

CLIMATE, ENERGY AND ENVIRONMENT COMMITTEE

**MEETING TO BE HELD AT 4.00 PM ON TUESDAY, 19 OCTOBER 2021
IN SEMINAR ROOM, NEXUS BUILDING, (UNIVERSITY OF LEEDS)
DISCOVERY WAY, LEEDS LS2 3AA**

A G E N D A

- 1. APOLOGIES FOR ABSENCE**
- 2. DECLARATIONS OF DISPOSABLE PECUNIARY INTERESTS**
- 3. EXCLUSION OF THE PRESS AND PUBLIC**
- 4. MINUTES OF GREEN ECONOMY PANEL 25 FEBRUARY 2021**
(Pages 1 - 4)
- 5. GOVERNANCE ARRANGEMENTS**
(Pages 5 - 12)
- 6. MAYOR'S PLEDGES**
(Pages 13 - 16)
- 7. CLIMATE AND ENVIRONMENT PLAN**
(Pages 17 - 70)
- 8. COP 26**
(Pages 71 - 76)
- 9. WHITE ROSE FOREST PLAN**
(Pages 77 - 102)
- 10. FLOOD RISK MANAGEMENT UPDATE**
(Pages 103 - 106)
- 11. ENERGY ACCELERATOR END OF PROGRAMME REVIEW**

(Pages 107 - 112)

Signed:

A handwritten signature in black ink, consisting of the letters 'BSM' in a stylized, cursive font. A horizontal line is drawn underneath the signature, extending slightly to the right.

WYCA Managing Director



**MINUTES OF THE MEETING OF THE
GREEN ECONOMY PANEL
HELD ON THURSDAY, 25 FEBRUARY 2021 AS A REMOTE MEETING**

Present:

William Firth	European Metal Recycling (EMR) Ltd
Richard Goodfellow	Addleshaw Goddard
Natasha Luther-Jones	DLA Piper LLC
Leah Stuart	Civic Engineers
Professor Simon Pringle (Chair)	Project Rome
Councillor Andrew Cooper	Kirklees Council
Councillor Sarah Ferriby	Bradford Council
Councillor Scott Patient	Calderdale Council
Rosa Foster (Advisory Representative)	Environment Agency
Nevil Muncaster (Advisory Representative)	Yorkshire Water

In attendance:

Antonia Mattos	Element Energy
Katherine Orchard	Element Energy
Noel Collings	West Yorkshire Combined Authority
Alan Reiss	West Yorkshire Combined Authority
Mathew Page	West Yorkshire Combined Authority
Ian Smyth	West Yorkshire Combined Authority
Ambrose White	West Yorkshire Combined Authority
Janette Woodcock	West Yorkshire Combined Authority
Aaliyah Younis	West Yorkshire Combined Authority

18. Apologies for Absence

Apologies for absence was received from Councillor Neil Walshaw, Jim Cardwell, Dr Alice Owen and Ben Tongue.

19. Declarations of Disclosable Pecuniary Interests

There were no pecuniary interests declared by members at the meeting.

20. Exclusion of the Press and Public

There were no items on the Agenda requiring exclusion of the press and public.

21. Minutes of the Meeting of the Green Economy Panel held on 18 November 2020.

Resolved: That the minutes of the meeting of the Green Economy Panel held on 18 November 2020 be approved.

22. Chair's Update

Element Energy

The Chair welcomed external guests Katherine Orchard and Antonia Mattos from Element Energy, the independent consultants assisting with the work, who will set out the measures, policy considerations and actions required in West Yorkshire to reach net zero carbon by 2028 and said there would be a change in the running order of the meeting so that this presentation would be the first item on the Agenda.

LEP Board

Feedback to the Panel was given following the meeting of the LEP Board on 24 February 2021.

Head of Energy and Sustainability

Daniel Barrett will be joining West Yorkshire Combined Authority in April 2021. Daniel was formerly Energy Systems and Innovation lead at the Greater London Authority.

Energy Hub

Nadia Macpherson joined the team to manage the Energy Hub.

The Chair was keen to pause briefly to reflect on the decision to go ahead with the expansion of Leeds Bradford Airport and to also to reflect back to June 2020 when the LEP Board approached the Panel in order to obtain the consensus of the Panel in respect of the proposed plans for the expansion of the airport following which the views of the Panel were incorporated in a letter sent by the Chair to the LEP Board.

Following the decision to approve the expansion, the Chair felt that an explanation on how the decision was reached and the role of the Combined Authority in the Planning Process and the mechanics involved would be useful as he was keen to ensure transparency and invited Alan Reiss, Director of Policy, Strategy and Communications, West Yorkshire Combined Authority, to speak to the Panel and provide a factual narrative. The Chair invited members to add their views, as this was a deeply personal issue, which have been noted.

23. Carbon Emissions Reduction Pathways

The Panel considered a report to introduce a presentation given at the meeting by Element Energy, the independent consultants assisting with the work setting out the measures, policy considerations and actions that are required for West Yorkshire to reach net-zero carbon by 2038.

The Panel was asked to note the advice of the consultants and for them to advise the Combined Authority to approve the use of the findings of the CERP work in wider engagement.

The proposed next steps are to report to the Combined Authority on 9 March seeking approval to start wider engagement with stakeholders in March / April.

Resolved:

- (i) That the contents of the report be noted.
- (ii) That the advice of the consultants be noted.
- (iii) That the Panel agreed to recommend that the consultants advise the Combined Authority to approve the use of the findings of the CERP work in wider engagement.

24. Carbon Impact Assessments

The Panel considered a report and a verbal update on the work commissioned by the Combined Authority to develop a carbon impact assessment tool and incorporate this into the Assurance Framework. This work will ensure that the impact of proposals on the Climate Emergency are more explicitly taken account in decision making. The Panel had been made aware of this work in previous reports on Major Projects.

There have been briefings with district council chief highways officers, directors of development and Leaders/Portfolio Holders. A list of existing projects has been developed and agreed with Directors of Development to be assessed through the project – including transport and non-transport schemes.

The outcomes of the assessments will be considered with partners to develop recommendations for the Combined Authority meeting in June 2021.

Feedback from members was noted and It was felt that the methodology should be as robust as can be. Mathew will come back to the Panel to show how the methodology is being developed.

Resolved: That the contents of the report on the ongoing work be noted.

25. Green Infrastructure Standards Trial

The Panel considered a report to give an update on the national Green Infrastructure Standards Trial (GIST), led by Natural England. Leeds City Region is one of 10 trial areas, and participation was confirmed as part of the West Yorkshire Devolution Deal.

The report was an updated version of the one planned to go the Panel in January and follows on from the update in November which provided background to the trial, with details of how the West Yorkshire trial has been undertaken, the scope of the local project and the feedback to be submitted to Natural England.

Resolved:

- (i) That the contents of the report be noted.
- (ii) That the progress made on the GIST and feedback received be noted.

26. Flooding Update

The Panel considered a report and verbal update to summarise the work of partners to address flood risk issues and deliver Natural Flood Management (NFM).and was asked to note the work undertaken in relation to Flood Risk Management activities.

Panel members Rosa Foster, Environment Agency and Neville Muncaster, Yorkshire Water also gave a verbal update on the details of the report and the key messages. Panel members provided further feedback and said that jobs, skills, forestry and maintenance of peat land needs a transparent and co-ordinated best practice approach.

Resolved: That the contents of the report and the work in relation to Flood Risk Management activities be noted.

27. Major Projects Update

The Panel considered a report to update on the progress against the Green Economy Panel's major projects and programmes, all of which form part of the City Region's approach to tackling the Climate Emergency and was asked to note the work undertaken.

Resolved: That the contents of the report be noted.



Report to: Climate, Energy and Environment Committee

Date: 19 October 2021

Subject: **Governance Arrangements**

Director: Angela Taylor, Director, Corporate and Commercial Services

Author: James Young, Governance Services Team Leader

Is this a key decision?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is the decision eligible for call-in by Scrutiny?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Does the report contain confidential or exempt information or appendices?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If relevant, state paragraph number of Schedule 12A, Local Government Act 1972, Part 1:	
Are there implications for equality and diversity?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

1. Purpose of this report

- 1.1 To advise the Climate, Energy and Environment Committee of the governance arrangements and terms of reference approved by the West Yorkshire Combined Authority (the Combined Authority) at the Annual Meeting on 24 June 2021 in respect of the committee.

2. Information

- 2.1 At its meeting on 22 April 2021, the Combined Authority considered proposals for changes to decision-making arrangements in the context of the new functions and funding arising from the West Yorkshire devolution deal. An overview of the principles and options highlighting the key elements was provided in the submitted report. It was considered that the proposed new arrangements would better reflect the changed role and responsibilities of the Combined Authority following the election of a Mayor for West Yorkshire.
- 2.2 Consequently, at its Annual Meeting on 24 June 2021, the Combined Authority resolved to appoint the Climate, Energy and Environment Committee on the terms of reference attached at **Appendix 1** to this report.

- 2.3 The **quorum** of the Committee is 3 voting members to include 2 Combined Authority members or Local Authority co-optees.
- 2.4 The Combined Authority also appointed Councillor Tim Swift as Chair of the Committee and Mark Roberts as deputy.
- 2.5 The Combined Authority also agreed meeting dates for the Committee as follows:
- 20 July 2021
 - 19 October 2021
 - 11 January 2022
 - 22 March 2022

3. Tackling the Climate Emergency Implications

- 3.1 The terms of reference require this, and all committees, to promote tackling the climate emergency implications in its actions.

4. Inclusive Growth Implications

- 4.1 The terms of reference require this, and all committees, to promote inclusive growth in its actions.

5. Equality and Diversity Implications

- 5.1 The diversity of the committee will be kept under review and steps will be taken, in future recruitment campaigns, to ensure as far as possible that the membership is representative of the population we serve.
- 5.2 Going forward, a lead committee member on inclusivity will be identified. The inclusivity lead will be responsible for ensuring that the regional priority of enabling inclusive growth is fully considered in all decisions and that new opportunities are considered and implemented where appropriate and where they can add value to the agenda of the committee

6. Financial Implications

- 6.1 There are no financial implications directly arising from this report.

7. Legal Implications

- 7.1 There are no legal implications directly arising from this report.

8. Staffing Implications

- 8.1 There are no staffing implications directly arising from this report.

9. External Consultees

9.1 No external consultations have been undertaken.

10. Recommendations

10.1 That the Climate, Energy and Environment Committee note the governance arrangements approved by the Combined Authority at the Annual Meeting on 24 June 2021.

11. Background Documents

There are no background documents referenced in this report.

12. Appendices

Appendix 1 – Terms of Reference for the Climate, Energy and Environment Committee

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Terms of Reference

Climate, Energy and Environment Committee

The Climate, Energy and Environment Committee is authorised:

1. To carry out any Non-Mayoral Function¹ of the Combined Authority relating to the **climate, energy and the environment**² including:³
 - a) progressing the elements of the Strategic Economic Framework that fall within the remit of this committee, by:
 - approving, amending or revoking any policy, investment priorities, strategy or plan⁴, and
 - delivering, monitoring and reviewing the outcomes and impact of any policy, investment priorities, strategy or plan,
 - b) progressing those elements of the Mayor's pledges that fall within the remit of this committee, ensuring alignment with the Strategic Economic Framework where appropriate,
 - c) submitting bids for devolved and other funding,
 - d) working with key partners to develop and promote a shared understanding, approach and coherent strategies and policies, and
 - e) delivering and overseeing any project or programme⁵ in accordance with the Leeds City Region Assurance Framework⁶,

¹ Functions in this context are to be construed in a broad and inclusive fashion, and as including the exercise of the ancillary powers under Section 113A of the Local Democracy, Economic Development and Construction Act 2009.

² Including functions relating to green and blue infrastructure, local nature recovery, climate resilience, tackling fuel poverty, White Rose Forest, emission reduction, energy efficiency, energy supply, flood risk management and flood resilience.

³ Including any regional flood resilience plan.

⁴ With the exception of any major policy, investment priorities, strategy or plan reserved to the Combined Authority - see further Section 2.2 of Part 3 of the Constitution - and subject to any direction by the Mayor that any decision on a policy, investment priorities, strategy or plan be referred to the Combined Authority for determination.

⁵ Including any flood risk management programme

⁶ Or otherwise, where the project or programme does not fall to be considered under the Assurance Framework

including the following where authorised by a bespoke approval pathway and approval route for a scheme (after decision-point 2 only):

- making a decision to progress the scheme^{7, 8} or
- making any recommendation to the Combined Authority⁹ or the Mayor¹⁰ about progressing the scheme, and
- reviewing the scheme's impact.

with the **exception** of

- any function which requires a Statutory Consent¹¹ where that consent has yet to be given¹²,
 - any matter related to a Non-Mayoral Function conferred by the 2021 Order, which the Mayor has directed should be referred to the Combined Authority for determination¹³, or
 - any function which is reserved to the Combined Authority¹⁴.
2. To advise the Combined Authority in respect of any Non-Mayoral Function which relates to, or impacts on, the climate, energy and the environment.
 3. To advise the Mayor in respect of any Mayoral General Function¹⁵ which relates to, or impacts on, the climate, energy and the environment.

⁷ including determining change requests

⁸ with the exception of any decision which would result in a revised financial approval which exceeds the cumulative total of the financial approval and tolerance threshold agreed by the Combined Authority at decision point 2 (or decision point 3) by more than 25%, in which case the decision must be referred to the Combined Authority

⁹ or to any other committee or relevant officer with delegated authority to make the decision.

¹⁰ The Mayor will determine any aspect of a scheme which is a Mayoral Function.

¹¹ These are specified functions conferred by the West Yorkshire Combined Authority (Election of Mayor and Functions) Order 2021 - see further the Access to Information Rules in Part 4 of the Constitution

¹² In relation to any function in respect of which a Statutory Consent has been given, the Committee must exercise their authority in accordance with the terms of any Statutory Consent.

¹³ The 2021 Order provides that these matters require the support of the Mayor.

¹⁴ The functions reserved to the Combined Authority are set out in Section 2.2 of Part 3 of the Constitution.

¹⁵ Mayoral General Functions are the functions of the Combined Authority which are exercisable only by the Mayor, other than PCC Functions. These are conferred by the 2021 Order (see further Table D in Section 3.1.1 of Part 3 of the Constitution), or other legislation.

4. To liaise with the Place, Regeneration and Housing Committee and the Transport Committee to secure the decarbonisation of infrastructure including planning for sustainable development and flood risk management.
5. To promote, in collaboration with other committees,
 - equality and diversity,
 - inclusive growth,
 - tackling the climate emergency, and
 - the strategic alignment of the Combined Authority’s policies, investment priorities, strategies and plans.
7. To respond to any report or recommendation from an overview and scrutiny committee¹⁶.

<i>Document version control</i>	
<i>Municipal Year:</i>	<i>2021-22</i>
<i>Version:</i>	<i>1 – 21/22</i>
<i>Document approved by:</i>	<i>The Combined Authority</i>
<i>Date:</i>	<i>24 June 2021</i>
<i>To be of effect from:</i>	<i>24 June 2021</i>

¹⁶ That is, any overview and scrutiny committee of the Combined Authority (in accordance with Scrutiny Standing Orders in Part 4 of the Constitution) or of any Constituent Council

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Report to: Climate, Energy & Environment Committee

Date: 19 October 2021

Subject: **Mayoral Pledges**

Director: Liz Hunter, Interim Director of Policy and Development

Author: Daniel Barrett, Head of Energy and Environment

Is this a key decision?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is the decision eligible for call-in by Scrutiny?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Does the report contain confidential or exempt information or appendices?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If relevant, state paragraph number of Schedule 12A, Local Government Act 1972, Part 1:	
Are there implications for equality and diversity?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

1. Purpose of this report

1.1 To brief the Committee on the Mayor of West Yorkshire’s manifesto pledges.

2. Information

2.1. The West Yorkshire Mayor has identified 10 pledges that will be prioritised for delivery over the Mayoral term:

- **Create 1,000 well paid, skilled jobs** for young people.
- **Prioritise skills and training** to ensure everyone in West Yorkshire has the skills they need to secure work.
- **Support local businesses** and be champion for our regional economy.
- **Lead a Creative New Deal** to ensure our creative industries are part of the broader recovery strategy.
- **Appoint an Inclusivity Champion** to work to ensure that the region’s recovery benefits us all.
- **Recruit 750 more frontline police officers** and staff to fight crime.

- **Put women and girls at the heart of the Mayor’s policing plan.**
- **Bring buses back under public control**, introduce simpler fares, contactless ticketing and greener buses.
- **Build 5000 affordable and sustainable homes.**
- **Tackling the climate emergency** and protecting our environment.

2.2. The Climate Emergency pledge is underpinned by several specific commitments, including

- Creating a road-map to ensure West Yorkshire reaches net zero carbon by 2038.
- Supporting the work of Yorkshire and Humber Climate Commission, work to accelerate investment in hard flood defences and natural flood management.
- Encourage investment in the development of new technologies which will contribute to a green recovery.
- Support projects to develop a hydrogen economy which could provide zero carbon solutions for heavy vehicles and heating.
- Work with large fuel retailers to provide electric vehicle charging points and deliver a network of thousands of electric vehicle charging points around the region. Ensure that motor manufacturers and energy suppliers take action alongside the Combined Authority’s public investment, to deliver their fair share of the infrastructure.
- Work with partners to restore our peatlands and conserve moorland.
- Support the creation of a White Rose Forest across the region.

2.3. The wider pledges also contain commitments, relevant to the work of this committee, including:

- Spearhead a campaign to make West Yorkshire a **Living Wage Region**, boosting the number of businesses paying the real living wage.
- Spearhead a **Digital Academy**, to ensure our young people have the skills required to be the entrepreneurs, innovators, engineers and creatives of the future.
- Establish a West Yorkshire **Digital Skills Partnership** to develop digital skills programmes and tackle digital exclusion.
- Ensure there are the relevant **Green Courses** on offer for young people to get the skills to support the delivery of a sustainable, net zero region, with particular emphasis on construction and engineering skills.
- Establish a **Manufacturing Task Force**, to ensure young people have the skills to become the engineers and designers of the future.

2.4. Updates on the mayor’s plans will be provided at future meetings.

3. Tackling the Climate Emergency Implications

- 3.1 The West Yorkshire Climate and Environment Plan is the primary document setting out the regional approach to addressing the climate and environment emergency and achieving a net zero region economy by 2038, with significant progress made by 2030.

4. Inclusive Growth Implications

- 4.1 Programmes to deliver the pledges are emerging, in collaboration with local partners, and will address inclusive growth implications.

5. Equality and Diversity Implications

- 5.1 The Mayor has committed to ensuring that equality and diversity is a cross-cutting priority for the Combined Authority, with a requirement that all policies and programmes address equality and diversity needs and improvements are made. Tackling inequality is at the heart of the delivery planning for the pledges.

6. Financial Implications

- 6.1 There are no financial implications directly arising from this report.

7. Legal Implications

- 7.1 There are no legal implications directly arising from this report.

8. Staffing Implications

- 8.1 There are no staffing implications directly arising from this report.

9. External Consultees

- 9.1 No external consultations are required and have been undertaken arising from this report.

10. Recommendations

- 10.1 The Committee is asked to comment on the Mayor's pledges and consider how it can support the pledges, ensuring links to its wider work are maximised.

11. Background Documents

None.

12. Appendices

None.

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Report to: Climate, Energy and Environment Committee

Date: 19 October 2021

Subject: **West Yorkshire Climate & Environment Plan**

Director: Liz Hunter, Director Policy & Development

Author: Daniel Barrett, Head of Energy & Environment

Is this a key decision?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is the decision eligible for call-in by Scrutiny?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Does the report contain confidential or exempt information or appendices?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If relevant, state paragraph number of Schedule 12A, Local Government Act 1972, Part 1:	
Are there implications for equality and diversity?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

1. Purpose of this report

1.1 The Combined Authority has declared a climate emergency and committed the region to be net zero carbon by 2038 at the latest, with significant progress by 2030. The West Yorkshire Climate and Environment Plan, presented today for approval, is the mayor's and Combined Authority response to tackling the climate emergency, protecting the environment and achieving a net zero West Yorkshire.

2. Information

Human Climate Change

2.1 There is scientific consensus that currently observed global warming is overwhelmingly because of human influence and action, being significantly over and above the warming caused by natural factors alone¹. Indeed, ice core records suggest concentrations of greenhouse gases in the atmosphere are at their highest for at least the last 800,000 years.

¹ IPCC (2014) Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change.

- 2.2 Warming of approximately 1.0°C above pre-industrial levels is estimated to have been caused by human activities and is likely to reach 1.5°C between 2030 and 2052 if current rates of temperature increase continue².
- 2.3 Human and natural systems are already being impacted by climate change with flooding, droughts, heatwaves, and crop yield reductions all being experienced more frequently. West Yorkshire has suffered the impacts of climate change having experienced catastrophic flood events over the last 10 years, causing damage for residents, communities, and businesses. Further warming will make these types of events even more common.
- 2.4 There is a clear and compelling rationale to deliver comprehensive and ambitious plan to mitigate and adapt to a changing climate and that is why tackling the climate and environment emergency is one of the Mayor's, Combined Authority's, and West Yorkshire Council's top priorities.

Background

- 2.5 The Combined Authority declared a climate emergency and committed to strengthen the West Yorkshire emission reduction target in June 2019. The Combined Authority's target is to be net zero carbon by 2038 at the latest, with significant progress by 2030. The task is extremely challenging and will require significant, swift, and collaborative action to decarbonise all sectors.
- 2.6 The Carbon Emission Reduction Pathways (CERP) study was commissioned to demonstrate the different ways in which the climate and environment emergency could be addressed, and the net zero by 2038 target met. It also provides guidance to West Yorkshire councils and businesses on the ways they could address their own climate emergency declarations and targets.
- 2.7 The CERP focusses on the transport, buildings, power, industry, and land-use and agriculture sectors, and consists of three main tasks:
- A. Developing three emission reduction pathways.
 - B. Setting out the timescales for decision-making and deployment of measures identified in the pathways; and
 - C. Identifying the policies and actions that need to be implemented to ensure the measures identified in the pathways are deployed.
- 2.8 The Combined Authority was presented with an overview of the CERP and endorsed the findings of Task A at their [27 July 2020](#) meeting. The findings built on significant process already made by the Combined Authority and its partners in tackling the climate and environment emergency.
- 2.9 The scientific evidence that is the CERP study has been used to inform the development of the Climate and Environment Plan for West Yorkshire, in light

² IPCC (2018) Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emissions pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty

of the Mayor of West Yorkshire's pledge to tackle the climate emergency and protect the environment production.

- 2.10 The final CERP report can be viewed at <https://www.westyorks-ca.gov.uk/media/4268/emission-reduction-pathways-report.pdf>.
- 2.11 This paper and the Climate and Environment Plan is now being brought to the Committee for approval, prior to final approval by the Combined Authority.

West Yorkshire Climate and Environment Plan 2021 - 2024

- 2.12 The West Yorkshire Climate and Environment Plan 2021-2024 (the Plan – see Appendix 1) is the Mayor's and Combined Authority's response to addressing the climate and environment emergency and delivering mayoral pledges relating to climate, nature, and the green economy. It also demonstrates how the region can go further and faster than national government, reinforcing commitments to be net zero carbon by 2038 at the latest.
- 2.13 The Plan has been developed to deliver a net zero carbon region with thriving nature, people and places that are climate ready. This means:
- homes that are healthy and affordable;
 - workplaces that more energy efficient;
 - energy supply that is local, clean and flexible;
 - a sustainable, integrated, and low emission transport system;
 - a rich, diverse, and improved natural environment; and
 - places and people that are ready and resilient to a changing climate.
- 2.14 It sets out the critical actions for the next three years to cut emissions, put nature in the recovery position and be ready for the impacts of a changing climate. Action is focussed across eight priority themes:
- **Leadership:** what the Mayor and Combined Authority will do to reduce emissions from its operations and the pipeline of projects under its control.
 - **Cross-cutting:** what makes sense to be considered as a strategic, rather than the individual theme or sector level, for example skills, innovation, research, and development.
 - **Transport:** reduce private vehicle use, increase active travel and public transport use, and decarbonise transport.
 - **Homes:** reduce emissions and the improve the energy efficiency and affordability of the region's homes.
 - **Business and industry:** support and expertise that businesses need to decarbonise and flourish in the region.
 - **Energy generation, supply, and flexibility:** accelerate the deployment of low carbon energy technologies, for example heat pumps, solar, smart energy solutions, including flexibility technologies such as batteries.

- **Natural environment:** focussing on reducing emissions through land-based action and measures to reverse declines in nature.
- **Climate ready:** action to ensure preparedness for the impacts of a changing climate.

2.15 Delivery will happen through partnerships at a local, regional, and national level and developing and nurturing these relationships will be crucial if the ambition and scale of the Plan is to be achieved. Demonstrating the strength of these partnerships will be fundamental in securing the investment and funding that is needed to deliver the Plan.

2.16 In terms of impact the Plan, if delivered in full, has the potential to generate emission reductions that are consistent with the trajectory the region needs to take if it is to meet net zero carbon by 2038. It also paves the way for significant emissions reductions to be made in future years by undertaking the groundwork that enables these reductions to be realised, for example the 71,000 potential jobs in the regional low carbon and renewable energy sector by 2050.

2.17 Subject to adoption by the Combined Authority, the Mayor will lead a West Yorkshire climate and environment conversation and participation. The purpose is to bring partners, stakeholders, and the people of West Yorkshire together to participate and collaborate on the development and delivery of the actions outlined in Plan.

3. Tackling the Climate Emergency Implications

3.1 The West Yorkshire Climate and Environment Plan is the primary document setting out the regional approach to addressing the climate and environment emergency and achieving a net zero region economy by 2038.

4. Inclusive Growth Implications

4.1 It is crucial that transitioning to a net zero carbon economy reduces inequality in West Yorkshire. It cannot be the cause of further inequality for our most excluded and deprived groups and communities. To that extent inclusive growth goals and outcomes will be included in the detailed design of the activities in the Action Plan.

4.2 All policies will be subject to Equality Impact Assessments, and there will be inclusive growth dimensions to all indicators to ensure progress is being made.

5. Equality and Diversity Implications

5.1 Meeting net zero carbon and transitioning to a net zero carbon economy should be equitable and not be at the expense of any groups or communities. To that extent equality and diversity implications and solutions will be cross cutting and integrated into the detailed development of the actions in the Plan

to ensure no one is adversely affected by net zero, nature recovery and climate ready transition.

- 5.2 All policies will be subject to Equality Impact Assessments, and there will be equality and diversity dimensions to all indicators to ensure progress is being made and inequalities are not widened.

6. Financial Implications

- 6.1 The actions identified in the Plan will need to be appropriately resourced with the right capital and revenue investment and investment in skills and capacity to lead these actions. Delivery will therefore require ongoing, targeted investment and an aligned financial policy and decision-making process.
- 6.2 The mayor is committing to bring forward a Climate and Environment Fund, for which the Combined Authority will work with partner local authorities to design the delivery mechanisms. So far, £800,000 has been committed by the mayor and Combined Authority to a Net Zero Region Accelerator programme to bring forward finance and funding for climate and environment projects that support delivery of the West Yorkshire Climate and Environment Plan.
- 6.3 Achieving net zero, nature recovery and climate ready resilience will deliver substantial financial savings to the region, both at an individual and organisational levels. For example, large savings are likely to be made through fuel cost reductions that occur because of efficiency improvements across buildings and industry and the transition from petrol and diesel to electric vehicles.

7. Legal Implications

- 7.1 There are no legal implications directly arising from this report.

8. Staffing Implications

- 8.1 Additional posts will be required across Combined Authority directorates and teams working on this agenda, alongside new capacity from our partners and stakeholders to deliver programmes resulting from the Plan and Net Zero Region Accelerator.

9. External Consultees

- 9.1 Extensive stakeholder consultation was undertaken in 2020 to inform the development of actions to include in the Plan.
- 9.3 West Yorkshire local authorities and the Combined Authorities Climate, Energy and Environment Committee have been consulted in developing the content of the Plan, including Leaders and Chief Executives.

10. Recommendations

- 10.1 This paper and the Climate and Environment Plan is now being brought to the Committee for approval, prior to final approval by the Combined Authority.

11. Background Documents

- 11.1 The final CERP report can be viewed [here](#).

12. Appendices

Appendix 1 – West Yorkshire Climate and Environment Plan



Tracy Brabin
Mayor
of West Yorkshire

West Yorkshire Climate and Environment Plan

2021 – 2024

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Mayor's Foreword

As Mayor of West Yorkshire, I am fully committed to leading our region's response to the climate emergency and protecting our environment. I am pleased to share with you West Yorkshire's ambitious climate and environment plan for action.

The climate and environment emergency is a real and present danger, affecting our health and wellbeing today. We can't have a fair, just and inclusive recovery from COVID-19 unless we address the impact of climate change and nature in decline. West Yorkshire's five councils and the West Yorkshire Combined Authority have all committed to reach net zero carbon emissions well before the Government's target date of 2050.

I know this challenge will require urgent and long-term collaborative action across all sectors of our economy and communities - and there is no simple and single solution.

However, there is also great opportunity to empower our region to build a modern and sustainable economy, with vibrant communities, free of air pollution, rich in green spaces and biodiversity and supported by an efficient low emission transport network and world class infrastructure.

I want everyone to be able to share the benefits of homes that are healthy, economical, and warm; workplaces that are more energy efficient; energy supply which is more local, clean, flexible and affordable; transport that is sustainable, integrated and low emission; nature and landscapes that are rich, diverse and improved; and places and people using resources efficiently whilst being ready and resilient to a changing climate.

We have an ambitious Plan to achieve this, creating a roadmap and policies, setting the groundwork for future emission reductions, delivering action and making the investments so West Yorkshire's economy is net zero carbon, fair, inclusive and sustainable.

Prioritising good, green jobs, and investing in skills and training for young people to do them have been some of my key pledges as Mayor for our region's economic recovery. Both will be vital to achieve our commitment to a fair, just and lasting recovery for all of West Yorkshire.

This is the key moment for Government, West Yorkshire businesses, communities, local authorities and citizens to work alongside each other and play their part in tackling the climate and environment emergency. We have no time left. Now is the time to act.

Tracy Brabin

Mayor of West Yorkshire

Introduction

Context

The Mayor of West Yorkshire and West Yorkshire Leaders have declared a climate emergency, going further and faster than national Government, and set an ambitious science-based target for the region to be net zero carbon by 2038, with significant progress by 2030. Our strong partnerships are critical to deliver the ambition and scale of the Plan, backed up by local and national investment and funding.

Reducing harmful carbon and air quality emissions, helping nature to recover and improve long-term climate resilience is critical and action across all parts of the economy and society is required.

The mayor and West Yorkshire Combined Authority ('Combined Authority') will ensure the West Yorkshire Climate and Environment Plan ('Plan') and transition to a net zero carbon economy is fair, just and reduces inequality in West Yorkshire. It cannot be the cause of further inequality for our most excluded and deprived groups and communities. Inclusive growth, equality and diversity goals and outcomes will be delivered through this Plan.

Delivering a fair, just and lasting recovery will ensure the region takes advantage from the transition to a sustainable and net zero carbon economy, boosting good jobs, training and upskilling opportunities across West Yorkshire. The construction industry, manufacturing, and transport, are the sectors where most focus is needed both to seize the employment boost of a sustainable and net zero economy and in terms of skills and retraining (LSE, University of Leeds, 2019, 2020).

Across West Yorkshire, 235,000 jobs could be affected by the transition to a net-zero carbon economy, with around 119,000 workers in high demand because of their skills and experience, and 116,000 workers requiring upskilling and support. However, 828,000 jobs will not be significantly affected by the transition (LSE, University of Leeds, 2019).

Progress to date to deliver at the pace and scale necessary has been hampered by a lack of resources to develop and deliver actions and have the right opportunities in place to secure the investment and funding we need. These obstacles must be overcome to tackle the climate and environment emergency.

The actions in the plan and the impact they can have is taken from the science-based reduction pathways study and responds to the carbon budget for the region. Consistent with the objectives of the UN Paris Agreement on Climate Change (Paris Agreement) and the Intergovernmental Panel on Climate Change (IPCC).

The Plan is focused to deliver a sustainable and net-zero carbon economy with the costs and benefits equally shared. It is critical that our response to COVID-19 is to invest in a new and different economy that lays the foundations for a healthy, sustainable and resilient future. To achieve this requires engagement and partnership working our communities and businesses across West Yorkshire.

The Plan lays the groundwork to allow significant carbon dioxide emission reductions to be made later this decade and in the 2030s.

A sustainable, nature rich and climate ready West Yorkshire requires significant public and private investment. Mobilising the finance will be a collaborative effort by the mayor and West Yorkshire leaders, Combined Authority, local authorities, government, lenders, investors and people of West Yorkshire. The finance required to deliver this three-year Plan is up to £4.4 billion. Furthermore, to deliver the priority programme of flooding schemes over the period 2021-2026 will require £120 million.

As is evident the financial implications of delivering the mayor's pledge, the Plan and its future iterations are significant. The financial investment will be through a mix of sources including the Combined Authority in partnership with public and private finance and funding.

Bringing together partnerships and collaborations between the public, anchor institutions and private sectors will help to secure the funding, finance and investment opportunities. This will make a significant contribution to the region's Strategic Economic Framework and shared ambitions for a modern, clean and inclusive economy and communities.

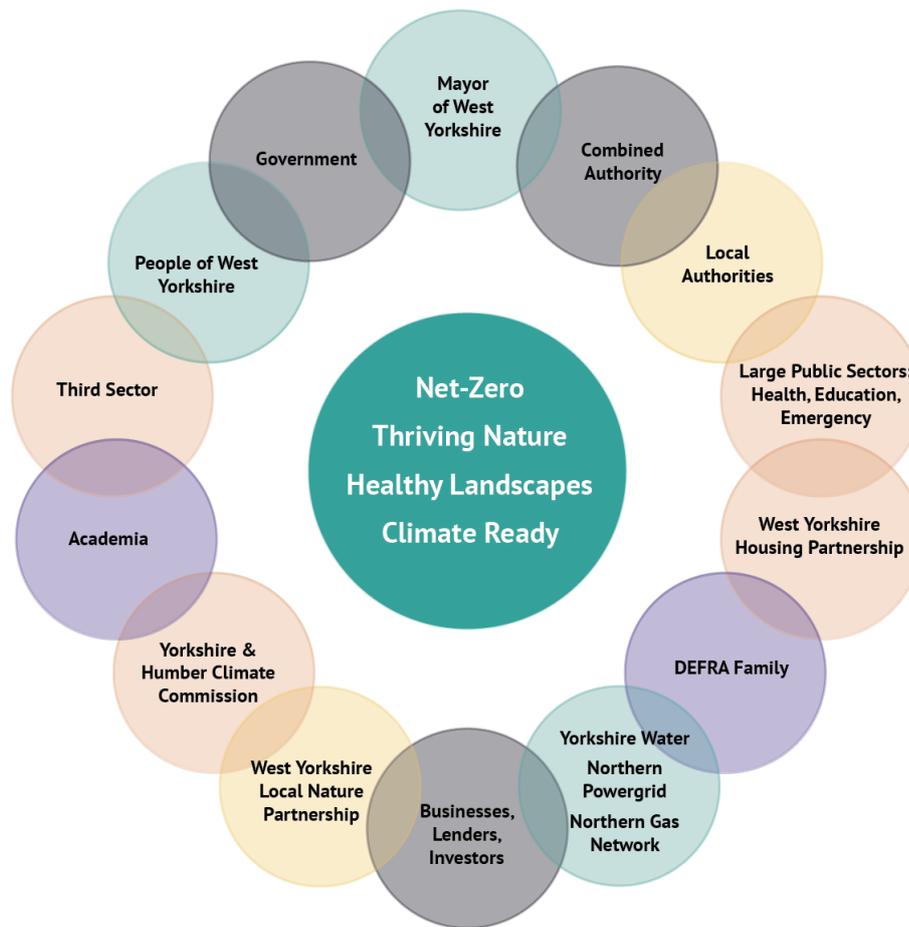
The Combined Authority will work with the mayor and Local Authority leaders to prioritise funding available through the Single Investment Fund

Securing the finance required to deliver this Plan is critically important. Financial investment will be through a mix of sources including the Combined Authority in partnership with public and private funding. Work is ongoing to identify potential funding sources, including the Single Investment Fund, and how to use local funding to secure investment from other partners, including government.

The mayor is committing to bring forward a Climate and Environment Fund, for which the Combined Authority will work with our partners to design the delivery mechanisms. So far, £800,000 has been committed by the mayor and Combined Authority to a Net Zero Region Accelerator programme to bring forward finance and funding for climate and environment projects that support delivery of the West Yorkshire Climate and Environment Plan.

This level of investment delivers significant financial savings to the region, both for individuals and organisations. For example, large savings are likely to be made through fuel cost reductions that occur because of efficiency improvements across buildings and industry and the transition from petrol and diesel to electric vehicles.

Our strong partnerships are critical to deliver the mayor's and West Yorkshire leaders' pledge to tackle the climate emergency and the region's climate and environment ambitions.



Progress to Tackle the Climate and Environment Emergency

Across West Yorkshire investment and action is underway to tackle the climate emergency, restore and enhance nature, be ready for a changing climate and create sustainable communities and businesses. West Yorkshire Combined Authority and partner councils are delivering projects and initiatives across the themes of this Plan and it complements local authority plans and action to address the climate and environment emergency. The following examples highlight the breadth of progress underway throughout our region

	<p>Bradford Council is demonstrating local leadership by connecting social, economic, cultural and environmental wellbeing, resilience and COVID-19 recovery within their sustainable and inclusive district and clean growth framework. The Council has invested over £300,000 in community climate action across all five Constituencies and with over 50 grass roots initiatives supporting citizens, children and young people in addressing climate challenges. Over £200m investment is planned to 2030.</p>
	<p>Calderdale Council's Natural Flood Management Landowner Grant Scheme is working with landowners and farmers to undertake natural flood management to build up Calderdale's resilience to heavy rainfall events. The Council are also directly delivering natural flood management projects elsewhere including installing heather bunds and blocking channels to retain water on moorland, delivering flood mitigation and enhanced wildlife habitats.</p>

	<p>The White Rose Forest is a local authority Joint Venture Agreement covering North & West Yorkshire that includes partners such as the Forestry Commission, Woodland Trust and Natural England. It represents North and West Yorkshire’s contribution to the ‘Northern Forest’. Kirklees Council is the accountable body and has primary responsibility for running the ‘White Rose Forest Delivery Pathway’ which aims to work with willing landowners and partners to deliver landscape-scale tree planting, green streets and landscapes for water. Tree planting will improve the health and wellbeing of residents, reduce flood risk, support wildlife and absorb carbon emissions.</p>
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	<p>Leeds City Council has committed to investing £100 million in measures to improve the energy efficiency of council housing by 2025. This commitment will help thousands of Leeds residents save energy, protect residents from cold-related illnesses and deliver significant carbon savings. Work announced as part of this commitment so far include: £24m to connect 26 tower blocks to ‘district heating clusters’ connected to ground source heat pumps; £9m works to deliver whole house retrofits to 190 flats in the Holtdale estate including air source heat pumps, solar PV, upgraded ventilation systems, insulation measures, and LED lighting.</p>
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	<p>Wakefield Council is planning to deliver its climate neutral 2030 pledge by: political leadership, decarbonise their corporate estate, buildings, street lighting, and fleet; switch to renewable electricity – developing Energy Parks to meet organisational demand; off-set remaining carbon emissions through tree-planting under the White Rose Forest and Woodland Carbon Code; raise awareness and incorporate into decision-making including carbon literacy training.</p>
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	<p>West Yorkshire Combined Authorities £12 million CityConnect programme works in partnership with a range of public, private and community organisations to encourage more people to take part in active travel - such as cycling or walking – by creating high quality cycling infrastructure alongside engagement initiatives such as cycle training, cycle challenges, business and school support and behaviour change campaigns.</p>
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Roadmap 2038

State of the Region

To fully understand how to address emissions to achieve net zero by 2038, secure recovery of the natural environment and be ready for a changing climate it is important to know where we are starting from. Our West Yorkshire State of the Region Report provides a handy snapshot of where we currently are in terms of tackling the climate and environment emergency.

West Yorkshire State of the Region Report Tackling the Climate Emergency Priority – Summary

West Yorkshire has committed to becoming a net zero carbon economy by 2038.

The latest data indicate that CO₂ end-user emissions in West Yorkshire stand at around 10.8 Mt CO₂. This equates to 4.7 tonnes per capita, slightly below the national average of 4.9 tonnes.

Carbon dioxide emissions have fallen less quickly in West Yorkshire than nationally over the last decade for which we have data, but West Yorkshire's starting point was lower in per capita terms.

A continuation of current rates of emission reduction in West Yorkshire will not be sufficient to achieve the target of net zero by 2038. It is projected that current policies will only achieve a fraction of the further reductions required to meet the net zero target.

Emissions from the industry, commercial and domestic sectors of the regional economy fell substantially over the last decade, but transport emissions did not register a sustained reduction in the period to 2019.

The emissions intensity of the West Yorkshire economy, in terms of CO₂ emissions (kt) per £m of GVA, is slightly above the national average and is higher than most of the comparator areas. The region's emissions intensity fell by 40% between 2005 and 2019.

National data shows that there was a significant fall of around 11% in CO₂ emissions in 2020, linked to the effects of the pandemic. This was manifested in a large reduction in the use of road transport and a fall in emissions from the business sector.

Engagement with the natural environment is key to quality of life. Currently, around 23% of West Yorkshire residents have local natural greenspace within easy access of their homes (defined as within 5 to 10 minutes walking distance depending on walking speed). Within the region, there is a variation between districts: in Leeds and Calderdale the proportion is slightly higher, at around 26%; in Bradford it is 23%; but it falls to less than a fifth in Kirklees (18%).

The average Energy Performance Certificate rating for domestic properties in West Yorkshire is D (using a scale of A – most efficient to G – least efficient). This

is like the national average, but significant progress is required to meet the government's target to upgrade as many homes as possible to EPC Band C by 2035.

Around 169,000 households in West Yorkshire (17% of all households) are in fuel poverty, a prevalence that is above the national average. Fuel poverty is the problem faced by households living on a low income in a home which cannot be kept warm at reasonable cost.

Around 4% of residential properties in West Yorkshire fall within a flood zone, rising to more than 6% in Calderdale. A significant proportion of neighborhoods' in Bradford and Calderdale are acutely vulnerable to the effects of flooding.

Emission Reduction Pathways

Background

Once we had calculated current emissions, we wanted to understand the different ways in which the region could meet its net zero carbon target by 2038¹. To do this we commissioned independent experts to model four different versions of the future in relation to emissions – our emission reduction pathways.

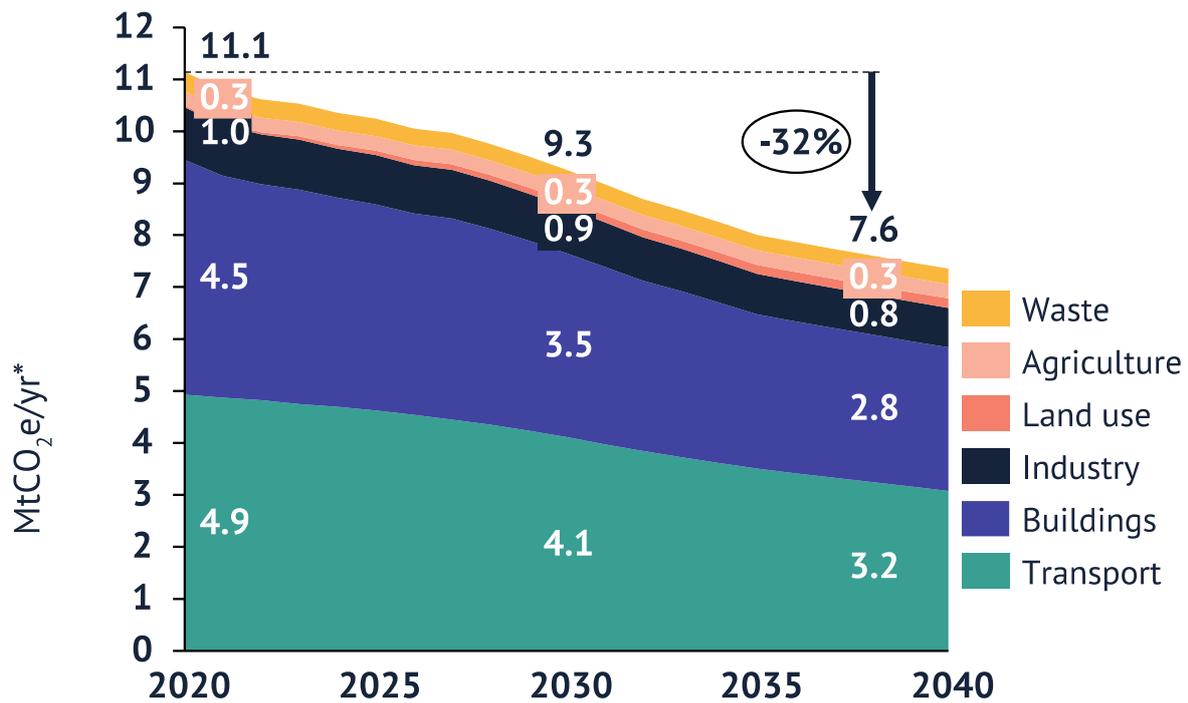
Our first pathway considered the emission reductions that we could expect to see in the region because of interventions that were already committed or in train, for example government policies. This was termed the Baseline Pathway and was helpful in providing us with an understanding of the level of interventions that would need to be implemented above and beyond existing commitments.

The remaining three pathways, our Maximum Ambition, High Hydrogen, and Balanced Pathways, all build on the Baseline Pathway to illustrate the realistic levels of emission reductions that could be delivered in the region in the context of the 2038 target.

Baseline Pathway

As referenced above the Baseline Pathway sets out the likely emission reductions, we could expect to see in the region because of current policies. In the absence of new policies, incentives, and regulations the Pathway suggests there will be a relatively low uptake of most technologies beyond 2025.

The Baseline Pathway estimates a 32% reduction in emissions could be achieved in the region if we did not implement interventions beyond current policies. Under this Pathway emissions would be 7.6 MtCO₂ in 2038, a long way short of our ambition.

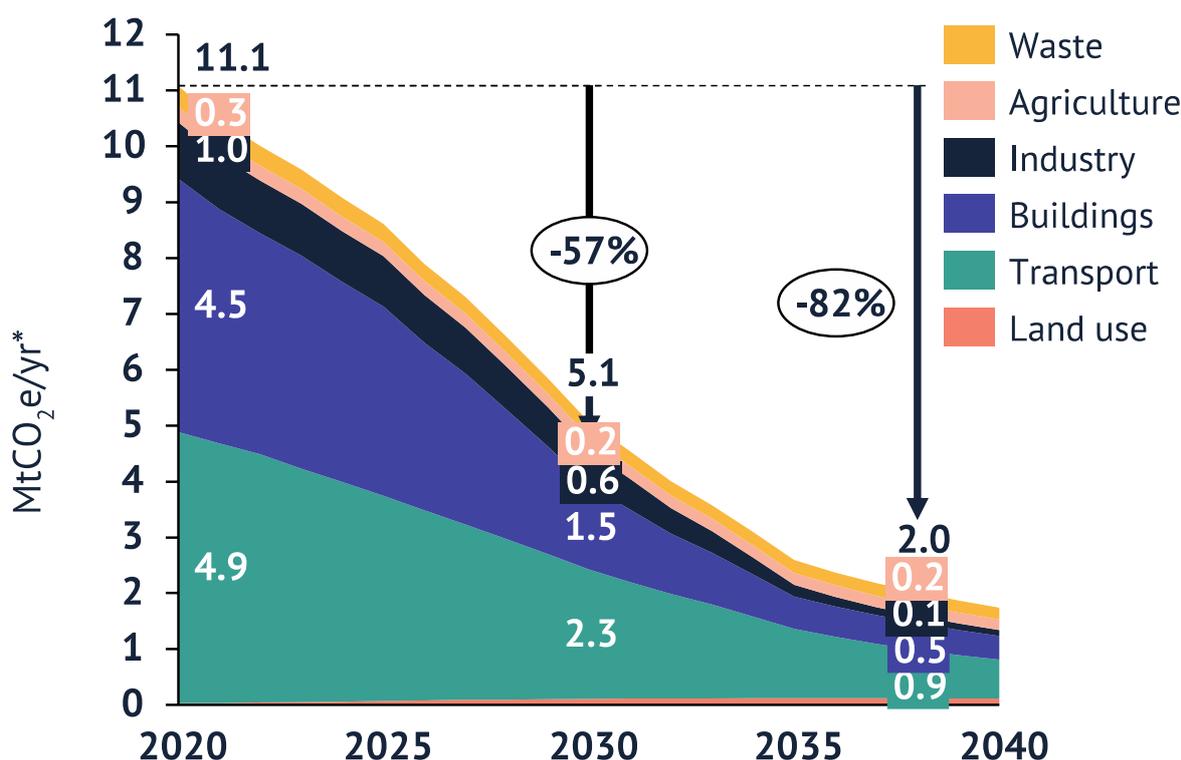


Across transport, reductions would occur through wider adoption of cleaner, more cost-effective technology such as electric vehicles. National efforts to decarbonise electricity and increase energy efficiency would result in reductions in emissions from buildings and industry. However, we would see a growth in emissions from agriculture and land-use as our population rises increasing food production and urban spread.

Maximum Ambition Pathway

This Pathway considered the emission reductions that could be achieved in the region if a predominately electricity led approach to decarbonisation was taken. This would mean significant electrification of heat, transport and industry supported by enabling technologies such as flexible demand and energy storage.

The Maximum Ambition Pathway estimates that an 83% reduction in emissions could be achieved in the region through the interventions modelled. 1.9 MtCO₂ would remain in 2038 under this Pathway primarily from transport and buildings.



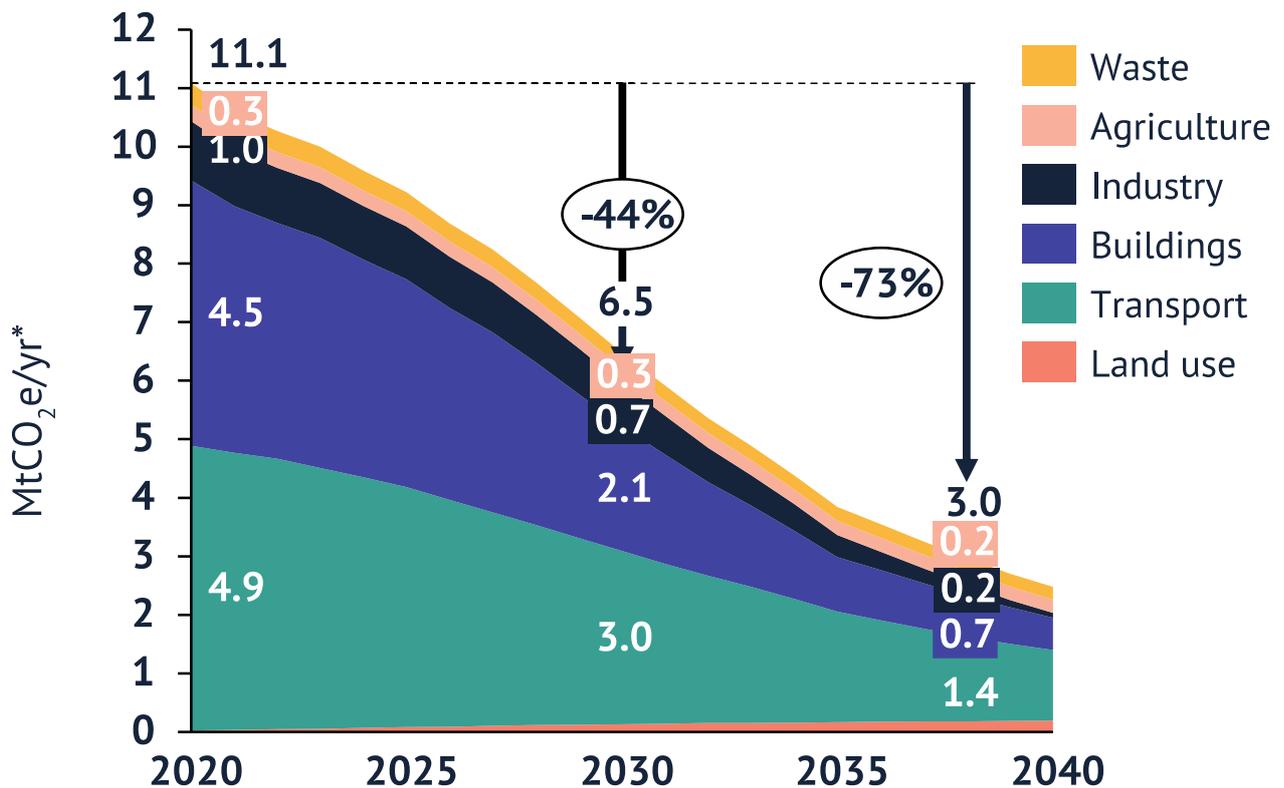
To achieve the emission reductions set out in the Pathway would require a significant acceleration of the deployment of technology and rapid behaviour change from consumers, industry, and business. Among other things the Pathway would require:

- a rapid uptake of electric vehicles, alongside significant consumer, and industry / business behaviour change;
- a large shift from private car use to cycling, walking and electrified public transport;
- a wide-scale retrofit of buildings with ambitious rollout of heat pumps and heat networks;
- a significant upscaling of solar, onshore wind, smart and flexible energy solutions and potentially carbon capture and storage;
- development of new technology and switching to low carbon fuels within industry; and
- forestry planting to offset emissions from new urban development.

High Hydrogen Pathway

The approach taken for this Pathway was to understand the emission reductions that could be achieved if large-scale hydrogen and carbon capture and storage was available for heating homes and businesses, delivering industrial processes, generating electricity, and transporting goods and people.

The High Hydrogen Pathway estimates a 76% reduction in emissions could be achieved in the region through the interventions modelled. 2.7 MtCO₂ would remain in 2038 with a large proportion of remaining emissions from transport.



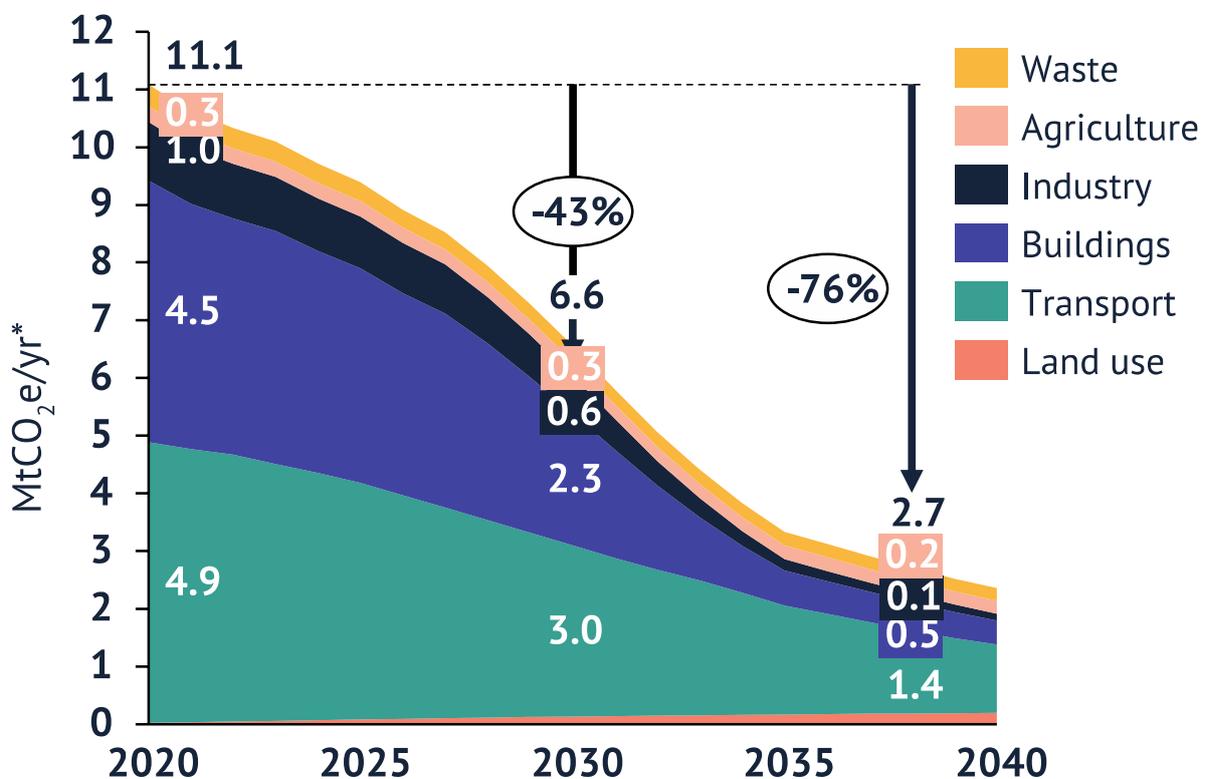
Measures that would need to be deployed as part of this Pathway include:

- a significant development and uptake of hydrogen fuel-cell vehicles, particularly in the heavier vehicle classes such as buses and HGVs;
- a conversion of the natural gas grid to hydrogen and for nearly half of the regions' homes to be heated by a hydrogen boiler; and
- installation of hybrid heat pumps and energy efficiency measures in advance of hydrogen being available.

Balanced Pathway

A balanced approach to decarbonisation was investigated as part of this Pathway. A mix of technologies were applied across the economy with contributions from electrification, hydrogen, bioenergy, carbon capture and storage, and decentralised energy production. This illustrated a scenario where technologies are deployed in parallel, with differing factors impacting on adoption, from location to price or consumer comfort.

The Balanced Pathway estimates a 75% reduction in emissions could be achieved in the region through the interventions modelled. 2.8 MtCO₂ would remain in 2038 with the Pathway differing from the Maximum Ambition and High Hydrogen Pathways in estimating significant remaining natural gas usage in building boilers and industrial sites.



Measures that would need to be deployed as part of this Pathway include:

- a significant shift from petrol and diesel to electric and to a lesser extent hydrogen vehicles;
- heating of buildings and the provision of heat to industry via a mixture of electric and hydrogen heating technologies; and
- high-levels of solar PV and onshore wind roll-out, as well as energy from waste carbon capture and storage and combined heat and power facilities.

Reaching Net Zero Carbon for Decarbonisation

None of the Pathways that the Combined Authority modelled illustrate a complete decarbonisation of the economy of West Yorkshire. Depending on the Pathway we will need to achieve an additional 25% to 17% reduction in emissions by 2038 on top of those measures that have identified in our modelling work.

To fully achieve the regional target, the Combined Authority will need to explore additional decarbonisation options that could be implemented to further mitigate emissions. Some of these options will require increased ambition around the deployment of measures, others are speculative options from less mature technologies or concepts.

The government's Net Zero Strategy must provide new options for West Yorkshire to decarbonise, with the right roles, responsibilities, powers and finance from government that allow the Combined Authority and West Yorkshire local authorities to play our part to deliver the government's agenda.

Examples of measures we could look to implement to generate additional emission reductions include:

- even more ambitious renewable electricity generation to offset remaining electricity related emissions;
- offsetting emissions through negative emissions methods such as bioenergy carbon capture and storage and direct air capture;
- quicker lifestyles change e.g., following the COVID-19 pandemic, the shift to remote working and decrease in business trips which includes reduced demand for aviation;
- circular economy system changes, for example to reduce material consumption, processing and disposal;
- Over the coming years we will consider the measures where we will look to increase our ambition or investigate in more detail with a view to increasing our knowledge of how we can fully decarbonise the region; and
- For more information on the evidence underpinning the roadmap please see our technical report.

Roadmaps

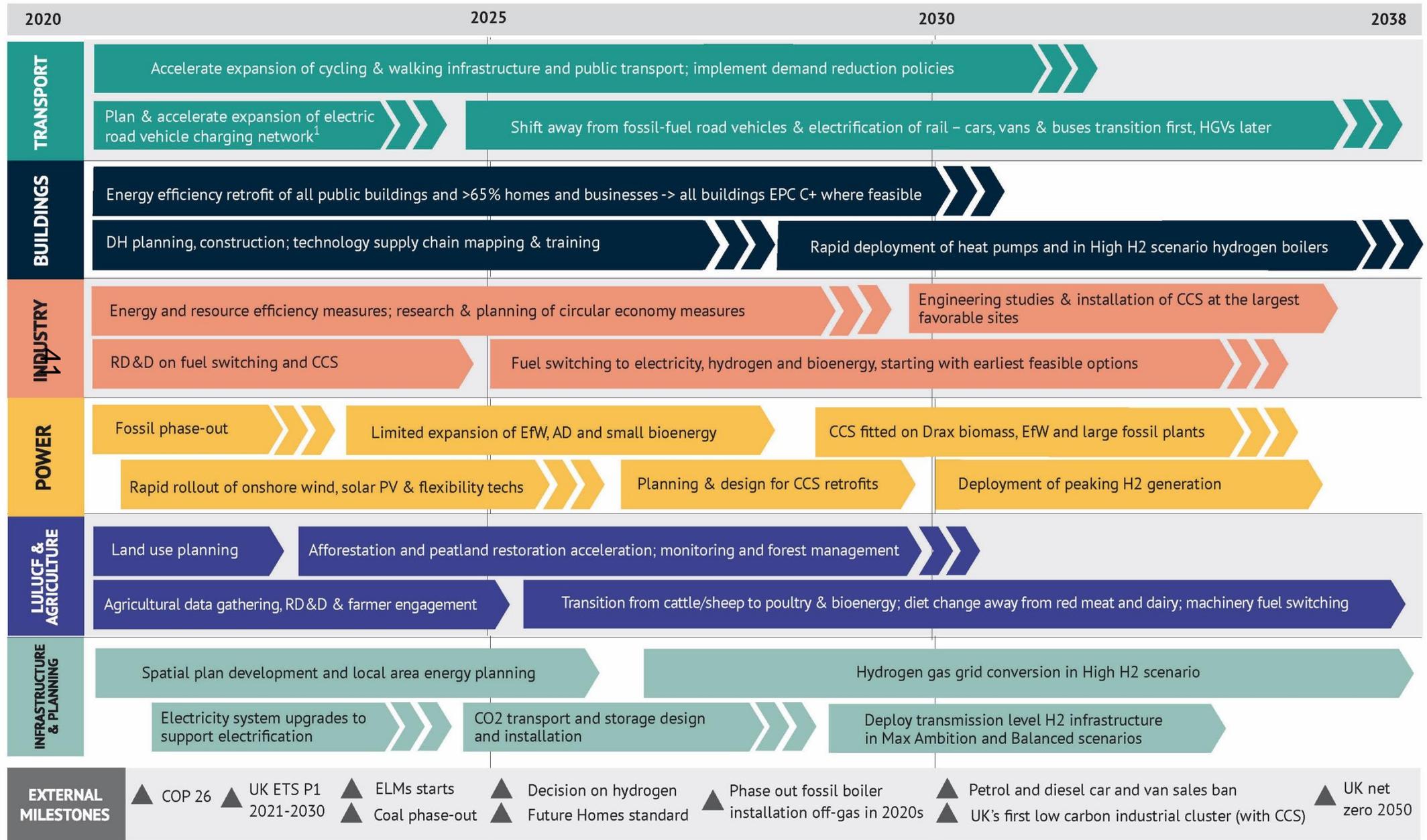
Our shared approach will require large-scale ambitious action to deliver a wide range of decarbonisation measures across the five areas of transport, buildings, industry, power, and land-use and agriculture. This will need to be integrated with and contribute to place-shaping across the region, and steer business and investor decision making and use of public funds.

To understand how the measures could be achieved and to assist in planning and monitoring activity we have produced modelled roadmaps for the five areas referenced above. They provide information on the timeline of key activities and technology rollout, key decision points along each of the Pathways, and key implementation milestones to monitor progress by.

Each roadmap reflects the inherent uncertainty and differences between the three modelled Pathways to reach net zero by 2038 and provides a range of timescales associated with deployment where a measure is common across all the Pathways. We have used the outputs of the roadmaps to inform the Plan and we will also use the outputs to inform our longer-term approach to sustainable development to achieve net zero carbon, wellbeing, resilience and healthy nature and landscapes in West Yorkshire.

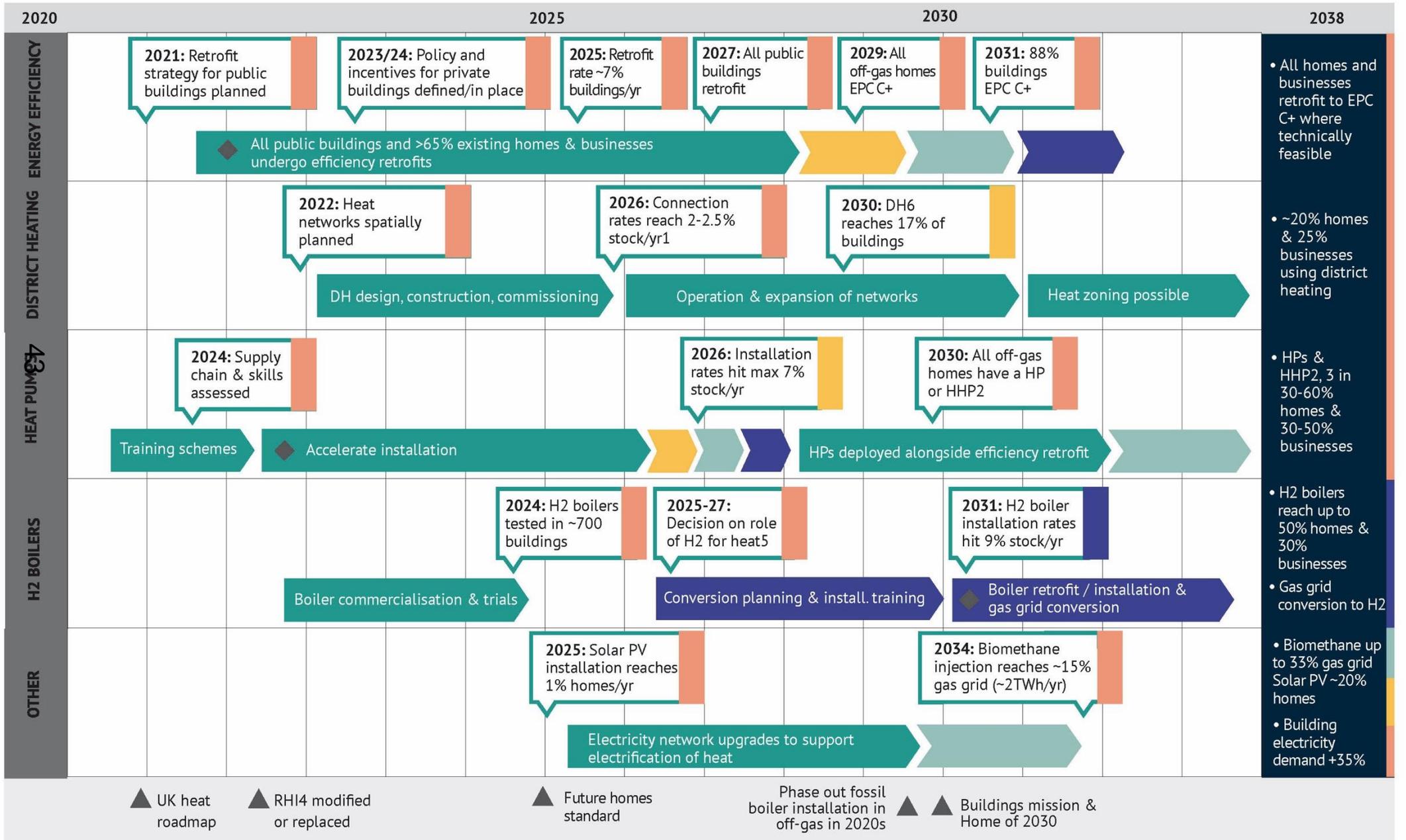
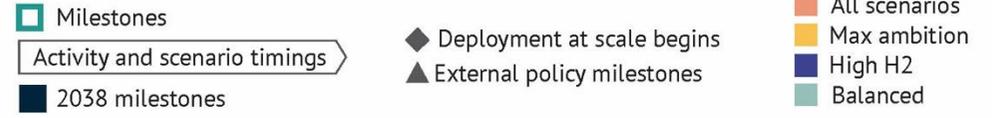
Cross-sectoral summary roadmap showing indicative timelines for implementation of the major measures

- ▲ Key decision points/ external milestones
- Activity timings
- » Indicates continuous action until 2038



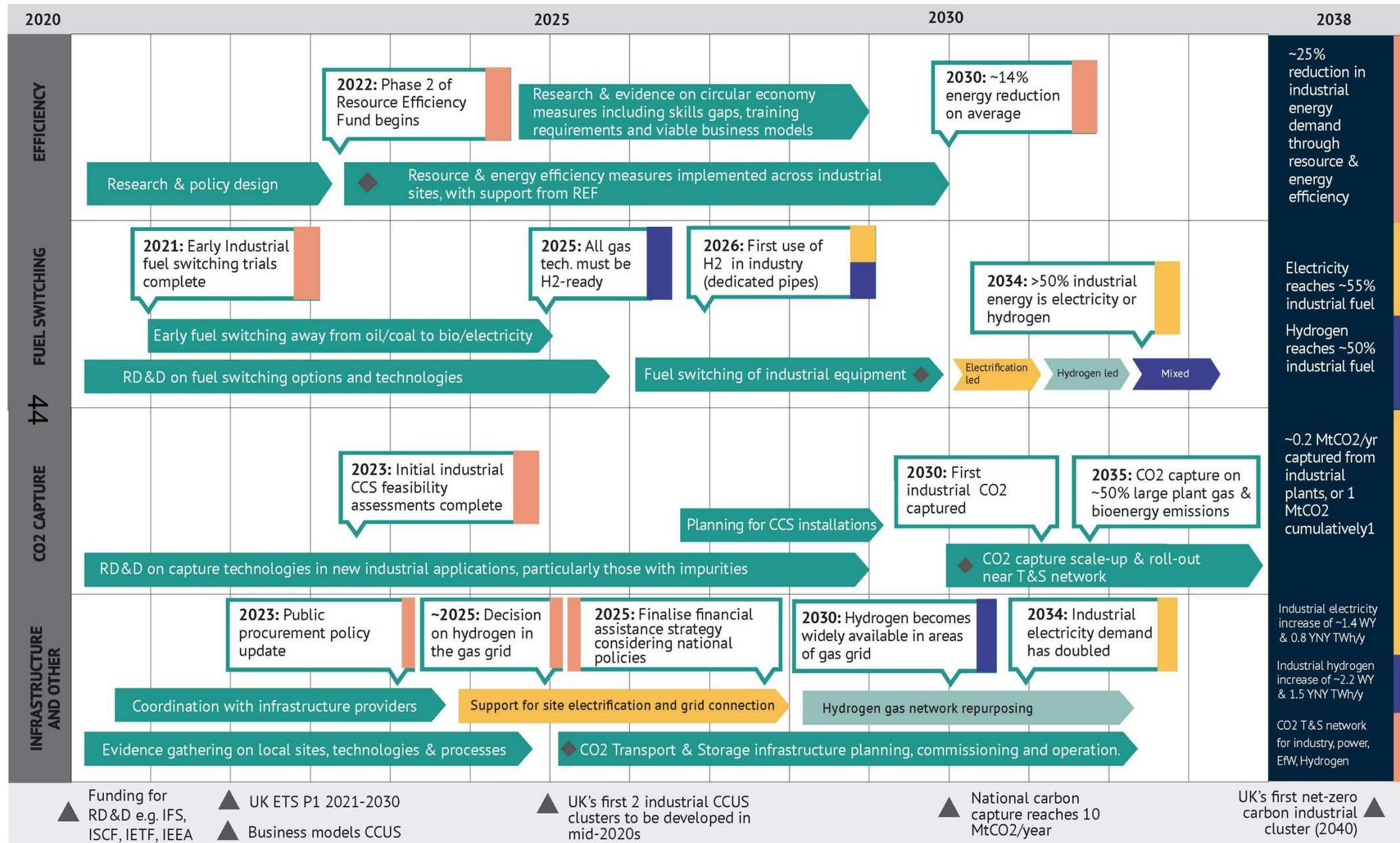
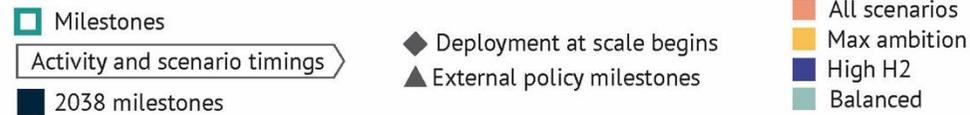
Acronyms: CCS: carbon capture and storage; H2: hydrogen; DH: district heating; EfW: energy from waste; AD: anaerobic digestion; ICE: internal combustion engine; HGV: heavy goods vehicle; EPC: energy performance certificate; RD&D: research development and demonstration; ETS: emissions trading system; ELMs: environmental land management scheme
 Note: timings are indicative due to simplification – please see sectoral roadmaps for more detail; 1. Expansion of charging network will continue beyond 2025

Roadmap - Buildings



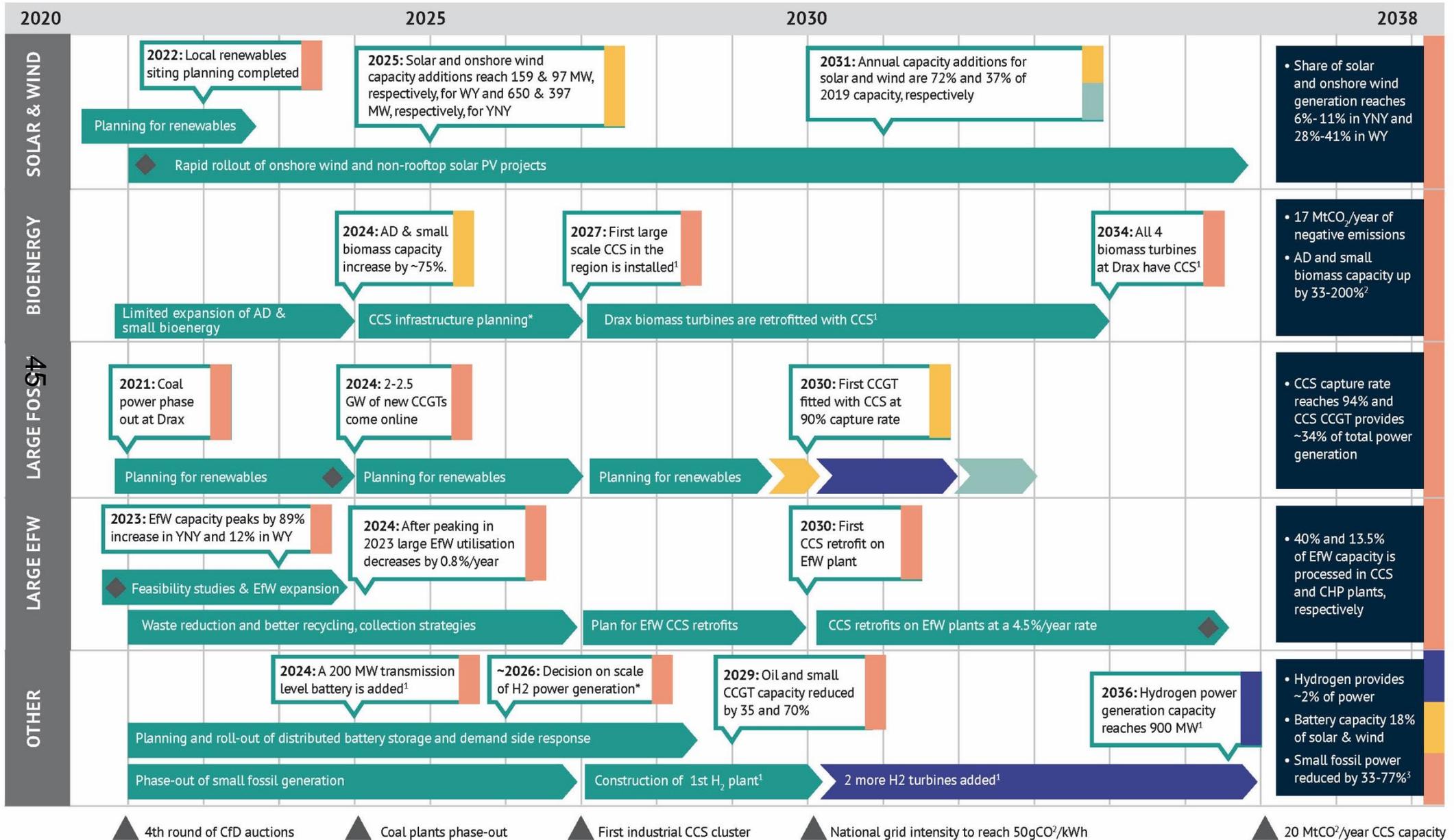
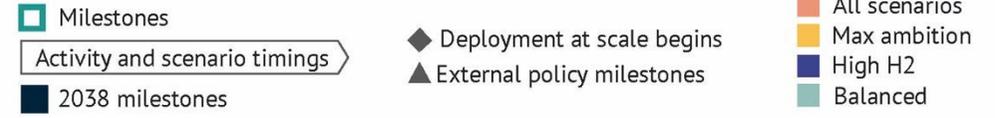
1. Higher value Max ambition, lower value High H2 and Balanced; 2. HP = heat pump, HHP = hybrid heat pump (heat pump plus boiler); 3. Higher value Max ambition, lower value High H2; 4. RHI = Renewable Heat Incentive; 5. Largely dependent on national decisions 6. District Heating

Roadmap - Industry



1 For the whole study region. Acronyms: T&S: transport and storage; IFS: industrial fuel switching; ISCF: Industrial Strategy Challenge Fund; The Industrial Energy Transformation Fund; IEAA: industrial energy efficiency accelerator; ETS Emissions trading system; CCS Carbon capture and Storage

Roadmap - Power



1- BECCS, CCS CCGT, Hydrogen turbines and one 200 MW transmission level battery are only installed in the York & North Yorkshire region.

2- Variation due to scenarios and technologies over the whole study region. 3- Savings are constant across scenarios with higher values representing WY and lower values YNY.

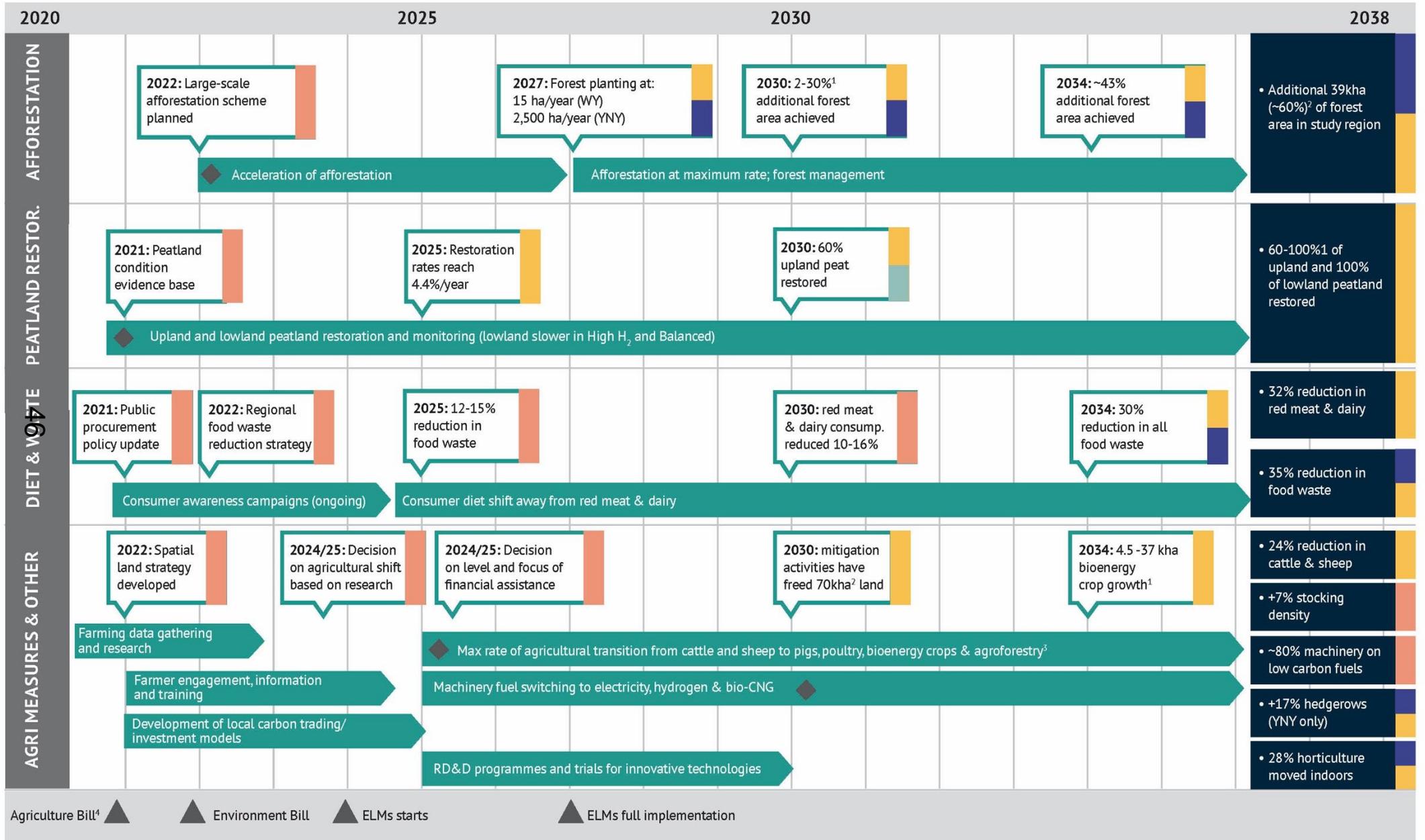
CCS: carbon capture and storage, BECCS: bioenergy with CCS, CCGT: combined cycle gas turbine, EfW: energy from waste, AD: anaerobic digestion, H2: hydrogen, CHP: combined heat and power

Roadmap - LULUCF and agriculture

■ Milestones
Activity and scenario timings
■ 2038 milestones

◆ Deployment at scale begins
▲ External policy milestones

■ All scenarios
■ Max ambition
■ High H2
■ Balanced



▲ Agriculture Bill⁴
 ▲ Environment Bill
 ▲ ELMs starts
 ▲ ELMs full implementation

1 Lower value is for WY, higher value YNY; 2. For the whole study region; 3. Agroforestry only in YNY, reaching 17-68 kha by 2038 (lower value Balanced scenario, higher value Max ambition)

4. Agriculture Bill passed into law Nov 2020; 5. ELMs = Environmental Land Management Scheme

Action Plan 2021 – 2024

Overview

The roadmaps identify the long-term routes we could take if we are to achieve net-zero carbon by 2038. The Action Plan is focused on the ‘no-regrets’ activity that will be taken over the next three years. Its primary aim is to put the partnerships and programmes in place that enable significant emission reductions to be made in future years. It also aligns with the Mayor of West Yorkshire’s term of office.

The Plan sets out what the mayor, West Yorkshire leaders, Combined Authority and local authorities will do over the next three years, reflecting our crucial role in providing leadership in meeting our regional target. We all, our local authority partners, the mayor, West Yorkshire businesses and people who live and visit our region, have a role to play in delivering this Plan. The Plan sets out high-level actions over the next three years to maximise emission reductions, improve nature and get ready for a changing world and climate.

We have structured the Action Plan around eight logical themes for action, reflecting independent advice provided to us on the policies and actions that need to be implemented over the coming years to enable good progress to be made towards the 2038 target. It also addresses gaps that we will need to bridge if we are to ensure the region is prepared for the impacts of a changing climate and to address wider social, economic and environmental threats and opportunities.

Leadership

The mayor, Combined Authority and local authorities want to lead by example with our efforts to tackle the climate and ecological emergencies. We firmly believe that we have a key leadership role given our unique position in the region of having a mayor, a devolution deal, and direct involvement in the issues of strategic significance.

Leadership is about being acting responsibly and with evidence of our impacts and contribution in the assets we all own, the way we operate, the policies we implement, and the investments we direct. It's about demonstrating leadership and our commitment to addressing climate challenges and the decline in the quality of our natural environment to stakeholders, including Government, regional businesses, and West Yorkshire residents.

LE01 Policies and Decision-Making

We will implement policy and decision-making that considers the issues and needs to tackle the climate and environment emergency.

We will do this by:

- Requiring all funding under our control to show how it is addressing carbon emissions, economic, social and environmental impacts.
- Requiring project sponsors seeking West Yorkshire Combined Authority funding to account for and mitigate the emissions and environmental impacts of projects. Developing and implementing tools to support this.
- Requiring all tendered bus services under the Combined Authority control to be net zero emission, or with a comprehensive plan to move to be net zero emission as soon as possible.
- Requiring all existing and future Combined Authority policies and strategies to demonstrate how they will contribute to addressing the climate and environment emergencies, legislation and required environmental performance of infrastructure and services.
- Developing options for a carbon offsetting scheme, recognising that for some schemes with multiple benefits seeking Combined Authority funding will be unavoidable.
- Purchasing clean energy for all our operations, considering the value of take up of power purchase agreements.
- Implementing sustainable travel policies and supporting measures.
- Developing a roadmap and implementation plan for the conversion of the vehicle fleet directly under the control of the Combined Authority to low and zero emission vehicles.

LE02 Environment and Energy Management

We will take greater control over the environmental impact the Combined Authority has as an organisation, publicly committing to challenging targets and actively monitoring and managing our impacts.

We will do this by:

- Making a public commitment to being net-zero carbon as an organisation by 2038 at the very latest.
- Declaring an ecological emergency, acknowledging that our ecosystems, habitats, and species are under increasing threat.
- Becoming a member of UK100, the UK network for locally elected leaders who have pledged to reach net-zero.
- Developing and implementing an organisation environment and energy management programme, incorporating our corporate actions for addressing climate change from our own operations.
- Developing a carbon reduction hierarchy to guide investment decisions and business operations.
- Disclosing our carbon footprint via the Carbon Disclosure Project (or similar) to increase transparency over our contribution to regional emissions.
- Developing an understanding of our Scope 3 emissions and implementing a plan to reduce them.

LE03 Monitoring and Evaluation

We will monitor and evaluate our organisational and regional progress to ensure we are on track to meet the targets that we have set and to accelerate action where progress is off-track.

We will do this by:

- Developing and implementing a monitoring and evaluation framework.
- Integrating metrics on climate and environmental performance into our annual State of the Region report.
- Updating our climate pathway model to enable us to run new climate scenarios based on local trends and new data that becomes available.

LE04 Influencing Strategy

We will clearly articulate our asks of Government and other stakeholders in terms of what is needed in the region

We will do this by:

- Producing an Influencing Strategy that clearly sets our asks and use it as the starting point for discussions with relevant Government departments and other stakeholders.

LE05 Pension Fund Divestment

We will use influence as a significant investor to start the process of developing options for West Yorkshire Pension Fund divestment from fossil fuel companies and other environmentally damaging activities.

We will do this by:

- Asking the West Yorkshire Pension Fund to provide an annual statement to the mayor on its divestment action.
- Working with the West Yorkshire Pension Fund to identify climate, clean energy and environmental investment opportunities that support delivery of the Plan.

Cross-Cutting

There are some areas of activity to address the climate and environment emergency that serve all the themes covered by this Plan, for example skills, research, and development, planning and neighbourhood approaches. In recognition of this, we have framed this theme around those actions that are applicable and cut across multiple themes, avoiding duplication.

CC01 Communications, Engagement and Marketing

We will deliver communications, marketing and engagement campaigns and actions focused on how partners, businesses and residents of West Yorkshire can work together to benefit from tackling the climate and environment emergency. This will be the start of sustained and productive engagement and conversations leading to meaningful long-term action and beneficially outcomes.

We will do this by:

- Building on existing activity across the region and look to enhance and add value where required.
- Outlining the ambition and plan for delivery to raise awareness and understanding of what is happening and how to get involved.
- Providing information and resources on technologies and behaviours that support people to move towards lifestyles and businesses that are safe, clean, ethical and low carbon.
- Advertising local and national schemes, incentives, and initiatives available to assist different groups, including businesses, to decarbonise.
- Conversations with partners, stakeholders and the public on our activities and the progress being made.

CC02 Strategic Planning

We will develop the spatial evidence base to tackle the climate and environment emergency and use this to inform and influence Local Plan policy and a potential West Yorkshire Strategic Spatial Plan.

We will do this by:

- Developing a Zero Emission Infrastructure Investment Framework (ZEIIF) that provides an evidence base on the infrastructure needed for the region to support net zero, nature recovery and climate ready.

CC03 Green Skills and Training

We will build on existing relationships and develop programmes and partnerships that ensure the region has the workforce and jobs that it needs to enable a transition to a sustainable net-zero carbon economy.

We will do this by:

- Integrating green skills and training into the mayor's pledge to deliver '1,000 well paid, skilled green jobs for young people.
- Establishing a Green Skills Partnership to deliver a roadmap and actions for the just and inclusive transition to a net-zero carbon economy and society.
- Undertaking an assessment to identify skills shortages, gaps, and demand in workforce (current and future).
- Implementing training programmes to address skills shortages and gaps and build the local skills base ready for the future.
- Creating careers and inspirational activities to ensure a future pipeline of talent.
- Considering how any existing programmes and skills delivery can contribute towards addressing the climate and environment emergencies, including commissioning of adult training and careers materials.
- Working with key partners to ensure that training aligns with labour market demand and provision can meet future demand in the growing green economy.

CC04 Green Finance

We will bring together existing funding, release new green finance, and leverage partner and private capital, to accelerate delivery.

We will do this by:

- Capitalising on the concentration of financial institutions located in the region, including the new National Infrastructure Bank, to develop partnerships and investment opportunities that increase finance and financial products.
- Considering the case for providing financial incentives for low emission transport technologies and encouraging behaviour change which supplements funding available at the national level where this is insufficient to accelerate the uptake of these measures.
- Bring forward the finance and funding for energy efficiency measures and low carbon technologies by households and measures, technologies, waste and material efficiency, and circular economy solutions by businesses through financial incentives and products.
- Considering the financial mechanisms which enable new homes being built in the region to be sustainable the point of construction.

- Considering the case for providing low-cost loans to developers of small and medium scale low carbon energy generation and flexibility technologies.
- Establishing a Climate Ready Financing Task Force that can work together to investigate the development of financial products for climate resilience and adaptation, for example resilience bonds.

CC05 Better Neighbourhoods

We will support a Better Neighbourhoods programme, bringing people, investment and funding together for greatest impact.

We will do this by:

- Launching a Better Neighbourhoods programme that support the best community proposals for greener, cleaner and climate ready neighbourhoods.
- Prioritising local, clean, and flexible energy solutions, healthy, affordable, and efficient buildings, walking, cycling and public transport, green and climate ready nature solutions.

CC06 Innovation for Net-Zero, Nature Recovery and Climate Ready

We will capitalise on the academic knowledge and expertise in the region to develop and support innovation that increases the ability of the region to meet its net zero carbon target and contribute to nature recovery and climate readiness.

We will do this by:

- Capitalising on the international expertise in the region to develop the solutions, share the results with partners and stakeholders, and integrate into our planning and activity.
- Prioritising net zero, nature recovery and climate ready through our Connecting Innovation Programme and influencing others in the innovation ecosystem to do the same.
- Exploring improved mechanisms for knowledge sharing and exchange between Higher Education Institutes and businesses across both research and development (ideation and development of new technologies) and innovation diffusions (adoption and exploitation of new technologies).
- Exploring the feasibility of focusing on net-zero, nature recovery and climate ready challenges as part of a new Mayors Challenge competition.
- Exploring a partnership arrangement with UK Research and Innovation on a region innovation programme with local and national expertise.
- Including net-zero, nature recovery and climate ready in existing innovation activities, for example the entrepreneur's package of support, Made Smarter Pilot.

CC07 Digital Infrastructure

We will support the delivery of digital infrastructure (gigabit capable broadband and 4/5G mobile connectivity) to enable greater opportunities for smarter and flexible activities and to increase the application of digital enabled technologies to reduce emissions and improve the environment.

We will do this by:

- Focusing on the public sector supporting delivery in hard-to-reach and/or rural areas that are unlikely to receive connectivity commercially.
- Delivering the West Yorkshire and York Superfast Broadband Programme (Contract Three) providing gigabit capable broadband to areas.
- Delivering the Wakefield Gigabit Voucher Top-Up Programme subsidising broadband connectivity to clusters of premises.
- Engaging with the Department for Digital, Culture, Media, and Sport (DCMS) on Project Gigabit which will support delivery of gigabit-capable broadband to the 'final 20%' of premises in the region.
- Refreshing the Digital Framework to reflect the role digital can play in addressing the climate and environment emergency.

Transport

The transport sector is the highest emitting sector of carbon emissions within West Yorkshire and is dominated by road-transport and the private car. To reduce emissions to virtually zero within the sector will require a fundamental change in the need and how we travel, with fewer journeys enabled by digital technology and and more of the journeys made being undertaken by public transport, cycling and walking.

This theme is focused on the activity that we will undertake over the next three years to address emissions from transport in the region and represents a combination of accelerating schemes that contribute to net zero and establishing the groundwork for significant emission reductions in the years to come.

TR01 Connectivity Infrastructure Plan

We will accelerate the delivery of the West Yorkshire Connectivity Infrastructure Plan.

We will do this by:

- Leading programme development for the City Region Sustainable Transport Settlement (CRSTS), working with West Yorkshire local authorities as the highway authorities and industry partners, and ensuring sustainable transport measures are included within the programme.
- Commencing planning on a range of mass transit routes across the region and making early progress on developing and delivering a Phase 1 route.
- Accelerating substantial investment in sustainable transport infrastructure, for example bus corridors, priority, and facilities; rail infrastructure; strategic Park and Ride; highways investment addressing road space reallocation for walking, cycling and public transport.
- Accelerating substantial investment in walking and cycling interventions with a focus on places and neighbourhoods and access to the public transport network.
- Delivering a substantial behaviour change programme.

TR02 Road Space Reallocation

We will investigate road space reallocation on key corridors for cycling, walking and public transport as a key mechanism for reducing travel by the private car.

We will do this by:

- Developing an overarching strategy for road space reallocation.
- Scrutinising the case for the construction of new roads through the funding that we control and only move schemes forward where they demonstrate significant benefit in delivering our priorities.

- Engaging with Highways England to support the mitigation of the impacts from the Strategic Road Network (SRN) to address environmental, safety and segregation issues e.g., using Highways England's Designated Funds Programme.
- Ensure road space reallocation forms part of bus reform (TR06) activities with the Bus Service Improvement Plan including better bus priority measures and integration across public and active travel modes.

TR03 Highways Demand Management

We will, in partnership with our West Yorkshire local authorities, examine the evidence and blend of policy options required to reduce car trips and encourage a mode shift to public transport and active travel, while recognising that ultimate control for parking related measures rests with West Yorkshire local authorities.

We will do this by:

- Consider measures that reduce parking supply to manage demand for car trips and show how the space can be reallocated to other uses such as car clubs, active and sustainable transport infrastructure, parklets, wider resident and business use, and micro-consolidation.
- Considering how banded parking charges could be implemented, for example by incorporating both tailpipe and other emissions, safety standard scores, dimensions incorporating weight, height, width, length etc., and on-street / off-street public parking.
- Considering how travel planning and other measures could be implemented to manage demand for business related travel.
- Work in partnership with West Yorkshire local authorities as the responsible bodies for the regulation of parking on the development of highways demand management measures.

TR04 Cycling and Walking Infrastructure

We will accelerate the development and implementation of Local Cycling and Walking Infrastructure Plans (LCWIPs), looking to expand their reach beyond town and city centres.

We will do this by:

- Utilising the CRSTS to accelerate the implementation of measures identified in LCWIPs.

TR05 Electric Vehicle Charging

We will accelerate the deployment of electric vehicle charging points across the region through direct funding or utilising our devolved powers with a focus on ensuring equity in provision.

We will do this by:

- Establishing an electric vehicle charging point framework to facilitate the procurement of electric vehicle charging points for public sector organisations.
- Considering the allocation of funding, possibly through the CRSTS, to support the roll-out of electric vehicle charging points for the public sector and communities.
- Investigating the need and business case for using the mayor's devolved powers to mandate the installation of electric vehicle charging points and/or hydrogen fuel at large refuelling stations.
- Collaborating with Northern Powergrid to ensure grid capacity, their investments and smart network management can support electric vehicle charging points in the areas proposed for installation.

TR06 Bus Reform

We will develop a Bus Service Improvement Plan which sets the ambition for the future of bus services regardless of the regulatory framework and includes activity such as the decarbonisation of the bus network and encouraging modal shift.

We will do this by:

- Supporting the transition of the bus fleet to zero emissions.
- Requiring all tendered services under our control to be zero emission, or with a comprehensive plan to move to zero emission as soon as possible.
- Investigating mechanisms to encourage and incentivise people to make sustainable travel choices such as ticketing offers and rewards schemes.
- Improving the supporting infrastructure for buses to increase patronage and decrease private car use, for example improved punctuality and reliability, consistent bus priority offer, better integration into the wider public transport system.

TR07 Future Rail Provision

We will set out rail's role as the backbone, alongside mass transit and bus and supported by active travel, as an attractive integrated sustainable and low carbon network that allows seamless, straightforward, swift, and reliable journeys throughout the region and beyond.

We will do this by:

- Completing the production of our Rail Strategy, including a variety of supporting studies to establish a roadmap to the delivery of our Rail Vision.

- Setting out the network interventions needed to accommodate the future demand for passenger and freight rail services to ensure rail can deliver the modal shift required to meet the net-zero carbon target, and how this should be delivered.
- Considering the case for reopening lines and stations.
- Seeking to influence existing schemes to ensure that they reflect our priorities and vision, for example Trans-Pennine Route Upgrade, Northern Powerhouse Rail, High Speed 2.
- Entering a Strategic Rail Partnership of the Mayor with Network Rail ahead of the constitution of the new Great British Railways.

TR08 Shared Mobility

We will explore opportunities for shared mobility models that we can support and undertake Demand Responsive Transport (DRT) trials.

We will do this by:

- Exploring opportunities for shared mobility transport (including micro-mobility) to support the objectives of the Connectivity Infrastructure Plan.
- Undertaking shared mobility trials to explore business models, public acceptance, impacts and the ability of services to help meet our goals.
- Identifying suitable trial sites to develop the West Yorkshire mobility hub concepts in different settings, including engaging with and securing buy-in from local stakeholders.

TR09 Better Active Mobility Neighbourhoods

We will, in partnership with stakeholders, deliver better, active mobility neighbourhoods with programmes that acts as catalysts to deliver co-benefits across transport, energy, green infrastructure and public health (see CC05).

We will do this by:

- Deliver neighbourhood programmes, that change the infrastructure and support communities in favour of walking, cycling and high quality, green and climate ready public realm for people.

Sustainable Homes

There are over a million homes in West Yorkshire contributing nearly a third of all emissions related to buildings in the region. There are hundreds of thousands of properties that require upgrading and refurbishment to be healthy, affordable, decent and resilient.

We estimate that just less than 700,000 homes across West Yorkshire will need some form of energy efficiency retrofit to be undertaken to bring them up to a level that contributes to significant emissions reductions. An equivalent number of the existing housing stock will also need some form of low carbon heating to be installed, especially given our need to transition away from natural gas as a heating source.

In addition to the existing housing stock, we cannot ignore the thousands of homes that will need to be built in the region over the coming years. To ensure these homes do not contribute to further emissions and require expensive retrofits in the future it is important to ensure energy efficiency and low carbon heating and power is built into their design at the construction stage.

This theme is focused on the activity that we will undertake over the next three years to ensure homes are healthy, affordable, more energy and water efficient and ready for a changing climate, both existing and new build. We will focus on the necessary actions to ensure the scale of this challenge is met over the long term.

HO01 Energy Advice Service

We will establish, in partnership, a one-stop-shop for energy and water efficiency, clean energy and climate resilience information and advice for West Yorkshire residents.

We will do this by:

- Designing the options for delivering a regional one-stop-shop and securing the resources and funding to implement the preferred option.
- Developing a preferred list of trusted local suppliers to build consumer confidence and ensure high-quality installation.

HO02 Better Homes Yorkshire Hub

We will establish a Better Homes Yorkshire Hub for better, net zero, neighbourhoods, Delivering home improvement solutions for healthy, affordable, efficient and net zero homes across all tenures.

We will do this by:

- Establishing the Better Homes Yorkshire Hub, including a task force to steer the customer journey, technical, commercial and finance activities.
- Look to the West Yorkshire Housing Partnership to create a market for better homes through their influence and assets.

- Developing a housing energy stock model, with enhanced data collation and analysis, to quantify and spatially plan the retrofit pipeline, costs, timescales, and solutions.
- Procuring a framework of high-quality repair, refurbishment and retrofit suppliers.
- Supporting the building of 5,000 affordable and sustainable homes.
- Requiring the performance of new build homes meet energy, water efficiency, climate resilience and and space standards.
- Testing retrofit customer journeys through our Community Renewal Fund project or alternative funded demonstrations.
- Making the case, and submitting proposals, to government for sustainable long-term funding for West Yorkshire.
- Exploring the most appropriate solutions for hard-to-decarbonise, hard-to-treat, hard-to-reach homes in West Yorkshire, including consideration of innovative solutions such as PassivHaus.
- Piloting a home retrofit loan to unlock funding for 'able-to-pay' residents to enable mixed tenure, scalable neighbourhood schemes.

Business and Industry

West Yorkshire is a region with a small number of energy intensive industries. This is reflected in the relatively small emissions from this sector of the economy when compared to our largest emitting sectors of transport and buildings. Emissions are small but we do have concentrations of energy intensive industries in the glass, chemicals and food and drink sectors. It will be important to provide support to these industries to enable them to decarbonise and continue to provide vital employment for the people of West Yorkshire.

We have several Small Medium Enterprises (SMEs) within the region that contribute significantly to overall emissions of the building sector. Meeting net zero carbon by 2038 will require us to provide the flexible support that allows SMEs to decarbonise and enhance their competitiveness.

Creating a clean, safe and inclusive economy, as we recover and move beyond COVID-19, creates significant opportunities for firms, investors and innovators to shape the new economy of West Yorkshire.

We are focussed on the activity that we will undertake over the next three years to address emissions from our businesses and industry and builds on the support that we already provide to SMEs in the region for energy and resource efficiency.

BI01 Business Sustainability Support

We will build on the success of our existing programmes for businesses with the support and advice they need to make their operations more sustainable, including support for decarbonisation and circular economy activity.

We will do this by:

- Investigating options for expanding our existing team providing sustainability support to businesses.
- Undertaking a bottom-up analysis of business sector size, value and needs to enable our support provision to be tailored to areas of greatest benefit and potential.

BI02 Industrial Decarbonisation

We will consider the support for regional industrial sites to assist with the decarbonisation of their operations.

We will do this by:

- Considering the options for support for industrial sites to carry out audits and feasibility studies for developing decarbonisation plans and roadmaps.
- Utilising our partnerships and contacts to identify and engage with large industrial site operators.

- Commissioning regional surveys of small industrial sites to understand current technologies on all sites and the applicability of low carbon options.
- Gathering the evidence for the feasibility of decarbonisation options at small industrial sites and develop archetypal decarbonisation plans.

BI03 Business Energy Efficiency & Renewable Energy

We will build on the success of our ReBiz scheme to provide further advice, funding and access to finance for energy efficiency improvements and renewable energy technologies across SMEs in the region.

We will do this by:

- Developing the business case for the continuation of the ReBiz programme beyond 2023.
- Expanding our existing support to businesses in the region, for example ReBiz, to be a universal offer across all SMEs, social enterprises, and charities.

Work with local authority and other partners like Universities and Colleges to create shared spaces for commercial eco-innovation and investment opportunities.

BI04 Circular Economy, Waste and Material Efficiency

We will provide support, advice and funding for circular economy and material efficiency activity in the region and support the work of West Yorkshire local authorities responsible for local waste management services.

We will do this by:

- Undertaking research and coordination of schemes to progress the circular economy within the West Yorkshire region through industrial recycling, remanufacturing and the introduction of alternative circular business models (including closed loop recycling, repair, rental / leasing etc.).
- Working with West Yorkshire local authorities to identify opportunities to introduce a circular economy,
- Working with businesses to develop links between those with unwanted resources that can be utilised by other businesses.
- Working with the business communities to investigate how the integration of circular economy business models could be used to strengthen the local economy.
- Working with businesses to identify any gaps which might prevent involvement with the circular economy.

Energy Generation, Supply and Flexibility

Regardless of our pathway to reaching net zero by 2038 it will require a fundamental change to how the energy system currently operates and what it does in the future. The system will need to be ready for increasing amounts of renewable electricity generated by wind, solar and other low carbon sources while also balancing and meeting changing demands for energy.

This theme is focussed on the activity that we will undertake over the next three years to support the transition of the energy system (including transport) away from fossil fuels to low carbon sources, technologies and services. Playing our part in the rapid transformation of the energy system, accelerating the deployment of technologies that will help to deliver the clean and flexible energy system of the future.

EG01 Local Area Energy Planning and Delivery

We will develop, in partnership, Local Area Energy Plans (LAEPs) for the region that meet the needs of our communities and businesses. To inform, shape and enable the transition to a net zero carbon energy system and share this intelligence and information for the business planning and investments of our partners, including energy and water network companies.

We will do this by:

- Consulting with local authority partners about their interest in and commitment to LAEPs.
- Providing regional coordination and action, supporting our local partners with their energy planning.
- Complete at least one LAEP.
- Seeking funding to roll out LAEPs across West Yorkshire.

EG02 Community Energy

We will explore the potential for providing support to communities to develop their renewable and low carbon energy aspirations, plans and projects to deliver change for their communities.

We will do this by:

- Considering the case for providing financial support for community energy to fund feasibility work and capital investment.

EG03 Heat Decarbonisation

We will identify the suitable locations for the implementation of different heat decarbonisation technologies and explore mechanisms to accelerate their implementation.

We will do this by:

- Considering the case for establishing a dedicated team focussed on the decarbonisation of heat across homes and businesses.
- Refreshing our approach to the delivery of district heat networks.
- Establishing new programmes relating to heat pumps.
- Developing and implementing a heat decarbonisation hierarchy for inclusion, as appropriate, in Local Plans across the region.
- Developing heat zoning plans for West Yorkshire that could be applied to new and existing developments via local planning policy.

EG04 Solar Photovoltaics & Storage

We will explore opportunities to support identifying and installing solar Photovoltaics (PV) and storage on buildings across the region.

We will do this by:

- Undertaking research across the region identifying the potential for solar PV and storage across domestic and business properties.
- Quantifying and mapping where the greatest opportunity exists to enable support and advice to be targeted.
- Considering the development and implementation of resource for residents and businesses for them to use to help identify if their property is suitable for solar PV.
- Considering the development of an offer to homes and business to support take up solar PV and storage.

Natural Environment

Our natural environment has a critical role to play in underpinning a healthy and resilient population helping to reduce emissions and providing climate ready services and solutions. A high-quality and accessible natural environment is vital for humans, biodiversity and sustainable places. The COVID-19 pandemic has clearly demonstrated the value of having green spaces easily accessible to peoples' homes, particularly in terms of both physical and mental health.

While some of the regions natural environment is in a good condition, this is by no means true for all West Yorkshire. Our biodiversity and ecosystem services are coming under increasing threat, and this is impacting on many areas of our economy, resulting in us not deriving the fullest value from the full range of natural environment assets we have.

This theme is focussed on the activity that we will undertake over the next three years to maximise the emissions savings that can be achieved from our natural environment whilst delivering multiple other benefits to our communities, businesses and visitors with nature-based solutions.

NE01 Local Nature Recovery Strategy

We will work with partners to produce a Local Nature Recovery Strategy (LNRS) for the region (as set out in the Environment Bill) which drives a more coordinated, practical and action investment focussed approach to helping nature and people flourish together, whilst delivering wider nature-based environmental, social, and economic benefits.

We will do this by:

- Utilising existing partnerships and stakeholder groups to establish the principles and scope for the LNRS, shape its evidence and content, and provide oversight for the development of the work.
- Mapping and valuing existing (and potential new) natural environment assets, ecosystem services, and natural capital of the region.
- Integrating the outcomes of the LNRS into regional planning and development considerations.

NE02 Land-Use Data and Evidence

We will undertake data and evidence collection activity to further our knowledge and understanding of the role land-use and agriculture can play in addressing the climate and environment emergencies and delivering regional sustainable development benefits.

We will do this by:

- Undertaking research with partners on the current peatland condition in the region and potential for restoration.

- Developing an understanding of the carbon intensity of local farming techniques.
- Identifying optimal livestock stocking densities that can be supported by the different landscapes of the region.
- Developing carbon sequestration measurement and monitoring techniques.
- Determining the extent of food waste quantities along supply chains in the region as a start to reducing food waste.

NE03 Green Infrastructure and Access for Health

We will work with the West Yorkshire and Harrogate Health and Care Partnership to expand schemes that provide nature-based activities for communities in the region.

We will do this by:

- Working with the West Yorkshire and Harrogate Health and Care Partnership to extend their existing scheme and adapt criteria alongside wellbeing outcomes.
- Considering the case for providing additional funding to green social prescribing.

NE04 Regenerative Nature Recovery Schemes

We will support those responsible for land restoration and production schemes, for example tree planting, peatland restoration, and local food systems that deliver and demonstrate sustainability including net zero, nature recovery and public health outcomes.

We will do this by:

- Support the White Rose Forest (WRF) Action Plan 2021 – 2025, formalising our involvement by becoming a joint venture signatory, getting behind the development of the WRF Plan 2025 – 2050, and utilising the WRF Delivery Pathway for our work with landowners and communities to increase tree canopy cover in the region.
- Consider the case for establishing a regional grants programme for land-use activities being progressed by communities, for example community greening and food growing in urban areas, community tree and hedgerow planting schemes, and supporting outlets for local healthy produce that does not meet supermarket standards.
- Support partners such as Yorkshire Water, National Trust, Moors for the Future, South Pennines Park, local authorities and others to restore nature, landscapes, and the peatland of the region.

NE05 Farmer & Landowner Information and Support Service

We will work with farmers and landowners on the information and support they need to make decisions that are good for their business and environment and consider the provision of funding to help them achieve these goals.

We will do this by:

- Considering the case for resources that provide information about options and interventions available, best practice examples and sources of funding and support.
- Developing a database of trusted, impartial advisors.
- Establishing knowledge networks to ensure best practice and latest evidence is shared, and to support a shift in culture among local stakeholders towards sustainable, climate friendly practices.
- Considering the development of a programme of grants and financial incentives for farmers and landowners to deliver measures that complement the new Environmental Land Management Scheme (ELMS) and fairly reward rural businesses for actions that contribute to sustainable development and clean growth achieving the net zero, nature recovery and climate ready ambitions.

Climate Ready

We accept a changing climate is already locked in and consequently we will need to be prepared for the increased risks, and opportunities, that this brings to the region. Efforts to reduce emissions and co-exist with nature on a global scale will have an impact on how severe these risks (and potential opportunities) will be for the region. It is important that we understand how these impacts will affect our businesses and communities, and those most vulnerable to more frequent and intense weather like the elderly and young people. The measures we all need to put in place to mitigate and adapt to the most disruptive effects.

This theme is focussed on the activity that we will undertake over the next three years to start being prepared for the impacts of a changing climate and start managing the health impacts (physical and mental) and disruption to the economy and society.

CR01 Climate Ready Strategy

We will produce a Climate Ready Strategy for the region, covering climate adaptation and resilience and identifying the risks and opportunities to the region of a changing climate.

We will do this by:

- Produce a regional version of the UK Climate Change Committee's (CCCs) Climate Risk Independent Assessment (CRIA) identifying the risks and opportunities that a changing climate will create and creating an evidence base on which robust decision making can be based.
- Producing, in partnership, a regional strategy and action plan.
- Integrating the findings of the CRIA into our decision-making and investment processes and encouraging our partners to do the same.

Working with local government public health and Public Health England to better understand and act on climate and linked population health threats.

CR02 Embedding Climate Readiness

We will ensure that climate readiness is embedded across the activity of this plan and Combined Authority operations and encourage our partners to follow and lead.

We will do this by:

- Reviewing our policies and strategies in relation to the outputs of the CRIA referred to in CR01 and implementing necessary changes.
- Considering how our Assurance Framework could be updated to better reflect climate readiness.

CR03 Flood Risk and Drainage

Flood risk does not respect administrative boundaries and can occur across all parts of West Yorkshire. The Aire and Calder River catchments flow through our region, with the upland elements of these catchments stretching into North Yorkshire and providing opportunities to 'slow the flow' of water through natural flood management techniques to provide more protection downstream.

Many of our communities are now under threat from flooding, with some areas under severe and constant threat from flooding, particularly in the wetter autumn and winter months.

We will work with the Yorkshire Regional Flood and Coastal Committee (YRFCC), the Environment Agency and other partners to deliver enhanced flood protection, incorporating natural flood management, and climate resilience to communities, homes and businesses across West Yorkshire.

We will do this by:

- Working in partnership with the YRFCC, Environment Agency, Risk Management Authorities, and other partners to deliver the six-year West Yorkshire capital flood risk management programme. This programme includes planned investment of £255m to better protect almost 7,000 homes across West Yorkshire and deliver benefits of over £2.5bn.
- Engaging with Government to outline the case for greater and accelerated delivery of flood risk management infrastructure to realise our ambition for a climate and resilient region. This will include identifying up to £120m of further investment to support the Combined Authority's Priority Flood Programme to provide enhanced flood protection to our communities and natural flood management.
- Continue to work with partners to deliver the recommendations of the Leeds City Region Flood Review and ensuring the Review's outputs align to the Climate and Environment Plan.
- Supporting the development of improved land-use activities relating to drainage and flooding, utilising the proposed Zero Emission Infrastructure Investment Framework and White Rose Forest Landscapes for Water Programme
- Improving the infrastructure, resilience and level of preparedness of existing development in flood zone areas, with a focus on investigating methods of making business areas more resilient to future flooding events and able to access suitable flood insurance

Roles

This Plan will guide the actions of the mayor, Combined Authority and West Yorkshire local authorities to deliver our commitment to sustainable development, tackling the climate and environment emergency and achieve a net zero economy by 2038. We cannot do this alone and we will need the power of our partnerships and the people of West Yorkshire to do this together.

This section provides actions that can help deliver this Plan. It is by no means an exhaustive list and is meant as a starter-for-ten of the types of activity people could consider. We have highlighted the types of roles that can be played by five groups: the mayor; West Yorkshire Councils; national government; West Yorkshire businesses; and the people of West Yorkshire.

More information on stakeholder roles will be developed as further work is undertaken on each of the actions in this plan.

The Mayor of West Yorkshire

In helping to deliver this Plan the mayor will:

- Lead by example by committing the Combined Authority to net zero emissions by 2038 and having a positive impact on the environment and nature throughout work, investment, and funding.
- Convene business leaders to collaborate on tackling the climate and environment emergency, sustainable development and enhance existing partnerships to deliver the mayor's pledge.
- Call on national government for statutory local net zero powers, funding, and incentives.
- Chair a Better Homes Yorkshire Hub that champions a new way for healthy, warm, affordable, and low carbon homes for all.
- Release a 'Fund for Nature' focussed on communities, green spaces, local seasonal and healthy food providing a doorstep 'natural' health service.
- Launch a 'Renewables West Yorkshire' scheme with attractive offers and low-cost finance for renewable energy technologies.
- Launch a Better Neighbourhoods Competition, bringing people together for greatest impact.
- Provide grants and free advice for SMEs worst hit by the pandemic to recover and grow their business with energy efficient and circular business applications.
- Secure funding for flood risk management priorities and engage with government to invest more in our region.

- Use devolved powers to require electric vehicle charging points and/or hydrogen refuelling to be installed in large refuelling stations across West Yorkshire.
- Work to divest West Yorkshire Pension Fund and any West Yorkshire Combined Authority assets from fossil fuel activities and companies and switch investments to climate and nature solutions.

West Yorkshire Councils

In helping to deliver this Plan West Yorkshire Councils will:

- Continue to invest in sustainable development, clean growth and community regeneration and resilience.
- Produce and extend climate and environment roadmaps and action plans following climate and ecological emergency declarations.
- Align Local Plan policies to further sustainable development, decarbonisation, net zero and nature recovery plans and outcomes.
- Demonstrate leadership in carbon reduction and transitioning away from fossil fuels in operations, buildings, procurement and partnership working.
- Ensure new buildings contribute to sustainable development in design, construction and whole life performance.
- Collect and use carbon offset funds from new development to drive climate action across the local authority area.
- Work with the mayor and Combined Authority on the rollout of a network of electric vehicle chargers and the delivery of better neighbourhoods.
- Accelerate home and workplace retrofit and improvements.
- Rollout solar PV, storage, heat pump and heat networks across building stock and land assets.
- Work with businesses, developers and investors to make West Yorkshire the location for business models, practices and delivery that achieve sustainable development and improve resilience.
- Work with the West Yorkshire Pension Fund and other investors to divest from fossil fuel activities and companies and switch investments to climate and nature solutions.

National Government

In helping to deliver this Plan national government must:

- Provide new powers and multi-year sustainable funding and incentives for achieving net zero and nature recovery at regional and local levels, without these freedoms and flexibilities local areas will find it increasingly difficult to deliver against their locally defined targets.

- Increase powers and funding to give greater regional control over rail that facilitates the electrification of existing routes and progression of new rail schemes.
- Produce a national decarbonisation strategy for aviation and introduce a frequent flyer levy.
- Open the Channel Tunnel to enable the expansion of rail services from the north to mainland Europe (sleeper services) as an alternative to air travel.
- Provide a clear policy direction on the future of heat decarbonisation.
- Design a more ambitious successor to the Renewable Heat Incentive from 2022.
- Revise Minimum Energy Efficiency Standards for the private rented sector.
- Implement regulation of the district heat network industry.
- Enable greater local influencing over the targeting of the Energy Company Obligation funding.
- Decouple generation and storage components when dealing with National Significant Infrastructure Projects so local planning has larger influence over medium size projects.
- Support early deployment of carbon capture, utilisation and storage infrastructure in Yorkshire and the Humber as an attractive location and critical for UK decarbonisation.
- Develop business models for supporting carbon capture, utilisation and storage and hydrogen electricity generation.
- Commission large-scale research on hydrogen for electricity generation and storage.
- Provide long-term funding for tree and hedgerow planting, agro-forestry, and peatland restoration either nationally and/or as part of nature recovery strategies.
- Ensure that the new Environmental Land Management Scheme (ELMS) adequately supported measures targeted for delivering net zero and nature recovery in West Yorkshire.
- Streamline the application process for afforestation.

Businesses

In helping to deliver this Plan businesses could:

- Work with their local authorities and supply chains to explore options to alter business models, products, services or operations to unlock value, contribute to sustainable development and clean growth.
- Measure and report their greenhouse gas emissions and set long-term emission reduction targets.

- Ensure buildings are as energy efficient as possible and include measures to reduce cooling needs.
- Look to connect buildings to low carbon heat networks or install heat pumps to meet heating requirements, replacing old fossil fuel boilers.
- Optimise fleet movements and switch vehicles to electric or other low carbon fuels.
- Use commissioning and procurement to encourage decarbonisation, sustainable development and minimise waste, such as switching to green energy tariffs.
- Work with staff to support behavioural changes that help reduce businesses emissions such as travelling less.

People of West Yorkshire

In helping to deliver this Plan the people of West Yorkshire could, depending on individual circumstances:

- Get an Energy Performance Certificate (EPC) assessment to see how best to improve the energy performance of their home.
- Explore whether your home is suitable for solar (PV and thermal) and/or electricity storage installations, matched with a smart energy tariff.
- Look to install low carbon heating technologies that benefit from financial incentives.
- Apply the waste reduction hierarchy of reduce, reuse, and recycle.
- Only purchase energy efficient appliances when needing to replace old end of life versions.
- Walk, cycle, or use public transport more often.
- Use car clubs, if the use of a car is necessary, selecting those whose service is provided through electric vehicles.
- Switch energy supplier to a green tariff.
- Consider flying less.
- Reducing the amount of meat within your diet and consider moving to a more plant-based diet.

Measuring and Monitoring

We will measure, monitor, and report on our progress as part of our annual State of the Region publication. We will also report against a set of indicators, including the implications for equality, diversity and inclusion (for example access to nature and green spaces by protected characteristic) - for both the region and Combined Authority operations, which could include (but not be limited to):

- tonnes of carbon dioxide emissions from Combined Authority operations;
- regional tonnes of carbon dioxide emissions;
- per capita tonnes of carbon dioxide emissions;
- percentage transport mode share;
- number of domestic gas and oil boilers, heat pumps and heat network connections;
- solar PV and storage installed capacity;
- fuel poverty;
- number of premises with enhanced flood resilience measures;
- number of jobs and businesses protected from flooding;
- number of jobs sustained and created by the net zero and environment economy; and
- percentage of the population with access to nature and green spaces.

Schemes considered for West Yorkshire Combined Authority funding will use our new Carbon Impact Toolkit to assess and mitigate their carbon and environmental impact as part of the Authority's Assurance Framework for funding and investment

Our research and intelligence capabilities, processes and data will evolve over time, and we will keep indicators and datasets that we are measuring progress against under review to ensure our accounting, monitoring, and reporting is, and continues to be, high quality.



Tracy Brabin
Mayor
of West Yorkshire

[Find out more](#)

westyorks-ca.gov.uk

West Yorkshire Combined Authority

40-50 Wellington House,
Wellington Street,
Leeds,
LS1 2DE

All information correct at time of writing.

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Report to: Climate, Energy & Environment Committee

Date: 19 October 2021

Subject: **COP26 Regional Green Zone Events**

Director: Liz Hunter, Interim Director of Policy & Development

Author: Nadia McPherson, Energy Hub Manager

Is this a key decision?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is the decision eligible for call-in by Scrutiny?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Does the report contain confidential or exempt information or appendices?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If relevant, state paragraph number of Schedule 12A, Local Government Act 1972, Part 1:	
Are there implications for equality and diversity?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

1. Purpose of this report

- 1.1 Update on the activity planned in the region before and during the 2021 United Nations Climate Change Conference (Conference of the Parties 26 – COP26).

2. Information

- 2.1 The COP 26 UN Climate Change Conference, hosted by the UK in partnership with Italy, will take place from 31 October to 12 November 2021 in the Scottish Event Campus (SEC) in Glasgow. ‘The Parties’ are the governments which have signed the UN Framework Convention of Climate Change (UNFCCC). The COP brings these signatory governments together once a year to discuss how to jointly address climate change. It is attended by world leaders, ministers, and negotiators but also by representatives from civil society, business, international organisations, and the media.
- 2.2 COP26 is a critical summit for global climate action. To have a chance of limiting warming to 1.5 degrees, global emissions must halve by 2030 and reach ‘net-zero’ by 2050. The 2021 Intergovernmental Panel on Climate

Change (IPCC) report underscores it is still possible to achieve the 1.5-degree-target but only if unprecedented action is taken now.

- 2.3 The Nationally Determined Contributions (NDCs) submitted by nations in 2015 were collectively not ambitious enough to even limit global warming to 'well below' 2 degrees. However, the signatories of the Paris Agreement are expected to submit new – and more ambitious – NDCs every five years, known as the 'ratchet mechanism'.
- 2.4 COP26 is the first test of this ambition-raising function. One of the main 'benchmarks for success' is that as many governments as possible submit new NDCs and, when put together, these are ambitious enough to put the world on track for 'well below' 2 degrees, preferably 1.5 degrees.
- 2.5 A successful outcome in Glasgow also requires developed countries to honour a promise they made back in 2009 of mobilizing \$100 billion per year by 2020 to support climate action in developing countries. The official figures for 2020 will not be available until 2022, but it is clear the goal was not met last year.
- 2.6 Strengthening the ability to adapt to climate change impacts is another important element of COP26, as is the question of how to deal with economic and non-economic harms caused by climate change impacts which cannot be avoided through adaptation or mitigation, known as 'loss and damage'.
- 2.7 Discussions often focus on mobilising finance but it is also important that parties make progress on other issues such as the Paris Agreement's 'global goal on adaptation' which, at present, is vaguely formulated.
- 2.8 The COP26 programme is detailed in Appendix 1. World leaders will meet on 1 and 2 November, followed by themed days out to the close of negotiations on 12 November.
- 2.9 The key aims of the United Nations and host countries for COP26 are to reach an agreement, through negotiation, on how to:
 - secure global net zero by 2050 and keep 1.5°C within reach;
 - adapt to protect communities and natural habitats;
 - mobilise finance; and
 - work together to deliver.
- 2.10 The UK's domestic campaign for COP26, funded by the Department for Business, Energy and Industrial Strategy (BEIS), is branded as [Together for Our Planet](#).

West Yorkshire at COP26

- 2.11 The Mayor has been invited by Cllr Susan Aitken, Leader of Glasgow City Council, to a UK100 and Glasgow City Council-hosted networking reception for UK local leaders on 10 November at COP26.

- 2.12 On 11 November the Mayor will attend a national and international Metro Mayors event (hosted by Glasgow City Council), with mayors discussing the role of cities and regions in the green economic recovery. The attendance of the mayor provides the platform for her to champion what West Yorkshire is doing to tackle the climate emergency and share the West Yorkshire Climate and Environment Plan – mobilising partnerships to deliver.
- 2.13 The MJ and Local Partnerships are hosting a podcast series during COP26, designed for local authorities seeking to understand the implications of COP26 and to decode what the high-level statements mean for local government. The podcasts will be 45-60 minutes long and feature a combination of reporting, opinions and interviews. Ben Still (the Combined Authority’s Managing Director) has been invited to speak at the third in the series and will spotlight what have we learned from the COP.
- 2.14 Liz Hunter (the Combined Authority’s Director for Policy and Development) has been invited to speak at a DecarboN8 live, in-person event at the UK Universities Network Innovation Showcase during COP26, title 'Real Zero in a Hurry: key messages and reflections on transport decarbonisation'.

Regional Green Zone

- 2.15 BEIS are funding several local authority-led Regional Green Zone events during the COP26 fortnight, to showcase local activity and projects to public, delegations and investors. The events will help to motivate and inspire people to join the race to net-zero and cut their carbon emissions. Event activity must be aligned with the themes outlined in the COP26 programme (Appendix 1).
- 2.16 The Northeast and Yorkshire Energy Hub ran a competition to determine where the events are held in its area. The Combined Authority and West Yorkshire local authorities have been successful with an application for £19,500 (from a maximum of £20,000) for five events, one in each area, as set out below. Local authorities will share the funding and are required to match the funding secured either directly or through in-kind contributions.
- **Friday 5 November** (theme: Youth and Public Empowerment)
 - Calderdale* – A youth facing public engagement event held at Todmorden College.
 - Leeds* – A green careers event focused on raising awareness and inspiring secondary-age young people to consider a future career in the low carbon economy.
 - **Thursday 11 November** (theme: Cities, Regions & Built Environment)
 - Kirklees* – An event showcasing the new Kirklees Climate Commission linked to the official launch of the Commission to demonstrate effective local, place-based carbon reduction and awareness.
 - Wakefield* – An event to showcase the pilot urban greening project.
 - Bradford* – An event to launch the development plans for Yorkshire Water’s Esholt Treatment Works (subject to planning decision).

2.17 Local authorities are responsible for organising and hosting their Regional Green Zone events and activities, supported by the Combined Authority.

3. Tackling the Climate Emergency Implications

3.1 The West Yorkshire Climate and Environment Plan is due to be launched in October 2021. It sets out what actions the region will take in the next three years to tackle the climate and environment emergencies.

3.2 Some of the key headlines for action are:

- Communications, engagement and marketing campaigns
- Green Skills and Training
- Energy efficiency retrofit for homes
- Nature recovery
- Better, sustainable neighbourhoods.

3.3 The regional Green Zone activities fit the objectives of the Plan and will help to inspire people to take action against climate change and support nature.

4. Inclusive Growth Implications

4.1 It is crucial that transitioning to a net zero carbon economy reduces inequality in West Yorkshire. It cannot be the cause of further inequality for our most excluded and deprived groups and communities. To that extent inclusive growth goals and outcomes coming from COP26 commitments, including green jobs and skills, will be considered in the detailed design of activities in the West Yorkshire Climate and Environment Plan. Indicators measuring progress against the Plan will incorporate inclusive growth dimensions.

5. Equality and Diversity Implications

5.1 Meeting net zero carbon and transitioning to a net zero carbon economy should be equitable and not be at the expense of any groups or communities, including those in high carbon intensive jobs and sectors. To that extent equality and diversity goals and outcomes coming from COP26 commitments will be considered in the detailed design of activities in the West Yorkshire Climate and Environment Plan.

5.2 All policies will be subject to Equality Impact Assessments, and there will be equality and diversity dimensions to all indicators to ensure progress is being made and inequalities are not widened.

6. Financial Implications

6.1 The Combined Authority submitted the Regional Green Zone application on behalf of the West Yorkshire local authorities, to increase the region's chances of securing funding. The Combined Authority is not organising an event itself and has requested that finding grants be awarded directly to each of the local authorities.

7. Legal Implications

7.1 There are no legal implications directly arising from this report.

8. Staffing Implications

8.1 There are no staffing implications directly arising from this report.

9. External Consultees

9.1 No external consultations have been undertaken.

10. Recommendations

10.1 The Committee is asked to note the upcoming activity.

11. Background Documents

None.

12. Appendices

Appendix 1 – COP26 Presidency Programme

12. Appendices

Appendix 1 – COP26 Presidency Programme

WEEK ONE						
SUNDAY OCTOBER 31ST	MONDAY NOVEMBER 1ST	TUESDAY NOVEMBER 2ND	WEDNESDAY NOVEMBER 3RD	THURSDAY NOVEMBER 4TH	FRIDAY NOVEMBER 5TH	SATURDAY NOVEMBER 6TH
PROCEDURAL OPENING OF NEGOTIATIONS	WORLD LEADERS SUMMIT Welcoming world leaders to COP to put forward high level ambition and action towards securing global net zero and keeping 1.5 degrees in reach; adapting to protect communities and natural habitats; and mobilising finance.		FINANCE Mobilising public and private finance flows at scale for mitigation and adaptation.	ENERGY Accelerating the global transition to clean energy.	YOUTH AND PUBLIC EMPOWERMENT Elevating the voice of young people and demonstrating the critical role of public empowerment and education in climate action.	NATURE Ensuring the importance of nature and sustainable land use are part of global action on climate change and a clean, green recovery.
WEEK TWO						
SUNDAY NOVEMBER 7TH	MONDAY NOVEMBER 8TH	TUESDAY NOVEMBER 9TH	WEDNESDAY NOVEMBER 10TH	THURSDAY NOVEMBER 11TH	FRIDAY NOVEMBER 12TH	SATURDAY NOVEMBER 13TH
REST DAY AHEAD OF THE SECOND WEEK OF NEGOTIATIONS	ADAPTATION, LOSS AND DAMAGE Delivering the practical solutions needed to adapt to climate impacts and address loss and damage.	GENDER Progressing gender equality and the full and meaningful participation of women and girls in climate action. SCIENCE AND INNOVATION Demonstrating that science and innovation can deliver climate solutions to meet, and accelerate, increased ambition.	TRANSPORT Driving the global transition to zero emission transport.	CITIES, REGIONS & BUILT ENVIRONMENT Advancing action in the places we live, from communities, through to cities and regions.	CLOSURE OF NEGOTIATIONS	

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Report to: Climate, Energy and Environment Committee

Date: 19 October 2021

Subject: **White Rose Forest Action Plan**

Director: David Shepherd, Strategic Director Growth and Regeneration, Kirklees Council.

Author: Guy Thompson, Programme Director White Rose Forest

Is this a key decision?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is the decision eligible for call-in by Scrutiny?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Does the report contain confidential or exempt information or appendices?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If relevant, state paragraph number of Schedule 12A, Local Government Act 1972, Part 1:	
Are there implications for equality and diversity?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

1. Purpose of this report

- 1.1 To seek endorsement for the White Rose Forest (WRF) Action Plan 2021-25 due for release in November 2021, including an update on a possible scenario for 2050 for tree canopy coverage in the WRF area.

2. Information

- 2.1 The White Rose Forest (WRF) is one of four community forests which span the width of England from Liverpool to Hull. It is the delivery vehicle for the Northern Forest in West and North Yorkshire, which has backing of £5.7 million from government and a further £10 million from the Woodlands Trust.
- 2.2 The WRF is also part of the England's Community Forest Network made up of 12 community forests which has been awarded 2020/21 £11.1 m from DEFRA's Trees for Climate fund, part of the Nature for Climate programme.
- 2.3 The WRF and the development of the WRF Action Plan is identified in the Leeds City Region Green and Blue Infrastructure Strategy as one of 12 key actions. It recognises the multiple benefits that trees can generate including

flood alleviation, improved physical and mental health. Trees also have an important part to play in the region achieving its target of being net-zero carbon by 2038.

- 2.4 The White Rose Forest Partnership is formed through a joint venture between partners across West and North Yorkshire, including local authorities, national organisations and government agencies like Forestry Commission, the National Trust and the Woodland Trust, and local organisations like Groundwork, Yorkshire Wildlife Trust, and community tree planting groups. Full details of the partners is available on the [WRF website](#).
- 2.5 The WRF Partnership is now well established. The Steering Group oversees delivery of the WRF Action Plan and the work of a number of thematic groups formed from representatives from all WRF partners.
- 2.6 Kirklees Council plays a leading role as the accountable body for delivery of the WRF, and a core team has been established within Kirklees Council on behalf of the partners, which reports to a WRF Management Group.

Progress to date

- 2.7 The WRF Carbon Group has assembled a group of regional and national experts in field of forestry and carbon to undertake a study to assess the potential level of carbon sequestration across the WRF and help set a tree canopy expansion target for the WRF region .
- 2.8 The WRF partnership has laid out some planting targets between 2021 and 2025, the end of the Nature for Climate programme. In addition to this, the WRF Action Plan 2021-25 (attached) sets out a possible scenario of what could be achieved by 2050 including its potential impact on residue carbon dioxide emissions.
- 2.9 These proposals for 2050 will start a conversation with wider partners and stakeholders in North and West Yorkshire to inform a full WRF Plan 2025-2050 to be published in 2025. The WRF Plan is envisaged as a 25-year plan and aims to establish a vision for how the Forest will develop into a large scale varied treescape across North and West Yorkshire.
- 2.10 The WRF Action Plan 2021-25 has been developed over the last few years and chimes well with the England's Tree Action Plan 2021-24 published in May 2021. Recent work of the WRF partners has focussed on identifying the canopy expansion and carbon sequestration targets, developing proposals for the set up and resourcing of a multi-partner WRF Delivery Pathway.
- 2.11 The WRF Action Plan 2021-25 announces our WRF Delivery Pathway which aims to manage and process site data for all WRF projects, supporting regulatory approval and design processes and allows multiple funding options to be presented to landowners for their schemes. This co-ordination of funding will be achieved via the WRF Funders' Group (chaired by the Forestry Commission) and is regarded nationally as a pilot for a new way of working to

achieve landscape scale change. The Combined Authority is an advisory member of the WRF Steering Group.

- 2.12 Although WRF local authority partners have been undertaking assessments of the level of tree planting that is achievable within their areas, a certain amount of uncertainty remains as a result of government policy on land management, which is still being developed and will influence the likely amount of tree planting that can be achieved across the region
- 2.13 The continued support by Directors of Development of their respective District WRF Groups across North and West Yorkshire chaired and hosted by the Local Authorities with support from the WRF Core Team (originally agreed in June 2017) is another key element to the successful operation of the WRF Delivery Pathway. It allows for WRF partners and the local authorities to co-ordinate third party landowner engagement.
- 2.14 The WRF Partners propose to launch the WRF Action Plan 2021-25 in November 2021 with the West Yorkshire Mayor. A revised standalone WRF website sets out the vision for the Forest, the principles of community and stakeholder engagement and the proposed WRF Delivery Pathway model
- 2.15 A final WRF Plan for North and West Yorkshire would be produced by 2025, when government policy is expected to be confirmed and when all partners will be able to confirm expected planting potential within their areas, and firm targets can be set for planting rates and carbon sequestration potential.

2.16 Summary planting targets for 2021- 2025

WRF Programme	Hectares	Numbers of trees
Green Streets®	1000	2,000,000
Landscape for Water - Aire	930	1,860,000
- Calder	670	1340,000
- Swale, Ure, Nidd and Ouse	400	800,000
Other Rural	500	1,000,000
Total	3500	7,000,000

2.17 Summary 2050 scenario to begin a wider conversation

Proposal for consultation	Additional Hectares	Additional Trees
Increase tree cover from 11% to 19%	80595	160,000,000
Bringing 90% of known ancient woodlands into management	18,000 protected	

- 2.18 If the tree cover for the WRF area were to be increased to 19% by 2050, a total of potentially 9,775 kilo tonnes of carbon dioxide would have been sequestered into new woodland. This would mean by 2050, 931 kilo tonnes of carbon dioxide could be sequestered annually equating to up to 50% of expected residue carbon dioxide emissions.
- 2.19 The capital for the 3,500 hectares will come from a range of funding streams including Trees for Climate and Northern Forest Grant Agreement 2 (both via

Kirklees), Forestry Commission England's Woodland Creation Offer, the Woodland Trust's Grow Back Greener, private sponsorship e.g. Northern Gas Network and the internal resources of the larger local authorities.

- 2.20 The National Forest and Community Forests offer valuable opportunities for improving the environment around towns and cities, by upgrading the landscape and providing for recreation and wildlife. The National Forest Strategy and an approved Community Forest Plan may be a material consideration in preparing development plans and in deciding planning applications. Any development proposals within the National Forest and Community Forests in the Green Belt should be subject to the normal policies for controlling development in Green Belts.

3. Tackling the Climate Emergency Implications

- 3.1 The WRF Action Plan 2021-25 is a clear statement of intent for WRF partners in North and West Yorkshire to take practical steps at a landscape scale to dramatically increase the rate of woodland creation to 1) begin creating a sizeable carbon store and 2) to provide meaningful adaptation measures such as a flood reduction and cooling of urban areas.

4. Inclusive Growth Implications

- 4.1 The WRF Green Streets® programme looks to work with landowners in priority community and employment areas. We will be undertaking an analysis of the Woodland Access Standard to ensure we can target tree canopy expansion within communities that do not meet the access to woodland standard

5. Equality and Diversity Implications

- 5.1 There are no equality and diversity implications directly arising from this report.

6. Financial Implications

- 6.1 There are no financial implications directly arising from this report.

7. Legal Implications

- 7.1 There are no legal implications directly arising from this report.

8. Staffing Implications

- 8.1 There are no staffing implications directly arising from this report.

9. External Consultees

- 9.1 Extensive WRF partner involvement across North and West Yorkshire in the development of the WRF Action Plan

10. Recommendations

- 10.1 That the Committee endorses the WRF Action Plan 2021-25, ahead of its planned launch in November.
- 10.2 That the Committee endorses the proposal for WRF partners across North and West Yorkshire, including the Combined Authority, to continue to work in partnership to develop a full White Rose Forest Plan 2025-50 that will have recognised status in the national planning policy framework.

11. Background Documents

None

12. Appendices

Appendix 1 – White Rose Forest Action Plan 2021–25.

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Planting for Our Future

White Rose Forest Action Plan
2021–2025



Trees for the Future

Our 2021–2025 Planting Targets:

+7 million

Trees planted.



+4900

Football pitches of trees planted.



Green Streets® Target:

By March 2025, we aim to have planted **2 million** trees in our urban areas and along our major transport routes.

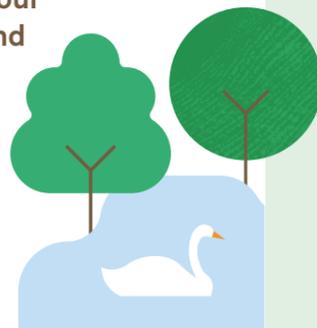
That's **1000 hectares** of new tree canopy or the equivalent of **1,400** football pitches.



Landscapes for Water Target:

By 2025 we want to have established **2500 hectares** of new tree canopy in our priority catchments and other rural areas.

That's the equivalent of **3,500** football pitches or **5 million** trees.



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Foreword

Trees are life. They contain life, they protect life, and they improve life – economically, culturally, and of course, environmentally. Whether we're in the presence of them or indirectly benefiting from them, we humans have a lot to gain when it comes to trees. We have a lot to lose, too.

With most of us now living in towns and cities, it would be easy to assume a dangerous disconnect between people and the trees that support their very existence. Scratch the surface of any district in North and West Yorkshire, however, and you will find that this is not the case. Community forestry is, thankfully, alive and well.

Starting out twenty-one years ago as a partnership that drew on local knowledge and expertise to identify opportunities for planting trees, the White Rose Forest has grown to encompass the differing interests of myriad stakeholders, enabling the planting of thousands of new trees in both rural and urban areas. It has also rekindled the essential relationship between people, nature, and their landscapes.



Prof. Dr. Alan Simson,
Leeds Beckett
University, Chair
WRF Steering Group

The White Rose Forest's bold proposals for expanding tree cover to **19%** by 2050 and its targets for planting **7,000,000** trees over the next four years in preparation for that, are a reassuring continuation of the partnership's work and achievements to date.

As Chair of the White Rose Forest, I'm proud to submit this Action Plan for your consideration and support as we continue to assist our communities to be happy, healthy, and alive with possibility.

Over the last 18 months we have seen how we can all come together to tackle the crises that we face and how we can act decisively when there is the political will to deliver. We have also seen people re-connecting with nature and the value to all of us in the environment around us.

We cannot afford to lose that collective mission and that spirit to protect one another and the world around us. The climate crisis means that we need to take urgent action to protect, restore and improve our environment; and Kirklees is committed to uniting with our residents, businesses and partners to lead the way.

Our vision for Kirklees is to have a strong, sustainable economy with a great quality of life, in a clean and green environment. In 2019 we declared a climate emergency, making tackling climate change one of our top priorities, and we set an ambitious target for the district to be carbon neutral by 2038.

Change is already happening, but there is much further to go. That is why we are proud to provide dedicated support for the White Rose Forest as the accountable body. Together, as a partnership of local authorities, community groups, businesses and charities, we're fully committed to increasing tree planting and restoring damaged habitats across North and West Yorkshire.

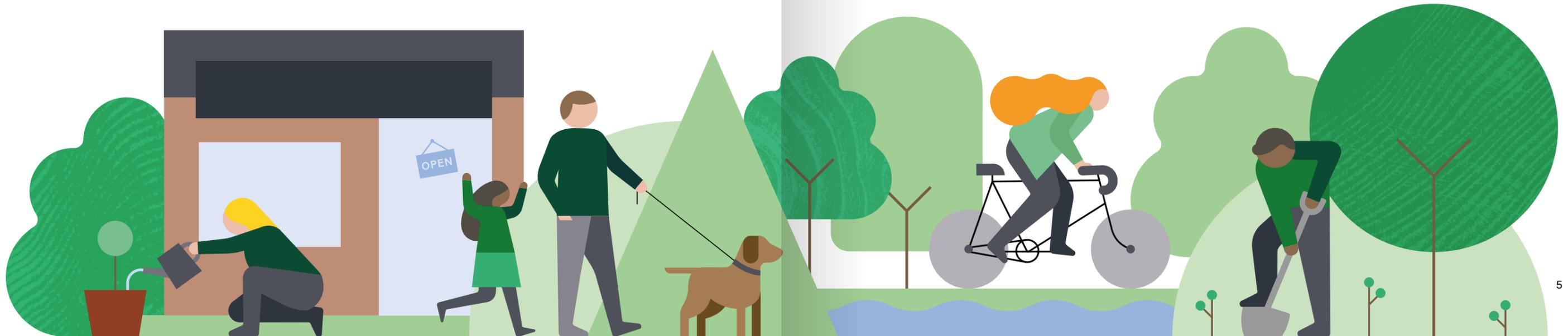


Councillor Will Simpson, Kirklees Council's Cabinet Member for Culture and Greener Kirklees

Kirklees Council is the accountable body for the WRF Partnership.

We reap many tangible benefits from the relatively simple act of planting a tree. Trees lock in carbon dioxide emissions, meaning they have a positive impact towards our climate objectives. They also prevent flooding, improve air quality and provide a much needed boost to biodiversity – as well as having important health and wellbeing benefits for us all, and helping to boost local, sustainable economies.

By 2025 the White Rose Forest partnership aims to plant an additional 3500 hectares of new woodland across the region. But this is just the start. Our Carbon Study suggests we could go much further so I invite all our partners and stakeholders to join us to develop a full White Rose Forest Plan for 2025-2050, with transformational targets for planting millions more trees in the right places, for our environment, our communities and our future.



Executive Summary

The purpose of this Interim White Rose Forest Plan 2021–2025 is three-fold:

1.

To provide a summary of the work we are doing now (2021–2025) and our methods of partnership working, which will lay the groundwork for both setting and meeting the longer-term targets agreed by March 2025.

2.

To introduce our proposal for a transformative uplift in tree cover by 2050 within the landscape of North and West Yorkshire and its impact on residual carbon dioxide.

3.

To start a conversation with future partners and advocates with whom we aim to produce a fully revised and endorsed White Rose Forest Plan (2025–2050) by March 2025.

Since its inception, the WRF Partnership has supported the planting of **2 million** trees across North and West Yorkshire. It's an achievement we are immensely proud of – and it's just the beginning.

Within the landscape of North and West Yorkshire, there's still significant potential for new areas of well-designed and managed rural and urban forest, which would build on our precious ancient woodland and, alongside the HEYwoods Community Forest Partnership in Hull and East Riding, serve as the Yorkshire region's contribution to the wider Northern Forest.

The start of our journey towards reaching the ambitious long-term goals we propose in this document, begins with us helping to deliver the Government's Nature for Climate objectives over the next four years. Using the WRF Delivery Pathway (see page 24), we are working with landowners, their agents, and WRF Partners, to plant **3500 hectares** of new woodland by 2025, under our Landscapes for Water and Green Streets® programmes.

But first things first... Why trees?

Trees make a significant and essential contribution to removing residual carbon dioxide from the earth's atmosphere. They are a key tool that can support our collective response to the climate emergency and nature crises we all face. We estimate, for example, that **if we were to increase tree cover in North and West Yorkshire from 11% to 19% by 2050, we could annually sequester up to 50% of residual CO₂ emissions by 2050.**

Helping society to meet its net zero carbon targets is just the start of it. As a broad and experienced partnership, we recognise the invaluable benefits that trees and woodland bring to the economy, the environment, and our communities, including:



Economic Investment

A well-designed and maintained urban forest will boost investor confidence in our region and help us retain our people and businesses by providing attractive working environments.



Flood Risk Mitigation

Carefully targeted woodland creation in rural river catchments will, over time, help reduce flooding in towns and cities downstream.



Public Wellbeing

By improving the quality of public open spaces, trees encourage us to be more active outside, which has positive outcomes for both our mental and physical health.



Air Cooling

Trees help clean and cool the air in urban areas, offsetting the stifling effects of both pollution and climate change, and creating more pleasant places to live and work.



Sustained Biodiversity

Trees provide and protect natural habitats and connect species migration corridors, creating greater areas of biodiversity, as recommended by the Lawton Review¹.

¹Lawton, J.H., Brotherton, P.N.M., Brown, V.K., Elphick, C., Fitter, A.H., Forshaw, J., Haddow, R.W., Hilborne, S., Leafe, R.N., Mace, G.M., Southgate, M.P., Sutherland, W.J., Tew, T.E., Varley, J., & Wynne, G.R. (2010) Making Space for Nature: a review of England's wildlife sites and ecological network. Report to Defra.

We are The White Rose Forest

Introduction to the White Rose Forest
and our 2050 Vision.



As one of England's 12 Community Forests, the White Rose Forest is part of the largest environmental regeneration initiative in England, and is supported by a partnership of local authorities, national parks, national and local charities, Defra organisations and community enterprises.

(See page 36 for a full list of the current WRF Partners).



The White Rose Forest reached its **21st anniversary** on 1st August 2021 and, in response to the Government's drive to significantly increase the nation's tree cover, we want to lay out what we believe is possible for North and West Yorkshire – and explain why our community forestry partnership is key to making it happen.

For Everyone

Community Forestry is the process of widening and deepening everybody's involvement in the planning, planting and management of trees and woodlands, to create healthy, inspiring, and resilient places for humans and nature to live, side by side.



Our 2050 Vision

In 2050, the White Rose Forest will be more than a partnership, it will be a place.



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The White Rose Forest will be a vast and varied treescape connecting our cities and countryside and stretching from the river valleys and transport corridors of West Yorkshire into the national parks and uplands of North Yorkshire.



Tree-lined streets and leafy active travel routes linking communities to places of work and leisure will help to cool our towns and cities during hot weather, provide stormwater management during floods, and bring fresh air, greenery and wildlife into the heart of our daily lives.



Our urban trees will lead us out into the countryside along beautifully restored, clean river corridors. The forest habitat network – woodland, hedgerows, heath, grassland, and lakes – will interconnect with species-rich meadows and wetlands, and heath and bogs will bring diversity to our farms and open spaces.



Our ancient woodland will be protected and connected by new native woodlands alive with the sounds of nature and visitors. Green active travel routes for cyclists and walkers will bring our rural and urban communities together in these new well-managed and cherished woodlands and greenspaces.

Confident, diverse, and self-reliant communities and businesses will work with local authorities and woodland owners to adopt trees and woodlands; they will be protected as essential parts of the rural and urban landscape and celebrated for their role in making Yorkshire the greenest, healthiest place in England.



Our Partnership

The White Rose Forest is a local authority-based joint venture with over 30 members, lead by a steering group of experts in the field.

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Our shared goal is to establish and nurture new trees and woodlands to help our communities, businesses and wildlife thrive and grow as we meet the challenges of a changing climate.

We also strive to remain:

Politically Agile

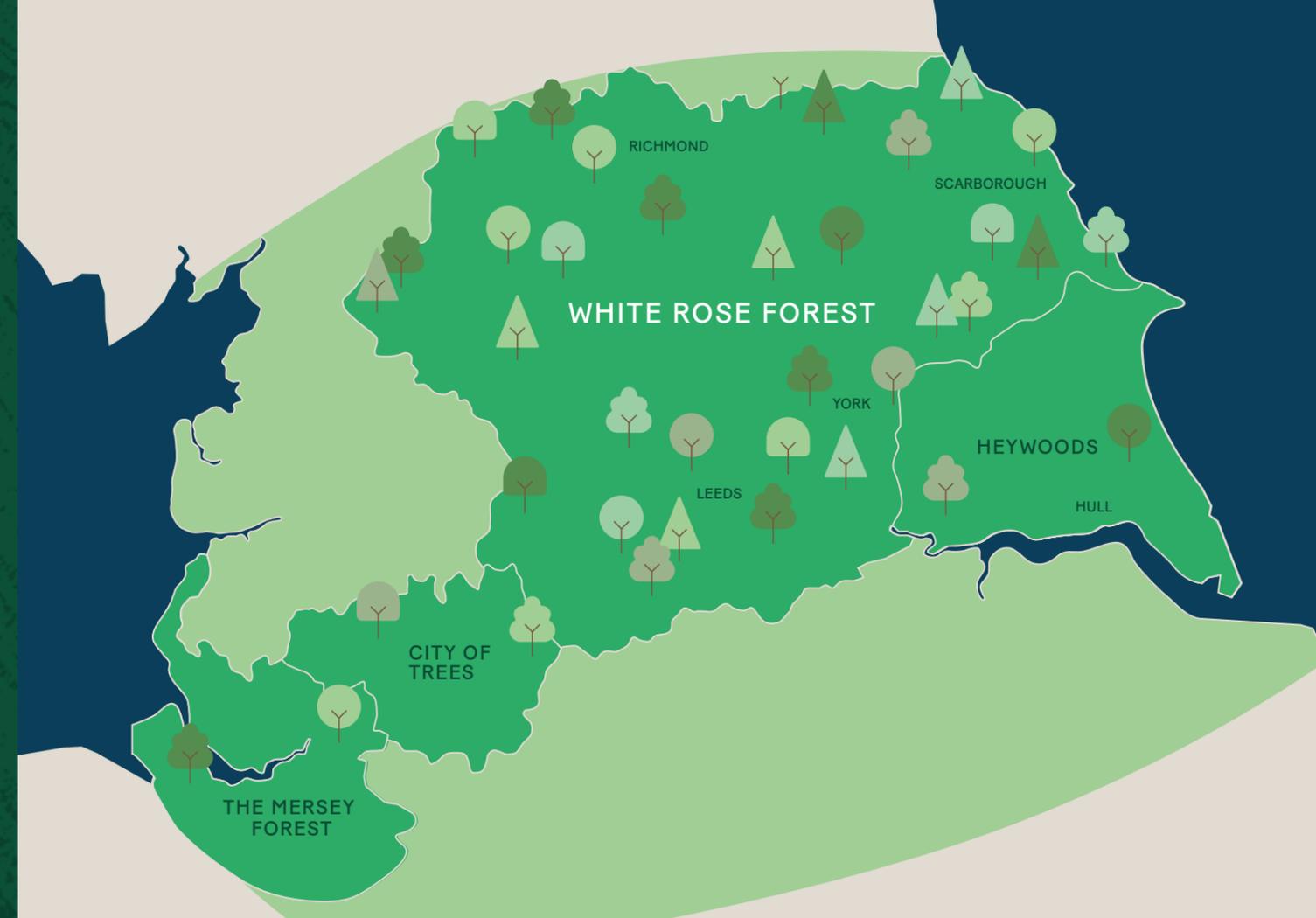
The partnership, through its many connections, aims to be fully responsive to the political drivers and governance structures of North and West Yorkshire, with the priorities of each authority always taken into account.

Consistent

Kirklees Council is the accountable body and, with support from the Community Forest Trust and other partners, manages a small core team to provide support and continuity across the partnership.

Collaborative

The WRF Steering Group is made up of groups and individuals with diverse areas of expertise and experience, and through partnership collaboration we are able to deliver high quality projects at a strategic scale.



Northern Forest

Launched in 2018, the Northern Forest is a partnership between four community forests, the Mersey Forest, City of Trees, the White Rose Forest and Heywoods, as well as the Woodland Trust and the Community Forest trust.

Building on the work of each individual organisation, the partnership aims to transform the landscape from Liverpool to Hull over the next 25 years by planting 50 million trees.



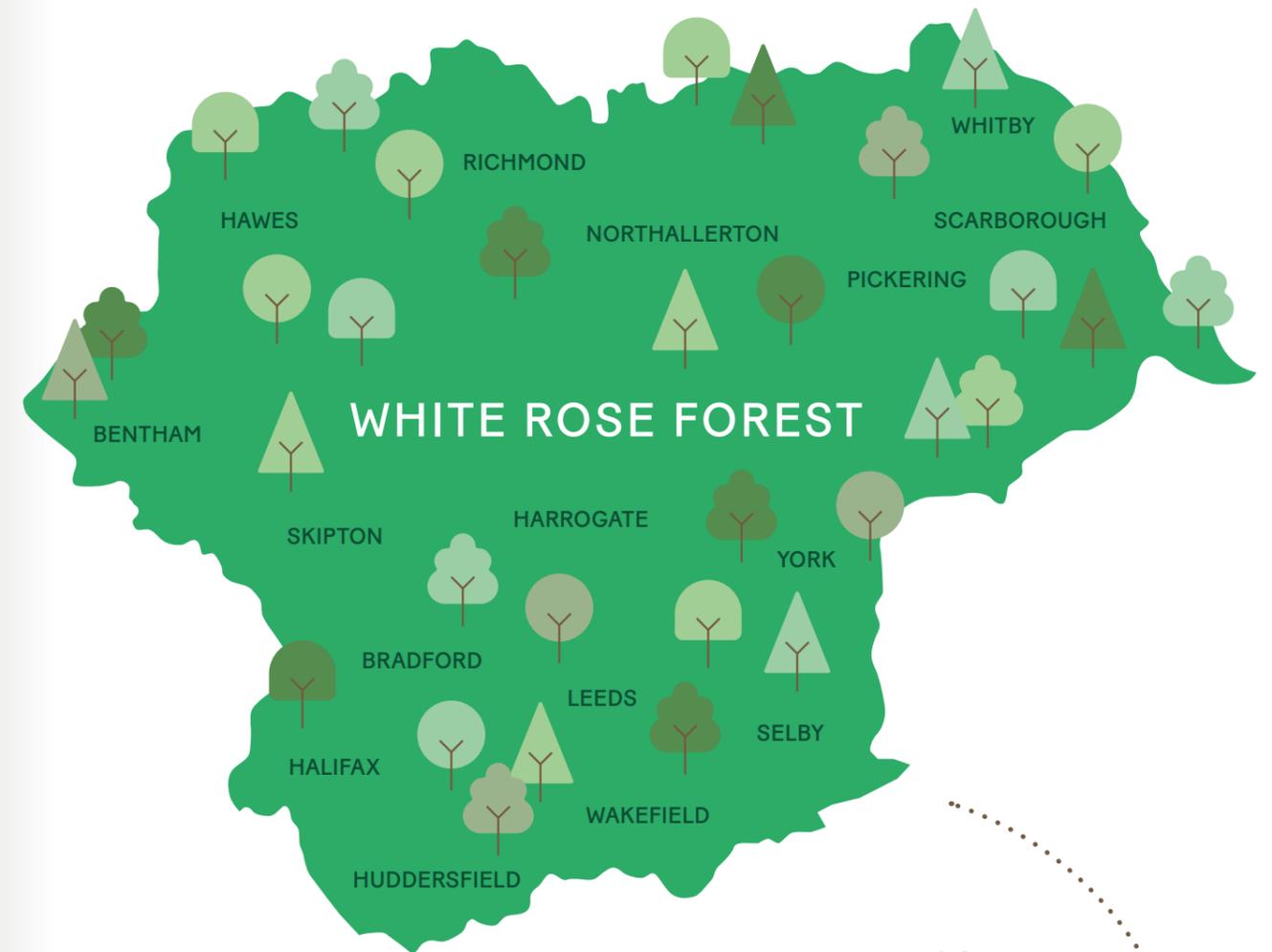
Long term land use change is complex, with a wide range of interests and stakeholders that need to be carefully managed and supported. The WRF partnership is shaped to meet that challenge in three main ways:

1. Partnership

Supported by a core team, the WRF Steering Group oversees and coordinates several task and finish groups that provide the opportunity for partnership specialists to work together to best effect.

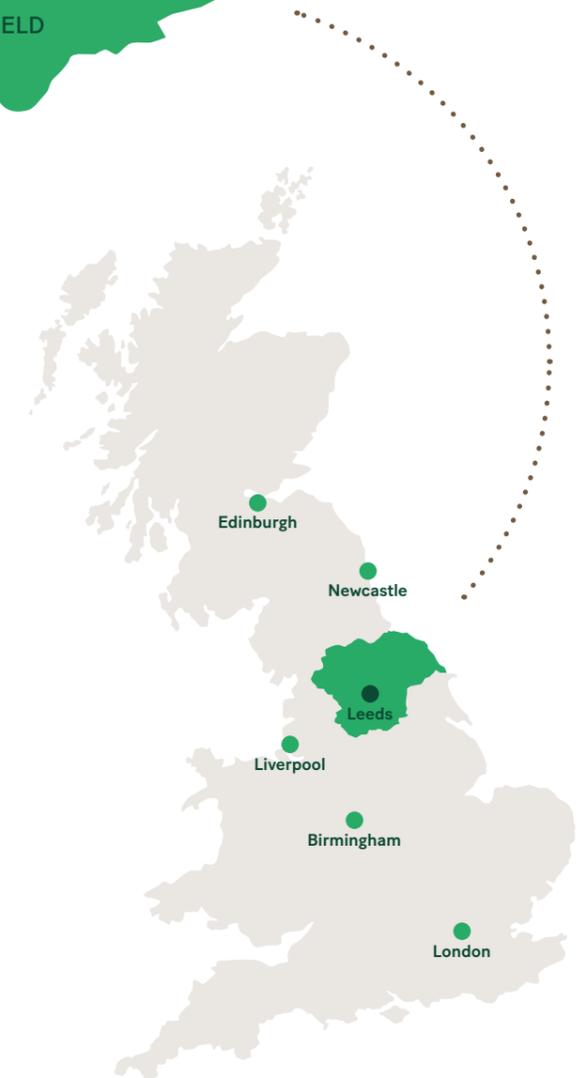
2. Local

Local authority-led WRF District Groups help co-ordinate landowner engagement locally and bring extra local resources to the WRF Delivery Pathway, such as local business and community engagement. Local authority knowledge and understanding of the districts they encompass is invaluable in the delivery of the White Rose Forest.



3. Bespoke

We are a design-led partnership which recognises that a 'one size fits all' model doesn't work well for long-term success. Instead, we use the WRF Delivery Pathway (see page 26) to develop a bespoke approach to each project and achieve the wider benefits Yorkshire wants for its people, business, and wildlife.



Our Planting Targets to 2025

This section of the White Rose Forest Action Plan highlights our ongoing Nature for Climate work (2021–2025), as well as our targets and our methods of recording and evaluating the impact of our work, all which will provide both momentum and insight for our post 2025 actions.

To start the conversation with wider partners (with whom we aim to produce a fully endorsed WRF Plan for 2025-50), we've proposed an interim figure for tree cover increase in the adjacent table, along with a calculation of the White Rose Forest's potential contribution to net zero carbon by 2050.

We also include partnership ambitions for protecting and maintaining our ancient woodlands, as part of the overall development of the White Rose Forest.

Total hectares per programme for 2025:

Green Streets®: 1000ha
Landscapes for Water: 2000ha
Other Rural: 500ha
Total: 3500ha

Breakdown of WRF change in tree cover:

2018:	2050:
11% Tree cover	19% Tree cover
113,047 hectares	193,642 hectares



Nature for Climate (2021–2025): Laying the groundwork for our long-term goals

The next four years to 2025 mark a transitional time for the WRF as it supports the Government's drive to increase new woodland creation as laid out in the England Tree Plan 2021-24. This acceleration of planting will, with Nature for Climate funding, provide valuable learning for post-2025 actions that, over a quarter of a century, will require an average of **3,000 hectares** of trees to be planted per year.

During the 2020 planting season, only **2330 hectares** were planted in the whole of England, so we understand the size of the challenge. To meet this target, the WRF has two strategic programmes, Green Streets® and Landscapes for Water.



Department
for Environment
Food & Rural Affairs

The **£640m Nature for Climate fund** was announced in 2020 with an aim to plant 30,000 hectares by 2025.

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Green Streets®

Green Streets® is focused on priority urban areas where we know that increasing tree canopy coverage will bring investment and health benefits for our economy and communities. We want to link priority communities to employment areas along key transport corridors, with trees, woodlands, and high-quality green infrastructure, including cycle paths and other active travel routes.

This work will be led by our core local authority partners, who own much of this land, and coordinated locally by WRF District Groups and regionally by the Green Streets® Task Group.

1000ha

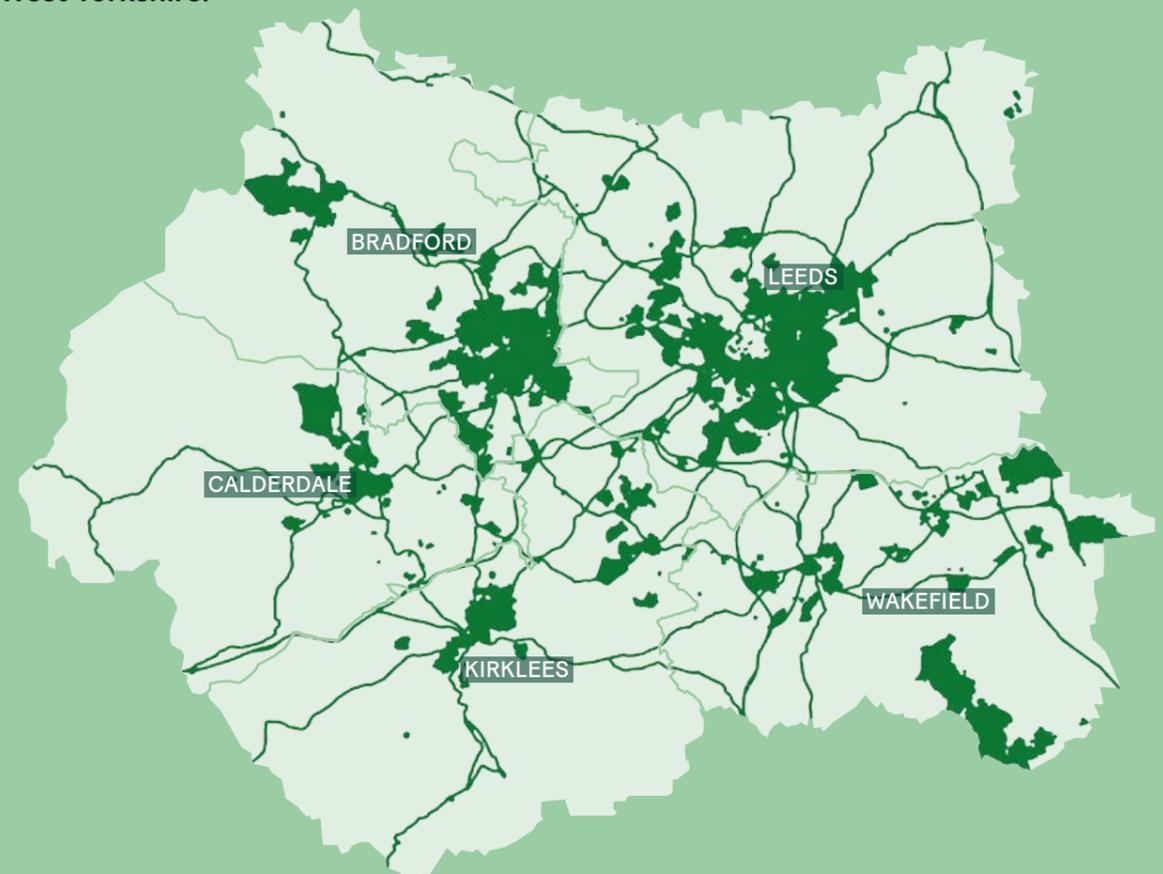
Green Streets® Target:
By March 2025, we aim to have established 1000 hectares of new tree canopy in our urban areas and along our major transport routes.



Northern Gas Networks is a Principal Funder of our Green Streets® programme. This is part of their commitment to improving air quality for their customers in urban communities.

Green Streets® areas
in West Yorkshire:

Green Streets®



Landscapes for Water

Landscapes for Water is focused on rural catchment priority areas where we know increasing tree canopy will reduce the flood risk to urban communities further downstream.

Working closely with the Environment Agency and the Forestry Commission, we have identified three priority catchments in North and West Yorkshire where we want to focus our resources: the Upper Calder, the SUNO (Swale, Ure, Nidd and Ouse) and our flagship Aire Catchment.

2000ha

Landscapes for Water Target:
By 2025 we want to have established 2000 hectares of new tree canopy in our priority catchments.




New tree canopy targets in priority catchments:

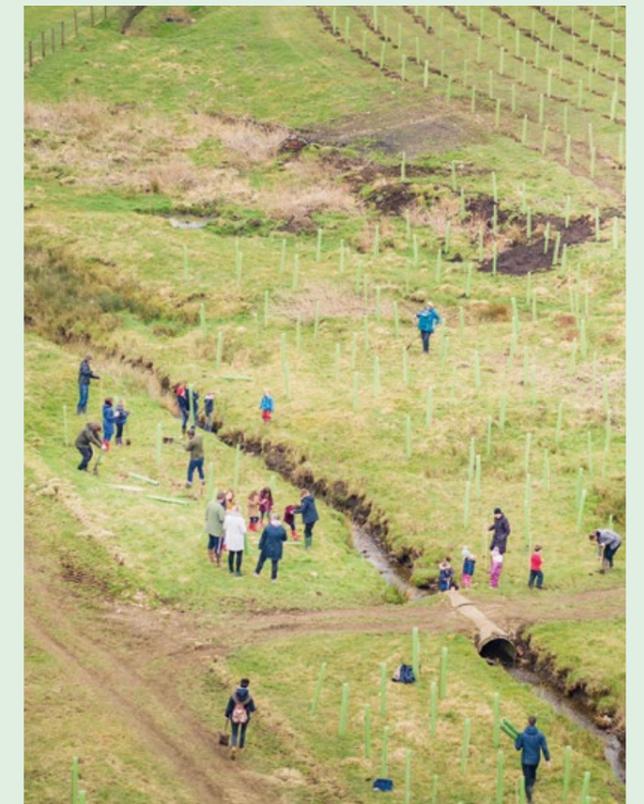
Aire: 930ha

Calder: 670ha

SUNO: 400ha

Other rural planting

We have also identified realistic potential for a further **500 hectares** of trees in other rural areas of North and West Yorkshire. This combined with our Green Streets target would give us a total target for 2025 of **3500**.



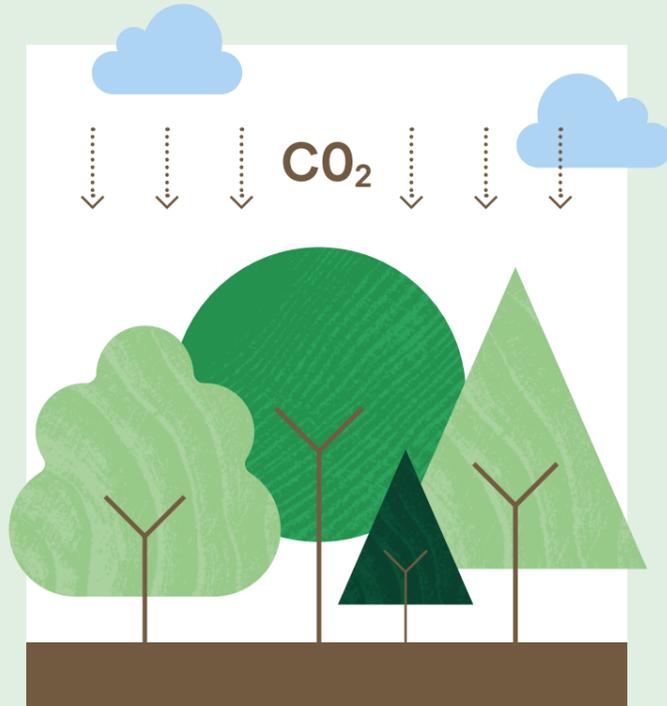
Measuring benefits and recording success (2021–2025)

In addition to recording the areas of new trees and woodlands on the Kirklees Kompass Geographical Information System (GIS) platform, we will be collecting the following data:

Carbon Sequestration

Each scheme will have a Woodland Carbon Code analysis undertaken to estimate the levels of carbon that will be sequestered over the next **100 years**.

In addition to this, with the landowner's permission, we will record the tonnes of carbon dioxide that have been officially registered on the carbon market.



Natural Flood Management

We will record how many hectares of trees and woodlands are established within the Woodland for Water areas of the WRF that will contribute to flood risk reduction.



Woodland Access Standard

The WRF Geographic Information System (GIS) and data group will undertake a full spatial analysis of North and West Yorkshire using the Woodland Access Standard to identify those communities that don't have sufficient woodland nearby to meet the current standard.

We will also be able to report how many households have had their opportunities to accessible woodland improved.

Biodiversity

We will record how many hectares of new native woodland have been planted within or adjacent to the primary biodiversity corridors in the region.

We will also document how many hectares of new native trees and woodland have been planted directly adjacent to existing ancient woodlands, and how many hectares contribute to biodiversity net gain.



Natural Capital Evaluation

Working with partners across the England's Community Forests network, our WRF Geographic Information System (GIS) and data group will help develop an evaluation method for Natural Capital, in order to assess the value of these additional natural resources within a commercial context.



Community Engagement

There are at least **100,000** businesses and community groups operating in the White Rose Forest region. We want to encourage them to help us fulfil our 2050 vision of the White Rose Forest, with donations and with their staff and families joining WRF Partners in community tree planting events. As part of this, we will record business donations on the WRF website, along with the number of people joining us at our '1000 tree challenge' events.



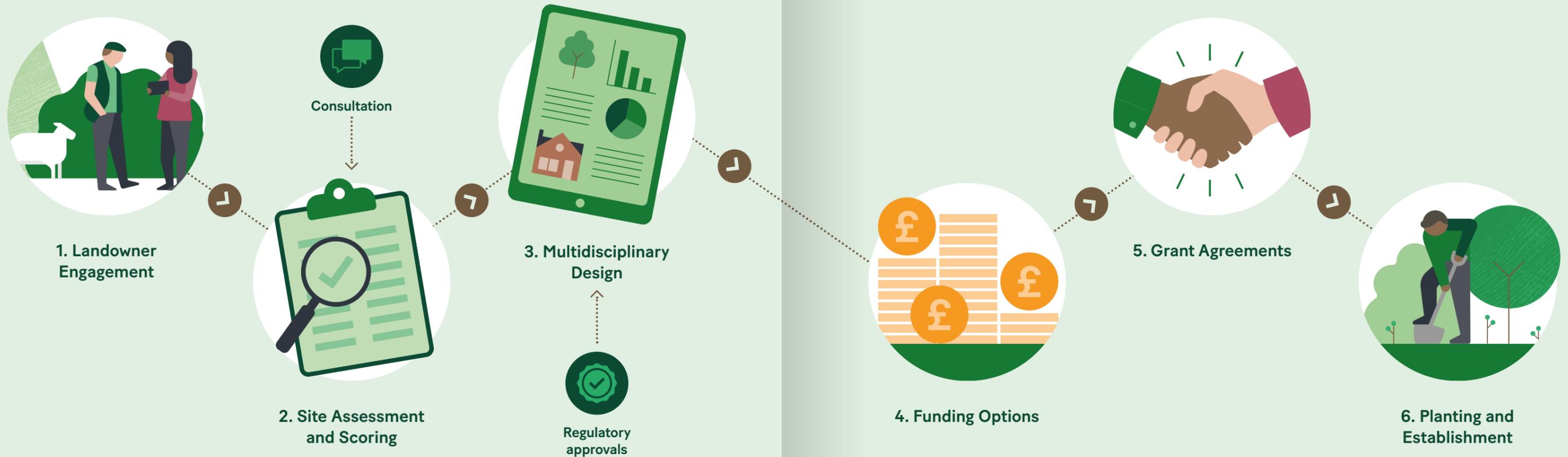
Our Delivery Pathway

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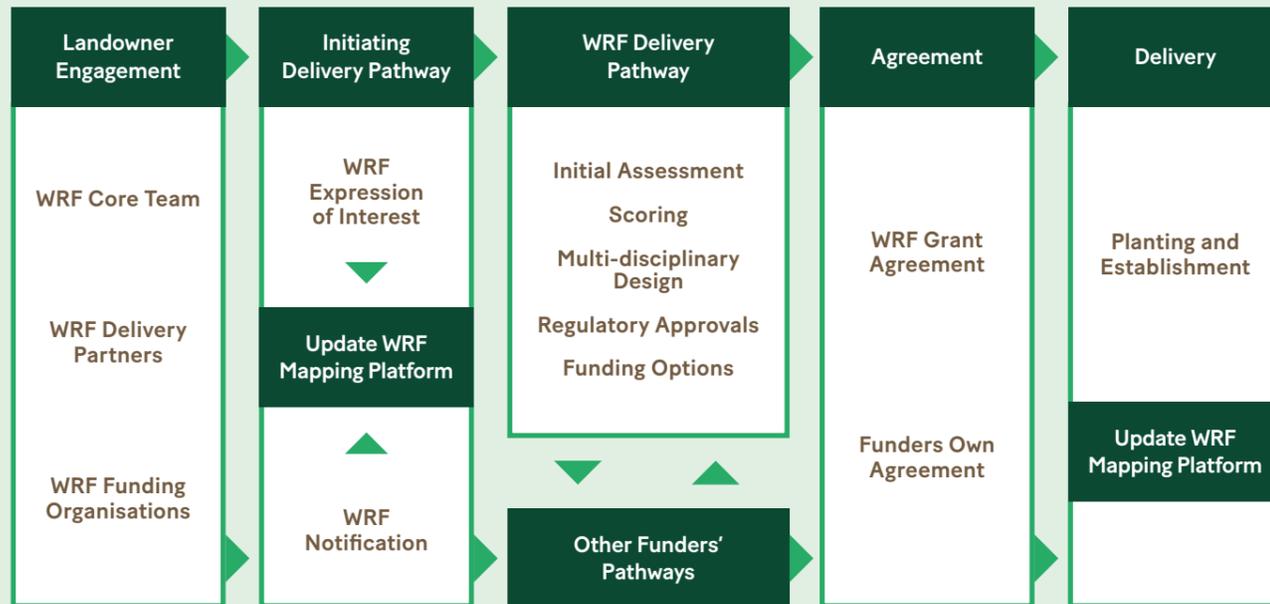
Over the last 20 years, the White Rose Forest partners have identified the key phases required to deliver high quality community forest schemes.

The WRF Partnership has formalised this process into the WRF Delivery Pathway – the WRF version of the ‘one team’ approach, which ensures that every project receives the best possible support.

The White Rose Forest core team provides a neutral advisory service, with responsibility for working with interested landowners and supporting them, their agents and WRF partners along the Delivery Pathway:



WRF Delivery Pathway



1. Landowner Engagement

Our starting point and primary focus throughout the entire delivery pathway process is to support landowners in North and West Yorkshire, who want to convert some of their land into woodland.

Each local authority led WRF District Group, with support from the WRF Communications Group, will help promote the WRF Delivery Pathway to landowners. Interested landowners or their agents can then initiate contact and begin a conversation.



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Exemplar Landowners Common Cause Partnership

Yorkshire Water and the National Trust are taking the lead in sustainable land management for water, biodiversity and public access around Gorpley reservoir.

This work builds on our Landscapes for Water pilot project at Gorpley, where a multi-partner design process has begun to transform this 160 hectare area of catchment land in the Calder Valley.



2. Site Assessment and Scoring

Kirklees Council has set up a data platform to store landowner information safely and to map each project that enters the WRF Delivery Pathway.

The platform will also help us keep a record of all tree planting projects across the region that are contributing to the White Rose Forest and larger Northern Forest.

After our initial conversation to find out what support the landowner requires, we will carry out a basic desktop assessment of the site and contact the relevant local authority for any helpful background information about the area. The WRF core team will then score the project for its contribution to public benefit.

This helps the WRF Partnership prioritise the project within our overall programme and helps the WRF Funders' Group suggest the best funding options for the project, including funding for non-woodland habitats that bring biodiversity net gains, such as grass and wetlands.

Depending on the scale and location of a landowner's project, regulatory approvals may be required. We will work with landowners and the relevant authorities to secure any necessary permissions

3. Multi-disciplinary Designed Plans

The WRF is a design-led partnership. Urban and rural tree planting projects should involve a multi-disciplinary design process to ensure that each scheme has the optimal mix of wider benefits such as biodiversity, public access, water management and landscape enhancement.

Underpinning all our work is a commitment to adhere to the UK Forestry Standard. The Forestry Commission has been a cornerstone of the WRF from the beginning and this is reflected in its commitment to the WRF Delivery Pathway, as the regulatory authority.

For projects in and around sensitive areas such as the Yorkshire Dales National Park, Natural England will be brought into the process as soon as possible to help partners incorporate best practice design and to avoid damaging existing priority habitats. For example, Natural England encourage the use of Guiding Principles for Clough Woodlands in the design approach for new woodland within the South Pennines Special Area of Conservation.



For urban schemes and 'green infrastructure' projects, WRF Partners are committed to incorporating the Green Streets® principles into the design. As part of this, the Green Streets® Task Group promotes the use of Trees in the Hard Landscape, an urban design manual published by the Trees Design Action Group.



4. Funding Options

Once the landowner has approved a fully designed and costed scheme, the WRF Funders' Group will select the best funding options for the landowner to choose from.

The WRF core team has no preference for which funding is selected but does aim to make the best use of public resources. For all projects, it is the landowner who makes the final decision.

There is currently a range of funding options available to support tree and woodland planting across West and North Yorkshire.

The WRF Funders' Group (which includes the Forestry Commission, Woodland Trust, Environment Agency, Forest Carbon Ltd and other funding organisations) is available to work with landowners to match funding option(s) to their requirements and, if needed, help with submitting any funding applications.

5. Grant Agreements

With a costed Plan and regulatory approvals in place the landowner is in a position to enter into a grant agreement with their preferred funding body.

For Trees for Climate funded schemes, support packages for the first 15 years of the new woodland may be offered.

6. Planting and Establishment

The White Rose Forest is a community forest. We don't just want to support new woodland creation for community benefit, we want the community – including local businesses – to get involved in the planting and nurturing of the new woodland.

Once sites have been designed and costed, and funding secured, the WRF core team will work with landowners and WRF Partners to encourage the involvement of communities and businesses through '1000 Tree Challenge' events and woodland management adoption projects.



Leeds City Region Green and Blue Infrastructure Strategy (2018) Priority 5:

“Promote delivery that has, where possible, the community at the forefront of activity. The growing forest will have a better chance of being looked after and cherished by the people of the Leeds City Region if all our children are involved in the planting. It will also help bring together divergent communities by helping to shape the natural environment in their shared community spaces.”

Looking ahead to 2050, what could we achieve?

We believe we could increase tree cover in North and West Yorkshire from 11 to 19% by 2050 and therefore absorb half the remaining residual carbon dioxide emissions. We would also look to bring 90% of our known ancient woodland into management by 2050.

Over the next three years the White Rose Forest partnership will explore how we can turn this scenario into a firm target as part of our 2025-2050 WRF Plan.



9,775 kilotonnes

If we increase tree cover to 19% by 2050, we could sequester up to 9,775 kilotonnes (kt) of CO₂ in total between 2021 and 2050. By 2050, 931 kt of CO₂ could be sequestered annually, equating to up to 50% of expected residual emissions.



WRF Interim Proposal 1 Increase area of tree canopy from 11% to 19% by 2050

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In 2018, using aerial photography, tree cover was digitised and mapped for North and West Yorkshire to create a WRF Blue Sky Tree Map. The map shows **113,047 hectares** of tree canopy out of a total area of **1,031,925 hectares**, equating to a tree canopy rate of **11 %**.

To scope out the potential within our landscape for increasing tree coverage up to 2050, and to help start a wider conversation with partners, the WRF Carbon Group has drawn on several additional sources of information, including ecological site classification data, Woodland for Water data from the Environment Agency, woodland carbon code measurements and low risk woodland creation data from the Forestry Commission, as well as other relevant local data.

The accumulated figures give us the potential canopy coverage for the White Rose Forest area. Over the next three years we want to start an active dialogue with all our partners, to arrive at a clear target in a WRF Plan 2025–2050.

**113,000
Football Pitches**

To increase canopy cover to 19% we will need to plant 80,595 hectares over the next 29 years. That's 113,000 football pitches or about 160,000,000 trees.



At today's costs, assuming an average of £12,000 per hectare, WRF partners will need a capital investment of **£967 million** over that time.

WRF Interim Proposal 2 Bring 90% of our known ancient woodlands into management by 2050

Parts of the White Rose Forest have been wooded in some form or another since **1600AD**. Today, only **18,342 hectares** of ancient woodland over 2 hectares in size remain. These are our 'ancient woodlands', a precious and finite resource. We recognise that these woodlands need special attention as they contain irreplaceable native habitats and genetic strains of plants such as bluebells.

We have set up a WRF Ancient Woodland Group with our partners at the Woodland Trust, to map and investigate these woodlands and support their owners in protecting them. We also aim to buffer them as much as possible with new native woodland and other semi-natural habitats, so the core varieties of native fauna and flora can expand into the wider landscape.

The Royal Forest of Knaresborough

The ancient Castle and Royal Forest of Knaresborough date back almost 1000 years and are centrally located in the White Rose Forest and Northern Forest, adding 1000 years of natural and built up heritage to the community forests.



Final Words

The 1st August 2021 marked 21 years since the White Rose Forest strategy was first launched.

We have:

- Built a unique and recognised community forest partnership made up of DEFRA organisations and Local Authorities, alongside national, regional and local charities and local community groups.
- Supported the establishment and early development of the Northern Forest.
- Played our part in building and helping to grow England's Community Forest network.
- Set ourselves challenging targets for planting 3500 hectares of new woodland in North and West Yorkshire by 2025.
- Set up a unique process, the WRF Delivery Pathway, to support WRF partners and funders in delivering that work with our landowners and local stakeholders.

Today, we ask wider partners and the Government to work with us over the next 4 years to help shape our future plans and ambitions and develop a 25-year community forest plan for 2025-2050. It will lay out what the landscape potential of the White Rose Forest area could be for significantly increasing tree cover, in line with Government ambitions for 2050, and its impact on reducing residual CO₂ emissions.

To make this happen we look forward to working with landowners, local businesses and community groups across North and West Yorkshire to explore how we can help each other to meet our targets and set us up for the journey to 2050.



Guy Thompson, White Rose Forest Programme Director



The WRF Partnership

The organisations below support the White Rose Forest under a joint venture agreement. Working alongside the core delivery team, the White Rose Forest partners work together to plant new woodland across North and West Yorkshire.

Glossary of Terms

Biodiversity Net Gain

Biodiversity Net Gain is an approach to development that leaves biodiversity in a better state than before. Where a development has an impact on biodiversity it encourages developers to provide an increase in appropriate natural habitat and ecological features over and above that being affected in such a way it is hoped that the current loss of biodiversity through development will be halted and ecological networks can be restored.

BlueSky Tree Map

A highly detailed dataset which not only shows the location of each tree within our region, but also information relating to its height and crown size. The data is created from a range of sources, including high resolution aerial imagery, terrain and surface information, and infrared imagery.

Carbon Market

Carbon markets aim to reduce greenhouse gas (GHG, or 'carbon') emissions cost-effectively by setting limits on emissions and enabling the trading of emission units.

Community Forest Trust

The Community Forest Trust is a national charity that works to support the development of community forestry initiatives.

Forest habitat network

The concept of a forest habitat network is to link woodlands old and new to form a more continuous woodland cover than at present. It is important to view woodlands as an integral part of the wider landscape rather than as individual stands of trees. Woods and forests must be placed within the context of the many other forms of land use.

Guiding Principles for Clough Woodlands

Area-specific guiding principles to be adopted in the creation of any new native woodland in the South Pennine Moors National Character Area:
www.moorsforthefuture.org.uk/our-work/our-projects/clough-woodland-project

HeyWoods Community Forest Partnership

www.heywoods.org.uk

Kompass GIS

Kompass is the web based mapping solution that is utilised across Kirklees Council and the White Rose Forest. Kompass allows us to visualise and disseminate a myriad of datasets relating to our priorities, targets and constraints. Using Kompass we can map all White Rose Forest-related tree planting activity across North and West Yorkshire.

Living Landscapes

A spatial dataset produced by The Yorkshire Wildlife Trust that helps us identify potential planting sites with strong biodiversity benefits.

Nature for Climate

A Government-funded £640 million programme to plant 30,000 hectares of trees in England by 2025.

Northern Forest

The Northern Forest is a forest partnership in Northern England between the Woodland Trust and four community forests. The aim is to plant 50 million trees by 2043 between Liverpool and Hull.

www.thenorthernforest.org.uk

Residual Co₂

Residual CO₂ emissions are the emissions remaining after all technically and economically feasible opportunities to reduce emissions in all covered scopes and sectors have been implemented.

The England Tree Action Plan 2021-24

The Government's plan to protect, plant and restore woods and trees for years to come, with an aim to significantly increase levels of annual tree planting in both urban and rural communities.

Trees and Design Action Group

The Trees and Design Action Group (TDAG), brings together individuals, professionals, academics and organisations from wide ranging disciplines in both the public and private sectors to improve knowledge and good practice to support the role of urban trees through better collaboration in the planning, design, construction and management and maintenance of our urban places.

www.tdag.org.uk

UK Forestry Standard

The UK Forestry Standard (UKFS) is the reference standard for sustainable forest management across the UK, and applies to all woodland, regardless of who owns or manages it.

UKFS ensures that international agreements and conventions on areas such as sustainable forest management, climate change, biodiversity and the protection of water resources are applied in the UK.

<https://www.gov.uk/government/publications/the-uk-forestry-standard>

Woodland Access Standard

An aspirational benchmark created by the Woodland Trust in 2004 and supported by the Forestry Commission, which says that: 1) No person should live more than 500m from at least one area of accessible woodland of no more than 2 hectares in size; and 2) There should also be at least one area of accessible woodland of no less than 20 hectares within 4 km of people's homes.

Woodland Carbon Code

The Woodland Carbon Code is the quality assurance standard for woodland creation projects in the UK, and generates independently verified carbon units for the carbon market.

Photo credits:

Aire Rivers Trust	Kirklees Council
Broughton Hall Estate	Leeds City Council
Carl Milner	The National Trust
City of Bradford Council	Selby District Council
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This publication uses 100% FSC certified paper from well-managed forests, and is part of the Woodland Trust's Woodland Carbon Capture scheme.





Report to: Climate, Energy and Environment Committee

Date: 19 October 2021

Subject: **Flood Risk Management Update**

Director: Liz Hunter, Director of Policy and Development

Author: Justin Wilson, Head of Strategic Networks

Is this a key decision?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is the decision eligible for call-in by Scrutiny?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Does the report contain confidential or exempt information or appendices?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If relevant, state paragraph number of Schedule 12A, Local Government Act 1972, Part 1:	
Are there implications for equality and diversity?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

1. Purpose of this report

- 1.1 To summarise the Combined Authority’s work with partners to address Flood Risk Management (FRM) issues.

2. Information

Policy Context

- 2.1 In collaboration with partners, the Combined Authority developed the Leeds City Region Flood Review following the 2015 Boxing Day floods. The Review sits within Strategic Economic Framework (SEF) and outlines the Combined Authority’s approach to FRM.
- 2.2 The Review includes 19 recommendations which relate to:
- Economic impact of flooding;
 - Emergency response and recovery; and
 - Planning, risk reduction and mitigation for future events.
- 2.3 Delivery of the recommendations is ongoing with partners. Consideration is also being given to opportunities to refresh the Review, having regard to

priorities emerging from the West Yorkshire Climate and Environment Plan.

- 2.4 The resilience of the City Region to flood risk is vitally important to tackling the climate emergency. Our communities need to be helped to become more resilient to current and future weather events, which will only increase as our climate continues to change. The work undertaken to improve FRM provides an important contribution to the City Region's work to address the Climate Emergency, supporting the commitment for West Yorkshire to reach net zero carbon by 2038 at the latest with significant progress by 2030.
- 2.5 This work aligns with the Mayor's pledge to tackle the climate emergency and protect the environment.

Capital Flood Risk Management Programme

Previous Delivery (up to March 2021)

- 2.6 The Combined Authority has invested £20 million from the Leeds City Region Growth Deal Three, alongside over £200 million of partner match, into flood alleviation schemes across the region. Projects included Skipton Flood Alleviation Scheme (FAS), Mytholmroyd, Hebden Bridge and Leeds FAS 1 & 2, alongside the Wyke Beck FAS.
- 2.7 The programme also included Natural Flood Management (NFM) projects in the Colne, Calder and Upper Aire catchment areas. For example, £1.7 million of interventions led by the National Trust and Yorkshire Wildlife Trust, designed to slow the flow of water and help protect 1,075 businesses and 2,936 homes. This innovative programme, which will be monitored by the University of Leeds, supports the City Region's ambition to become a trailblazer in NFM techniques.
- 2.8 When complete, the programme will provide enhanced flood protection to approximately 1,300 businesses and 11,100 jobs.

Future Funding (2021/22-2026/27)

- 2.9 Building on the success of the above programme, the Combined Authority has worked with partners to develop a programme of priority schemes for delivery between 2021/22 and 2026/27. The programme requires £120m of additional investment from government or other sources, and includes:
- £103.9m to unlock local contributions and private funding to deliver 28 FRM schemes with a total capital value of £176.4m.
 - £15m NFM Programme to deliver the Leeds and Upper Calder NFM schemes and support a £8.3m pipeline of other NFM projects.
- 2.10 The programme includes four 'shovel ready' schemes, which are fully developed and can be accelerated to commence delivery by December 2022.
- Leeds FAS Phase 2, Step 2
 - Brighouse FAS Phase 1 (fluvial)
 - Reservoir Storage (Calderdale)

- Wortley Beck Improvements, Leeds

2.11 The updated Programme was submitted to DEFRA and HM Treasury on 22 December 2021 and forms part of the West Yorkshire Economic Recovery Plan. The Combined Authority and the Mayor are continuing to engage with government to outline the wide range of benefits the programme could deliver, with a view to securing the additional investment required.

Business Flood Resilience & Recovery Support

- 2.12 The Combined Authority has previously provided flood recovery business support grants, with two funds operational recently with circa £4m provided from early 2016 and early 2020, with around 100 businesses supported. These have mostly been manufacturing businesses in West Yorkshire. These utilised Growth Deal Three (GD3) funding which ran out at in March 2021
- 2.13 As the Combined Authority moves into a new funding position, thought needs to be given to the need for and design of any potential successor business flood recovery programme. There is also the opportunity to deliver proactive resilience measures outside of flood events, which could result in better value for money and reduced damage to properties during a flooding event.
- 2.14 If the Committee endorses further work on this issue, the Combined Authority will continue with the West Yorkshire Flood Risk Partnership, Environment Agency and local authority partners to develop the structure, design and financial requirements of the programme.
- 2.15 If it is considered that a programme is required and is deliverable, it would need to progress through the Combined Authority's assurance process and additional funding would need be identified.

3. Tackling the Climate Emergency Implications

- 3.1 Climate change drives extreme weather events such storms and prolonged periods of wet weather which cause floods. The programmes of work outlined in this paper seek to adapt our communities so that they become more resilient to future flood events.
- 3.2 NFM also provides wider adaptation and mitigation measures by delivering tree planting, peat restoration and wider green infrastructure activities. These measures offer a mix of benefits including carbon sequestration, biodiversity enhancements and urban cooling.

4. Inclusive Growth Implications

- 4.1 Climate change drives adverse weather events such as floods and heatwaves, which significantly affect health and are likely to worsen health inequalities.
- 4.2 The flood risk management work by partners recognises the importance of the health and wellbeing benefits provided by enhanced flood protection. This is

particularly important when considering NFM measures, which can offer wider health benefits when integrated with green infrastructure.

4.3 The flood pipeline developed with partners will include stages of community engagement and co-development of schemes as they develop.

4.4 NFM projects present an excellent opportunity to collaborate across public, private and third sector. As delivery increases and COVID-19 restrictions reduce, there is scope for more focus on where volunteers come from and how these projects can develop skills and experience in an emerging sector.

5. Equality and Diversity Implications

5.1 There are no equality and diversity implications directly arising from this report.

6. Financial Implications

6.1 Many of the FRM schemes in the Environment Agency's pipeline of schemes have significant funding gaps. The Combined Authority is working with partners to engage with government to address this issue.

7. Legal Implications

7.1 There are no legal implications directly arising from this report.

8. Staffing Implications

8.1 Capacity to deliver this work programme is constrained. The Combined Authority and partners are likely to have the resources to deliver but timescales can often become pressured e.g. after a major flooding event with resource being directed to crisis management.

9. External Consultees

9.1 The work outlined in this update has used an extensive partnership approach. This includes industry, public sector, business and academia.

10. Recommendations

10.1 The Committee to note the work undertaken in relation to FRM activities.

11. Background Documents

None.

12. Appendices

None.



Report to: Climate, Energy and Environment Committee

Date: 19 October 2021

Subject: **Energy Accelerator: End of Programme Review**

Director: Melanie Corcoran, Director of Delivery

Author: Daisy Johnson, Programme Manager

Is this a key decision?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Is the decision eligible for call-in by Scrutiny?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Does the report contain confidential or exempt information or appendices?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If relevant, state paragraph number of Schedule 12A, Local Government Act 1972, Part 1:	
Are there implications for equality and diversity?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

1. Purpose of this report

- 1.1 To provide an end of programme review of the delivery of The Energy Accelerator programme, funded by the European Investment Bank (EIB) European Local Energy Assistance (ELENA) fund and, with match funding from Leeds City Region Growth Deal, following the programme closure on 31st July 2021.

2. Information

Programme Background:

- 2.1 The Energy Accelerator programme began on 1st August 2018 and closed at the end of July 2021.
- 2.2 The initial funding allocation from the European Investment Bank ELENA fund was £2.996 million, matched by £0.820 million from the Leeds City Region Growth Deal.

- 2.3 The aims and objectives of the Programme, as defined in the legal agreement, were to, 'provide a new project development support service (PDS) ... to remove the barriers relating to lack of project development funding and expertise that are currently preventing investment in low carbon capital projects in the Leeds City Region. ...[and to]... provide technical, commercial, and legal services to the public, private, academic and community sectors to develop low carbon projects'.
- 2.4 Works were delivered by a consortium of consultants, and comprised investment in four key sectors:
- 1 Commercial & Domestic Retrofit
 - 2 Photovoltaics (PV) in Buildings
 - 3 Street Lighting and Urban Traffic Management and Control
 - 4 District Heat Programme
- 2.5 Three key performance indicators were set out in the contract with the EIB, the most significant of which was the requirement to achieve an Accelerator Leverage Factor of at least 1:20, meaning that every £1 of ELENA support needs to result in at least £20 capital expenditure (Capex) pulled in through other sources, e.g., the private sector.

Delivery Success:

- 2.6 By the end of the contract the programme has achieved the three key performance indicators listed at point 2.5.
- 2.7 Despite operating within a challenging economic climate, including the impacts of Brexit and COVID-19, a total of 45 projects were considered for investment. Of these, 22 projects received full Energy Accelerator feasibility support, of which six projects reached the required development stage within the Energy Accelerator timeframe. These are:
1. Leeds City Centre South Bank Phase 2 Extension Heat Network (IP011: Leeds City Council)
 2. Schools Energy Efficiency Renewables (IP020: Beckfoot Trust)
 3. Bradford City Council Street Lighting (IP031: Bradford Metropolitan District Council)
 4. Building Portfolio Energy Efficiency Measures (IP035: Leeds City Council)
 5. EV Charging, City of York (IP041: City of York Council)
 6. Calderdale Heat Pump Project (IP045: Calderdale Council)
- The Energy Accelerator will lead to the creation of 247 new jobs (16.2 permanent and 230.4 temporary jobs).
- 2.8 The capital expenditure and project development services are lower than forecast due to the combined impacts of the COVID-19 crisis, Brexit, and the complex funding landscape for the larger district heating network projects. However, despite these factors, the programme achieved a 1:28 Accelerator Leverage Factor, exceeding the EIB requirement of 1:20.
- 2.9 When the projects are fully constructed and operational, the programme will have delivered 7785 tonnes annual reduction in CO₂, annual savings of 22.15

GWh for energy efficiency (EE) projects, and annual production of 15.592 GWh energy production as a result of low carbon solutions and renewable energy sources (RES) projects.

- 2.10 The figures presented above are still undergoing verification by the EIB as part of the closure process. A Final Report, supported by an external audit, to close the programme was submitted to the EIB on 31st August 2021 and the outcome is pending.

Legacy of the Energy Accelerator:

- 2.11 Clean growth continues to be a high priority for the West Yorkshire Combined Authority since it declared a climate emergency on Thursday, 27 June 2019 and set an objective to support the Leeds City Region to become a net zero carbon economy by 2038. Moreover, one of the Mayor of West Yorkshire's ten pledges is to tackle the climate emergency and protect the environment.
- 2.12 More recently, at its meeting of 8th June 2021, the Combined Authority approved a Full Business Case for the Net Zero Region Accelerator which is intended to, 'influence the achievement of a net-zero carbon West Yorkshire by 2038, and the economic recovery post COVID-19.'
- 2.13 Lessons learned from the delivery of the Energy Accelerator programme have informed the design of the Net Zero Region Accelerator. In addition, projects that were not able to come forward as part of the Energy Accelerator, such as Halifax District Heating Network, are being referred to this new programme in the hope they will benefit from future rounds of funding, thereby creating a legacy for the Energy Accelerator programme.
- 2.14 It is worth noting that the Energy Accelerator programme has experienced a number of challenges throughout its lifetime. These included a longlist of provisional projects which were not deemed suitable to progress for various reasons and others needed to be established; challenges in procurement, which may have been better addressed by establishing a framework to spread the risk. As a result the level of effort required to oversee the programme to ensure that it achieved its objectives and that the EIB leverage targets were met, far outweighed what was anticipated at 'bid stage'. These challenges, together with recommendations for change have been captured in a lessons learned log and, as mentioned above, it is intended that these will inform the future work of the Net Zero Region Accelerator programme.

3. Tackling the Climate Emergency Implications

- 3.1 The Programme has reported as delivered 7785 tonnes annual reduction in CO₂, annual savings of 22.15 GWh for energy efficiency (EE) projects, and annual production of 15.592 GWh energy production because of renewable energy sources (RES) projects. These figures are still undergoing verification by the EIB as part of the closure process.

4. Inclusive Growth Implications

- 4.1 **Responding to high levels of unemployment** The Leeds City Region is home to an expanding green technologies industry, and so investment in this area contributes to the levelling up agenda in West Yorkshire generally. 247 full time jobs have been created across West Yorkshire as a result of the Energy Accelerator Programme, which responds to the fact that Yorkshire and the Humber have a higher rate of unemployment (5% in April 2021).
- 4.2 **Levelling up in Schools** The energy saving measures delivered by the Energy Accelerator Programme for Project IP020 Beckfoot Trust will reduce annual expenditure on energy consumption, reducing the cost of bills for the school, allowing the funding to be invested into pupils and other works to improve the school buildings.
- 4.3 **Tackling Fuel Poverty:** The IP025 Leeds Pipes DHN Project is set to result in energy bill savings of 10-25% per year, providing almost 800 homes with affordable and sustainable heat. Whilst this is of benefit for the Net Zero Agenda, this has the added benefit of responding to poverty, allowing residents to save money each month (with reports of savings up to £150 per month per home connected to the DHN).

5. Equality and Diversity Implications

- 5.1 **Green energy as environmental/racial justice** In 2019, the UK government released a report which found a higher risk of exposure of black British children to air pollution than white British children. As West Yorkshire is a diverse region, with varying levels of economic inequalities, air pollution has the potential to become an area of racial disparity, exacerbating existing inequalities. The projects supported and delivered by the Energy Accelerator respond to this risk and help to work towards a cleaner environment for all residents. E.g., Project IP031 Bradford Street Lighting will reduce Bradford Council's energy consumption by 65% per year, with a reduction of 6,000 tonnes of CO₂ emissions per year.
- 5.2 **Responding to vulnerable populations and improving access to public transport** Project IP031 Bradford Street Lighting responds to a need to improve personal safety in West Yorkshire by providing well-lit streets, removing barriers to public transport access, e.g., a perceived lack of personal safety, which might prevent someone from using public transport with the consequence of limiting their employment/economic prospects. The upgraded street lighting is expected to save approximately £2 million annually, and £189 million over 50 years.
- 5.3 **Responding to inequalities in access to arts and heritage** Projects delivered also helped to respond to national inequalities in access to arts and heritage opportunities including museums, a position exacerbated by the pandemic and a funding package which was insufficient for projected needs. Project IP045 Calderdale Heat Pumps has allowed Calderdale Council to invest in measures which will reduce expenditure on heating and water across an ageing estate of heritage buildings, helping to ensure the viability of heritage buildings used by the public including museums and libraries.

6. Financial Implications

- 6.1 The total EIB spend was £2.052 million of the £2.996 million allocation, therefore the full grant allocation will not be utilised and drawn down. The full allocation was not required due to the combined impacts of the COVID-19 crisis and Brexit, with several larger projects experiencing delays outside of their control and being placed on the pipeline for future investment.
- 6.2 The total Leeds City Region Growth Deal spend was £0.510 million of the £0.820 allocation.
- 6.3 The Energy Accelerator has received two instalments of funding from the EIB that total 70% of the EIB contribution to the Programme. The third payment will not be required and a repayment of the unspent grant of ~€ 0.427 million is expected to be made to the EIB subject to approval of the figures in the Final Report.
- 6.4 The programme was required to undergo an external audit, which has been successfully completed and submitted to the EIB, along with the Final Report.

7. Legal Implications

- 7.1 Records must be maintained for a period of seven years post programme closure in the event of audit by the European Investment Bank.
- 7.2 State Aid implications will be monitored for a period of 15 years.

8. Staffing Implications

- 8.1 Resource is in place until 31st October 2021 to lead programme closure, including responding to queries from the European Investment Bank, and producing the Project Closure Report.

9. External Consultees

- 9.1 No external consultations have been undertaken.

10. Recommendations

- 10.1 That the members of the Climate, Energy and Environment Committee note, subject to Final Report approval by the EIB:
 - a) That the programme has achieved its three primary KPIs, most notably securing an Accelerator Leverage Factor of 1:28, exceeding the EIB requirement of 1:20.
 - b) That the programme has contributed significantly to the Tackling the Climate Emergency agenda by delivering 7785 tonnes annual reduction in CO₂, annual savings of 22.15 GWh for energy efficiency (EE) projects, and annual production of 15.592 GWh energy production because of renewable energy sources (RES) projects.

- c) That a return of unspent grant of ~€ 0.427 million will be made to the EIB subject to approval of the figures in the Final Report.
- d) That projects unable to come forward within Energy Accelerator timescales have been referred to the Net Zero Region Accelerator, creating a legacy for this programme.

11. Background Documents

None.

12. Appendices

None.