

**REPORT TO: WEST OF ENGLAND COMBINED AUTHORITY
COMMITTEE**

DATE: 17 MARCH 2023

**REPORT TITLE: CLIMATE AND ECOLOGICAL STRATEGY AND
ACTION PLAN 2023**

DIRECTOR: ROGER HOARE, HEAD OF ENVIRONMENT

**AUTHOR: KIERAN HIGHMAN, SENIOR ENVIRONMENT
MANAGER**

Purpose of Report

1. This report updates Committee on regional progress towards tackling the climate and ecological emergencies and seeks approval to adopt a revised regional Climate and Ecological Strategy and Action Plan (CESAP) 2023; and expand the Green Recovery Fund (GRF) to £60m.

Recommendation

- The West of England Combined Authority Committee is asked to:
 1. Note progress on Climate and Ecological Strategy and Action Plan 2022 actions, as set out in Appendix 2.
 2. Adopt the Climate and Ecological Strategy and Action Plan 2023 as set out in Appendix 3.
 3. To support expansion of the Green Recovery Fund by £10m to invest in priority projects that target the climate and ecological emergencies, including allocating £6m from the existing Combined Authority Investment Fund headroom as shown in Table 8.1 of this Report.
 4. As part of the Green Recovery Fund expansion, further development work will take place to determine supply and demand for green construction skills, building on the Post 16 Education and Infrastructure Report and aligning with a refreshed West of England Employment and Skills Plan, with an update to come to June 2023 Committee meeting.

Reasons for recommendations

- The CESAP aligns with Council and Unitary Authority motions in 2019 and 2020 relating to climate and ecological emergencies respectively

- The Committee's adoption of last year's CESAP included biannual reporting and a yearly update. This report and appendices form this annual update.
- Reporting on CESAP actions ensures the Committee continues to scrutinize Combined Authority and regional progress in addressing our declarations
- Adopting a revised CESAP ensures the region has a coherent strategy and meaningful actions to address climate change, and halt the decline in nature
- Recognising that we are not currently on track to meet our 2030 ambitions of Net Zero and Nature Recovery, we are seeking additional funding for projects. These projects will enable us to both strengthen delivery and increase our ability to bring investment into the region on these agendas.
- Of the £30m contribution from the Combined Authority's Investment Fund in establishing the £50m Green Recovery Fund, only £3.7m remains unallocated. A further £6m is sought to ensure the pace of delivery and ability of the Combined Authority to leverage in additional investment continues to grow.

Voting arrangements

- Decision requires majority agreement of Committee Members in attendance, or their substitutes (one vote representing each Authority) and including the West of England Combined Authority Mayor.

Background / Issues for Consideration

2. As a region, we have all declared climate and ecological emergencies. We have set ourselves 2030 ambitions for the West of England to be net zero, and to ensure that wildlife and the natural environment are in recovery with their decline halted.
- 2.1 The Climate and Ecological Strategy & Action Plan (CESAP) sets the regional approach to meeting these ambitions. It includes short-term actions for delivery each year, and medium-term actions needed to achieve longer term 2030 ambitions. It recognises – to achieve our long-term vision and goals – we need to be collaborating across all levels of government and the wider public sector, helping to catalyse and seek funding from the private sector, and empowering our residents and communities.
- 2.2 The CESAP was first agreed in April 2022, including commitments for the Combined Authority to provide 6-monthly progress updates and an annual review of actions. The 6-monthly update was provided to Committee on 13 September. This report provides an update on each action and sets out the proposed revised CESAP for 2023.

Progress update on CESAP 2022

- 2.3 Over the last year as a region we have made some great progress and have delivered on many of the actions we committed to. Others are ongoing, with a couple of actions requiring a rethink. Appendix 1 provides an update on each action. Highlights from our activities last year are included in our CESAP 2023, delivering:

- Retrofits to over 1000 homes and establishing the Retrofit Accelerator.
- Support for residents and businesses with escalating energy costs, providing 360 SMEs with carbon surveys and 160 SME retrofits.
- projects a share of £439,000 from our Community Pollinator Fund.
- An additional 950 solar PV installations.
- Improving public and sustainable transport across our region, extending the metrobus to Cribbs, gaining planning approval for new train stations - and securing over £640m in our CRSTS and BSIP settlements.

2.4 Increasingly our work is integrated, and we are working ever closer with our region's Unitary Authorities. They too have universally refreshed their commitments and action plans, and are working with us on significant projects that could be rolled out and benefit the wider region including:

- Bristol has seen the [launch of City Leap](#). This will invest £424m through a partnership between the Council and its partner Ameresco. Plans include installing 182MW of additional renewables and retrofitting council homes over the next 5 years.
- Bath and North East Somerset are adopting the UK's first net zero requirements for new housing, and ambitious Biodiversity Net Gain requirements. Working in partnership with them and the South West Net Zero Hub, other councils are seeking to adopt a similar policy.
- South Gloucestershire Council have [started investigating the potential of abstracting heat from former coal mine workings](#) across their area and parts of Bristol. This identified four areas of potential with over 20,000 homes and buildings that could use this as a potential heat source. There has been interest across our region, such as in Radstock. We are working with our Unitary Authorities to expand and explore this potential of heat from mines further.

2.5 Next year, we will develop a shared digital portal of actions the Combined and Unitary Authorities have committed to in respective action plans – for greater public engagement in delivery of environmental actions across our region.

Expansion of the Green Recovery Fund

2.6 Last year, £21.5m of GRF from the Combined Authority's Investment Fund was awarded to projects aligned to our regional objectives, leveraging in £16m match funding. Overall, of the £50m GRF, £37.5m has been awarded.

2.7 Of the remaining £8.5m Investment Fund element of the GRF, a further £4.8m is earmarked for electric vehicle charging infrastructure. Following Bristol City Council's indication that they are not going to proceed with on street charging element of EV project, the Combined Authority is pursuing ways of delivering a compliant Final Business Case (FBC) to move forward with Bath & North East Somerset and South Gloucestershire elements of the scheme to maintain the region's commitment to net zero by 2030.

2.8 This results in £3.7m of the Combined Authority's Investment Fund remaining to be allocated to environmental projects. This paper seeks to expand this by £6m, with an aim of leveraging in an additional £5.9m. This would bring the

total GRF to £60m. Our aim, included in our revised CESAP, is to secure additional investment from other public and private sources over this year.

- 2.9 The Post 16 Education and Infrastructure Report, detailed in Appendix 4, has identified a growing need for green construction and retrofit skills. Our region's net zero ambitions are predicted to result in over half of green jobs being created in the sector. This £100k evidence-base work is needed to understand the current and future supply and demand position to inform training provision and any future capital investment in the FE estate needed, including the potential for a Regional Centre for Net Zero Construction Skills.
- 2.10 New GRF investment would be the subject of a delegated decision to the West of England Combined Authority's Chief Executive, in consultation with fellow Chief Executives of the Unitary Authorities.

Proposed Climate and Ecological Strategy and Action Plan (CESAP) 2023

- 2.11 We need the residents and businesses of the region to be better engaged in the climate and ecological emergencies. This will help to both shape our approach and support the delivery of the CESAP. Achieving the scale of change we need across our region requires us all to make big choices, especially when it comes to our homes and sustainable travel.
- 2.12 We will explore routes to bring in different voices and perspectives into the region to provide robust scrutiny of our approach and learn lessons from national and international experience.
- 2.13 We have used new evidence and input through consultation to update the CESAP's actions, to better reflect regional activity and priorities. Largely the format, strategic approach and long-term vision remain the same.
- 2.14 Two notable changes are a new Climate Resilience theme and a section noting last year's delivery, as above. Key priorities for next year include:
- Delivering domestic retrofits and strengthening supply chains via the Retrofit Accelerator. Phase one is aiming to advise 10,600 households, survey 5,250 homes, and deliver an additional 1,400 retrofits over the next 2 years; and Phase 2 will ensure local economic benefit in supporting 350 businesses to build their retrofit skills and capacity
 - Creating new habitats and securing investment in improving quality and connectivity of existing spaces for nature, including vital habitats for pollinators.
 - Supporting businesses to become resilient to climate change and energy price rises
 - Expanding green skills programmes to benefit from more local green jobs.
 - Removing barriers and increasing investment to expand rollout of EV infrastructure, new dedicated walking and cycling routes and improved public transport.
 - Empowering community energy and innovation to unlock renewable energy potential including mine water heat.
 - Preparing for the impacts of climate change, establishing a cross-sector

resilience group and investing in flood defences.

- 2.15 Achieving our long-term vision and objectives requires monumental effort. This is set out in the 'Challenges' section of the appended CESAP 2023. We cannot achieve this as a Combined Authority nor region alone. We need national regulatory changes and investment befitting the emergencies we face. Without this, achieving carbon neutrality and halting nature's decline by 2030 is almost impossible.
- 2.16 For instance, our region needs greater Government support in retrofitting 250,000 of our homes by 2030. Currently c1,700 retrofits are delivered in our region each year; with the Retrofit Accelerator targeting an additional 1,400 homes retrofitted over the next two years. The Government's key 'ECO+' £5bn insulation subsidy scheme may retrofit 410,000 UK homes by 2026 – proportionally this could help retrofit a mere 6,500 homes in the West of England.
- 2.17 Working with our Unitary Authorities, we will be collating our knowledge and actions into one shared accessible website – using this to engage our residents and businesses over the next year to define scenarios for our region in 2030, based on what we can deliver and what interventions are needed by others.

Consultation

- 3 We have consulted with the following in reporting on actions and updating the CESAP and expanding the GRF:
- Sought input from Combined Authority colleagues including those responsible for actions in CESAP 2022 and Heads of Service.
 - Via the West of England Climate Panel on 8 December 2022, represented by the regions Unitary Authorities, community groups, trade unions, businesses, infrastructure providers and universities.
 - Presented to and consulted with West of England Nature Partnership Board on 14 December 2022.
 - Held a whole-day workshop on 8 December 2022 with Unitary Authority Officers and had virtual follow-ups – including consulting upon the draft plan for 3 weeks (16 January to 6 February 2022).
 - Presented to and consulted with Business and Skills Board (9 Jan 2022).
 - Consulted with and presented to LEP Board (18 Jan 2022).
 - Consulted with and presented to Natural Environment Officer's Steering Group on 25 January 2022.
 - Bristol Avon Catchment Partnership on 3 February 2022.
 - Briefing regional environment directors 8 and 9 February 2022.
 - Briefings with Cabinet Members with climate and transport responsibility on 7 and 8 February 2022.
 - Briefing Climate Officers on additional regional GRF needs on 22 February 2022.

Other Options Considered

- 4 Not developing a revised Climate and Ecological Emergency Strategy and

Action Plan has been considered. This has been discounted on the basis that this does not meet our commitments to Committee nor the Motions we and Unitary Authorities have declared, and that a plan will enable action to be prioritised and ensure we are focused on the actions that will have most impact.

Risk Management / Assessment

- 5 The CESAP sets out how we plan to tackle risks associated with the climate and ecological emergencies. Full risk assessments will be undertaken for each action or project outlined within the action plan as they are brought forwards.

Public Sector Equality Duties

- 6 Public Sector Equality implications are considered as part of the individual delivery plans for each action within the CESAP.

Climate Change Implications

- 7 The Combined Authority's Climate Emergency Action Plan is the focus of this report, both reporting on progress last year and proposing new activity within the 2023 CESAP. This has been overseen by the Head of Environment.

Report and advice reviewed and signed off by: Roger Hoare, Head of Environment, Combined Authority

Finance Implications, including economic impact assessment where appropriate

- 8 This report seeks approval to allocate £6m from the existing Combined Authority Investment Fund headroom to contribute to expanding the Green Recovery Fund. Appendix 1 of this report, summarised below in Table 8.1, identifies regional priorities for this funding. As with the existing GRF, decisions on drawing down this funding would be made by the Combined Authority's Chief Executive in consultation with the Chief Executive Officers (CEOs) of the West of England Unitary Authorities.

Table 8.1:

	Existing Green Recovery Fund allocated or assigned to date	Existing Green Recovery Fund still to be allocated	Total	New Green Recovery Funding sought in this report	Total
Investment Fund	£26.3m	£3.7m	£30m	£6m	£36m
Leveraged investment	£16m	£2.1m	£18.1m	£5.9m	£24m
Total	£42.3m	£5.8m	£48.1m	£11.9m	£60m

Report and advice reviewed and signed off by: Stephen Fitzgerald, Interim Director of Investment and Corporate Services, Combined Authority

Legal Implications

- 9 There are no direct legal implications associated with this report. Legal implications associated with individual decisions to deliver this plan will be brought to Committee via CEOs if and when required.

Report and advice reviewed and signed off by: Stephan Gerrard, Interim Director of Law and Governance, Combined Authority

Human Resources Implications

- 10 There are no direct HR implications associated with this report.

Report and advice reviewed and signed off by: Alex Holly, Head of People and Assets, Combined Authority

Land / property Implications

- 11 There are no direct land or property implications associated with this report.

Report and advice reviewed and signed off by: Alex Holly, Head of People and Assets, Combined Authority

Appendices:

Appendix 1 – Outline Funding Priorities for expanded Green Recovery Fund

Appendix 2 – Climate Ecological Strategy and Action Plan – 2022: Overview of progress in delivering our actions

Appendix 3 – Climate Ecological Strategy and Action Plan 2023 (recommended for adoption)

Appendix 4 – Post-16 Skills Planning (Green Skills)

Background papers:

Green Recovery Fund - Overview and Establishment – Combined Authority Committee Paper approved December 2021: <https://westofengland-ca.moderngov.co.uk/documents/s3085/9%20-%20Green%20Recovery%20Fund.pdf>

Climate and Ecological Strategy and Action Plan 2022: <https://www.westofengland-ca.gov.uk/wp-content/uploads/2022/04/West-of-England-Climate-and-Ecological-Strategy-and-Action-Plan-2022.pdf>

West of England Combined Authority Contact:

Report Author	Contact Details
Kieran Highman	Kieran.highman@westofengland-ca.gov.uk

Appendix 1 - Outline Funding Priorities for expanded Green Recovery Fund

The previously approved Green Recovery Fund (GRF) has largely been allocated to projects. Details of where it is being allocated and funding award decisions can be found in is summarised in the table below:

GRF theme	Outline Proposal	GRF Allocation	Funding status FBC = Full Business Case OBC = Outline Business Case GOL = Grant Offer Letter
Low carbon buildings & places	Retrofit Accelerator Phase I	£3,000,000	FBC approved ¹
	Retrofit Accelerator Phase IIb (Step-up)	£200,000	OBC approved in Dec '21 committee alongside Retrofit Accelerator Phase IIa ²
	Local energy advice	£118,503	FBC approved ³ ; GOL and Procurement complete; project operational
	Retrofit Accelerator Phase 2a (supply chain)	£2,000,000	OBC approved; FBC to CEOs this Weds
	LCCF - innovative housing retrofit	£300,000	FBC approved ¹ ; GOL out
	RLCD - innovative housing retrofit	£995,000	FBC approved ¹ ; One GOL out, other being drafted
	Regional Low Carbon Delivery - business assessment	£2,839,247	FBC approved ¹ ; Green Business Grant and Surveys operational from April '23
	Sub totals of allocated amounts	£9,452,750	
	Remainder of £10m originally earmarked in Dec '21	£547,250	
Low carbon transport system, including EV infrastructure	Development of business case	£200,000	£200k invested in developing business case; remainder subject to this being approved
	Trials of innovative low cost on-street residential charging infrastructure	£4,800,000	
	Trial residential charging hubs		
	Install destination chargers in public car parks		
	Support EV Car Clubs		
	Totals of allocated and earmarked amounts as per £5m allocated at Dec '21 committee	£5,000,000	
Green Environment/N	GI projects (incl Bath RiverLine)	£1,525,000	FBC approved ¹ ; GOL going out

Nature Recovery	Community Pollinator Fund	£1,458,075	FBC approved; Round 1 all GOLs signed and projects are initiating/running. Round 2 is launched and open until 19th April
	GRF round 1 - Somer Valley Rediscovered	£923,246	FBC approved ¹ ; GOLs going out
	GRF round 1 - Capricorn Quay	£480,000	
	GRF round 1 - Frome Valley	£1,106,377	
	GRF round 1 - Forest of Avon	£732,429	
	GRF round 1 - Tree Canopy	£1,131,046	FBC approved ¹ ; GOLs going out
	Local Nature Recovery Strategy Funding	£330,000	FBC approved ¹
	Sub totals of allocated amounts	£7,686,173	
	Remainder of £10m originally earmarked in Dec '21	£2,313,827	
Renewable Energy & Energy Capacity	Regional Low Carbon Delivery – Community Energy Scheme (local energy scheme continuation)	£1,160,222	FBC approved ¹
	Round 1 GRF - Solar roof (bristol energy co-op)	£569,312	FBC approved ¹
	Round 1 GRF - SIFFT	£1,551,400	FBC approved ¹
	HSTEAs	£900,000	FBC approved ¹
	Sub totals of allocated amounts	£4,180,934	
	Remainder of £5m originally earmarked in Dec '21	£819,066	

¹ Combined Authority Green Recovery Fund Update Committee Paper 23 September 2022: <https://westofengland-ca.moderngov.co.uk/documents/s5257/13.%20GRF.pdf>

² Combined Authority Green Skills and Advice Prioritisation in Response to Budget and Spending Review Committee Paper 3 December 2021: <https://westofengland-ca.moderngov.co.uk/documents/g485/Public%20reports%20pack%2003rd-Dec-2021%2012.00%20West%20of%20England%20Combined%20Authority%20Committee.pdf?T=10>

³ West of England CEOs delegated decision in awarding up to £150,000 of funding to provide local energy advice support during winter 2022/23 up to 31 March 2023: <https://westofengland-ca.moderngov.co.uk/ieDecisionDetails.aspx?ID=393>

⁴ West of England CEOs delegated decision in awarding funding to the Tree Canopy Green Recovery Fund Round 1 application: <https://westofengland-ca.moderngov.co.uk/ieDecisionDetails.aspx?ID=401>

There is still c£3.7m of the Combined Authority's Investment Fund remaining to be allocated to environmental projects. This is split between projects seeking to retrofit buildings (£547k), those delivering recovery in nature (£2.3m) and those increasing renewable energy and energy capacity (£819k). The unallocated funding for nature will be allocated by launching a second round seeking bids for nature recovery projects.

Decisions to award GRF to specific projects are subject of a delegated decision to the Combined Authority's Chief Executive, in consultation with fellow Chief Executives of the Unitary Authorities.

Included in the table below are outline funding proposals warranting expansion of the Green Recovery Fund (GRF) - *including* the existing unallocated GRF, *excluding* projects listed in the table above with funding already agreed or (in the case of £4.8m for electric vehicles) earmarked.

These areas for investment have been identified in the development of and consultation on the revised Climate and Ecological Strategy and Action Plan (CESAP) 2023; in turn, this is informed from reviewing regional priorities and last year's delivery.

Each has been included on the perceived need and urgency of Combined Authority investment: where delivery is needed, and other sources are not available or known to the Authority at the time of writing.

These total £6m of additional Investment Fund sought with potential of leveraging in c£5.9m of investment into the region's environment, if not more should heat from mines prove to be viable for commercial investment. Together with the existing unallocated GRF funding, these total £9.5m of Investment Fund with potential to leverage in £8m of third-party investment.

Funding sought for	Rationale	Proposed Combined Authority Investment Fund to GRF Allocation	Target for third-party 'leveraged' investment
Nature Recovery Funding Round 2	This GRF funding is already allocated for supporting regional nature recovery projects. A second round of GRF applications would be sought. Cost based on £10m originally being allocated to Nature Recovery, with £7.7m of funds already committed. Leverage funding based on previous projects awarded, having secured over 80% matched leverage.	£2,313,827 (existing from nature recovery allocation)	£1,800,000
Green Skills (including Retrofit Accelerator Phase 2B)	Building on the Post-16 Education & Skills Infrastructure report, and Green Skills reports (including Retrofit Market Analysis) more work is needed to develop our understanding of the current and future supply and demand position for green construction skills to inform training provision and any future capital investment in the FE estate, including the potential for a Regional Centre for Net Zero Construction Skills. This will form part of	£52,750 (new) £547,250 (existing from retrofit allocation) Total: £600,000	£300,000

	<p>a wider FE Capital Investment Strategy. We would anticipate this costing c.£100K.</p> <p>Using the outcome of the analysis work, we would propose using c.£200-300K to extend the work of the Retrofit Accelerator Phase IIb 'Step Up' which will focus on driving up the demand for retrofit training by individuals by bringing focus on green skills and training, and providing advice and guidance on access routes, including via existing services such as Future Bright and our new Skills Connect service.</p> <p>The funding would also allow us to continue to fund the successful pilot Green Futures project which works to bring understanding and focus on green jobs and careers pathways to young people in our schools and Colleges, increasing understanding of employer demands and building LMI and knowledge in schools. c.£200-300K would permit this project to be rolled out beyond its pilot to potentially every school and College in the region.</p> <p>See <i>Appendix 4</i> Post-16 Skills Planning (Green Skills) for further information.</p>		
Retrofit Accelerator Phase 3	<p>To pilot a revolving low-cost loan fund with a residential lending organisation such as Lendology CIC for the Combined Authority area, to be tested through the Retrofit Accelerator. This is to provide residents not qualifying for grant support access to finance for retrofit for those without savings, ability to extend their mortgage or access to other forms of preferential credit. In doing so, together with Gov subsidy for those living in fuel poverty, this aims to ensure majority of residents have the means to retrofit their homes and provide a just transition.</p> <p>Costs based on study commissioned by SW Net Zero Hub on behalf of Bath & NE Somerset Council and other Lendology consortium members (including other West</p>	£1,625,115 (new)	<p>£130,000 – Hub/Gov Match</p> <p>£5,000,000 - leveraged capital in retrofit</p>

	of England UAs). Initial stage is developing FBC: £200k, with match sought from SW Net Zero Hub/BEIS. If Business Case viable, has potential to support up to 300 homes based on typical retrofit cost of £20k per home; with potential for leverage representing capital borrowing estimate figure for piloting in the West of England sought in consultation w/ Lendology.		
Innovative Housing Retrofit Scheme	<p>A second tranche of the Scheme to fund 2-3 pilot projects that use modern methods of retrofit, ie those with exterior components manufactured offsite. Working with social housing providers and regional businesses to test innovative technologies and approaches, and finance models.</p> <p>Cost based on running a second tranche at same value of current Innovative Housing Retrofit Scheme, with potential to fund c3 innovative housing retrofit projects</p>	£1,500,000	£300,000
Pollinator Fund Expansion	<p>To respond to the overwhelming interest in the fund, which would otherwise be fully subscribed after a second round, and is making a significant contribution to the region's nature recovery ambitions.</p> <p>Cost based on interest received and learning from Round 1 and (live) Round 2, meaning Round 2 likely to fully allocate existing £1m to projects. Costs based on previously approved Full Business Case taking account of: 20% increase in applications to small grants; 20% increase in application success; and 15% extended reach. Rounds 2 and 3 could therefore issue grants to £680,450 worth of projects, with a total of £1,799,900 across the three rounds – hence an additional £800k could be utilised on additional Pollinator projects without any additional Combined Authority officer expense. Matched leverage is based on 25% requirement from those applying to scheme.</p>	£800,000	£200,000
Carbon surveys	To extend the free carbon survey offer and advice for energy bill reduction to support a	£716,000	£200,000

	<p>greater number of small & medium sized enterprises, using a wider eligibility criteria for business type. Potential to explore large business sponsorship for supply chains.</p> <p>Cost based on additional staffing needs and procuring of external surveys. Leverage based on securing sponsorship</p>		
Extension of Local Energy Advice Support	<p>Residents have continued need for local energy advice support. Funding sought to continue resourcing these services during 2024 – otherwise services in some parts of region will close end of March 2023.</p> <p>Investigations are continuing into securing investment into the region for these services. Options deployed in other areas (such as Gloucestershire) include NHS and public health funding, as a preventative measure to alleviate people suffering ill health in cold/damp homes, to reduce pressures on NHS and public health services; and securing CSR funding, such as funding from electricity distribution network operator Scottish and Southern Energy (SSEN) who fund local energy advice services across much of southern England.</p> <p>Cost estimate based on costs of running existing local energy advice services, obtained in consultation with UA officers and existing UA funding arrangements.</p>	£165,000	Ongoing to secure sustainable funding from health services and/or CSR for £165k/yr
Heat from mines	<p>The West of England has a rich mining heritage. These former workings, often flooded with warm water, could provide a strategic heating/cooling resource.</p> <p>Funding is needed to confirm the business case; and if confirmed, could de-risk heat extraction for commercial investment. The illustrative costs comprise:</p> <ul style="list-style-type: none"> - c£10k to commission Coal Authority Stage 1 study for West of England as a whole 	<p>£818,865 (existing from Renewable Energy & Energy Capacity allocation)</p> <p>£841,135 (new)</p> <p>Total</p>	Match funding to be sought; heat from mines, if viable, could leverage in significant commercial investment in heating

	<p>- Stage 2 studies plus investigative boreholes for up to 6 high potential areas identified in Stage 1: £1,650k Total: £1,660k</p> <p>These costs are based on consultation with UA officers, who in-turn have consulted with the Coal Authority.</p>	£1,660,000	20 – 60,000 homes
Regional heat vulnerability and cooling resilience mapping	<p>This would be a commissioned study/ies to expand geography and scope of Bristol's Heat Vulnerability Mapping. It would cover the whole region, look at rural as well as urban environments; and determine cooling strategy for region's buildings (role of building solutions (e.g. reverse cycle heat pumps) and network solutions (cooling networks or ambient loops)</p> <p>Cost estimate being soft-tested with Bristol Climate Adaptation Manager and consultants with suitable skillsets</p>	£300,000	£0
Total from existing GRF	Round 2 of Nature Recovery Funding; 25% towards Retrofit Accelerator Phase 2; & 54% towards Retrofit Accelerator Phase 3	£3,679,942	£2,100,000
Total expanded GRF		£6,000,000	£5,865,000
Total		£9,679,942	£7,965,000

Appendix 2 - Climate Ecological Strategy and Action Plan – 2022

Overview of progress in delivering our actions

This background paper provides details on progress of actions in the West of England Climate Ecological Strategy and Action Plan (CESAP) 2022. It groups progress against the CESAP themes, summarising where these have been successfully delivered and therefore are not included as an action for the CESAP 2023; where action is ongoing, what's been successfully achieved and what needs progressing this next year; and where a rethink has occurred and a different approach is proposed.

Theme: Transport

Reduce number of car trips and freight journeys by:

Reviewing our transport major scheme programme to confirm how our schemes perform in terms of their carbon impact.

Review underway of carbon impacts of major transport schemes. **Ongoing action** to consider not just operational, but embedded carbon and wider environmental impacts and climate resilience - and embed this within decision making and project management. DfT guidance, expected Q4 2022/23, will allow us to robustly prioritise major schemes which have the greatest ability to reduce car dependency and congestion (aligning to improving air quality).

Increasing the pace of transport decarbonisation by progressing demand management measures including Travel Planning, marketing, parking policy, and a package of Workplace Parking Levies and/ or congestion charging areas (we will do this by updating JLTP4)

DfT guidance on updating JLTPs expected Q4 2022/23. We have commissioned and are reviewing a West of England Transport Decarbonisation Study evidence-base. Working with UAs, as an **ongoing action** these will enable us to update JLTP4 by Spring 2024.

Developing detailed plans for a liveable neighbourhood in Bristol and confirming areas to develop liveable neighbourhoods in B&NES and South Gloucestershire with a view to rolling out a programme of delivery across the region to reduce reliance on cars.

Programme delivery has **successfully** secured funding via City Region Sustainable Transport Settlement (CRSTS), and has awarded funding to one Bristol pilot. This is **ongoing** work. Outline Business Case (OBC) is being developed for Bristol project for a planned trial; B&NES and South Gloucestershire are being scoped, ahead of drawing down capital development funding - as well as a second tranche of projects in Bristol.

Increase cycling & walking by:

Delivering 14 cycling and walking schemes as identified in the cycling & walking strategy and work with partners to start to design schemes and proposals to submit to active travel fund (round three).

We have **successfully** started designing these schemes, with each completing their Outline Business Cases – targeting delivery this coming financial year. Work is **ongoing** to deliver these. Cotham Hill, Park Row, Old Market Gap Active Travel Fund (ATF) schemes are just about to start construction. Kingswood design is being finalised. We have incorporated these schemes into wider strategic schemes where possible, to minimise disruption and achieve economies of scale in construction. In addition, we've **successfully** secured and allocated £360k towards from the Transforming Cities Fund in providing at least 28 cycle hangers on Bristol Council housing sites being delivered by this Spring.

Launching e-Bike offer within Bristol, with a view to expanding across the region

An e-bike offer within Bristol in February 2022, operated by ShareBike in partnership with Big Issue. As of June 2022, the scheme showed initial **success** had 150 e-bikes, 33,000 rides and 3,800 users. In August 2022, ShareBike pulled out. We have had to **rethink** and are now procuring an Integrated Micromobility Service to include e-scooters, e-bikes and e-cargo bikes, due to launch Summer 2023.

Increase uptake of public transport by:

Delivering tap on tap off transport ticketing, offering a simpler public transport fares system which provides better value for money through fare capping in place for adult single trips and developing an integrated ticketing plan to provide a single consistent offer to customers across the region.

This was **successfully** launched on 17th July across all First West of England services, including those in North Somerset. We have also implemented fare capping in place for adult single trips. **Ongoing** work is developing integrated ticketing initiatives, with the aim to provide travellers a single ticket for using different forms of public transport, with plans to develop the multi operator scheme to introduce mobile tickets and availability through the new multi modal MaaS system in summer 2023. Expansion of tap on tap off systems to multi operator ticketing is expected in 2024/25.

Improving frequency and accessibility of rail services through commencement of key infrastructure delivery including MetroWest Phase 1a and Phase 2 and commencing CRSTS delivery

We have **successfully** introduced additional services between Bristol Temple Meads (BTM and Severn Beach in Dec '21. Work is **ongoing** between the Combined Authority, Network Rail and Great Western Railways to accelerate the introduction of new enhanced half hourly services between BTM and both Westbury and Gloucester from May 2023.

We have **successfully** secured DfT capital funding for MetroWest1 (Portishead Line), and secured Development Consent Order approval from DfT in Nov '22. Detailed design work has now started, with line opening planned in 2026.

We have **successfully** secured planning approval for Ashley Down Station, which is the first station planned to be constructed under MetroWest 2, with funding approved at 27th January Committee. Construction work will commence in January (subject to funding being confirmed) and the station is programmed to be open in 2024.

The remaining two stations to be delivered under MetroWest 2, North Filton and Henbury, are at outline design stage. Planning approval has **successfully** been approved for North Filton, and is anticipated Henbury and Charfield station in the next few months; with these new stations planned to open in 2026.

We have **successfully** secured CRSTS funding and have recently started design and optioneering work with Network Rail aimed at delivering step free access at Lawrence Hill station. Construction works are planned to start in 2025 following completion of design work.

Improving frequency and accessibility of bus services through commencement of key infrastructure delivery including commitments made in the Bus Service Improvement Plans and transport hubs in Future Transport Zones

We have **successfully** secured £540m in our City Region Sustainable Transport Settlement (CRSTS) and a further £105m to improve bus services specifically, including in North Somerset, in our Bus Service Improvement Plan (BSIP) settlement. We have successfully commenced infrastructure delivery, allowing the extension of metrobus routes to Cribbs Patchway now operational and Bedminster Green section works well underway. **Ongoing** work will see our CRSTS and BSIP programmes continue in delivery; and see metrobus improvements at Bedminster Green (linked to wider regeneration project).

Increase uptake of public transport by:

Building better bus shelters, enabling green roofs and investing in green areas around stops including commissioning at least 15 new green roof bus stops and designing new standards to improve quality of wildlife habitats and buses and the surrounding verges

Work is **ongoing** to deliver at least 15 new green roof bus stops. The first 3 green roof bus shelters are due to be delivered in South Gloucestershire by March 2023. We are working to develop a regional bus stop standard to provide a consistent standard for green roof bus shelters.

Launching new transport brand to build a consistent brand across the region to increase awareness of public transport capabilities and provision and build trust amongst users

Following a public design competition launched in January 2022, **ongoing** work is underway in preparing this brand. This is being aligned to our revised corporate branding work. This is due to launch in later in 2023

Launching public consultation on a new public transport system within the region to prioritise deliverable routes and modes

Building on the 'Big Choices on Buses' conversation run by Dan Norris, work is **Ongoing** to prepare public consultations on the public transport needs within the region

Increase uptake of low carbon vehicles including electric vehicles by:

Increasing the amount of electric charge infrastructure in the region by investing £5m in a range of new projects (informed by EV charging strategy & feasibility work) and accessing government funds through £500m EV Charging Strategy to enhance our work where possible

Work is **ongoing**. Since the previous CESAP report on the Electric Vehicle (EV) charging infrastructure delivery action, Bristol City Council (BCC) have indicated they have put on hold all work towards the delivery of on-street residential EV lamp-post charging schemes. The CA is pursuing ways of delivering a compliant Final Business Case (FBC), through agreed delegations, to West of England CEOs that will enable us to progress delivery of EV Charging infrastructure in Bath & North East Somerset & South Gloucestershire while exploring with BCC options to progress the remaining scope.

Theme: Buildings & Places

Increase the energy performance of homes and buildings across the region by:

Increasing retrofit across the region. Working in partnership to develop and launch the regional Retrofit Accelerator to increase the scale and pace of retrofit within the region by creating a hub for homeowners to access information on retrofit and increase the number of accredited surveyors, coordinators and designers

We have been **successfully** working in partnership - allocating £3m towards Phase 1 of the Retrofit Accelerator, working with fellow councils, and procuring the Centre for Sustainable Energy (CSE). This first element is the Homeowner Advice Service. **Ongoing** work will see this launch in Spring with a website and advice line opening. CSE have set up 'Retrofit West' CIC to deliver this phase.

Developing further retrofit interventions, building on the retrofit accelerator, and focussing on development of supply chain and skills (developing a business case for this to access funding from the Green Recovery Fund)

Delivering the Low Carbon Challenge Fund's Innovative Housing Retrofit Scheme to retrofit 25 hard-to-treat properties within the region, acting as a demonstrator for new technologies and to support the wider roll out of retrofit

Continue to grow delivery of the Low Carbon Challenge Fund Green Business Grants to improve energy efficiency of commercial and industrial properties (developing a business case for this to access funding from the Green Recovery Fund)

Skills Bootcamps (regional funding): Wave 3 to deliver 4 green elements: 1) Delivering training programmes to increase the number of retrofit installers within the region including construction skills, 2) Green skills for future tech, 3) Modern Methods of Construction and 4) Upskilling retrofit.

Working with South West Net Zero Hub to deliver retrofitting schemes to improve energy efficiency to homes in fuel poverty including Green Homes Grant

We have **successfully** allocated £2m of funding towards the Retrofit Accelerator Phase II - a Supply Side Market & Capacity Building project. The Full Business Case is drafted, going to committee Q3 2022/23 **Ongoing** work, assuming this is approved, will see this launch this summer. It will provide a minimum of 350 business supports at a range of intensities with the outcome of increasing retrofit levels; whole house retrofit and installation of heat pumps.

£1.5m has been **successfully** awarded to three innovative projects in the region. These cover 3 types: pre-1900, Easiform and rural off gas grid homes. Construction work is **ongoing** across these three projects, resulting in between 50-75 whole house retrofits to net zero or net zero ready standards.

We have **successfully** surveyed 360 SME businesses and awarded 166 with over £1m of grant funding match - and have grown the Low Carbon Challenge Fund team into the Regional Low Carbon Delivery in September 2022 with a further £2m of funding for business grants, and expanding the team offering zero carbon surveys. **Ongoing** work will see this support provide c400 SME businesses free surveys, and up to 225 with grants towards energy efficiency measures.

We ran Wave 3 Green Skills Bootcamps during 2022/23. These initially struggled to attract companies, with the exception of the Retrofit element seeing significant interest from providers. Following a **rethink**, we more heavily promoted these in November and have seen more interest. **Ongoing work** will see Wave 4 launch this April.

The Hub, hosted by us, has **successfully** delivered energy retrofits to 1007 homes across the West of England (including North Somerset) via the Green Homes Grant Local Authority Delivery Programme. 440 of these have been raised to an EPC C or above. The Hub have **ongoing** work on, including awaiting the outcome of a Social Housing Decarb Fund bid - which would see it working with social housing providers to retrofit their stock across the southwest

Increase the number of new carbon neutral homes and buildings being developed that deliver Biodiversity Net Gain by:

Requiring increased development of low emission and net zero new build homes standards through our planning policy

Following the decision to pause the Spatial Development Strategy (SDS) - this action has had a **rethink**. The evidence we and SW Hub developed and continued collaborative work across the region has seen **success** for Bath & NE Somerset Council in adopting the country's first net zero homes planning policy. **Ongoing** work by other local councils is underway to adopt similar requirements across the region's local planning policy

Support businesses to upskill around retrofit and green skills via Workforce for the Future Programme (namely the Modern Methods of Construction project (YTKO), Skills for Clean Growth (UWE) and digital learning factories (NCC)

The YTKO, UWE and NCC projects are **ongoing** and due to conclude in August 2023. Work is ongoing with SMEs, with learning feeding into other activity in our Business and Skills activity

Increase the number of new carbon neutral homes and buildings being developed that deliver Biodiversity Net Gain by:

Developing a long-term strategic plan setting out where homes, jobs and infrastructure are to support low emissions developments that are linked with biodiversity objectives including increasing wildlife abundance and new habitat creation.

Following the decision to pause the SDS - this action has had a **rethink**. Work is **ongoing** by local councils in updating their local plans to reflect shared 2030 ambitions

Use planning policy to ensure delivery of minimum 10% Biodiversity Net Gain across new developments

Following the decision to pause the SDS - this action has had a **rethink**. Bath & NE Somerset Council has had **success** in adopting minimum 10% BNG. **Ongoing** work by other local councils is underway to adopt similar requirements across the region's local planning policy

Reduce reliance on fossil-fuel based heating by:

Using planning policy to develop and implement an energy hierarchy for preferred energy systems to influence new developments and help shift from fossil fuel heating

Following the decision to pause the SDS - this action has had a **rethink**. The evidence we and SW Hub developed and continued collaborative work across the region has seen **success** for Bath & NE Somerset Council in adopting 'Energy In Use' targets as part of its Net Zero requirements. These establish an energy hierarchy in new buildings, requiring them to achieve energy performance levels prior to implementing renewable solutions. **Ongoing** work by other local councils is underway to adopt similar requirements across the region's local policy

Releasing the regional Placemaking Charter, setting out the quality standards expected in the region for developers, architects and house builders.

The Place Making Charter was **successfully** launched on 20 July 2022.

Theme: Nature Recovery

Improve the quality and connectivity of existing spaces for nature and wildlife by:

Improving existing natural spaces including Common Connections, Bath Riverline and Chew Valley Lake (Delivering Green Infrastructure Strategy projects)

We have **successfully** allocated £3m towards WaterSpace Connected and £3m to Chew Valley Lake from the GRF. **Ongoing** work will see Common Connections continue in its delivery. Bath River Line will continue in its development phase, having successfully recruited a project manager. WaterSpace Connected Phase I is progressing to full business case, having also successfully recruited a project manager - with community engagement starting early 2023. Chew Valley Lake Recreational Trail are developing their full business case too.

Developing a Local Nature Recovery Strategy (LNRS) that provides a coherent regional vision for nature's recovery, building on the West of England Nature Recovery Network and helps direct investment in the natural environment into the most effective areas

A delay from Government sees this work as **Ongoing**. Government to roll out LNRS from April 2023. We have successfully recruited a LNRS project manager in Bath & NE Somerset Council; have set up governance arrangements and are scoping the LNRS, including seeking input from ADEPT.

Opening Green Recovery Fund (GRF) for projects to create new habitats and improve quality and connectivity of existing spaces for nature

We **successfully** opened the GRF to nature recovery projects - receiving 5 bids totalling £4.4m, and awarding 4 of these with a total of £3.2m whilst securing £4m match. Further **ongoing** work will see these progress throughout 2023: Somer Valley Rediscovered, Capricorn Quay, Frome Valley River Reserve and Avon Needs Trees.

Planting more trees and create habitat spaces along strategic corridors (incl. CRSTS and strategic nature recovery networks) and improved bus shelters (as part of replacement programme)

We have **successfully** awarded £732k and achieved £1.5m match for the Avon Needs Trees project. This seeks to plant 113 acres (50,000 trees). This and other nature recovery projects will result in more trees planted. Work is **ongoing** to embed nature recovery in bus stops and our strategic transport work (see reporting on Transport actions).

Working with partners (incl. Natural England) to develop a monitoring framework for the natural environment in the West of England to enable us to measure progress towards our ambitions, including the possibility to use a wildlife index to measure abundance and diversity of wildlife amongst the current ecological network

Create new spaces for nature and wildlife by:

Launching the Community Pollinator Fund to increase the number and quality of habitats for pollinators and bees across the region

Using planning policy to set out where homes, jobs and infrastructure are needed linking in with the biodiversity and ecology objectives, including those set out in Joint Green Infrastructure Strategy, Environment Act, Tree and Woodland Strategy, including the delivery of at least 10% Biodiversity Net Gain

Ensuring that transport and planning projects delivered by the Combined Authority positively contribute towards nature's net recovery, including delivering at least 10% Biodiversity Net Gain

Supporting WENP and the Forest of Avon Trust in accelerating action to deliver the ambitions of the Forest of Avon Plan and access government funds such as Woodland Creation Accelerator Fund

Enable business, other stakeholders and residents to contribute to nature's recovery, including unlocking investment in nature-based solutions by:

Launching the West of England Placemaking Charter for creating high quality, biodiverse places that support access to nature and encourage health and wellbeing

Work is **ongoing**. We are recruiting a data analyst to gather evidence on the state of nature in the region, to inform the West of England Local Nature Recovery Strategy and better target funding for nature-based projects in the region

We have **successfully** run the 1st round of the Community Pollinator Fund, awarding 13 projects a combined £440,000 to create 224,000m² of habitats. **Ongoing** work to award further rounds (£560,000) is aimed to gain 312,498m² by 2024, supported by volunteers (target number 3,693 and hours 12,868)

Following the decision to pause the SDS - this action has had a **rethink**. Bath & NE Somerset Council has had **success** in adopting minimum 10% BNG. **Ongoing** work by other local councils is underway to adopt similar requirements across the region's local planning policy

The Environment Team has **successfully** recruited Senior Managers for nature recovery and a Senior Manager for transport. Their **ongoing** work with colleagues will see transport projects contribute to BNG

The £300k WENP bid was a **success**.

Ongoing work will accelerate work planting trees across the region through a partnership and new posts with the UAs and Forest of Avon Trust; in working towards the West of England ambition to double tree cover across the West of England by 2050; with at least 175-200 hectares by March 2025.

The Place Making Charter was **successfully** launched on 20 July 2022.

Working with business to protect pollinators and create green spaces by holding first regional Bee Bold Day and creating a targeted business campaign around this, including reducing pesticide use

The first community Bee Bold Day was **successfully** held at Siston common in partnership with the Common Connections project, including mass planting and family activities. Awards were given out by Mayor to community groups, business and charities to celebrate action to protect pollinators and green spaces. **Ongoing** work is linked to the Pollinator Fund

Supporting and promoting UA and partner organisations (e.g. WENP, Eat Local) engagement campaigns to raise awareness of and engagement with the natural environment, and encourage conservation volunteering and pro-environmental behaviours

We **successfully** delivered the 'Love Local. Explore Local' campaign, showcasing great spots to eat and shop locally. The WENP bid was successful too (see above). **Ongoing** work will see us support further campaigns to encourage residents to rediscover their local food growers and high streets, including the City Nature Challenge (April/May 2023), Festival of Nature (June '23) and Schools Summit (Spring '23)

Working with partners to support the development of platforms that enable businesses to invest in the natural environment (e.g. Bristol and Avon Catchment Market)

Dedicated resource was needed. We have **successfully** recruited a Senior Environment Manager to drive this work forwards. **Ongoing** work with Bristol Avon Catchment Market, Wildlife Trust habitat banking and Net Zero fund development is defining actions for our 2023 CESAP

Using regional skills programmes including Skills bootcamps and adult education budget to build skills required for ecology and natural environment sector.

The bootcamps have had good success, but there has been lack of uptake in those relating to nature. Following a **rethink**, ongoing work will see a revised proposal in how we support people developing green skills associated with nature

Community Support Fund (CSF) £1.5m of community projects including a number with environmental focus - linking communities, social cohesion and environment - HACT social value measures include pride of place and environmental awareness

The 4 CSF programmes focused on environmental social value are **successfully** delivering on target for March 23. So far 162 participants have enrolled, 86 have completed and 50 have progressed to further skills, employability or volunteering.

Green Futures Fund: testing innovative approaches to delivery of school careers activity and curriculum that align with the regional 'green' skills agenda.

This was **successfully** launched in March 22. Small numbers were reached thought the pilot and saw more interest and focus on low carbon and the LMI from our green skills reports. **Ongoing** work is evaluating this, informing development of supporting people developing green skills associated with nature (see above) - and also to be informed by the regional Schools Summit in April 2023.

Theme: Businesses

Support businesses to transition to low emission, sustainable practices and adapt for climate resilience by:

Delivering 400+ free carbon surveys and funding 200+ small & medium enterprises to make energy saving improvements to their buildings and equipment will be completed for SMEs as part of the Green Business Grant Scheme

We have **successfully** awarded 166 with over £1m of grant funding match - and have grown the Low Carbon Challenge Fund team into the Regional Low Carbon Delivery in September 2022 with a further £2m of funding for business grants. **Ongoing** work will see this support up to 225 with grants towards energy efficiency measures.

Developing and implementing a carbon literacy programme for businesses to improve their understanding of climate and ecological emergencies and actions they can take to help address it

We **successfully** delivered a carbon literacy webinar programme, linked to above surveys and Green Business Grants programme. We have embedded carbon literacy within the Growth Hub offer to business (see below).

Using the Growth Hub Net Zero Cluster to support and promote low carbon business practices with our Net zero enterprise advisers incl. developing a regional communications campaign to business and industry – measure, monitor and reduce emissions, prepare for the local impacts of a changing climate, protect, and restore nature.

Our Growth Hub has **successfully** supported businesses. This is despite national funding being reduced. Since April 2022, 43 Medium Intensity (Over 1 hour/referral to a programme) interactions regarding Sustainability & Clean Growth have been held. A further, 98 interactions where 'Sustainability', 36 interactions where 'Net Zero', 41 interactions where 'Low Carbon' have been discussed; and a further 33 referrals for Carbon Surveys. We have also made Green Business Support one of five key areas within the Growth Hub, meaning **ongoing** work will develop a Net Zero pillar of support on the Growth Hub website and promote to increase SME awareness of tools and support available for launch in June 2023

Continue to grow delivery of Low Carbon Challenge Fund Green Business Grants to improve energy efficiency of commercial and industrial properties (developing a business case for this to access funding from the Green Recovery Fund)

We have **successfully** surveyed 360 SME businesses - and have grown the Low Carbon Challenge Fund team into the Regional Low Carbon Delivery in September 2022. **Ongoing** work will see this support provide c400 SME businesses with free surveys.

Ensure local people to access green jobs and bring 23,000 green jobs across the region by:

Delivering careers advice to school aged children through the Careers Hub and Green Futures Fund to encourage them into careers to support key skills needed to support our 2030 ambitions, including ecology

Providing young people with information on jobs and careers that contribute to NET ZERO through an online digital tool used by schools as well as resources for teachers.

Green' Teacher Encounters Project - offering schools the opportunity for teachers to take part in industry placements within 'green' employers to better understand the pathways and careers available now and in the future within green skills. Teachers also involve the employer in curriculum delivery aligned to green skills and LMI.

Using Workforce for the Future to deliver business support to 220 SMEs to understand what skills / knowledge they need in place to meet the 2030 ambitions and support the growth of modern methods of construction

Ensure that the refresh of the regional skills and employment plan includes focus on green job growth.

The Green Futures Fund was **successfully** launched in March 22. This saw interest and focus on low carbon and the LMI from our green skills reports. **Ongoing** work is evaluating this, informing development of potential to scale across all schools - to be informed by the regional Schools Summit in April 2023.

The Career Pilot partner has **successfully** been procured. **Ongoing** work to is captured in our CESAP 2023 proposed actions

Schools have **successfully** been recruited to take part across the region. **Ongoing** work on this is dependent on funding confirmation from the CEC, captured in our CESAP 2023 proposed actions

We have **successfully** supported 43 businesses and 59 residents through Workforce for the Future. The UWE Future project Skills for Clean Growth (UWE) is helping businesses to measure their carbon emissions and develop practices within the business to reduce emissions. Target of 100 business supports (currently achieved 24) and support to 200 employees/residents (currently achieved 16).

Also the Modern Methods of Construction project delivered through Workforce for the Future by YTKO to bring more sustainable practices and skills into the construction sector. Target to support 120 businesses (19 currently achieved) and 150 employees/residents supported (43 currently achieved). Workforce for the Future concludes this Dec 23, with actual support to businesses finishing in September this year. Target is to support 471 SMEs and 1062 learners.

We have **successfully** made Green Business Support a cross-cutting theme in our Growth Hub, and green skills being a cross-cutting theme across our Skills Connect portal. Work is **ongoing** on refreshing regional skills and employment plan provision, expected to conclude in October 2023

Prepare business for emerging green economies by:

Helping key sectors (incl. manufacturing & engineering) to innovate new sustainable technologies and supply chains via a range of projects, including through Workforce for the Future, DETI and Made Smarter projects

Digital Engineering, Technology and Innovation (DETI) Phase 1 has **successfully** been completed, including supporting more than 4,200 children across 60 schools.
Made Smarter launched in July 22 via the Growth Hub, and **ongoing** work is supporting 80 SME manufacturing businesses.
Workforce for the Future is reported on above.

Encourage businesses to 'green' their procurement, supply chain, and recruitment practices through incorporate green elements into Job Descriptions, all via the Good Employment Charter

The Good Employment Charter has been **successfully** launched. Sustainability objectives have been woven throughout the 7 pillars of the Charter. **Ongoing** work is encouraging employees to sign up to the Charter, and we are investigating the possibility of issuing a Green Digital Badge

Encouraging innovation in low carbon services, goods and technologies by awarding 50 new R&D grants to SMEs and 15 new products, processes or services (via Business Innovation Fund)

Round 3 of the Business Innovation Fund saw 9 SMEs **successfully** awarded £490,040 in grant funding towards a total of £2.2m R&D project costs. The SMEs have forecast that over a 5-year period 15m tonnes of greenhouse gas emissions would be saved if their R&D is successful and the new products processes and/or services they create are commercialised as they envisage. Round 4 closed in December 2022.

Revising our regional procurement strategy to maximise the use of social value weighting to procure locally sourced goods and services.

Work is **ongoing** to revise our corporate approach to procurement, being led by our newly appointed Procurement Business Partner. Following a rethink, this approach will include embedding sustainability commitments within procurement. This will be informed by Local Council approaches to green procurement and embedding sustainability within wider decision making - including South Gloucestershire and Bath & NE Somerset councils developing approaches aligned to Doughnut Economics, Bristol One City's use of Sustainable Development Goals, and North Somerset's work with Centre for Thriving Places

Using Invest Bristol & Bath to create a campaign to attract new green businesses to the region

Work on developing this campaign is **ongoing** - building upon the 'Clean Tech and Energy' landing page and associated articles on the website.

Theme: Energy

Increase renewable energy generation across the region, including through local, community focussed generation by:

Using Green Recovery Fund (GRF) to stimulate further renewable energy generation and capacity, including securing ongoing funding for Local Energy Scheme

Round One of the GRF saw 5 applications totalling £5.5m apply. Two projects **succeeded** in securing funding: Bristol Energy Network SIFFFT wind turbine project was awarded £1.5m and provided £1.3m match; and Bristol Energy Co-op Solar Rooftop project was awarded £569k, providing £2.1m match.

Ongoing work will see us supporting and managing the aforementioned wind turbine and solar rooftop projects.

Undertaking a feasibility study to de-risk the development stage of community energy, including creating a revolving fund

We had initially expected support for community energy to continue nationally, but had to **rethink** when Gov grant the Rural Community Energy Scheme drew to a close last year. **Ongoing** on this is to convert some of the Local Energy Scheme to provide development funding support; to encourage community energy applications to our Shared Prosperity Fund (SPF); and work with the SW Net Zero Hub on exploring other development funding opportunities that our local groups can access

Delivering Solar Together to increase number of Solar Panels in the region and reviewing its impact to decide if we will participate in a second round

The first round of Solar Together was **successfully** delivered. This saw 1,310 residents accept an offer - with c950 residents seeing panels installed, and 600 batteries installed. More than 8,000 solar panels installed across West of England Combined Authority & North Somerset area created 2.8MW solar PV capacity and saving 575 tonnes of carbon in year 1. **Ongoing** work with fellow unitary authorities is looking at launching a Round 2.

Delivering Innovative Local Energy Scheme (round 2) to support the implementation of innovative renewable energy projects of between 50kW and 5MW, that also deliver community benefits

Two projects were successfully awarded over £800k in Round 2 - a Bath and West Community Energy solar array in a community meadow at Fairy Hill, and Clevedon Pools lido river heat pump infrastructure. From Round One, the Ambition Community Energy 4.2MW wind turbine is being installed in Lawrence Weston and is due to be operational this spring. **Ongoing** work is overseeing the aforementioned projects, including work with National Grid on local grid constraints holding back the Fairy Hill project; and a Round 3 funding round will seek to for the £473k still to be allocated will launch early 2023

Encourage development of renewable energy schemes across the region (working with the South West Net Zero Hub to allocate funding and advice focussed on proven cheaper technologies e.g. solar, wind)

The Hub, hosted by the Combined Authority, has seen **success** supporting the development of renewable energy schemes. It has provided support and guidance to LA climate officers to enable development of rooftop and ground mount solar proposals, enabling a number of successful PSDS applications, and supporting funding bids for further domestic retrofit works across the CA and wider SW region. Their work will be **ongoing**, following their recent success in securing ongoing commitment and funding from central Government to be hosted by us and operate across the southwest

Continue to develop and fund the Low Carbon Challenge Fund's Innovative Local Energy Scheme to support renewable energy generation

We are **successfully** continuing to develop and fund the Local Energy Scheme. A further £660k funding has been allocated as ongoing funding. **Ongoing** work will see a new Local Energy Scheme grant round open in early 2023, and we're developing whether a proportion of this can provide development finance for community energy schemes in our region.

Work in partnership to develop new smart approaches to the decarbonisation, storage, management and distribution of energy by:

Ensuring new developments gas & electricity requirements are accurately included energy planning building on North Fringe & SW Bristol development plans (EPIC project)

The Energy Planning Integrated with Councils (EPIC), Feb 21 - Dec 22, has been **successfully** completed and findings published on their website:
<https://www.nationalgrid.co.uk/projects/energy-planning-integrated-with-councils-epic>
Ongoing work is seeing Unitary Authorities developing their Local Plans, including South Gloucestershire's work in the North Fringe - and us working with National Grid (see action below)

Increasing energy innovation funding coming to the region, working with partners such as Western Power

Western Power Distribution were acquired by National Grid, with their distribution business known as National Grid Electricity Distribution (NGED). We are **successfully** working closely with NGED - they have presented to and sit on the region's Climate Action Panel; we have partnered with them on an innovation funding bid (outcome this Spring); and are coordinating engagement with them and fellow councils across our region. We have successfully awarded £2.5m funding and approved the Full Business Case for the Hydrogen Sustainable Transport Economy Accelerator (HSTEa).

Our work on increasing energy innovation is **ongoing**. We are working with National Grid in delivering renewable energy on our constrained grid; will be working with other infrastructure providers as part of our new work on Climate Resilience; supporting and working with councils on Net Zero Innovation funding bids; and are building region's strengths in energy infrastructure, hydrogen, wind and nuclear into our Digital and Innovation plans; and working with the likes of Western Gateway, Innovate UK and their associated Catapults

Appendix 4 – Post-16 Skills Planning (Green Skills)

Background:

West of England Combined Authority commissioned Pye Tait Consulting and Cambridge Econometrics to undertake a two-part demand and supply forecasting assessment of the region's post-16 estate and infrastructure in order to establish the extent to which it will be able to meet its future skills and training needs¹.

The report showed that the construction sector employs just under 48,000 people in the West of England area and future growth is predicted to be strong, at around 1.6% per year up to 2036. It states that green construction (e.g. housing, retrofit and energy installations) will constitute the key areas of demand, and these will require technical and green skills over and above those already being taught, as well as the upskilling of substantial numbers of current employees.

¹ Post16 Skills Horizon Scanning Research Report (westofengland-ca.gov.uk)

The region's net zero ambitions are predicted to result in 52% of the green jobs created being in the sector. These will be primarily in retrofitting existing buildings with energy efficient and green measures, including over 11,000 additional jobs in the installation of heat pumps and 2,500 additional jobs in installing insulation².

The region's FE Colleges have highlighted that construction facilities in the region are currently not meeting demand with the use of external temporary accommodation forced on colleges by excess demand and limited internal space. Other gaps identified by the report included: limited provision of Modern Methods of Construction (MMC) – ideally a site which enables expansion of scaffolding, logistics and modern methods of construction, including potential for off-site fabrications skills; and lack of green skills provision to support delivery of sustainable building, retrofitting, and low carbon heating installation.

The report calls for greater numbers of retrofitting and installation courses to meet green skills needs (for new entrants and existing workforce), alongside more sector apprenticeships with digital skills incorporated. It also recommends more funding to help boost the West of England's 'ecosystem' by giving providers confidence to develop training programmes with input from green suppliers to meet anticipated need.

Action to date and next steps:

The Combined Authority has developed a strong strategic and high-level evidence base via the Green Skills Report, Retrofit Analysis and Post-16 Education and Infrastructure reports. These will underpin a refreshed West of England Employment and Skills Plan due this year to ensure that Net Zero is fundamental to regional skills policy, planning and delivery.

A Retrofit Step-up (£200K) was funded as part of the £50m Green Recovery Fund, aimed at engaging and upskilling residents for retrofit roles, as well as regional co-ordination capacity to better join up education providers and employers. Alongside this, a range of Skills Boot camps have been delivered including 'upskilling to retrofit, 'training of retrofit advisers and assessors' (see also Appendix 2).

Further work is now needed to understand in greater detail, the current and future supply and demand position for green construction skills (including retrofit) to inform training provision and any future capital investment in the FE estate needed, including the potential for a Regional Centre for Net Zero Construction Skills. It is proposed that an allocation of £100K is made within the £6m ask to the Combined Authority Committee to enable this.

This will also inform ongoing work on regional priorities to ensure that skills is fully reflected as a key driver of economic growth and development, particularly in relation to Net Zero. It is recommended that an update on this work and the refreshed Employment and Skills Plan brought back to Committee at a later date.

² Green skills - West of England Combined Authority (westofengland-ca.gov.uk)

