achieve the outcomes identified.
- 4.4 The committee supported the recommendations and, in recognition of the need to be greener faster to meet carbon neutrality targets by 2030, and as a matter of urgency recommended that:
 - a) That the Policy Committee are asked to comment upon the Carbon Neutrality Roadmap.
 - b) Prioritise and seek funding for highest impact actions within our scope.

- c) Identify ways to use developer (Community Infrastructure Levy) and other funding to drive or unlock change.
- d) Put carbon at heart of relationship with key partners to accelerate delivery.
- e) Scale up actions and increase pace of delivery.

5 ENVIRONMENTAL CONSIDERATIONS

- 5.1 The Carbon Neutrality Roadmap provides advice to the council and the district's stakeholders, residents and businesses on the interventions needed to achieve a carbon neutral district. This includes matters of energy reduction and generation; habitat creation for carbon sequestration and climate mitigation; active travel and sustainable transport impacting air quality.

6 PUBLIC SECTOR EQUALITY DUTY

- 6.1 The Public Sector Equality Duty (PSED), at section 149 of the Equality Act 2010, requires public bodies, including the council to have due regard to the aims of the general equality duty when making decisions and when setting policies.
- 6.2 Having due regard to the need to advance equality of opportunity involves considering the need to remove or minimise disadvantages suffered by people due to their protected characteristics.
- 6.3 The interventions identified within the Roadmap may have impacts which will need to be assessed at implementation stage, for example electric vehicle charging points and changes to public transport, changes to heating systems in people's homes, and changes to recycling. The action owners will be responsible for completing the necessary assessments.

7 RISK MANAGEMENT

- 7.1 The development of the Carbon Neutrality Roadmap is in line with the council's current risk appetite which is moderate as this does means the council remains open to innovative ways of working.

| Risk | Mitigation | Opportunities |
|---|--|---|
| Financial Exposure Insufficient finance and investment is secured to deliver the required intervention External investment and funding cannot be | A funding strategy is to be created that will consider who the delivery agency is and therefore has responsibility for making investments, the availability of finance and | Supporting innovation in the deployment of carbon reduction/elimination measures can attract business investment and research & development |

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| secured to enable implementation of the action plan. | <p>routes to grants and who can access these.</p> <p>Development of strong partnerships and collaborations for projects supported by robustly developed business cases to stand the best chance of attracting external funding and investment</p> | <p>grants from government.</p> <p>Some interventions, such as renewable energy generation, present opportunities to make ongoing income and/or savings.</p> |
| <p>Exposure to challenge</p> <p>The council is challenged over how it will achieve the carbon neutrality targets</p> | <p>The Roadmap and the updateable tool to review and report progress provides the details on how the target can be met.</p> | |
| <p>Innovation</p> <p>New technologies and innovation in carbon reduction/elimination do not come forward in the required timeframe or cost.</p> <p>New technology / novel approaches create delay in implementation due to their complexity, lack of market testing, low confidence and unwillingness to adopt.</p> | <p>A balanced approach will be adopted to the implementation of known and trusted versus new and untested technologies.</p> <p>A pilot, test and learn approach can be adopted for appropriate projects before investment at scale.</p> | <p>New technologies may also create an acceleration to the achievement of carbon emissions reduction / elimination.</p> <p>Deployment of new technology may create job opportunities, business investment and research collaboration. These activities and outcomes support the council Green Economic Development Strategy objectives.</p> |
| <p>Reputation</p> <p>See exposure to challenge</p> | | |
| <p>Achievement of outcome</p> | <p>The Roadmap tool will be</p> | <p>Innovative ways of</p> |

| | | |
|---|---|--|
| <p>The interventions in the Road are not implemented and the carbon neutrality target is not achieved.</p> | <p>used for scenario testing and recording of progress. These regular reviews enable prioritisation of actions, so that different levels of effort can be directed at those outcomes that most need addressing.</p> <p>The funding strategy will setting out to secure investment and grant funding will identify how and when intervention can be implemented.</p> | <p>deploying carbon reduction/elimination measures can be shared so that other can adopt these approaches</p> |
| <p><u>Property</u></p> <p>Investment in property energy efficiency / generation installations fail to achieve the planned savings and carbon reductions.</p> | <p>As investments are identified, the business case will need to quantify the expected carbon impact so that monitoring can improve future decision making.</p> | <p>The council may make energy savings from reduced operational costs and even profit from renewable energy schemes linked to buildings.</p> |
| <p>Community Support</p> <p>Stakeholders do not participate in the delivery of interventions. Targets for other organisations are not aligned to ours.</p> | <p>Numerous stakeholders and local groups are already engaged in carbon reduction / climate emergency activities across the district. Continuing engagement with these individuals and groups will mitigate against lack of support.</p> | <p>Further developed approaches to engagement will ensure that a comprehensive cross section of stakeholders is engaged bringing forward new and different voices and opinions to further facilitate action.</p> |
| <p>Project capacity</p> <p>Lack of council staff resources reduces capacity to deliver the projects.</p> <p>Lack of intervention owners and delivery</p> | <p>The council has committed some staff resources across the organisation to the implement of the Carbon Neutrality Action Plan.</p> | |

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| partner resources delays or prevents delivery of projects. | Working closely with partners and engaging them in the Roadmap delivery will enable warning of issues regarding ability to deliver. | |
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8 OTHER KEY ISSUES

8.1 None

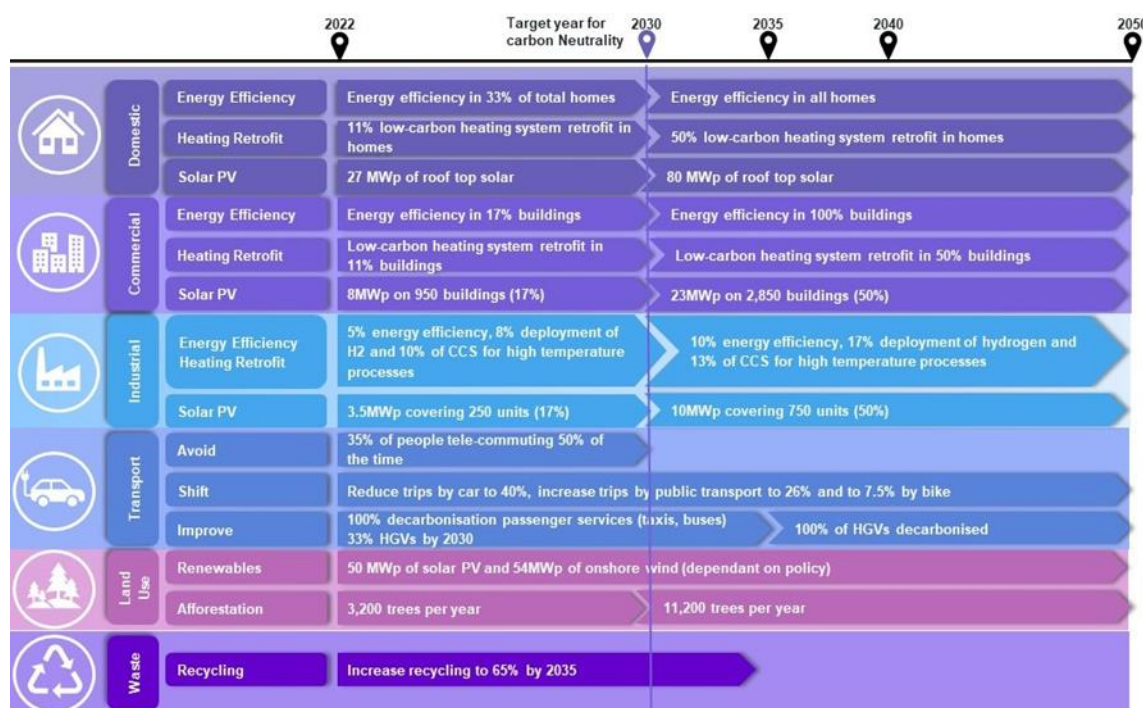
9 SUPPORTING INFORMATION:

- 9.1 The Carbon Neutrality Roadmap sets out the scale of the challenge for the district on meeting the 2030 target for carbon neutrality. Many of the interventions identified are underway, but not at the scale required. It was produced for the council by consultants WSP.
- 9.2 This Roadmap is an important stage in providing the guidance needed to target everyone's efforts to the most effective carbon reduction strategies to help meet the carbon neutrality target for the district. Vital to its success will be the contribution made by not only the council but also the district residents, businesses and institutions.
- 9.3 To develop the Roadmap WSP
- a) Held a series of stakeholder workshops. This included a workshop with Winchester Action on Climate Change (WinACC), in-depth interviews with Hampshire County Council officers and Wessex Green Hub and a session with a wide range of stakeholders including Cycle Winchester, Friends of the Earth, Sustrans, Hampshire & IoW Wildlife Trust, BID and many more. A questionnaire was also used to engage with officers across the council to build knowledge of specific initiatives already happening or planned. Feedback from stakeholders is summarised in Chapter 2 (Table 2.1) of the report.
 - b) Evaluated key council policies including the Carbon Neutrality Action Plan (CNAP), the Green Economic Development Strategy (GEDS), the Council Plan 2020-25 and the emerging Local Plan, as well as national strategies and policies and those of HCC. A summary of policies evaluated can be found in Appendix E of the Roadmap.
 - c) Identified total emissions of 634 kt CO₂e as the baseline for the district in 2019. This is in line with the emission 603 ktCO₂ (excluding motorways) reported in the 2021 CNAP review.

- d) Modelled the potential carbon reduction from the projects in the CNAP and concluded these would be insufficient on their own to achieve district carbon neutrality by 2030.
- e) Identified 16 interventions and modelled and quantified their carbon reduction impact for 2030. The Roadmap suggests that these interventions could deliver a cumulative reduction of 1,116 kt CO₂e by 2030. The detail behind this is outlined in Figure 6.3 (P42) of the Roadmap.
- f) Estimated the cost for each intervention and that these large scale projects are estimated to require capital investment of between £600m and £100mil

9.4 Key Findings

9.5 The 16 interventions modelled in the Roadmap are detailed in Chapter 6 and is summarised in Figure 6.3 (p42), reproduced below.



9.6 Of these 16 intervention WSP advise that three have the greatest potential to reduce emissions of the 1,116 kt CO₂e identified:

| Intervention | Quantum | Carbon reduction cumulative by 2030 | Share of cumulative reduction |
|---|--|-------------------------------------|-------------------------------|
| Generating 50 MW of utility scale solar PV | This would generate the average energy demand of 3,100 UK households | 147 kt CO ₂ e | 13% |
| Electric vehicle (EV) charging to | Infrastructure sufficient to support 11,400 EVs (16% of all | 600 kt CO ₂ e | 53% |

| | | | |
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| decarbonise private cars | vehicles). | | |
| Renewable heating measures in homes | Renewable heating and hot water systems in 5,940 homes (33% of domestic dwellings). | 68 kt CO2e | 6% |
| Totals | | 812 kt CO2e | 73% |

9.7 The Roadmap makes four recommendations on how the council sequester carbon through nature based approaches. These are contained in section 6.11: Carbon in Habitats Assessment. The Roadmap estimates that an additional 558 kt CO2 will be removed through carbon sequestration by 2030, approximately 100 kt CO2/yr. The four actions recommended are:

- a) Review of land management strategy
- b) Agricultural land management strategy
- c) Carbon sequestration through soils; and
- d) Green Infrastructure such as verge management.

9.8 Conclusions

9.9 This Roadmap is an important stage in providing the guidance needed to focus everyone's efforts to the most effective carbon reduction strategies to help meet the carbon neutrality target for the district. Vital to its success will be the contribution made by not only the council but also the district residents, businesses and institutions. The reports key messages are:

- a) Net zero strategies should sit within a broader policy framework that connects with issues such as wellbeing, inequality, and biodiversity.
- b) Communication is a key issue and working with local partners and citizens is vital in achieving carbon neutrality and a just transition
- c) Winchester needs to be realistic and targeted in what it can achieve.

9.10 In response and to supporting going greener faster the council is already taking action including:

9.11 Housing

- a) Retro- fit ready offer made to tenants with over 800 tenants having responded and expressing interested in energy efficiency measures.
- b) Energy efficient heating systems – the council is applying for ECOflex 4 grant funding.
- c) Consultation with tenant on future of gas heating – results will be known end of January.

- d) Completed the Solar Resource map and will publish on the council website.
- e) Opted into Hampshire County Council Solar Together scheme to purchase PVs with 1,400 homes in the district registered.

9.12 Commercial

- a) As part of delivering the Green Economic Development Strategy the council has commenced work on its sustainable tourism strategy including a workshop with Attraction Partnership on sustainable measures and actions.
- b) The CIL call for projects opens in January and welcomes bid for community solar projects.
- c) The district's Rural Fund investment plan as prioritised net zero and climate mitigation for funding to projects for environment / green measures.
- d) Completed a roof top map analysis for solar and will share with partners and put on our website for all to access.
- e) An application to the Public Sector Decarbonisation Fund has been made to cover installation of Air Source Heat Pumps and Solar PV at Meadowside Leisure Centre.
- f) WCC and HCC are working with Solent Transport on the feasibility of a micro-consolidation site in Winchester. We are currently reviewing if there are any potential site locations across the city.

9.13 Transport

- a) Consolidation centre – the council is working together with HCC and Solent Transport on the feasibility of a micro-consolidation site in Winchester. We are currently reviewing if there are any potential site locations across the city.
- b) Mini-Holland – the council has made an application for funding to develop low traffic neighbourhoods and is awaiting the outcome of this.

9.14 Land Use

- a) A request to quote from consultants to undertake site identification and feasibility for district energy generation scheme(s) has been issued.

10 OTHER OPTIONS CONSIDERED AND REJECTED

- 10.1 Not to adopt the Roadmap. This is rejected as without the identification and quantification of the interventions required to become a carbon neutral district this will not be achieved.

BACKGROUND DOCUMENTS:-

Previous Cabinet/Committee Reports or Cabinet Member Decisions:-

[Carbon Roadmap and Actions \(HEP030\) 6 December 2022](#)

[Carbon Neutrality Annual Report and Action Plan 2021/22 \(HEP027\); 5 July, 2022](#)

Other Background Documents:-

[Carbon Neutrality Action Plan](#)

APPENDICES:

Appendix 1: A Carbon Neutrality Roadmap for the Winchester District by 2030

Appendix 2: The report of the Winchester District Climate Assembly 2022
(WinACC/Winchester Together for our Planet, October 2022)

Appendix 3: Implementation Process for Carbon Neutrality Roadmap