

Agenda

LEP Overview and Scrutiny
Tuesday, 27 February 2024 at 10.30 am
Cumbria House, 117 Botchergate, Carlisle, CA1 1RD

A pre meeting for Members to prepare for the Committee will take place 45 minutes before the meeting

The press and public are welcome to attend for the consideration of any items which are public.

Enquiries and requests for supporting papers to: Rose Blaney

Email: rose.blaney@cumberland.gov.uk

Membership

Cllr J Ghayouba

Cllr J Perry

Cllr M Johnson, Leader of the Conservative Group

Cllr B Pegram

CIIr A Semple

Cllr H Tucker

Cllr C Weber

Substitutes:

Cllr T Allison

Cllr R Betton, Leader of the Independent Group

Cllr MD Campbell-Savours, Executive Member - Governance and Thriving Communities

Cllr Dr H Davison, Leader of the Green Group

Cllr M Eldon

Cllr J Forster

Cllr A Glendinning

Cllr J Grisdale

Cllr A Harid, Vice-Chair of Council

Cllr M Hawkins

Cllr L Jones-Bulman

Cllr J Mallinson

Cllr A Markley

Cllr C McCarron-Holmes, Chair of Council

Cllr G Minshaw

Cllr G Mitchell

Cllr M Mitchelson

Cllr D Moore

Cllr L Patrick

Cllr S Pollen

Cllr A Pratt

Cllr K Thurlow

Cllr G Troughton

Cllr J Whalen

Access to Information

Agenda and Reports

Copies of the agenda and Part A reports are available for members of the public to inspect prior to the meeting. Copies will also be available at the meeting.

The agenda and Part A reports are also available on the Cumberland Council website.

1. Apologies for Absence

To receive apologies for absence.

2. Declarations of Interest

To receive declarations by Councillors of disclosable pecuniary interests, personal interests, other registerable interests and any other interests in respect of items on the agenda

3. Exclusion of Press and Public

To consider whether the press and public should be excluded from the meeting during consideration of any items of business on the agenda.

4. Minutes of the Previous Meeting (Pages 5 - 10)

To receive the minutes of the LEP Scrutiny Board meeting held on 21 July 2023.

5. **Draft Delivery Plan 2023/24** (Pages 11 - 48)

To receive an update on the projects that the LEP aimed to deliver and any comments from the Government from the LEP Chief Executive.

6. Skills Bootcamp Update (Pages 49 - 54)

To receive an update on the Skills Bootcamps which have been taking place from the LEP Chief Executive.

7. Net Zero Update (Pages 55 - 98

To receive an update on LEP projects around clean energy, grid connectivity and business decarbonisation from the LEP Chief Executive.

8. Integration of Local Enterprise Partnership Activities to Local Authorities (Pages 99 - 110)

To receive an update report from the appropriate Senior Officers regarding the integration of the LEP activities to Cumberland Council and Westmorland & Furness Council.

9. Future of LEP Overview & Scrutiny

To discuss the future of the Cumberland LEP Overview & Scrutiny with verbal updates following the decisions made by Cumberland Council and Westmorland & Furness Council around the Future of the LEP.



Agenda Item 4



LEP Overview and Scrutiny

Date: Friday, 21 July 2023

Time: 10.30 am

Location: Allerdale House, Workington, CA14 3YJ

Present: Cllr J Ghayouba (Chair), Cllr J Perry (Vice-Chair), Cllr J Grisdale (substitute

for Cllr C Weber), Cllr T Markley (substitute for Cllr M Johnson), Cllr

A Semple, Cllr S Stoddart and Cllr H Tucker

Also Present: Lord Inglewood (Chair of LEP) and Jo Lappin (LEP Chief Executive)

In Attendance Democratic Services Officer (Scrutiny)

LEP.1/23 Apologies for Absence

Apologies were received from Councillors Cyril Weber, Mike Johnson and Bill Pegram.

LEP.2/23 Declarations of Interest

There were no Declarations of Interest received.

LEP.3/23 Exclusion of Press and Public

RESOLVED - that the press and public not be excluded from the meeting for any items of business on this occasion.

LEP.4/23 Overview of LEP and Activities

The Chair of LEP provided the Board with an overview of the history of LEP and their purpose, noting that they have a private sector way of working but are subject to public sector accountability, which is set out within the framework provided by central government. The Chair of LEP also explained that LEPs operate differently throughout England due to each area and that their primary purpose is economic. The LEP Chief Executive then gave the Board an overview of the provided presentation. She explained that the LEP is leanly resourced but aims to support businesses and the local economy and is also focused on delivery activity, such as skills bootcamps. The LEP Chief Executive then also explained the LEP's assessment themes, current 'trilemma' regarding working age population, productivity and economic output and ongoing projects such as 'Heart of the UK', Clean Energy Net Zero Priorities (discussed further during agenda item 6) and Natural Capital.

Members thanked the LEP Chief Executive and the Chair of LEP for their presentation.

Members had a discussion regarding the productivity issue, which included aspects such as how is productivity measured, what jobs are being measured, does the productivity measurement translate considering population numbers and the fact that Cumbria is more top heavy with public sector and tourism jobs rather than private and manufacturing. The LEP Chief Executive explained that productivity is measured by the methodology that the economists used, for which they would provide further information after the meeting. She added that the methodology does compare all areas on a like for like basis regarding input versus output.

There is a current discussion whether productivity is the right measure for success. She felt it was as it as it should be focused on efficiency and effectiveness. The LEP Chief Executive also noted that Cumbria has pockets of overperforming productivity and pockets of underperforming productivity, although structurally it did not have significant high performing sectors. The LEP was looking to promote Cumbria through their 'Your Future' campaign to try and improve the economic climate and improve international trade. The Chair of LEP also noted that the LEP were looking to devise an approach for inward investment with other northern LEPs.

A Member queried whether the geology focus was on the coal mine and nuclear waste. The LEP Chief Executive answered that neither of those were the geology focus, but rather Spirit Energy repurposing a gas facility for carbon capture and possible underground storage if the geology allows for it.

A Member noted the current struggle for members of the public to identify business leaders within Cumberland and the Chair of LEP agreed that not many business leaders were known in any communities compared to the past, but that the LEP were encouraging the best leaders to come forward and contribute to the community, as per their Terms of Reference to promote business.

A Member asked about comparing the advantages of Cumbria with other areas and the LEP Chief Executive directed the Board to the six 'Re-Think' themes, such as clean energy generation where Cumbria has less than 1% of the population but produces almost 6% of the clean energy with expertise across a range of technologies, including nuclear. Cumbria has higher than national concentration in advanced manufacturing, farming and the visitor economy with Cumbria having two world heritage sites. The LEP Chief Executive also highlighted the Future of Food, food security and the resilience that their aiming to create, especially once the 'big ticket' item has been secured which LEP are hoping to use to transform the area.

Members discussed the 'Heart of the UK' strategy and how it focused on Carlisle, which while central does not highlight the struggle that the West Coast has to get to Carlisle and the need for better transport links. The Chair of LEP noted that they recognised the issue and support improvement for transport and the LEP Chief Executive highlighted that the strategy is to sell the whole of Cumbria by using the shortest point, which is Carlisle, but the strategy will include the whole of the area. The LEP Chief Executive also noted that their transport group are currently looking at the transport issues in West Cumbria but that it was not easy to find a viable solution to the external location, which varied dependant on the location.

RESOLVED – that,

- a) The presentation be noted.
- b) That the LEP provide a definition of productivity, particularly for service sectors and details of the Future of Food work, before the next meeting.

LEP.5/23 Draft Delivery Plan 2023/24

The LEP Chief Executive gave the Board an overview of the report highlighting that this was a plan that was produced each year for the government, which was currently in draft format. It was meant to be a light touch document on what the LEP aims to deliver in 2023/24. They had yet to receive any comments from the government regarding the draft delivery plan nor the format it had been produced in.

A Member asked for an update on how the headline priorities are progressing and the LEP Chief Executive informed the Board that all priorities were moving forward, such as with supporting Carlton Power to get potential funding opportunities by hosting a House of Lords Page 6

reception and working to support an individual regarding a nuclear fusion proposal by providing an intellectual property lawyer.

A Member asked about the skills bootcamps, such as who delivers these, who can attend and what are their priorities, and noted the link between education and work. The LEP Chief Executive explained that the menu for what skills bootcamps can be provided is very much framed by the Department for Education and is open to any individual who is over 19, and they can by either employed, unemployed or self-employed. The skills bootcamps are delivered by a range of suppliers and cover topics such as digital skills, plumbing, construction, manufacturing, and green skills, with LEPs being given 30% freedom and flex on what they can provide to support the local need. Regarding funding, it was noted that for Small and Medium-sized Enterprises (SMEs) 90% of the skills bootcamp funding comes from government and for larger business, 70% is paid by the government. The LEP Chief Executive then explained that the LEP are delivering national Careers and Enterprise programmes, with a focus on secondary education to help improve the link between the worlds of education and work, with further resources and websites to promote the careers available and annual report that they would be happy to provide after the meeting.

Members discussed network connectivity and grid connections, noting the need for good and cost-effective bids for projects such as Small Modular Reactors (SMRs) at Moorside and wind farms with there being a need for good connectivity to be able to accommodate generation proposals. The LEP Chief Executive highlighted that LEP would need to refresh their previous calculations to reflect what needed to be generated, as it depended on issues such as how many SMRs, local offtake and energy delivered to local users to remove demand from grid. It would only be known what grid capacity was needed once a proposal was brought forward. However, planning assumptions could be made as to what could be accommodated.

A Member asked about Agri-Tech in Cumbria which the LEP Chief Executive explained that LEP were looking at innovation and the Agri-Tech team were looking for a new centre, but the conversations had moved at a glacial pace, and it was hard work, but LEP were working on other similar possibilities and would be happy to share the work that they've been conducting with the Board

A Member asked about including performance metrics on delivering projects in the update report to the next meeting which the LEP Chief Executive confirmed they were happy to include as that followed the pattern previously established with the sovereign c. the LEP was therefore focusing on other Agri-tech opportunities.

RESOLVED – that,

- a) Cumbria LEP's (CLEP's) Draft Annual Delivery Plan for 2023/24 (Annex A) be reviewed.
- b) Comments on this be provided and any additional activities for inclusion be identified.
- c) The requested updated information on the Careers Hub and its programmes and updated information on grid connectivity be provided before the next meeting.

LEP.6/23 LEP Role in Net Zero

The Chief Executive gave an overview of the report to the Board, which highlighted the two main priorities of the LEP's commitment to Net Zero - Clean Energy Generation and Business Decarbonisation and also explained that they were in the process of refreshing their decarbonisation ten-point plan and working with businesses to reduce their energy consumption, with the Innovating for Success programme making grants available for small businesses. The Chair of LEP noted that as Cumbrian business energy use is concentrated on the larger companies, the LEP had focused on these businesses. The Chief Executive

confirmed that the LEP was also directly working with SMEs through a range of programme activity.

A Member asked if the Innovation for Success funding was closed and the LEP Chief Executive explained that the Innovation for Success had closed as it was over-subscribed. The project had launched in September 2022, with bidding closing in December/January 2023 and projects were now being implemented with some of them already having been completed.

A Member queried if LEP were using the governments definition of 'clean' energy, which they personally did not agree with due to it containing nuclear, and the use of blue hydrogen rather than green. They also requested a copy of CLEP's and Lichfields' submitted response to the government's consultation on the new onshore wind infrastructure and for further information on the small-scale solar technologies' demonstration facility. The LEP Chief Executive noted that they were working to the government's definition of 'clean' energy and that there were multiple colours of hydrogen, though they aspired to move towards green, it was a long process, and their expert team would be able to provide further information to the Board of the process. The LEP Chief Executive then explained that the small-scale solar technologies demonstration facility was currently in the planning stage with a planning decision imminent. This was an existing solar facility, which would extend and provide access to other businesses as a demonstrator project. The Chief Executive also commented that they were happy to provide a copy of the consultation response.

Members asked about the Net Zero Event that LEP were hosting regarding the public transport access and time of the event. The LEP Chief Executive explained that there was no time as yet, as they were still working on developing the agenda and that, if there was a demand for it, LEP would be happy to provide transport with a collection point.

A member noted that there was a mixture of information and views available regarding Net Zero for which the Chair of LEP and the LEP Chief Executive agreed that there was a difficulty to discuss the topic due to the numerous different perspectives but that it was an issue that needed to be addressed. The LEP was clear about having plans to address it, which the LEP were looking to enact as quickly as possible to help make Cumbria clean.

A Member asked about the Workington Port currently trying to get Freeport Status, which the LEP Chief Executive noted that they were not working on this time, as they had previously submitted to the open competition. During the previous round the bid had scored highly but lost the bid due to it becoming a regional competition against Liverpool. The LEP would be happy to share the ports studies work that had been previously produced, with those working on the current bid,

A Member asked if the governments change in direction regarding hydrogen would impact on LEP's ambitions and if there was an industrial demand for hydrogen. The LEP Chief Executive highlighted that the LEP approach is focused on industrial application, for which there is an increased demand with the need for a reduction in emissions and moving away from natural gas reliance. The move away from hydrogen had been predominantly related to domestic hydrogen, and therefore there was no impact on the LEP's ambitions.

[The committee took an 11-minute comfort break.]

RESOLVED – that,

- a) The report and any issues raised in relation to this report are noted.
- b) The response to the onshore wind consultation and the Ports Study be provided before the next meeting.

LEP.7/23 Labour Supply and Skills

The LEP Chief Executive gave the Board an overview of the report, which included highlighting that businesses reported labour supply issues, following the pandemic as a larger issue than lack of skills. There was a struggle to attract and keep workers due to an accommodation shortage in some locations and the need to encourage working age population to come and work in Cumbria. The LEP Chief Executive advised that LEP had a ten-point action plan to try and help address these issues, including to promote Cumbria by selling 'our' place. It was highlighted that Cumbria was one of the most self-contained areas in the country, with 96% of the population living and working in the area.

A Member asked for clarification on the acronym PESSG which the LEP Chief Executive explained was the People, Employment and Skills Strategy Group.

Members discussed the skills issues from previous decades and how to improve engagement with schools, as schools and teachers are important for improving the skills shortage, with the need for careers advice at the appropriate age group. Members also noted the need to service the industries in the Cumberland area and to include all students. The LEP Chief Executive highlighted the Career Hubs, which promote good understanding of moving into working life and show what careers are available within the area and agreed that the team can aim to raise the visibility of the Hubs and provide the Board with images, the Hubs' annual report and strategy. It was also noted that the Hubs had a website with resources available to teachers and young people, which included videos of business speakers, which it was agreed that a link would be provided after the meeting. The LEP Chief Executive also noted the importance of all children being equally valued with the LEP highlighting both academic and vocational routes through the Resilience and Employability action plan. The Chair of LEP agreed that the aim was to secure parity for less academic students.

A member asked why labour supply was seen as more of an issue than skills and noted the difficulty of moving in and around Cumbria, with difficult commutes for some. The LEP Chief Executive noted the struggles and explained that labour supply was seen as more of an issue from the business's perspectives, as this was a key issue in areas that didn't require high skills levels.

Members discussed the link between transport issues and the hampering of recruitment in the hospitality industry and how the larger companies are able to put on transport, but smaller businesses are having to close for two days a week due to capacity issues. Members also wondered how the visitor economy translated into works and if the wages reflect the demand. The Chair of LEP noted that, currently, the visitor economy cannot pay more but the hope is to establish a mechanism for money generated to enhance the local economy and therefore allow businesses to pay good wages which would I turn allow for further investment locally. Noting that the best way to level up is for the money to stay locally, generate further income and build local businesses.

Members discussed food security and international trade compared to local farmers. The Chair of LEP highlighted the wish for international products to meet the standards of domestic production and the LEP Chief Executive highlighted the inclusive growth touchstone (agenda item 4) and noted that while LEP may be an economic organisation it was also socially aware and environmentally committed. The Chair of LEP and LEP Chief Executive also commented that it was early in the current Indo-Pacific trade deal process and that discussions can only take place after the trade agreements have been signed.

A Member queried how many young people stayed away and how many came back after university and the LEP Chief Executive explained that, although the figures were outdated, they

show that those between the ages of 18-24 are moving out of Cumbria and retirees are moving in. And that those who do come back, most are only staying for six months. The LEP Chief Executive agreed to find the latest figures and forward them to the Board after the meeting.

Members asked if there were any certain demands and hotspots for housing in Cumberland and whether those areas fit in with the shortage of workers. The LEP Chief Executive explained that there are small pockets of areas with a high demand, although not all are based on jobs, and that some areas struggle with house price compared to the income available, with a mismatch between employment and accommodation. The LEP Chief Executive noted that there needed to be a smarter way of linking right product, right place and right price, moving forward.

[Councillor Markley left the meeting at 13:15]

A Member asked if the government increase on visa costs will have an impact in Cumberland and the LEP Chief Executive acknowledged that there was likely to be an impact, especially as the process is already difficulty. But, the LEP do offer help on visa process, though there had been very limited appetite to take up the offer.

[Councillor Stoddart left the meeting at 13:20]

A Member asked if housing and transport are key for the LEP and both the Chair of LEP and LEP Chief Executive agreed that they mattered as enabler of growth and the LEP does lots of work in those areas.

RESOLVED – that,

- a) The report and any issues raised in relation to this report are noted.
- b) The requested information be provided before the next meeting.

LEP.8/23 Date and Time of Next Meeting

The next scheduled meeting of the LEP Scrutiny Board is on Tuesday 27th February 2024 at 10:3am in Conference Room B, Cumbria House, Carlisle.

The meeting finished at 1.25 pm

IMPLEMENTING THE ANNUAL DELIVERY PLAN 2023/24

1. ISSUE

1.1 Updating the Cumberland Scrutiny and Overview Committee on the implementation of the Annual Delivery Plan for 2023/24.

2. RECOMMENDATION

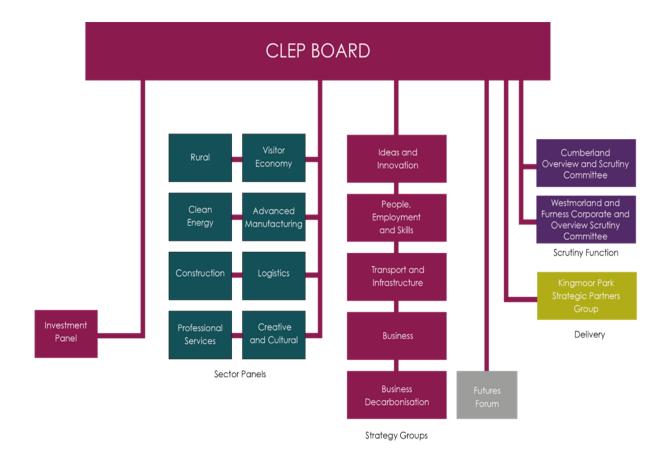
2.1 That the Cumberland Scrutiny and Overview Committee note progress on implementing the CLEP Delivery Plan (Annex A) in 2023/24.

3. BACKGROUND

- 3.1 The Cumberland Scrutiny and Overview Committee considered the Cumbria LEP's (CLEP's) Annual Delivery Plan at its previous meeting. CLEP was asked to provide an update on the implementation of the Annual Delivery Plan at this meeting. This report outlines some of the areas of CLEP's business that has been the focus of activity.
- 3.2 The Annual Delivery Plan is structured around the themes on which LEPs are assessed by Government governance, strategy and delivery and this report is structured in line with this.

GOVERNANCE

- 3.3 Governance activity has focused on maintaining and managing the existing governance structure, given the pending transfer of functions.
- 3.4 During the period since the last Scrutiny and Overview Committee, CLEP has secured one new Board Member, Sarah McGrath as the FE College representative, with Professor Andrew Wren remaining on the Board as a representative of secondary education. The appointments of John Coughlan and Nigel Wilkinson, MBE were also extended until at least end of March 2024.
- 3.5 The remainder of CLEP's governance structure, as outlined overleaf, has continued operating and delivering their respective work programmes.



STRATEGY

Consultations

3.6 CLEP regularly responds to national consultations to ensure that Cumbria's business voice influences national policy. In recent months the CLEP has responded to the following consultations.

Implementation of Plan-Making Reforms

3.7 In summary, CLEP confirmed that it was supportive of the aims and objectives of DLUHC to speed up the preparation and adoption of local plans, which in turn will help to boost both local and national housing delivery and will support sustainable economic growth at all levels. However, there were a number of concerns which DLUHC was asked to take into account before implementing the plan-making amendments to the Levelling Up Regeneration Bill.

Education and Careers in Land-based Sectors

3.8 A response was submitted to the Environment, Food and Rural Affairs Committee's Call for Evidence, for its Inquiry to explore the relationship between education and the land-based industries and the effectiveness of current primary, secondary, further and higher education in embedding awareness and equipping students with the skills and knowledge necessary.

Regulation Call for Evidence

- 3.9 ChamberWalker Economics (CWE) was commissioned to develop a composite business response to Government's Regulation Call for Evidence, which closed on 17 January 2024. Lord Inglewood, Mark Brook, Jennifer Cormack, John Coughlan and Nigel Wilkinson, MBE attended on behalf of the Board to provide input into the response. CLEP also made an offer for a CLEP representative to provide input to any future oral hearings.
- 3.10 CLEP is currently in the process of developing responses to two consultations related to the Nuclear Roadmap Siting Selection and Alternative Routes to Market, as outlined in the Net Zero report.

Strategy Development and Research Activity

Cumbria Transport Infrastructure Plan (CTIP) Synthesis

3.11 CLEP is leading on the development of a synthesis piece to draw together the headline priorities from the Cumbria Transport Infrastructure Plan (CTIP) and to update this with the emerging priorities of Cumberland and Westmorland and Furness Councils. This is being completed on behalf of the Transport and Infrastructure Strategy Group (TISG). The first draft of the synthesis was presented to TISG at its meeting on 29 January 2024 and is now being refined in line with the feedback provided.

Rural Sector Transformation Workstreams

- 3.12 Work is underway to mobilise three transformation workstreams, which will help future proof Cumbria's rural economy and increase GVA, which currently stands at 3% of total GVA, for a sector, which has far greater concentration of activity than most other economies. The future focus considers issues including decarbonisation, changing weather patterns, behavioural change and the policy and investment context.
- 3.13 Due to the Transfer of Functions, the focus is currently on identifying, one or two projects that can be taking forward for each workstream. The latest project proposals being worked up for each of the workstreams are as follows:
- Workstream 1: Increasing land-use resilience and biodiversity High level meeting for rural advisers to explore the opportunities to increase impact, alongside looking to sponsor places on the European Institute of Innovation and Technology (EiT) programme.
- Workstream 2: Incentivising beef and dairy farming practices optimisation and emissions reduction – developing a bid to SRUC's Dairy Chain Innovation Programme on animal genetics and exploring the opportunities related to feedstock.
- Workstream 3: Developing Cumbria's high quality, distinctive markets –
 exploring opportunities around mycology, venison and the potential for abattoir
 facilities.

Creative and Cultural Work Programme

3.14 The Work Programme continues to be progressed with the Creative Residency programme now launched. CLEP is funding this programme, which is being delivered by a Consortium consisting of the University of Cumbria, CACN and ArtGene, which will recruit and host the residencies. The competition for the three residencies has been launched both regionally and nationally to attract significant interest. The intention is that this will be a showcase for both Cumbria and its cultural activity.

Nutrient Neutrality

3.15 Lichfields is developing a submission for the Construction Sector Panel, which outlines the impact that nutrient neutrality is having on house building, quantifies this and proposes potential solutions. This will; be submitted to the relevant Ministers in both DLUHC and Defra to highlight how badly affected Cumbria is by this issue.

Decarbonising the Logistics Sector

- 3.16 CWE is undertaking a commission to identify opportunities to decarbonise the logistics sector, which currently creates about 11% of global greenhouse gas emissions, of which 8% comes from freight transportation and 3% from warehousing operations.
- 3.17 The biggest contributor to CO2 emissions within logistics is road freight mainly medium-duty and heavy-duty trucks which accounts for 53% of CO2 emissions within global trade-related transport. Currently, nearly 80% of goods in the UK are moved by road, with road freight generating around 10% of emissions the UK. Heavy duty trucks alone account for 4% of emissions, with this expected to increase by a half by 2050.
- 3.18 The first draft report has been produced and will be developed further by incorporating information on sea and air freight, warehousing, grid connectivity and the results of a survey from Logistics Sector Panel members.

Labour Supply

- 3.19 Cumbria's declining working age population is one of Cumbria's economic 'trilemmas' and if not addressed it will further inhibit growth. CLEP has therefore put significant time and energy into addressing this issue, with positive shoots appearing in the last two population estimates, which demonstrate small increases in population growth. However, this is a long term project that requires continued effort. Recent activity includes:
 - Increasing the impact of the Futures Campaign The refreshed design of both the
 Our Future and Your Future campaigns are being rolled out on a weekly basis across
 CLEP's social channels, alternating between Our and Your Future each Tuesday or
 Thursday. The latest filming has focused on the Logistics, Construction and
 Professional Services sectors and to help to promote The Pears Cumbria School of
 Medicine.

- Modern Workplace Charter this has been further refined with work to prepare for the launch of the programme, post Transfer of Functions. In order to mobilise the Charter exemplar businesses have been sought to lead the way in completing the assessment process.
- Resilience and Employability Action Plan this was developed in response to increased feedback from both employers and the skills system, regarding the resilience and employability of younger people, with the pandemic exacerbating some already growing concerns around these issues. The Plan has now been fully developed with delivery partners including members of the CLEP team, Cumbria Youth Alliance, Cumbria Careers Hub, Lakes College, Sellafield, Inspira and Local Authorities.
- Over 50s Employment Events Flexible Working Recruitment events took place in Barrow, Carlisle, Kendal and Whitehaven during September 2023. These were aimed at attracting over 50s, who may have retired, back into the workplace as well as attracting other job seekers. Across all for events, approximately 1,200 people attended. Employers that attended on the day and DWP colleagues have confirmed that there have been 50 individuals, who were offered a role on the day, with other leads being followed up.

DELIVERY

3.20 CLEP has been responsible for the delivery of both capital and revenue programmes on behalf of Government, alongside delivery of contracts for Government agencies and Local Government. The latest position on each of these is outlined within the report, with a separate report provided on the Skills Bootcamp programme.

Capital Programmes

Getting Building Fund

- 3.21 The £10.5million Getting Building Fund resulted in investment in two projects, which are both now practically complete, as follows:
 - Marina Village this project was practically and financially complete in November 2023 with a Project Team photo and video shoot taking place on 8 January 2024.
 Ongoing monitoring will continue to report the relevant outputs.
 - A595 Bothel this project practically completed in May 2023. Final claims have been submitted to the Accountable Body, and relevant outputs reported on the Monitoring Return.

Local Growth Fund

- 3.22 The focus of the programme activity has been full and final closure of remaining projects, with only A595 Grizeback now to be completed, as outlined below:
 - A595 Grizebeck this project completed the necessary activities to support the
 development of the Full Business Case (FBC), which was submitted in October
 2023. The final claim evidencing defrayment of the full Growth Deal grant has now
 been processed. However, the practical completion of the full scheme is not
 expected until 2025. The Accountable Body will continue to ensure the delivery of
 the full scheme. Currently, Westmorland and Furness Council are awaiting approval
 of the FBC.
- 3.23 The Growth Deal expenditure that was paid to projects as advance payments in accordance with Government timescales has now been fully evidenced and the focus has been on monitoring the delivery of outputs. The output monitoring is focused on jobs and homes created, as all other outputs have been achieved. The homes target will be increasingly challenging due to the challenges currently facing housebuilding in Cumbria. The latest position reported to the CLEP Board is outlined below:

Programme Outputs	Jobs		Investment (Public & Private	Learning Opportunities	Housing	Sq. Metres Premises (Created /	Premises with access to superfast
	Created	Safeguarded	Match / Follow-on Investment)			Refurbished)	broadband
Output Target		3,000	£60,000,000	1,700	3,000	62,000	5,000
Alla sations /	3,642	1,493					
Allocations/ Commitments		5,135	£128,817,186	5,207	4,162	211,213	11,220
Forecast		5,147	£150,284,843	6,886	1,987	211,354	11,243
Achieved		2,350	£109,125,053	6,071	1,107	124,266	11,223
Achieved (% of BEIS Target)	-	78.3%	181.9%	357.1%	36.9%	200.4%	224.5%
Remaining Target		650	EXCEEDED	EXCEEDED	1,893	EXCEEDED	EXCEEDED

3.24 Progress towards outputs continues although reporting in interim periods is limited, as most projects are now on an annual reporting cycle. This means that further achievements will be noted in the return following the end of financial year.

Cumberland Rural England Prosperity Fund (REPF)

- 3.25 CLEP was invited to deliver this programme on behalf of Cumberland Council. The programme was split into two strands Enterprise Grants and Visitor economy Grants, with funding of £222,710 and £88,000 available for these, respectively, with an expectation that approximately 11 and 4 grants, respectively, of up to £20,000 would be issued.
- 3.26 The timescales for delivery are extremely tight and as such CLEP delivered an accelerated appraisal and decision making process with grant awards agreed at its Investment Panel on 2 February. This resulted in 14 grant offers being agreed for the Enterprise strand and 4 for the Visitor Economy. In order to de-risk delivery CLEP also agreed to provide additional funding to fund 2 further Enterprise Grants and 1 Visitor economy grants. All projects funded by the grants must be delivered by 31 May 2024, to allow full programme closure by 30 June 2024, in line with CLEP's Grant Funding Agreement with Cumberland Council.

Westmorland and Furness Shared Prosperity Fund

- 3.27 Following a competitive process, the LEP was selected to deliver the Business Support element of the Shared Prosperity Fund for Westmorland and Furness Council. This included two grant programmes, the capital Investing in Growth and the revenue Catalysing Growth Programmes. The launch of these grant programmes resulted in the submission of 171 Expressions of Interests, with eligibility checks completed on these. Following appraisal by independent economists, recommendations were presented to the Investment Panel meeting held on 15 December 2023 for approval.
- 3.28 This resulted in the agreement to provide grant support to 69 businesses with CLEP agreeing to fund a further two projects to de-risk the Programme. Grant Funding Agreements have been both issued and accepted.

Innovating for Success Programme

- 3.29 The Innovating for Success programme, which is funded from CLEP's own sources, is making good progress, with Quarter 3 2023/24 claims now processed. Currently, 29 businesses have or are being supported by the programme, following 6 businesses withdrawing for a range of reasons.
- 3.30 The table overleaf outlines which businesses have been supported, which have completed and which have participated in media activity to promote the outcomes from the programme.

Business Name	PR/Case Study	Strand	Completed
Accurite Industries Ltd.	Requested	Innovation	Yes
Ackerley Milton Mains	Yes	Decarbonisation	Yes

Business Name	PR/Case Study	Strand	Completed
Barrnon Media	Yes	Innovation	Yes
Blencow Partnership Limited	Yes	Decarbonisation	Yes
Burlington Slate Limited	Yes	Decarbonisation	Yes
Casterton Golf Course Ltd	Yes	Decarbonisation	Yes
Crown Hotel (Wetheral)	Yes	Decarbonisation	Yes
Delkia		Innovation	
Furness Fish & Game	Yes	Innovation	Yes
Grosvenor House Papers Limited (GHP)	Yes	Innovation	Yes
Harbourside Products Limited		Innovation	
lan Cleasby Agricultural and Industrial Limited	Yes	Innovation	Yes
Jacksons Timber	Yes	Innovation	Yes
Just R Ltd	No	Innovation	Yes
Lakes Speciality Foods Limited	Yes	Innovation	Yes
Muncaster Visitor Management Limited	Awaited	Decarbonisation	Yes
Ratio Technology Limited		Innovation	
Revolutionary Concepts Ltd		Innovation	
Stone Harrison		Decarbonisation	
Storth Ltd CB	Yes	Decarbonisation	Yes
The Creators Cortex Ltd.		Decarbonisation	
The Lakes Free Range Egg Company Ltd	Yes	Decarbonisation	Yes
The Lakes Free Range Egg Company Ltd		Innovation	
The Wordsworth Trust		Decarbonisation	
The Yan at Broadrayne		Innovation	

Business Name	PR/Case Study	Strand	Completed
Transaction 360 Degrees Ltd		Innovation	
Kombineer Ltd	Yes	Innovation	
Brathay Trust	Yes	Decarbonisation	
DGTLOnline Ltd	Yes	Innovation	

3.31 The cumulative grant expenditure position for Quarters 1 and 2 was £564,789, with claims of £114,079 processed for Quarter 3, with only 1 claim of £4,200 outstanding. A further £178,104 remains to be claimed in Quarter 4 of 2023/24 and 2024/25.

Revenue Programmes

3.32 The latest position on each revenue programme is summarised below.

Growth Hub Business Support Programme

- 3.33 CLEP is receiving £261,000 to deliver business support advice to Small and Medium Enterprises (SMEs) through the Department for Business and Trade (DBT) Growth Hub programme in 2023/24. This is being delivered via a series of low, medium and high intensity interventions, alongside a programme of workshops. All activity is to be delivered by 31 March 2024.
- 3.34 For 2023/24 CLEP has agreed to support 220 business with light touch support, 550 businesses with medium intensity support and 55 businesses with High level support.
- 3.35 As of 6 February delivery performance was as below:

Support level	Completed	In process	In pipeline	Target	% Completed/In process
Signposting / Low level assist	205	0	0	220	93%
3 hrs support / Medium assist	467	63	20	550	96%
12 hrs support / High level assist	26	20	9	55	83%

DBT KAM Foreign-owned Business Support

3.36 The Department for Business and Trade (DBT) provides funding to deliver a Key Account Management function in Cumbria to support Foreign Direct Investment (FDI's). This programme enables CLEP to maintain close relationships with around 40 international

businesses and ensure that they have the necessary support to further grow and develop their business.

- 3.37 The benefits of FDI are often typified by investment in new premises, plant and machinery, increasing turnover, improved exporting, skills development, technology enhancements/energy reduction/decarbonisation and management practices.
- 3.38 CLEP supports a wide portfolio of businesses and a few examples of recent or pending interactions directly or via partners are, Anord Mardix, Acrastyle, Bender UK, CCL Secure, Crown Packaging, Enesco, Enkev UK, Hollingsworth & Vose, Kimberly Clark, Komatsu Forest UK, Pac Tec, Tata Shapfell, Crown Hotel Wetheral, New Balance.

Barrow Town Deal Business & Enterprise Support

- 3.39 The Barrow Town Deal revenue programme is a Business & Enterprise Support project, which provides tailored assistance to individuals and SMEs in Barrow to support resilience and business growth. The programme will increase business start-ups; those becoming self-employed, or people who wish to create community businesses.
- 3.40 The programme aims to support a combined total of 541 enterprises and individuals, with CLEP sub-contracting delivery to the Cumbria Chamber of Commerce in partnership with Cumbria Social Enterprise Partnership to deliver the project for the 2022/23 and 2023/24 financial years. Progress reported as at 15 January 2024 was as follows:

Output	Profile to end of Dec 23	Submitted on CRM	In progress
3hrs enterprise	Chamber - 29	Chamber - 1	Chamber – 1
ready	CSEP - 18	CSEP - 3	CSEP - 11
12hrs enterprise	Chamber - 56	Chamber – 1	Chamber – 11
ready	CSEP - 5	CSEP - 0	CSEP - 4
3hrs enterprise	Chamber - 37	Chamber – 30	Chamber – 22
	CSEP - 5	CSEP - 1	CSEP - 3
12hrs enterprise	Chamber –27	Chamber – 10	Chamber – 4
	CSEP - 5	CSEP - 0	CSEP - 3

3.41 This project has proved particularly challenging to deliver as there is an ongoing struggle to engage individuals who may be interested in starting a business, which was the primary focus of the delivery when originally contracted. Despite concerted efforts the pipeline of participants has not developed as was hoped. This is partly attributable to the abundance of well-paid jobs available in the area, and partly due to historically low levels of

entrepreneurialism in the local area. CLEP is working with the Accountable Body to identify mechanisms to address these ongoing challenges.

Careers and Enterprise Activity

Overall Contract

- 3.42 Each academic year the Careers and Enterprise Company set targets for the Cumbria Careers Hub to achieve as part of the Grant Offer Letter. In order to ensure that all targets are achieved by 31 August 2024 the team has prioritised the Institutions that need additional support to achieve at least 3 Gatsby Benchmarks (3 out of 53 schools), Gatsby Benchmark 1 (14 out of 53 schools). In addition, all schools are being encouraged to complete the Future Skills Questionnaire (FSQ) with their students.
- 3.43 Schools in West Cumbria have received additional funding from the WELL project to deliver 1:1 careers guidance to Year 9 pupils and will complete the FSQ with this year group to help measure impact.

Cumbria Careers Day

- 3.44 Cumbria Careers Day will be celebrated on 6 March 2024. It is a celebration of careers in Cumbria and will be a focal point during National Careers Week. The intention is to get everybody talking about the fabulous career opportunities in Cumbria. The Careers Hub will engage with all levels of education from Primary through to HE and encourage employers and partners to take part in one or more of the suggested activities taking place that day. Schools and colleges will be provided with resources that can be used in school highlighting careers in Cumbria.
- 3.45 Organisations are being encouraged to get involved and will be provided with suggestions on how to get involved including engaging with a local school or college delivering projects, competitions, open door visits, bring your child to work etc. There will be a "Did you know?" social media campaign on that day and Employers and Partners are being encouraged to engage in this by sharing quirky facts about their organisation.

Cumbria Talent Force

- 3.46 The aim of the Cumbria Talent Force is to link Cumbria's young professionals and talent in the workforce with young people in school and colleges to raise their aspirations about the breadth of career opportunities available to them in Cumbria. It is also designed to address employers significant skills shortages, which is as a result of our declining working age population. Retaining our young people and encouraging them to stay in Cumbria is therefore really important.
- 3.47 The objectives of the Cumbria Talent Force are to:
 - To raise awareness of ALL the career pathways and opportunities in Cumbria.

- To support schools and colleges to develop their alumni by building a bank of exstudents that will be more relatable to current students and act as positive role models.
- To nurture and develop the talent of young people in Cumbria retaining them in our workforce. (This could be part of their early careers CPD to help build their skills and link to Futures Forum Leadership model.)
- To create a sustainable employer engagement programme that can be managed by schools in the future.

Hub Innovation Project

3.48 The Careers Hub completed delivery of the Hub Innovation Project on 31 December 2023. The project was designed to explore whether targeted interventions with young people (aged 16-18) studying at Furness College would help improve their aspirations and employability skills. It was designed to help to respond to Barrow's high level of unemployment in aged 18-24, which is the highest in Cumbria. Impact Data will be available in February 2024, based on evaluation research, which is being completed by the Careers and Enterprise Company.

Teacher Encounter Project Extension

- 3.49 Following the successful delivery of the National Highways Teacher Encounter Project, the CEC has approved funding for an extension to the project to deliver a similar event for the Health and Social Care Sector. Partners include Cumberland and Westmorland & Furness Councils, NHS representatives (North and South), Skills for Care, University of Cumbria and the 4 FE Colleges.
- 3.50 The project will deliver an Employer/Teacher Conference in April 2024 followed by teachers spending time out in the health and social care sector. A minimum of 25 teachers will be involved in the programme and teaching resources will be created that will be shared across the County and nationally.
- 3.51 A video was produced on the Teacher Encounter Project with National Highways, which can be accessed at <u>video</u>.



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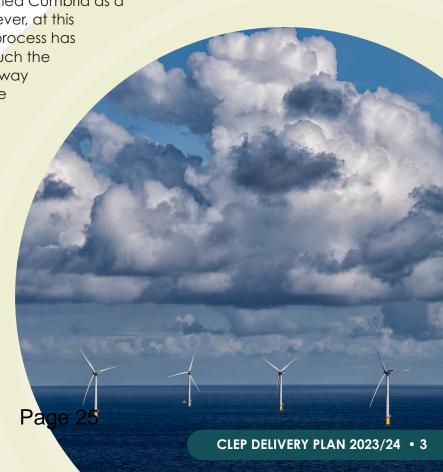
Introduction

- 1.1 The Annual Delivery Plan, which is to be produced by all Local Enterprise Partnerships was initially introduced in the "Strengthened Local Enterprise Partnerships" report published by Government in July 2018. At the point that the Annual Delivery Plan was introduced it was assumed that this would be aligned with the priorities outlined within the Local Industrial Strategy. However, in the absence of Local Industrial Strategies being approved in every area, Government introduced a 'light-touch' version, which would provide the framework for the production of Annual Delivery Plans.
- 1.2 This light-touch version was the template adopted for the production of Annual Delivery Plans over the last four financial years, and in the absence of any additional guidance, this version has again been used to produce the 2023/24 Annual Delivery Plan. The activities and focus in this Plan are driven by the priorities identified in Cumbria's Local Industrial Strategy and Restart, Reboot, Rethink A Plan for Cumbria's Economic Recovery.
- 1.3 The Levelling Up White Paper published on 2 February 2022 confirmed that LEPs would continue to play a key role in supporting the levelling up agenda across England, stating "For the last decade, LEPs have acted as important organisational means of bringing together businesses and local leaders to drive economic growth across England. They have also been responsible for the delivery of a number of major funding streams.

It is important to retain the key strengths of these local, business-oriented institutions in supporting private sector partnerships and economic clusters, while at the same time better integrating their services and business voice into the UK Government's new devolution plans. To that end, the UK Government is encouraging the integration of LEPs and their business boards into MCAs, the GLA and County Deals, where these exist. Where a devolution deal does not yet exist, LEPs will continue to play their vital role in supporting local businesses and the local economy".

1.4 The Levelling Up White Paper identified Cumbria as a 'priority place' for devolution. However, at this point in time no formal devolution process has been agreed for Cumbria and as such the Cumbria LEP (CLEP) remains a Pathway II LEP, which are those areas that are maintaining LEPs until a Devolution Deal is agreed.

1.5 The joint letter from Neil O'Brien, MP and Paul Scully, MP to LEP Chairs on 31 March 2022 confirmed that each LEP on Pathway II "will continue to be the recipient of core funding" and in order to secure this "LEPs will need to submit draft Delivery Plans for 2023/24 by 25 November 2022. Future provision of core funding will be subject to agreement of these plans with government and, thereafter, subject to meeting agreed delivery and performance metrics."



- 1.6 Since this letter was produced Government announced in the Autumn Statement that it was 'minded to remove' core funding from LEPs in 2024/25 and as such the Cumbria LEP is undertaking prudent planning on this basis. The guidance on the production of Delivery Plans for 2023/24 has still yet to be received.
- 1.7 In the absence of further Government guidance, the approach to the development of the 2023/24 Delivery Plan has addressed the issues that Government asked LEPs to respond to in 2022/23, namely outlining the full range of our core functions and roles to support our local economy and local decision-making, including:
 - Embedding a strong, independent and diverse local business voice into the local decision-making, which might include advising Local Authorities on the development of local plans and applications to local growth funds such as the UK Shared Prosperity Fund (UKSPF) or Levelling Up Fund, where projects have an economic development purpose.
 - Developing local economic strategies and maintain business and economic intelligence for their areas. This includes activity to support the levelling up missions.
 - Delivering activity on behalf of Government Departments, including business support; international trade and investment activity; Careers Hubs; Local Skills Bootcamps; local skills analysis.
 - Post completion monitoring of outputs, outcomes and impacts from the Growth Deal and Getting Building Fund.
- 1.8 CLEP will be working with Government to develop measures to report against, within these plans, which will be considered as part of our Annual Assurance process. In the interim, CLEP will continue to comply with the current National Local Growth Assurance Framework (NLGAF).
- 1.9 In line with the Plan produced in previous years' this Delivery Plan is structured around the three themes of the Annual Performance Review Strategy, Governance and Delivery.
- 1.10 Cumbria, alongside the rest of the UK, continues to experience one of the most challenging economic periods with businesses facing a range of issues that are hampering economic growth, with citizens facing one of the most acute cost of living squeezes in recent memory. This remains the economic context in which this Annual Delivery Plan has been produced.
- 1.11 In introducing this Delivery Plan it is important to recognise the financial and secondee resource that is provided by Sellafield and BAE to help deliver CLEP's activities. This is alongside the in-kind support provided by Cumberland and Westmorland and Furness Council; Westmorland and Furness as CLEP's Accountable Body and to both Councils for the match funding that has been kindly provided and which is very much appreciated.
- 1.12 Finally, following Local Government Reoranisation, the Board and Executive look forward to working with both of the new Local Authorities Cumberland and Westmorland and Furness, going forward and developing positive and mutually beneficial relationships.

The Operating Context

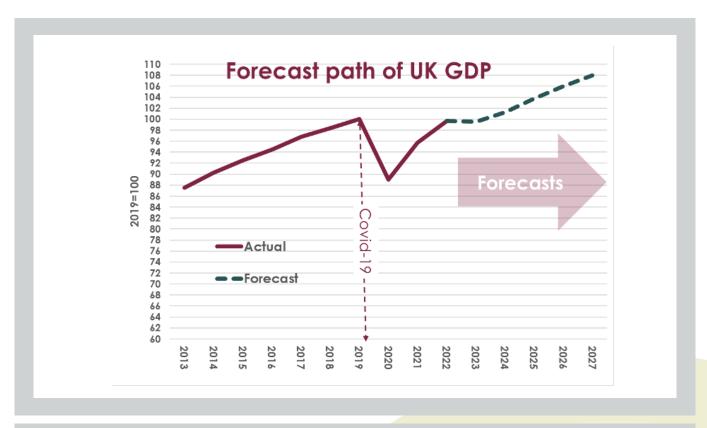
2.1 There is limited change in the operating context from that experienced in 2022/23 in that the overhang from the pandemic, the war in Ukraine and managing the changes following EU Exit are having a profound impact on the economy and businesses. This means that as we look towards 2023/24 our economy faces, as with the rest of the UK, very serious challenges indeed. Inflation has not reduced in line with Bank of England forecasts and interest rates have risen and are set to rise further, placing further stress on businesses, particularly SMEs.

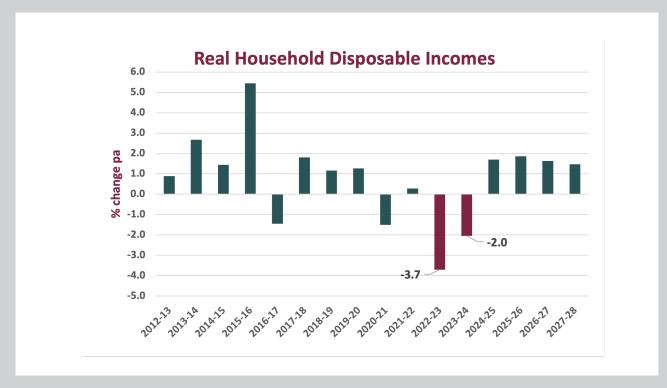
A challenging national and international economic context

- 2.2 At the end of 2021 and the beginning of 2022 the UK economy was recovering from the effects of COVID and associated policy measures. These had hit the economy more severely than most other advanced economies. The UK was starting to face inflationary demand pressure (post-COVID demand rising faster that supply especially in the labour market). Demand was rising for workers, but at the same time there had been a contraction in the size of the workforce due to a combination of factors, particularly illness and earlier retirement. This UK-wide phenomenon was being felt including Brexit, illness and earlier retirement acutely in Cumbria, which already faced a declining working age population.
- 2.3 Then in early 2022 the UK experienced a strong inflation and demand shock. This arose from the rapid price increases in global energy, commodities and other goods in large part due to the Russian invasion of Ukraine, in February. By the autumn of 2022 the UK economy had hit the buffers:
 - The UK economy had ground to a halt and by Q3 2022 the economy not yet recovered to the pre-COVID levels of Q4 2019. The economy grew by just 0.1% in Q4 2022 and in Q1 2023
 - Consumer price inflation had reached a 40 year high (CPI 11.1% in October) a rate much faster than earnings growth (5% to 6%) it remained over 10% until finally dropping to 9% in April 2023. Producer cost inflation was over 20%.
 - The real value of earnings and savings falling sharply leading to a squeeze on consumer spending and in the housing market.
 - In response to inflationary pressures, the Bank of England has raised interest rates several times (from 0.25% in January to 4.0% by March 2023), with the markets expecting the base rate to rise to over 5.0% during 2023.
 - Major fiscal imbalances were looming after COVID, the slowing economy and the cost
 of the Government's energy price cap measures.
- 2.4 In March 2023 OBR produced new economic forecasts. These predicted: (1) a slight recession during all of 2023; then very slow recovery, with pre-COVID economic output levels only reached during 2024; (2) a strong squeeze on living standards in 2022/2 and 2023/4 (an overall fall of 6%); and (3) unemployment to rise from 3.5% to 4.5% by mid-2024.
- 2.5 Other advanced economies are facing similar challenges, but in the UK these have been exacerbated by the impacts of Brexit on trade¹ and so business investment; the

particularly acute post-COVID effects on labour supply; and recent market destabilisation and reputational damage in respect of UK Government's borrowing costs.

Latest UK Economic Forecasts, November 2022





Source: OBR, Economic and Fiscal Outlook, March 2023

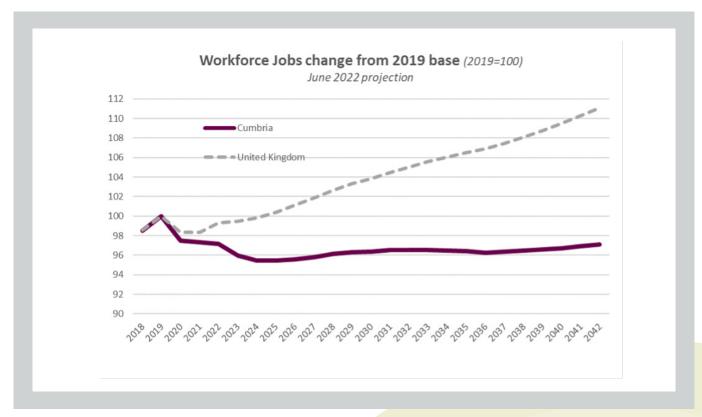
Short to medium term implications for Cumbria

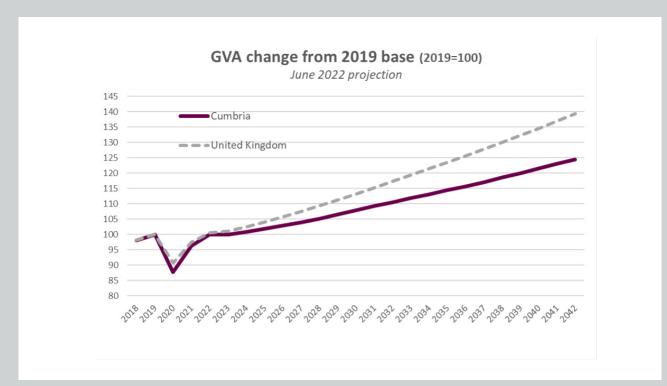
- 2.6 The implications for Cumbria are as follows:
 - The **severe squeeze on real incomes** is and will lead to falls as well as shifts in consumer spending, away from non-essentials to budget items/essentials. This will impact on the demand for goods and services for most Cumbrian businesses, both for residents, visitors and for firms, who export out of the county to the rest of the UK. Firms focussing on luxuries/non-essential items will face particular challenges.
 - Those business that are more **export focussed** are better placed to weather the storm as overseas markets are expected to contract less than the UK. The weakening pound presents opportunities for exporters, although, it does at the same time increase import costs and may also create opportunities for international tourism.
 - High produce input inflation is a major problem for agriculture and other energy and raw materials intensive sectors. It is likely to lead to stronger interest in investment in energy efficiency measures and renewable generation.
 - Higher energy costs are being reported nationally as a particular issues for small retail
 and for most hospitality businesses, which is also true in Cumbria with reports of energy
 bills increasing four or five fold.
 - Construction cost inflation is already causing difficulties for some public sector investment and regeneration projects where budgets are fixed in cash term and this will continue to be a challenge.
 - The overall impact on domestic tourism activity remains uncertain. However, the real
 income squeeze is likely to lead to less spending per trip by domestic visitors. Higher
 fuel costs may deter day trippers. Value for money will become much more important.
 - The reduction in overall demand is likely to reduce the more acute local labour supply
 pressures, which apply in most parts of Cumbria. There are signs of number of reported
 vacancies tailing off from historically high levels. If UK-wide changes apply to Cumbria,
 we are likely to see a rise in the unemployment rate during 2023 and 2024.
 - However, Cumbria is fortunate in that key parts of our economy e.g. BAE Systems/
 Barrow and Sellafield and their associated supply chains will largely continue as before
 over the next few years.

Cumbria baseline economic forecasts

- 2.7 In June 2022 CLEP received updated long term baseline economic forecasts for Cumbria (from Experian). These are essentially 'business as usual' forecasts that apply past trends in labour supply and growth by sector relative to the UK to national sectoral forecasts. They do not reflect on any changes in policy and local activities that would make the Cumbria economy more productive and successful in either relative and absolute terms.
- 2.8 The main take away from the forecasts is that the overall number of jobs in Cumbria, including self-employed and in FTE terms, is forecast to continue to fall in 2024 and 2025 and then flatline for the remainder of the forecast period at around 268,000 jobs. This remains around 10,000 below pre-COVID levels. In contrast, employment is forecast to rise by around 0.6% pa in the UK.

2.9 This feeds through into the forecast for the economy (GVA) where growth in Cumbria lags behind that of the UK, but almost entirely due to slower workforce growth. In other words relative productivity (GVA per job) is forecast to remain largely unchanged but not to catch up on the rest of the UK and close the current large productivity gap.





Supporting Economic Recovery

- 3.1 The current economic challenges mean that supporting economic recovery has and will remain an issue throughout 2023/24 and as such CLEP continues to Chair the Business and Economic Advisory Group (BEAG).
- 3.2 BEAG's responsibilities in supporting recovery and growth, include:
 - Providing strategic oversight on the implementation of 'Restart, Reboot, Rethink A
 Plan for Economic Recovery' and the underpinning Plans to deliver this.
 - Identifying key emerging strategic issues and proposing strategies and suitable mechanisms to address these issues.
 - Identifying emerging international and national policy, best practice and thematic trends, and ensure that these inform CLEP's activities.
 - Monitoring Cumbria's economic performance and identifying and escalating key emerging issues and suggesting potential ideas to help address these.
 - Identifying investment opportunities that can support Cumbria's economic and business growth and develop these opportunities.
 - Proving response to national consultations, Select Committees, APPGs etc. on issues that are relevant to Cumbria's economy, businesses and people.
- 3.3 Meetings of BEAG will continue to take place on a four weekly basis during 2023/24 and will be timed to ensure that the intelligence emerging from these meetings is received in sufficient time to inform the monthly intelligence reports that CLEP will continue to provide to BEIS.
- 3.4 In implementing strategic priorities BEAG will continue to focus on the Rethink elements, which are those priorities that are genuinely based in Cumbria's competitive advantages and opportunities and are grounded in Government's policy and investment opportunities.
- 3.5 BEAG's membership has continued to be and will remain extensive, with full membership extending to over 70 member organisations. The intention is to ensure that regular attendance at each meeting remains strong, in order to demonstrate the added value that members believe BEAG brings. It will also continue to operate as a 'network of networks' bringing together all Business Representative Organisations with business leaders, the public and Voluntary and Community Sector alongside Government representatives.
- 3.6 CLEP's focus on economic recovery and growth will not be limited to the activities of BEAG with all aspects of the governance structure focused on this.

Strategy

- 4.1 CLEP's Local Industrial Strategy (LIS) published in March 2019 outlined a vision for Cumbria to be "The place to live, work, visit and invest sustainably - where exceptional industry and innovation meets a breathtakingly beautiful and productive landscape." This vision was grounded in the reality of Cumbria's economy, which effectively marries together cutting edge advanced manufacturing and clean energy generation with exceptional natural capital, which acts as a catalyst for visitors, investors and individuals relocating.
- 4.2 Cumbria's strategic imperatives remain unchanged, although the impact of the changes to the economic operating environment, means that the focus and relative priority of these have changed. During 2023/24 the prioritisation of these have remained consistent, given that there has been limited change in the operating context, as outlined below:

Strategic Imperative	Impact - Ongoing (April 2023 onwards)
Declining Working Age Population	HIGH Acute labour supply shortages seriously impact on recovery and future growth.
2. Thin pool of higher level skills	HIGH The level of individuals with higher level skills exiting the labour market reduces productivity, performance and impedes recovery and growth.
3. Cold spots of worklessness and deprivation	HIGH The cost of living squeeze makes it more difficult for workless individuals to return to the labour market.
4. Increase Business Start Ups	MEDIUM Trading environment still not strong enough to see significant start up activity.
5. Increase Faster Growing Firms	HIGH Economic climate inhibits recovery and growth.
6. Increase Innovation Activity	HIGH Inability to find investment finance inhibits innovation and prevents recovery, productivity improvements and growth.
7. Improved Infrastructure	HIGH Cost escalation and fragmentation of investment funds inhibits the delivery of major infrastructure priorities.

4.3 CLEP's three strategic touchstones of net zero, productivity and inclusive growth are at the heart of every strategy and implementation plan and will continue to guide our activity.



- 4.4 In response to the economic challenges presented by the pandemic, CLEP produced "Restart, Reboot, Rethink A Plan for Cumbria's Economic Recovery." This was published in August 2020 and has been implemented ever since then. The delivery of the 'Rethink' themes will remain the priorities in 2023/24 recognising that these are focused on Cumbria's competitive strengths, which align with national policy and investment priorities. Therefore, these will be best able to accelerate economic recovery and also ensure a higher degree of delivery certainty.
- 4.5 The six rethink themes, which will be taken forward are:
 - Clean Energy Generation implementing the Clean Energy Strategy, which looks to use Cumbria's world-recognised heritage and expertise as a catalyst for significant future investment in energy generation.
 - **Diversify to Thrive** moving to the next level in terms of localisation of supply chains, movement into new markets and extending inward investment.
 - The New Visitor Experience capturing the changes in sustainable visitor behaviour by
 offering a world class experience to a wider range of markets.
 - The Future of Food ensuring that Cumbria's existing meat and dairy excellence is supported to grow, whilst at the same time considering opportunities that will put Cumbria at the forefront of supporting food security and resilience, alongside developing a sector operating to the highest standards of sustainability.
 - The UK's Natural Capital promoting and exploiting the benefits created by having the most protected landscape in percentage of area terms in England.
 - The Way We Live, The Way We Work Now benefitting from the opportunities that people now have and will have in the future in the way that they will live and work.
- 4.6 During 2023/24, all of these priorities will be moved forward with particular focus on the following headline priorities:

Rethink Theme	Headline Priorities	2023/24 Timescale
	Hydrogen 1.1 Support Spirit Energy to develop and implement their plans for re-purposing the Morecambe Bay Gas Field.	Quarter 1 onwards
	1.2 Support Carlton Power to develop their implementation plans with Kimberley-Clark.	Quarter 1 onwards
	1.3 Support Carlton Power to identify strategic 'anchor' business partners for future Net Zero Hydrogen Fund (NZHF) bidding rounds.	Quarter 1 onwards
Theme 1	1.4 Arrange a Hydrogen Event in the House of Lords to outline Cumbria's offer.	Quarter 1
Clean	Small Modular Reactors	
Energy Generation	1.5 Promote Cumbria's credentials as an early adopter for siting of Small Modular Reactors and the development of supply chain opportunities.	Quarter 1 onwards
	1.6 Support Rolls-Royce SMR and partners to assemble the case for siting of an SMR in Cumbria.	Quarter 1 onwards
	1.7 Progress Cumbria's ambition for an advanced manufacturing facility for Rolls-Royce SMR.	Quarter 1 onwards
	1.8 Support the Solway Community Power Company to implement their proposals in Page Bria.	Quarter 1 onwards

Rethink Theme	Headline Priorities	2023/24 Timescale
	Advanced Modular Reactors 1.9 Support partners to secure the supply side benefits of any national Advanced Modular Reactor activity.	Quarter 1 onwards
	Fusion 1.10 Explore opportunities to secure fusion investments in Cumbria based on the case assembled for UKAEA's siting competition for the Spherical Tokamak for Energy Production (STEP).	Quarter 1 onwards
Theme 1 Clean Energy Generation	Off Shore Wind 1.11 Promote the manufacturing opportunities for Cumbrian businesses as part of the supply chain opportunities for offshore wind.	Quarter 1 onwards
	1.12 Work with Port Operators to establish Cumbrian ports as the O&M Centre for Round 4 leases.	Ongoing
	1.13 Present Cumbria's case to Crown Estates for Round 5 leases.	Quarter 2 onwards
	Network Connectivity 1.14 Work with Electricity North West Ltd to ensure that grid connectivity facilitates clean energy generation.	Quarter 1 onwards
	2.1 Utilise the Innovating for Success programme to facilitate innovation, improve productivity and reduce the demand for labour.	Quarter 1 onwards
	2.2 Explore diversification opportunities in all business support diagnostic activity.	Ongoing
	2.3 Identify and promote supply chain opportunities resulting from the rethink themes.	Ongoing
	2.4 Develop Cumbria's innovation activity to identify new market opportunities.	Ongoing
Theme 2 Diversify to	2.5 Support space ambitions with Space Technologies Facility Council.	Ongoing
Thrive	2.6 Complete further analysis of export activity and implement a targeted programme to encourage greater international trade.	Quarter 2 onwards
	2.7 Refresh inward investment marketing materials to promote Cumbria's investment credentials.	Ongoing
	2.8 Secure additional Cumbrian sites in DiT Northern Powerhouse playbook.	Ongoing
	2.9 Continually refresh Our Future material to promote Cumbria as a great place to invest.	Ongoing
	2.10 Refresh the Advanced Manufacturing Sector Panel and its work programme to take forward this theme.	Quarter 1 onwards
Theme	3.1 Implement the refreshed Visitor Economy Work Programme to reflect current market realities.	Ongoing
3 -	3.2 Develop a proposal for a Training Hotel.	Quarter 1
The New Visitor	3.3 Implement the visitor economy aspects of the Labour Supply Action Plan.	Ongoing
Experience	3.4 Support Cumbria Tourism in the development of the Destination Management Plan	Quarter 1 onwards.

Rethink Theme	Headline Priorities	2023/24 Timescale
	4.1 Work with Scottish Rural University College (SRUC) to support the implementation of the Dairy Chain Strength in Places to ensure Cumbria fully benefits.	Quarter 1 onwards
	4.2 Support the development of a new website to promote Cumbria's food offer and the exceptional provenance of this.	Quarter 1
Theme 4 The Future	4.3 Explore the opportunity to develop a bid for an Agri-Tech Centre in Cumbria.	Quarter 1 onwards
of Food	4.4 Refresh the Rural Sector Work programme.	Quarter 1
	4.5 Develop a future facing Future of Food Action Plan focused on transformatary activities to sit alongside existing development activity.	Quarter 1
	4.6 Implement the refreshed work programme and Future of Food Action Plan.	Quarter 2 onwards
	5.1 Continue to develop the economic quantification case for natural capital in Cumbria.	Ongoing
Theme 5 The UK's Natural	5.2 Develop a commercial model that ensures that Cumbria's economy, businesses and citizens benefit from the economic benefits of natural capital.	Quarter 1 onwards
Capital	5.3 Develop an Action Plan to implement the Natural Capital opportunity.	Quarter 1
Theme 6 The Way	6.1 Refresh the Your Future campaign to promote Cumbria as a great place to live work and invest.	Ongoing
We Live, The Way We Work Now	6.2 Re-launch the refreshed Your Future materials.	Ongoing

- 4.7 The priorities outlined within the Levelling up White Paper will continue to be integrated into strategic planning and implementation. In relation to the 12 Levelling Up Missions, CLEP will have a particular focus on the following missions, which are felt to most strongly align with our role and responsibilities:
 - Mission 1 By 2030, pay, employment and productivity will have risen in every area of the UK, with each containing a globally competitive city, with the gap between the top performing and other areas closing.
 - Mission 2 By 2030, domestic public investment in R&D outside the Greater Southeast
 will increase by at least 40% and at least one third over the Spending Review period,
 with that additional Government funding seeking to leverage at least twice as much
 private sector investment over the long term to stimulate innovation and productivity
 growth.
 - Mission 6 By 2030, the number of people successfully completing high-quality skills training will have significantly increased in every area of the UK. In England, this will lead to 200,000 more people successfully completing high-quality skills training annually, driven by 80,000 more people completing courses in the lowest skilled areas.

- 4.8 CLEP will also play a highly supportive role in working with partners on the delivery of a range of missions. The scale and intensity of this support will be mission specific, with for example Mission 3 being a significant priority, given CLEP's joint production of the Cumbria Transport and Infrastructure Plan with Local Authority colleagues, as the statutory transport authorities and the commitment to produce a synthesis piece based on the emerging priorities of Cumberland and Westmorland and Furness Councils. The missions where CLEP will look to make both a strategic and delivery contribution are:
 - **Mission 3** By 2030, local public transport connectivity across the country will be significantly closer to the standards of London, with improved services, simpler fares and integrated ticketing.
 - **Mission 4** By 2030, the UK will have nationwide gigabit-capable broadband and 4G coverage, with 5G coverage for the majority of the population.
 - Mission 7 By 2030, the gap in Healthy Life Expectancy (HLE) between local areas where it is highest and lowest will have narrowed, and by 2035 HLE will rise by 5 years.
 - Mission 8 By 2030, well-being will have improved in every area of the UK, with the gap between top performing and other areas closing.
 - **Mission 9** By 2030, pride in place, such as people's satisfaction with their town centre and engagement in local culture and community, will have risen in every area of the UK, with the gap between the top performing and other areas closing.
- 4.9 Clearly, Mission 12 By 2030, every part of England that wants one will have a devolution deal with powers at or approaching the highest level of devolution and a simplified, long-term funding settlement, will be led by Local Authority colleagues in the new Cumberland and Westmorland and Furness Local Authorities, which became operational on 1 April 2023. However, CLEP stands ready to provide whatever assistance it can to support this.

4.10 Economic intelligence remains a key strategic priority and going forward CLEP will continue to produce Economic Updates, with these provided every two months by CLEP's Economist and Senior Researcher. These will provide information at Cumbria, Cumberland and Westmorland and Furness levels.

In the last three years, CLEP has focused 4.11 on developing its underpinning strategies producing the Creative and Cultural Strategy; Digital Strategy; Housing Delivery Strategy; Internationalisation Strategy; **Employment Sites and Premises** Strategy, Nuclear Prospectus, the Cumbria Transport and Infrastructure Plan (CTIP) and the Clean Energy Strategy. The requirement to draft further strategy documents has therefore reduced with the focus very much being on delivery of these agreed strategies and ensuring that the priorities within these are achieved.

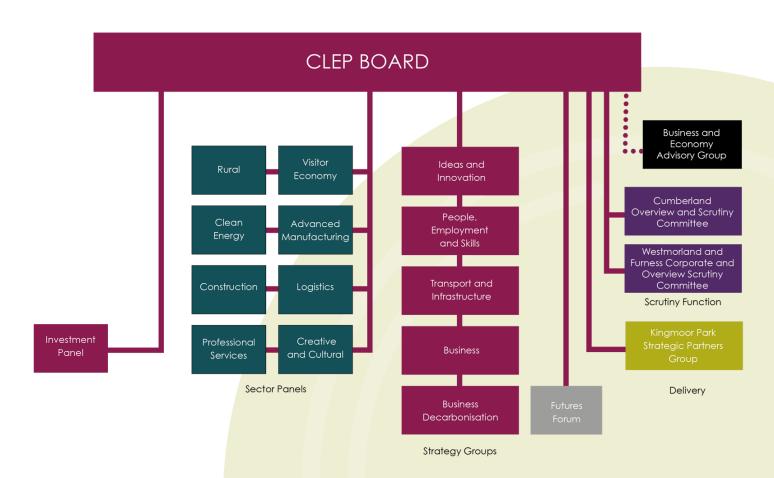
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- 4.12 In addition to the strategies outlined above, CLEP's commitment to Net Zero will be delivered by our twin priorities of Clean Energy Generation and Business Decarbonisation, which means that we will continue to implement the 10 Point Plan, which is outlined above. In 2023/24 we will also introduce a new Business Decarbonisation Strategy Group, which will oversee the further development and implementation of this Plan.
- 4.13 Whilst the family of strategic documentation will be fundamentally in place there will remain a strong focus on updating all of the work programmes for both the Sector Panels and the Strategy Groups.
- 4.14 There are other really important strategic priorities that will be taken forward in 2023/24, including:
 - Labour Supply Action Plan continually refreshing, updating and implementing this
 plan to help address Cumbria's significant labour supply challenges.
 - Productivity Deep Dive working to improve Cumbria's productivity under performance.
 - Innovation implementing the Innovating for Success Programme and supporting businesses to implement their innovation proposals to help address productivity and labour supply challenges.
 - Resilience and Employability Action Plan implementing this newly produced Plan to address concerns that some younger people are less resilient and employment ready than in the past to help make sure that youth unemployment and well being paddressed, as a matter of priority.

Governance

- 5.1 CLEP continues to keep its governance arrangements under constant review, in line with its commitment to operating to the highest standards of propriety, transparency and accountability. Importantly, the arrangements seek to ensure that private, public and voluntary and community sector partners are actively engaged in the development and implementation of strategies and plans, with the structure engaging hundreds of partners in this.
- 5.2 CLEP has continued to make sure that it is inclusive, action-focused, aligned to Cumbria's strategic priorities and reflects Cumbria's economic priorities. Each part of the structure has specific responsibilities and Terms of References to avoid duplication and overlap. The changes to governance introduced in 2019 have stood the test of time and as such only minor changes have been made to the structure, with the Places Strategy Group replaced by the Business Decarbonisation Strategy Group, as outlined previously.
- 5.3 Changes resulting from Local Government Reorganisation necessitated the incorporation of two new scrutiny bodies Cumberland Overview and Scrutiny Committee and Westmorland and Furness Corporate and Overview Scrutiny Committee both of which will replace the previous LEP Scrutiny Board. The diagram below reflects the governance structure for 2023/24.



5.4 Most bodies are advisory with the only formal decision making bodies being the Board, Investment Panel and the Kingmoor Park Strategic Partners Group.

Decision Making Groups

- 5.5 The Board is the main decision body, with all governance bodies ultimately reporting to it, other than the two scrutiny bodies, which are entirely independent.
- 5.6 The Investment Panel is responsible for overseeing and developing the pipeline of investment opportunities and ensuring that all due diligence in relation to publicly funded investments are met.
- 5.7 The Kingmoor Park Strategic Partners Group will address the residual responsibilities of Enterprise Zone status.

Advisory Groups

- 5.8 The Strategy Groups and Sector Panels operate on a supply and demand basis, with the Strategy Groups representing the supply side and the Sector Panels the demand side. For example, the Sector Panels will outline their skills needs with the People, Employment and Skills Strategy Group identifying how this need can be met; or their business decarbonisation issues to the Business Decarbonisation Strategy Group.
- 5.9 The Futures Forum is an important part of the governance structure, ensuring that 18-35 year olds influence CLEP's decisions and activity ensuring that our future generations have a genuine stake in Cumbria's economy. In 2023/24 CLEP will be refreshing the Forum's membership to ensure that it continues to represent the most pressing priorities for younger people in Cumbria, with a particular focus on securing younger members aged 18-24.
- 5.10 The LEP Scrutiny Board has fulfilled an essential function with elected members independently scrutinising the LEP's strategic and operational activity. This body has actively demonstrated CLEP's commitment to the highest standards of transparency and accountability. CLEP will work with the Cumberland Overview and Scrutiny Committee and Westmorland and Furness Corporate and Overview Scrutiny Committee to ensure that similarly robust independent scrutiny arrangements are established.
- 5.11 The Business and Economy Advisory Group continues to operate and fulfil an important sounding board function, particularly on testing the economic temperature with businesses, Business Representative Organisations and public and voluntary and community sector partners.
- 5.12 In addition to its external facing governance, CLEP also has an important internal governance body, its Finance, Audit and Resource Committee (FARC), which reports directly to the Board. Reports from FARC are a standing item on every Board agenda to ensure that the Board has full oversight of CLEP's finances.

Diversity and Inclusion

5.13 All LEPs had a target to achieve at least a third female Board membership by 2020 and equal representation by January 2023, which was achieved by CLEP in advance of that deadline. The focus is therefore on maintaining this and making equally strong progress on broader diversity issues. We will therefore encourage representation from underrepresented groups and people with protected characteristics, to ensure that CLEP is fully representative of the communities which it serves. The Futures Forum, consisting of members ages 18 - 35 year olds, remediage: 39 all conduit to Cumbria's younger people.

Performance Review

5.14 CLEP continues to meet all performance requirements in its assessment by Government, with the 2022/23 assessment, operating under the streamlined arrangements, confirming that CLEP was 'met' in all three categories - strategy, governance and delivery. Met is the highest marking currently available.

Board Membership and Development

- 5.15 The Board has agreed that the Board will reduce from 20 to 16 members during 2023 to reflect the changes in the Local Authority landscape with the public sector membership reducing from 6 to 4 member. A compensating reduction of 2 private sector members will also take place once two terms of office conclude in July 2023.
- 5.16 The Board Development Plan below reflects the priorities for 2023/24.

LEP THEME	PRIORITY	BOARD THEME	TIMESCALE	OUTCOME
Strategy	Implement the Strategy Twilight sessions for Board members.	Strategic Development	Ongoing	Board are well sighted on key economic issues and CLEP implementation priorities.
	Hold the Annual Strategy Development Day.	2023 stra forn		Board consider the key strategic issues that need to form the work programme going forward.
	Implement 'lunch and learn' sessions to explore key strategic issues following each Board meeting.		Ongoing	Board members have the time and space to consider key strategic opportunities and challenges.
	Ensure that Board agendas allow sufficient time to discuss strategic rather than operational issues.		Ongoing	Board collectively focuses the balance of time on strategic priorities.
	Ensure that all Sector Panel and Strategy Boards work programmes are continually updated.		Ongoing	All governance bodies are focused on the issues that will provide greatest impact on recovery and growth for Cumbria's economy and businesses.
	Complete bi-annual portfolio reviews with each Board member.		October 2023/24	All Board members have the opportunity to deploy their expertise in line with economic and business priorities.

LEP THEME	PRIORITY	BOARD THEME	TIMESCALE	OUTCOME
Governance	Revise the governance structure to reflect Local Government Reorganisation.	Net Zero	Ongoing	Cumberland and Westmorland and Furness representatives are fully engaged in CLEP's governance structure.
	Ensure that public sector partners are equally engaged in strategy and governance issues.	Inclusive Board	Ongoing	All members fully and actively contribute to CLEP's agenda.
	Review Equality, Diversity and Inclusion Policy.	Diversity	March 2023	Policy keeps pace with best in class.
	Complete the annual Equality, Diversity and Inclusion audit.		November 2023	Progress effectively monitored.
	Ensure that the governance structure is diverse and inclusive.		Ongoing	The structure fully reflects the businesses, citizens and communities that we serve.
Delivery	Ensure that the Executive remains resourced for impact.	Canacity and	Ongoing	The structure remains fit for purpose.
	Identify mechanisms to secure additional Executive resource – secondees, additional funding etc.	Capacity and Capability	Ongoing	CLEP can further extend its activity and reach.
	Ensure that going concern status continues to be met.	Compliance	Ongoing	CLEP can continue to trade effectively.

5.18 The Deputy Chair continues to lead the Board Development Programme, which is summarised in the Action Plan above and is being implemented on an ongoing

basis.

Annual General Meeting

5.19 CLEP remains committed to securing strong attendance at its Annual General Meeting, which will take place on 22 September 2023. The Annual Report for 2023 will be produced in electronic format, to avoid unnecessary printing. This approach will also ensure that the Annual Report is interactive and can be regularly updated.



Programme

Administrator

SHARON HITCHEN

Development of Staff and Capabilities of CLEP

6.1 The Executive structure has been maintained and enhanced Chief Executive and was rolled forward into 2023/24. The structure of the team JO LAPPIN reflects CLEP's responsibilities and the increased focus on the delivery of revenue programmes. 6.2 CLEP's structure continues to reflect the three priority themes – strategy, governance and delivery and is therefore perceived to **Executive Assistant** SHELLEY WILKINSON be fit for purpose in terms of current and medium term priorities. It has also been designed to deliver on the current work programme. The structure is outlined below: Head of Employment Senior Policy Officer Head of Programmes Head of Sectors Head of Transport and Careers Hub Manager and Skills of Skills Infrastructure **PAUL FOSTER** IAN WHEELER VACANT Page 42 **CATH DUTTON** RACHEL WLODARCZAK **DAVID HUGHES** Skills Bootcamp P/T Enterprise Adviser Clean Energy Manager Programme Manager **MELANIE CARR** NAOMI MORGAN **BRIAN WHITE** Senior Project Manager Senior Policy Officer Enterprise co-ordinator SARAH JONES **VACANT JO TATE** Internationalisation Enterprise co-ordinator Manager **NINA PORTER** JON POWER Employer Engagement Programme Administrator Manager RACHELLE POYNTZ **LUCY JOHNSON**

Communications

Assistant

EBONY RITCHIE

- 6.3 The outlined staffing structure is felt to be fit for purpose at this point in time. However, beyond this the intention is to cover other priorities via consultancy, secondee or temporary resource to provide greater flexibility. CLEP will continue to make use of its call off arrangements for communications, economic and policy support, accountancy, design and legal advice.
- 6.4 CLEP will also continue to explore opportunities to secure additional high quality secondee resource to augment the 2.0 senior level posts provided by NDA/ Sellafield Ltd and the 1.0 post provided by BAE.
- 6.5 There will be continued focus on learning and development to ensure that the team are equipped with the highest level of employability, recognising that this will ensure that the team is well able to manage change and deal with an uncertain operating environment.
- 6.6 CLEP will continue with its hybrid working arrangements throughout 2023/24, with an expectation that all team members will spend at least 1 day per week working in the office. In continuing with these arrangements CLEP will continue to ensure that these working arrangements operate in the interest of Cumbria's economy and businesses and enable us to deliver in the most effective way possible.
- 6.7 During 2023/24, CLEP will produce its fourth set of audited accounts with these being presented to the CLEP Board meeting taking place on 28 July 2023, prior to formal adoption at the Annual General Meeting on 22 September. CLEP will continue to ensure that its systems and processes receive a clean bill of health at audit as in previous years.
- 6.8 Alongside the independent audit of the company accounts, all of CLEP's programmes will be audited in line with the requirements of the relevant Grant Funding Agreement.



7

Multi-Lep and Working Outside Cumbria

Partnership working outside of Cumbria

- 7.1 CLEP continues to work effectively in partnership outside of our boundaries, including:
 - The LEP Network CLEP is an active member and has led and contributed to several
 of the LEP Network's submissions to Government, to Select Committees and other
 consultations.
 - Northern Powerhouse 11 (NP11) working collaboratively with the other 10 LEPs within the NP11 on the work programme that has been developed, and actively contributing to the Place theme.
 - Borderland Inclusive Growth Deal CLEP is a committed partner to this initiative and will work with colleagues to deliver this. The CLEP Chair and a CLEP Board member are representatives on the Economic Forum with CLEP actively engaging in the energy work and other initiatives.
 - North West Region the 5 LEPs across the North West come together in a variety of settings to work collaboratively on issues of common interest including Net Zero, including NZNW, Clean Energy Generation; and promoting the interests of the region. All 5 LEPs work together on the implementation of the work programme for the North West Net Zero Hub.
 - Lancashire LEP working together on cross-boundary issues and on sharing best practice.

Partnership working within Cumbria

Engaging with the business community

7.2 The business sector engagement takes place through several channels:

 CLEP's business support services – which provide direct advice and support to the SME community through business assists and workshops.

 Our formal governance structures has a very strong business representation. We have eight Sector Panels covering the rural economy (largely responsible for Agri-food), the visitor economy, the creative & cultural sector, clean energy, advanced manufacturing, construction, logistics, and professional services. At least 150 businesses are members of these Sector Panels, which meet every 3 to 4 months. Businesses are also represented on the LEP's other key governance sub-committees (five Strategy Groups). Page 44



- The LEP holds an **Annual General Meeting**, which this year takes place on 22 September 2023. The 2022 AGM operated as an effective hybrid meeting and was well attended by representatives from the private, public, voluntary and community sector partners. Therefore, the intention is to operate a similar approach in 2023.
- **Key Account Management** meeting with a cohort of foreign owned businesses to support their ongoing engagement and investment in Cumbria.
- 7.3 In addition, CLEP staff attend, present and answer questions at a wide range of business networking events and business clubs on an ad hoc basis.

Engaging with wider public, voluntary and community-based bodies

- 7.4 The wider public, voluntary and community-based bodies also are represented across CLEP's governance structure and sit on different Sector Panels and Strategy Groups. In addition the LEP engages with the public sector via:
 - Membership of all Towns Deal Boards including CLEP Board members Chairing three of these.
 - Membership of all relevant Local Resilience Forum bodies, when operating.
 - Membership of Cumbria's Zero Carbon Cumbria Partnership.
- 7.5 As with the business sector, LEP staff attend, present and answer questions at a wide range of networking events and conferences on an ad hoc basis. This includes the Cumbria CVS. There is a Voluntary, Community and Social Enterprise (VCSE) nominee on the CLEP Board and membership throughout the wider governance structure.

Engaging with the skills system

7.6 CLEP has highly effective relationships with the skills system, through both HE and FE representation on the Board and through its People, Employment and Skills Strategy Group. The latter brings together a wide range of education and skills providers to ensure that the system is responsive to the needs of the business community as identified by CLEP's extensive governance arrangement.

Programme Activity

Capital Programmes

Getting Building Fund

- 8.1 CLEP allocated in full its £10.5 million from the Getting Building Fund in line with the timetable set out by Government. The focus is therefore on ensuring the delivery of all outputs for the A595 Bothel scheme, which received £5.0million of funding and the Barrow Marina Village Scheme that received £5.5 million of funding.
- 8.2 The Marina Village project was completed in the 2022/23 financial year. Going forward, the focus will be on ensuring that the housing delivered meet the current and future needs of the population.
- 8.3 The A595 Bothel investment focused on the reconstruction of the Greyhound/ Torpenhow Junction, which is now complete. Unfortunately, DfT decided not to proceed with the wider A595 Bothel Strategic Improvements scheme.

Local Growth Fund/Growth Deal

- 8.5 The Growth Deal Programme is financially complete, with all projects receiving payment in advance of Government's 31 March 2021 deadline. There is now only one project A595 Grizebeck that is subject to practical completion, following the completion of Lillyhall North, Optimising Connectivity 2, Low Carbon Barrow and Cross-A-Moor.
- 8.5 The A595 Grizebeck project cost outturn is now forecasted to be at £23.292million, an increase of 24% on the original cost estimates. This funding gap has been met by the Local Authorities. CLEP's £2.244 million investment has now been fully expended, so the focus is on full practical completion of the wider project.
- 8.6 CLEP is therefore focused on ensuring that all outputs from the programme are achieved. The targets for investment; learning opportunities; Sq. Metres created/refurbished; and access to Superfast Broadband have already been achieved and as such the focus is on the housing and the jobs created/safeguarded targets which are still to be met.

Programme Outputs	Jobs Created	Jobs Safeguarded	Investment (Public & Private Match / Follow-on Investment)	Learning Opportunities	Housing	Sq. Metres Premises (Created / Refurbished)	Premises with access to superfast
Output Target		3,000	£60,000,000	1,700	3,000	62,000	5,000
Allocations / Commitments	3,642	1,493 5,135	£128,817,186	5,207	4,162	211.213	11,220
Forecast		5,147	£150,284,843	6,886	1,987	221,354	11,243
Achieved		2,323.1	£109,125,053	6,071	1,107	124,266	11,223
Achieved (% of BEIS Target)		77.44%	181.9%	357.1%	36.9%	200.4%	224.5%
Remaining Target	676.9		EXCEEDED	EXCEEDED	1,893	EXCEEDED	EXCEEDED

Community Infrastructure Fund

- 8.7 CLEP re-purposed the Community Infrastructure Fund for two purposes to convert the loan element into a grant scheme and to use the revenue stream to support CLEP's wider activity. This resulted in the implementation of the Innovating for Success grant programme, which is providing grants to businesses to support innovation or business decarbonisation.
- 8.8 CLEP will be working with its Accountable Body, Board and Investment Panel to identify further opportunities to re-purpose the Community Infrastructure Fund to support economic and business growth.

Revenue Programmes

Growth Hub Business Support Programme

- 8.9 CLEP has committed resource into 2023/24 to ensure that there is capacity to deliver the BEIS Growth Hub programme. It is assumed that the service will include the triage service, medium and high intensity assists, workshops and marketing and communications as well as managing the Business Hub website. The delivery model will move to a predominantly outsourced model in 2023/24, incorporating a wide range of delivery partners.
- 8.10 The services provided will be delivered in an impartial and collaborative manner. CLEP's leadership of the local business support agenda has meant that excellent relationships are in place with a range of business support and representative organisations. CLEP is well versed in the range of quality business support provision available in Cumbria and will seek to refer businesses to the support that provides the best fit for their individual business needs. The service will provide a free at the point of entry assessment of businesses support requirements.
- 8.11 Where business support services can support immediately, this will be offered regardless of sector or size. After this initial assessment, a client will be either referred to other provision elsewhere or if appropriate, provided with further high intensity support inhouse. CLEP will continue with its freephone number to ensure that calls to the LEP's Business support service are free at the point of entry.
- 8.12 Once the delivery targets for 2023/24 are agreed with BEIS, activity will be framed to ensure that these are achieved. Page 47

Skills Bootcamps

- 8.13 Going into 2023/24 the Wave 4 Skills Bootcamps will be CLEP's largest revenue programme. It is a major programme for Cumbria, given the skills and labour challenges that we are currently facing.
- 8.14 The Programme will focus on intensive, Level 3-5 or equivalent flexible training courses delivered over up to 16 weeks with a minimum of 60 Guided Learning Hours. It will equip adults with the necessary technical skills to enable them to access in-demand jobs, apprenticeships, new opportunities and an increased level of income over time (including for the self-employed). Each applicant not in work should be guaranteed a job interview.
- 8.15 It is open to all adults aged 19 or over on 31 August within the 2023-2024 funding year, who are full-time or part-time employed, self-employed, unemployed (i.e. not in work), as well as adults returning to work after a break. Skills Bootcamps will also be open to serving prisoners due to be released within 6 months of completion of a Skills Bootcamp and those on Temporary Release.
- 8.16 The Bootcamps will be co-funded at 30% by the employer where the employer is training their own existing employees. This is reduced to 10% where the employer is a Small or Medium Enterprise (SME) training their own existing employees. Courses are fully funded by Government for individuals not being co-funded by their employer, and for the self-employed. There must be no charges to the individual learner.
- 8.17 The 30% flexibility provided for the 2023/24 Programme has ensured that there is greater alignment with the needs of Cumbria's economy and businesses.

Careers and Enterprise Programme

- 8.18 The Careers and Enterprise Programme is funded on an academic year basis and as such the delivery period continues until 31 August 2023. It consists of two distinct elements Programme and Management with the programme budget being directly expended on delivery activity and the management funding supporting CLEP's in-house delivery team. In terms of the management funding this meets 100% of the costs of the Careers Hub Manager and 50% of the Enterprise Co-Ordinator Full Time Equivalent posts. The Careers and Enterprise Company has issued its offer letter for the 2023/24 academic year, with CLEP confirming its acceptance of this, following Board approval to guarantee match funding until the end of August 2024.
- 8.19 The focus of delivery will once again be on the implementation of the Careers Hub Strategic Plan, alongside the successful delivery of the Hub Innovation Project: Removing Barriers fund, which is due to complete in December 2023.

DBT Key Account Management

8.20 The creation of the new Department of Business and Trade (DBT) means that the Key Account Management function for international businesses now sits within it. CLEP's contract for 2023/24 has been confirmed and delivery will focus on the funding of a Key Account Manager, alongside some resource from the wider team.

SKILLS BOOTCAMPS AND GREEN SKILLS UPDATE

1. ISSUE

1.1 Updating the Cumberland Scrutiny and Overview Committee on delivery of the Skills Bootcamp programme and support for the development of green skills in Cumbria.

2. RECOMMENDATION

- 2.1 That the Cumberland Scrutiny and Overview Committee notes:
 - a) progress in delivering Wave, 3 Wave 4 and preparing for Wave 5 Skills Bootcamps activity; and
 - b) the activity that CLEP is undertaking to support 'green' skills.

3. BACKGROUND

Skills Bootcamps

Introduction

3.1 Skills Bootcamps are part of the Government's Lifetime Skills Guarantee and Plan for Jobs, and of the eligibility and structure of the programme. This report therefore focuses on programme delivery in Cumbria.

Wave 3 (2022/23)

- 3.2 In 2022/23 CLEP launched the local delivery of the Skills Bootcamp programme in Cumbria, on behalf of the Department of Education (DfE) with a contract value of £975,362. This provided places for 334 learners, 82% of whom completed their course, which is in line with the target in the Grant Offer Letter, with 71% of whom have achieved a positive outcome.
- 3.3 In August DfE announced that performance wise, CLEP was positioned 4th nationally.
- 3.4 The final grant amount spent was £694,930.21 with confirmation that any outstanding finance for the remaining milestones 2 and 3 could be used on additional Wave 4 provision. At the close of Wave 3, the total remaining balance was £112,773.92.

Wave 4 (2023/24)

- 3.5 CLEP's 2023/24 Grant Offer Letter was issued with a grant value of £1.2 million. This was subsequently varied to include the remaining provision from Wave 3 to give a total 2022/23 & 2023/24 delivery budget of £1,447,781.52.
- 3.6 The number of places available is a minimum of 300 across CLEP's 10 delivery partners. To date, 390 starts (Milestone 1) have been contracted, which considerably exceeded the minimum target. Most Milestones have been achieved with a further 7 courses starting throughout January 2024. Additional funding has been allocated to successful delivery providers and all providers contracts will be completed by March 2024.
- 3.7 In terms of delivery to date 292 (Milestone 1) starts have been recorded, 146 learners have completed their courses (Milestone 2) and 87 learners have achieved a positive outcome (Milestone 3).

Examples of positive outcomes include:

- Start-up business making bespoke 3D printed items including company logo keyrings.
- Start-up business making 3D printed scale buildings for project planning.
- Self-employed heating engineer taking on new projects in Air Source Heat Pumps, based on new skills in designing plumbing and heating systems for new construction projects, preparing estimates and consulting with clients providing technical support.
- Unemployed construction learner starting a new position in a local building firm.
- Current work force taking on new responsibilities, including a teacher now able to help students with 3D printing.
- LGV driver starting new role at £28,000 per annum.
- Large employer supported staff obtained NEBOSH Qual and all have taken on new responsibilities within their current roles supporting the site's safety agenda in line with requirements stated by the Office of Nuclear Regulations (ONR)
- 3.8 Two providers have reported challenges in finding work opportunities for newly skilled job seekers. For example, withing the construction industry it has been challenging to place newly skilled Construction Supervisors (experienced in managing). Another provider has struggled to secure interviews for learners despite strong employer engagement. SME interest in interviews has been poor and difficult to secure, given the other pressures on their businesses.

3.9 One positive example of employer engagement has been the strong leadership and management support from Sellafield, including support to work with the local supply chain. CLEP will continue to work with providers to ensure that all non-employer supported learners get the support needed.

Wave 3 and 4 Financial Overview

3.10 The combined Wave 3 and Wave 4 delivery advance has now been exhausted. The process of claiming funding payments from DfE in arrears via an Annex C is underway. The claims prepared to date are as follows:

October £57,056.64

November £128,751.06

December £60,866.76

3.11 Currently, the remaining potential drawdown balance is £654,895. However, given the changeable nature of the programme and its dependence on people to complete provision and achieve a positive outcome, we anticipate not spending the entirety of this financial drawdown by approximately 10%. Reasons for this vary but include a higher proportion of employer contributions than first anticipated, drops out rates including learners not being successful at interview and additionally providers failing to sufficiently evidence an outcome. *The key success of the programme is based on learner outcomes.*

Wave 5 (2024/25)

- 3.12 In June 2023, CLEP was advised that DfE had approval for Wave 5 Skills Bootcamps grant funding in the 2024/25 financial year. CLEP held an employer workshop on 5 September 2023 to gauge demand for specific sector skills, followed by a questionnaire that was also sent to delivery partners. This was in recognition of the fact that employer engagement remains central to the provision as this is an employer led programme.
- 3.13 In September 2023 CLEP submitted its proposal for Wave 5 grant funding for a total of 400 places to meet employer demand in Construction, Digital, Logistics, Project Management and Manufacturing. Green Skills were included as part of these sectors.
- 3.14 In December 2023 CLEP's Westmorland and Furness as Accountable Body received the Grant Offer Letter with a value of the full application £1,715,146 including management costs of £180,360. CLEP has prepared the tender documentation and will work with colleagues in Cumberland Council to agree arrangements to manage the contracting process.

Green Skills - Wave 4

Air Source Heat Pumps

- 3.15 CLEP has funded 63 places in Air Source Heat Pumps via The Gas Rooms based in Kendal. Mostly aimed at self-employed heating engineers and SMEs. This is a nationally accredited course. Gareth Gore, owner of Lakes Plumbing and Heating, said: "You've got to continue to move and grow your business in my view. And the way that the markets are shifting in our industry we need to be looking at the green technologies. The funding is there, grab it and go for it".
- 3.16 Trainer John Ladell said: "It's giving the many self-employed engineers access to qualifications that were previously unaffordable. It should help to ensure the local industry is equipped to install air source heat pumps in Cumbria and help meet the Cumbria Net Zero by 2037 target. It's also increased our engagement with local engineers, which is important to us as a local training centre."

Sustainable Construction

- 3.17 20 entry level places have been provided for learners who are looking for a new career. The programme offers current green skills training with a Level 2 Award in managing business responses to environmental challenges, with the addition of career and employability sessions to support learners into a new role. The outcomes of this programme are yet to be realised.
- 3.18 In addition to these specific courses there are a range of other programmes, which build in green skills. These include Civil Engineering and Housebuilding which includes current training on managing environmental building needs, Lean Manufacturing and Engineering & Bridging. The Project Management.

Green Skills - Wave 5

- 3.19 Green skills have been absorbed into all provision, with tender responses expected to include 'green skills'.
- 3.20 During Wave 5, CLEP anticipates that the following courses will be delivered:
 - Sustainable construction
 - Air Source Heat Pumps
 - Photo Voltaic
 - Electric Vehicle

3.21 Additionally, the wider provision will cover Engineering & Manufacturing, Sales, Marketing & Procurement, Project Management and HGV Logistics, as well as digital.

4. Retrofit Programme

- 4.1 The Net Zero report confirmed that CLEP has received £100,000 of funding from the NW Net Zero Hub pilot to support retrofitting delivery.
- 4.2 This is being delivered by the FE Colleges in Cumbria with Lakes College leading this consortium. The programme will deliver:
 - 200 Training Needs Analysis completed with employers.
 - 25 staff undertaking CPD training.
 - 20 employers will support curriculum development.
 - 75 employers will feedback on whether testing training is providing learners with the skills that they need.
- 4.3 The programme needs to be delivered by 31 March 2024 and as such the benefits of the delivery activity should materialise quickly.



NET ZERO UPDATE

1. ISSUE

1.1 Providing the Cumberland Scrutiny and Overview Committee with an update on CLEP's activities related to net zero through the twin priorities of clean energy generation and business decarbonisation.

2. RECOMMENDATION

- 2.1 That the Cumberland Scrutiny and Overview Committee note:
 - a) this report and the ongoing activities in support of moving towards Net Zero; and
 - b) CLEP's relationship with Project Colette. .

3. BACKGROUND

Introduction

3.1 At the last Cumberland Scrutiny and Overview Committee members were advised that Cumbria LEP (CLEP) had twin priorities to support Net Zero – clean energy generation and business decarbonisation. The remainder of this report provides an update on CLEP's activities in relation to this.

Partnership Engagement

North West Net Zero Hub

- 3.2 Grant Funding Agreements are in place for a £590,000 programme of activity in Cumbria, as part of the wider DESNZ funded North-West Net Zero Hub, which runs through until September 2025.
- 3.3 Tom Webb has recently joined the LEP as a Net Zero Policy Officer. He recently graduated with a master's degree in environmental economics and is part of the NW hub funded scheme to develop capacity and capability in the sector.
- 3.4 The programme activity currently being delivered includes:
 - Ernst & Young has completed a Distributed Energy Strategy study that
 assesses Cumbria's potential for localised clean energy opportunities
 spanning a range of renewables including solar, hydro, onshore wind, bio
 energy and heat networks. This builds on the opportunities identified in the
 Clean Energy Strategy issued in 2022. It is hoped that it will stimulate clean
 energy schemes and promote bids to either the Borderlands Energy
 Investment Plan or the NW Hub Community Energy Fund. The draft
 document is provided at Annex A.
 - Installation work is proceeding at Base Camp North to create a demonstration facility for a range of solar technologies at their visitor attraction, west of

Penrith. It will be available for visitor access by the end of March and be open access for two years to showcase the value of different types of solar in Cumbria.

- CLEP has engaged with Cumbria's Further Education Colleges to develop a
 Hub funded package of work to develop retrofit skills. This needs to be
 completed by the end of March 2024. Further details are provided under the
 Skills Bootcamp and Green Skills Update.
- Support has been provided to community groups to develop 4 feasibility study bids for submission to the NW Net Zero Hub Community Energy Fund scheme. Decisions are expected in March 2024.

Borderlands Energy Masterplan

3.5 CLEP has continued to support the Borderland Energy Programme Board with the meeting on 22 January focused on implementing the Energy Investment Strategy. There was an agreement that further work needed to be undertaken on this, prior to approval and launch.

Business Decarbonisation

Business Decarbonisation Strategy Group

3.6 The LEP Business Decarbonisation Strategy Group held its third meeting on 1 February to review progress towards the implementation of the 10 Point Action Plan (Annex B), alongside presentations from James Walker and Revolutionary Concepts, the latter of which was funded via CLEP's Innovating for Success programme.

Energy Intensive Industry Decarbonisation

3.7 A briefing session was held in December 2023, building on the October Workshop, in order to consider the upcoming round of the Industrial Energy Fund that DESNZ is about to open. In support of this a number of targeted sessions have been held with innovation technology providers in partnership with the Henry Royce Institute. These have included heat recovery and energy storage schemes.

Hydrogen Business Decarbonisation

- 3.8 The Final Investment Decision was approved by DESNZ to provide approval for the Barrow Green Hydrogen Project. CLEP has supported Carlton Power as a partner since the inception of the scheme. The project will deliver hydrogen to the adjacent Kimberly-Clark site by the end of 2025 and will have the potential to grow to supply other users. CLEP continues to engage with businesses in Cumbria, which have the potential to develop other green hydrogen schemes that could be funded through future DESNZ Hydrogen Allocation Rounds (HAR).
- 3.9 Cadent has commissioned Arup to produce a North West Hydrogen Vision that brings together all of the hydrogen initiatives in the region. CLEP has been asked to participate in an advisory board. The first meeting was held on 19 January

2024 and CLEP will ensure that Cumbria's initiatives are incorporated into the regional vision.

Carbon Capture

3.10 CLEP has continued its engagement with Spirit Energy on the Morecambe Bay Net Zero Carbon Storage initiative. Although, the project was not selected for the Government's "Track 2 Cluster Sequencing Process", progress is being made with the potential for a privately funded trial scheme to store CO2 emissions from Spirit's own gas terminal. A Memorandum of Understanding has also been signed with Peak District Cluster for Carbon Capture/Storage from cement manufacturing in that area to directly pipe to Morecambe Bay. This work is expected to accelerate through 2024.

Clean Energy Generation

Nuclear Road Map and Associated Consultation Documents.

- 3.11 DESNZ issued the Roadmap document and associated consultations for Siting Selection and Alternative Routes to Market on 11 January 2024. The roadmap sets out Government's intent to both the supply chain and potential investors.
- 3.12 It highlights the potential for the Moorside site for either Gigawatt or SMR facilities. Importantly, for Cumbria the Nuclear Decommissioning Authority (NDA) will produce and then regularly update a prospectus for each of their sites suitable for new nuclear development, including Moorside. This should help provide clarity on the way forward for Moorside and the interaction with the NDA Decommissioning and Waste Management mission. The Clean Energy Sector Panel reviewed the documents in detail and CLEP is preparing its response to the consultations.

Grid Connectivity

Electricity North West Limited

3.13 CLEP has worked with Electricity North West Limited to assess grid capacity and reliability and resilience.

Increasing Capacity

- The Cumbria ring project Phase 1 confirmed (ED2) £14m to re-conductor 145km of 132kV of overhead line to create over 230MW of new capacity across Cumbria for the uptake of low carbon technologies. Total programme value estimated £40m to 2033.
- Harker upgrade £40m upgrade to allow access to capacity created by National Grid upgrading at the Harker substation. Complete 2029.
- Motorway service areas £13m to expand capacity at Tebay and Southwaite.
- Windermere area reinforcement.
- Adaptive regulation use of "uncertainty mechanisms" to secure additional funding.
- Bespoke to West Coast of Cumbria uncertain costs associated with the potential for new nuclear generation in Cumbria

Reliability and Resilience

Numerous programmes to replace assets across Cumbria to improve reliability including:

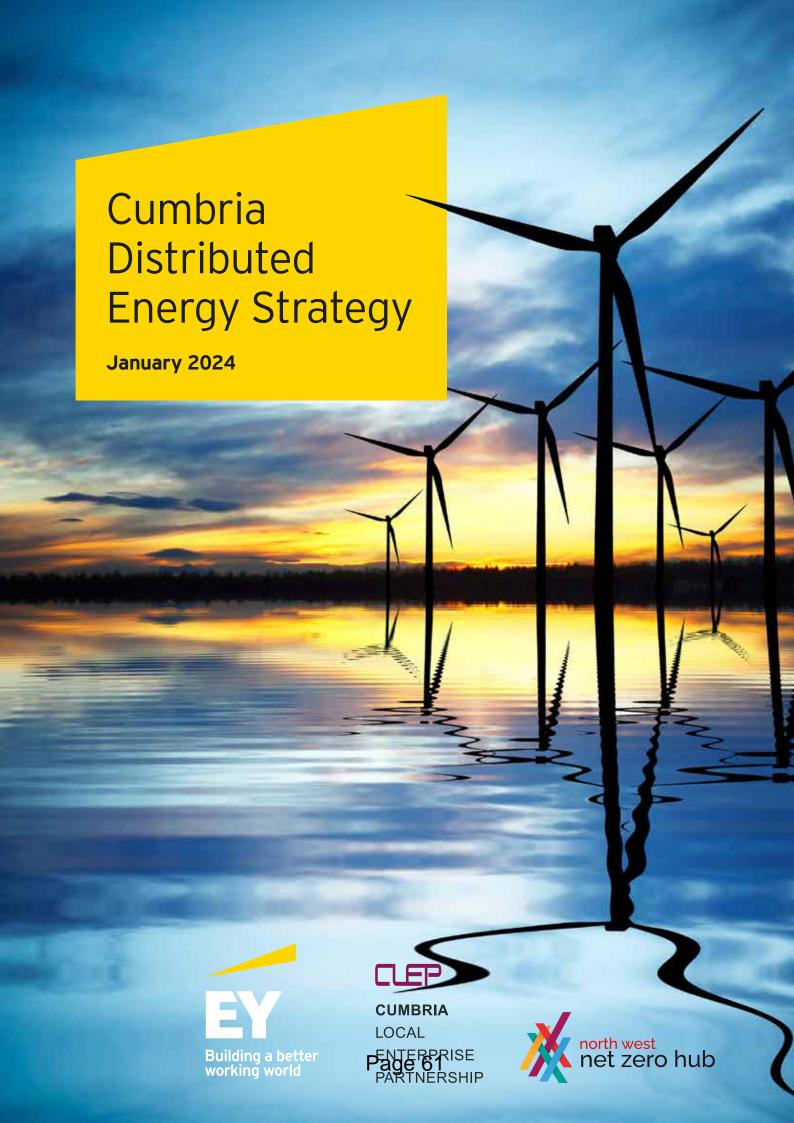
- Worst-served customers programme £20m to improve reliability for customers receiving poorest service.
- Storm resilience programme £35m submitted for additional funding to improve network resilience to storms including Alston and Coniston areas.
- Borrowdale transformers £9m programme to replace over 200 small rural substations.
- Undergrounding £5m to replace most visually intrusive overhead lines with underground cables.
- Investment in key substations e.g. £5m upgrade to Egremont.
- Tree cutting and maintenance.
- Adaptive regulation use of "reopeners" to secure additional funding Storm Arwen.
- 3.14 CLEP is also working with National Grid to understand its grid plans and this information is still awaited. Once this information is available CLEP will prepare a comprehensive report summarising Cumbria's total grid capacity.

4. PROJECT COLLETTE

- 4.1 The LEP Scrutiny Board specifically asked for an update on Project Collette, which is not a project that is directly led by the LEP. The update is therefore focused on CLEP's relationship with the project and our engagement to date.
- 4.2 The CLEP Team productively engage with any potential developers on projects, which could deliver economic benefit in Cumbria and as such have engaged with Ciara Shannon of the Green Investment Group over a number of years. This has been in relation to both Project Colette and its wider Green Investment Plan for Cumbria.
- 4.3 The development of offshore wind fits with CLEP's Clean Energy Strategy as well as potentially providing the opportunity to stimulate new supply chain opportunities.
- 4.4 CLEP's Head of Sectors has provided advice on taking forward the project, which is the approach taken with all such developments. This has focused on developing an outline feasibility study to cover:
 - Availability of seabed location from Crown Estates
 - Offshore wind project delivery capability
 - Infrastructure requirements for grid connection
 - Assessment of potential off-takers

- Finance model and role of community ownership for a £multi-billion development.
- 4.5 These issues will need to be addressed in order to progress the project. The CLEP team has offered advice and support as to potential sources of funding to fund such a feasibility study.
- 4.6 The LEP has no financial or contractual relationship with this development and our role has been to provide advice and support, in line with that provided to all project developers.





EY was appointed in August 2023 by the Cumbria Local Enterprise Partnership (CLEP), with funding from the North-West Net Zero Hub (NWNZH), to undertake a study on the potential of de-centralised energy systems across Cumbria, and the role they could play in accelerating the clean energy transition and driving sustainable, economic growth.

This study was commissioned by the LEP to build on the adopted Cumbria Clean Energy Strategy, published in July 2022, with the aim of expanding the strategy to consider the role of more decentralised renewable technologies.

This study addresses an action in the Cumbria Clean Energy Strategy to further explore wider renewables. Action plans are already in place for the large-scale renewables of offshore wind, nuclear, hydrogen and Carbon Capture, Utilisation and Storage (CCUS).

The purpose of the report is to facilitate discussion with key stakeholders, including local authorities, businesses, investors and other interested parties, with the aim of accelerating investment and delivery of these renewable technologies within Cumbria.

The requirements of the study were to explore onshore wind, tidal and wave, solar photovoltaics, geothermal, heat networks, hydropower and bioenergy, and to undertake the below research against each technology:

- 1. Establish the current status of the technology in the UK in terms of government policy and deployment to date. Identify areas of best practice.
- 2. Summarise current level of deployment in Cumbria (if any) and then estimate unconstrained renewable generation potential within Cumbria.
- 3. Identify relevant constraints on the technology (e.g., Planning, Grid, Public Acceptance) and potential actions to address.
- 4. Highlight at least 3 areas of strongest potential across the technologies and for each.
- 5. Identify sites owned by owned by public sector bodies, private companies, major landowners and national parks.
- 6. Recommend a development approach that could deliver a viable scheme.
- 7. Produce a strategic outline investment case for these sites.

During the course of the study, and during workshops to agree point 4 – the priority areas for further investigation, a scope change was agreed. This was due to initial technology screening demonstrating high potential across all of the identified range of clean energy generation types. Instead of just focusing on building out three technologies in detail, it was agreed to develop a high-level way forward across all technologies, with a more granular focus on the highest potential technologies, where the LEP could add the most value, notably bioenergy and hydropower. As these technologies are highly distributed, often under 1MW, and have a broad range of potential sites, it was agreed that scope items 5, 6 and 7, focused on specific sites and schemes, would instead focus on building out the overall potential for Cumbria and the criteria for success, wrapped up in an action plan – essentially making this study more strategic in nature. It was agreed this was the approach that would best fit the overall aim to stimulate development interest into clean energy generation across Cumbria, as well as the wider north-west region and the change was approved and actioned during contract governance in November.

The information is correct as at the time of research and it is not the responsibility of EY to keep the document updated. It should not be regarded as comprehensive nor sufficient for making decisions, nor should it be used in place of professional advice. EY accepts no responsibility for loss arising from any action taken or not taken by anyone using this publication.



Foreword

The energy transition and wider evolution to a greener economy presents significant growth opportunities for the UK. The emergence of more decentralised energy systems represents a significant prospect to also drive economic growth in local communities and more rural parts of the UK. Decentralised energy systems involve a locally focused approach, incentivising local participation and ownership over the energy production process, with smaller scale but more numerous generation sites. This leads to new local energy markets, which provide opportunities for local businesses, creating new jobs alongside developing localised supply chains. Decentralised generation schemes, especially schemes under 1MW, help to avoid the constraints on the grid currently delaying the UK's transition to a renewable powered national grid. Decentralised renewable energy is a great example of an opportunity for improving environmental and social outcomes and enabling more sustainable communities.

Executive summary

The UK transition to renewable energy is one of the most significant infrastructure transformations in recent history, representing a shift towards decentralised energy systems and enabling integration of renewable and low-carbon resources which are more sustainable and environmentally friendly. The transition is critical in achieving UK decarbonisation and a Net Zero 2050 goal, by reducing carbon emissions and building a more sustainable, prosperous, and cleaner economy. The transition will create billions of pounds in economic activity and will fundamentally change the structure of the energy and related sector, creating significant growth opportunities.

With its unique topography and natural resources, and with its existing reputation as an energy leader, Cumbria has an opportunity to position itself as a green energy pioneer, benefiting the economy, local communities, businesses, and the environment as a whole.

Accelerating the clean energy transition through decentralised renewable energy can have a significant positive economic impact on Cumbria, creating local, good quality, sustainable jobs for generations to come. By shifting towards renewable energy sources, clean energy jobs can be created, providing new opportunities for the workforce, supporting the development of local businesses, supply chains and creating entrepreneurial ventures. This will result in sustainable growth and more job prospects across many areas of the Cumbrian economy, as well as the wider North-West. The decrease in the use of fossil fuels could lead to a reduction in energy costs, strengthening the local economy, giving more purchasing power to households and local businesses and helping to reduce fuel poverty and the cost-of-living burden for thousands of families. Encouraging community involvement

in these projects will enhance awareness of the clean energy advantages, leading to increased local support creating a sense of ownership and responsibility in the energy infrastructure. By taking a proactive, forward-thinking approach to clean energy projects, Cumbria has an opportunity to position itself as a leader in its field, boosting employment, economy and prosperity for the entire region.

All renewable technologies play an important role in the decentralised energy model. Applying a decentralised would enable the market to leverage a combination of several renewable energy technologies leading to greater efficiency as well as an opportunity to harness the unique advantages of each technology, harmonising constraints across the technologies.

Cumbria's natural assets make the region an attractive area for a wide range of renewable generation technologies. Paired with its vibrant industrial and agricultural communities, Cumbria's national parks and wet climate, provide the greatest opportunity to maximise Cumbria's natural resources in their energy generation mix to scale operations in both bioenergy and hydropower in the area. As established technologies, both can be easily assessed for locational suitability and viability of deployment and applied flexibly to suit the deployment need whilst maintaining both a predictable output and cost. Distributed generation is naturally more resilient than centralised energy production, and using a range of different distributed renewable technology can further improve resilience and energy security.

In summary, Cumbria has an exciting opportunity to drive clean, economic growth through accelerated investment and deployment of decentralised renewable generation.

Page 64 Cumbria has made noticeable strides in the deployment of renewable energy solutions over the years. With its abundant natural resources, the region has already commenced on the journey to become a leading hub for clean energy in the UK. However, there is potential for further development and expansion of its existing renewable energy sources and an opportunity to explore new innovative and sustainable technologies. The UK government is supporting the growth of these energy technology fields through additional investment, with both 2022 and 2023 seeing investment into flagship renewable schemes, including Contracts for Difference, making renewable energy deployments in the UK increasingly attractive of investors and developers. There is significant potential in further utilising the natural resources Cumbria has to offer in a sustainable way. This is catalysed by the potential of emerging technology, combined with the funding and supplementary guidance provided within the UK Government's Net Zero Strategy. This leads to the conclusion that Cumbria could lead the way towards a cleaner and greener future for the UK through the deployment of a distributed renewable energy generation model.

Distributed renewable generation

This study focuses on the potential of distributed renewable generation technology applicable to Cumbria. A distributed renewable technology model refers to a way of generating electricity (or sometimes heat) by using multiple small-scale, locally sited renewable energy systems instead of a single large-scale centralised system. It is a decentralised approach that aims to meet the energy demand of local communities with renewable energy production near to the point of use. Renewable energy generation has been a significant element of the UK's energy mix for a number of years, however the intermittent and largely unpredictable nature of energy generated by sunlight and wind has limited the renewable share in the generation mix. Distributed renewable energy models enable regions to optimise the benefits of each technology whilst minimising the negative impacts, offering a more balanced approach to energy generation.

The UK's distributed model

The UK is increasingly turning towards distributed renewable energy models as a key solution to the challenge of reducing carbon emissions, enhancing energy security and combatting climate change. The distributed renewable energy model is gaining traction in the UK due to its potential to promote greater societal, economic, and environmental benefits. Decentralised generation is more resilient than centralised energy production, and using a range of different distributed renewable technologies can further improve resilience and energy security. Finally, a distributed model reduces strain, capacity and fault levels on the national grid, removing this as a key obstacle in accelerating deployment. The UK is rich in natural renewable energy resources and is well placed for renewable energy development.

Onshore Wind 247 installations accounting for

1.3% of UK energy generations by source

Solar PV

10,936 installations accounting for

0.8% of UK energy generations by source

Bioenergy

32 schemes accounting for

1.5% of UK energy generations by source

Hydro

62 schemes accounting for

1.4% of UK energy generations by so

UK Government Renewable Electricity by Local Authority (2014 - 2022) (National Statistics publication Energy Trends produced by the Department for Energy Security and Net Zero (DESNZ)).

Renewables generation capacity and actual electricity generation 2022

Source	Installed capacity MW end of 2022					Electricity generation in 2022 (GWh)				
	Cumbria	% of Cumbria's total renewable	UK	Cumbria's Share of UK's Total Capacity for Tech	% of UK total renewable capacity	Cumbria	% of Cumbria's total renewable	UK	Cumbria's Share of UK's Total Generation for Tech	% of UK total renewable generated
Onshore wind	214.2	28.90%	14,834.6	1.44%	27.73%	447.0	45.88%	35,237.4	1.27%	26.13%
Tidal and wave			22.4		0.04%			11.2		0.01%
Hydropower	7.2	0.97%	1,890.4	0.38%	3.53%	22.5	2.31%	5,640.2	0.40%	4.18%
Solar PV	120.6	16.27%	14,651.1	0.82%	27.38%	107.1	10.99%	13,282.9	0.81%	9.85%
Bioenergy	61.8	8.34%	5,344.6	1.16%	9.99%	397.6	40.81%	26,807.2	1.48%	19.88%
Total of the covered techs	403.8	54.49%	36,743.1	3.8%	68.67%	974.2	100.00%	80,978.9	3.96%	60.04%
Other tech total	337.2	45.50%	16759.8	2.01%	31.33%	0	0.00%	53,886.1		39.96%
Total of renewables	741.1	100.00%	53,502.9	5.81%	100.00%	974.2	100.00%	134,865	3.96%	100.00%

 * Bioenergy includes animal biomass, plant biomass and anaerobic digestion All data from Renewable_electricity_by_local_authority_2014_2022.xlsx (live.com)

Page

The Role of the UK Government Policy

Between 1990 and 2021, the UK cut greenhouse gas emissions by 48%; faster than any other G7 country and was the first country to sign legislation to reach Net Zero Greenhouse Gas emission by 2050 into UK law. In 2021 the UK Government published the Net Zero Strategy: Build Back Greener, a policy document setting out the Government's vision for a market-led, technologydriven transition to decarbonise the UK economy highlighting the important role that renewable technology will play in both powering Britain and advancing the UK's position in the renewable energy exports market. The UK Government's Net Zero Growth Plan – Powering Up Britain 2023 and the accompanying Powering Up Britain – Energy Security Plan 2023 both respond to the Skidmore review 2022 and set out the strategic growth plan for the UK energy transition and policy, providing funding measures to cement long term investment into new 'green' technologies that will pave the way in developing the vision set out in their Net Zero strategy. By way of addressing the highlighted funding challenges developers face with introducing new technologies to the UK market, the Green Finance Strategy was published in 2023. It identifies the area levers available to mobilise private investment to support the delivery of Net Zero through a series of dedicated roadmaps on the private sector investment required for Net Zero technologies which will continue to be published throughout 2024.

The Decentralised Energy Study

This report will build upon the Clean Energy Strategy completed in 2022 by Cumbria Local Enterprise Partnership providing insight into the remaining eight technologies that are considered within the region for the decentralised energy model: onshore wind, tidal and wave, solar photovoltaics, deep geothermal, 4th and 5th generation heat networks, hydropower and bioenergy. It will identify their current role in both the UK context and the Cumbria region, the opportunity that they bring in developing a more decentralised solution to renewable energy generation in the region and addresses some of the challenges that Cumbria will need to overcome in order to ensure the successful implementation and deployment of the technologies. The final section of the report will summarise the wider opportunity for deploying a decentralised energy model in Cumbria, highlight the challenges that the region will face in deployment and provides an action plan for both the Cumbria Local Enterprise Partnership and landowners to support implementation.

The decentralised technologies

This section of the report will review the eight technologies: onshore wind, tidal and wave, solar photovoltaics, deep geothermal, 4th and 5th generation heat networks, hydropower and bioenergy and the opportunities for each to play a role in the distributed renewable energy mix within Cumbria.

The contents of the next section will review each technology, covering:

- ➤ An overview of the technology: what it is, how it works and any other contextual information on how the technology could be used.
- The UK context: The role of the technology in the UK currently and plan for further deployment.
- ▶ The role in Cumbria: How the technology is currently deployed in Cumbria.
- ► The opportunity: The opportunity for the technology to be leveraged and deployed further within Cumbria.
- ► The challenges: The challenges that the region and developers would need to overcome to make deployment successful.
- A summary for businesses: To highlight our overall assessment of the technology.





UK context

As one of the cheapest forms of renewable power, onshore wind is more flexible and scalable than other renewable technologies. It has already seen substantial growth in the UK with its total wind capacity increasing by 72% from 8.6GW in 2014 to 14.8GW in 2022. In 2022, onshore wind contributed to 11% of the UK's electricity needs, generating a total of 35,237GWh. The UK is one of the windiest countries in Europe and has a large resource of wind at its disposal. The Climate Change Committee recommends that the UK should almost double its onshore wind capacity from 14.8GW to 29GW by the end of the decade. There are also opportunities for some onshore wind farms to be repowered, which involves existing windfarms having their existing turbines (partially or fully) replaced with more modern, powerful and efficient models. It is expected that more than 20GW of onshore wind farms in the UK will be repowered over the next 10 years. McKinsey & Company completed a report quantifying the benefits of Onshore Wind in the UK in 2019 which stated that Deploying 35GW of onshore wind by 2035 could reduce UK electricity costs by 7%, support 31,000 jobs, lift productivity throughout the UK and enable a £360m export industry.

In September 2023, in its fifth round of the Contracts for Difference (CfD) scheme, the UK supported 24 Onshore Wind Schemes which will add 1,481MW of capacity. In September 2023, the UK Government relaxed the planning permission process to allow locations suitable for new wind farms to be identified in a number of ways rather than only in the area's development plan and also updated the policies for replacing existing wind turbines to no longer be subject to the same planning requirements as new turbines, supporting the process of repowering. In addition, the UK Government amended the law to state that subject to size, some planning applications can now be approved by the Local Planning Authority as opposed to requiring a Development Consent Order (DCO) which requires authorisation from the UK Secretary of State. This could ease the process for permitting applications by smoothing the current bottle necks associated with DCOs.

Current role in Cumbria

Onshore wind has a significant role in Cumbria's distributed clean energy mix. The region houses many wind farms, which supply thousands of homes and businesses with renewable electricity. Wind power has been operational in Cumbria for over two decades, with several established wind farms across the region. These farms contribute significantly to the region's energy output.

Cumbria has 247 onshore wind sites around the county, generating 447GWh of clean energy, and as of 2022, Cumbria's onshore wind energy accounted for 1.3% of the renewable energy produced through onshore wind in the UK.

Baywind Energy Co-operative Ltd is the UK's first community-owned wind energy project formed in 1996 and to date has enabled 1,300 people to invest in two projects in Cumbria. In total, it has successfully raised £2 million through its share offers and has

made share interest payments to

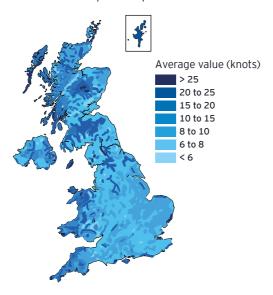
its 1,300 members, averaging 7%

gross per annum since it launched.



The opportunity for Cumbria

Mean UK wind speed map



The location and topography of Cumbria contribute to strong and consistent winds, making it an ideal location for onshore wind energy generation. Due to the prevailing wind direction, the wind resource in Cumbria is greatest on west facing upland sites and along the coast, see Mean UK Wind Speed Map. This generates two main opportunities for developing onshore wind in Cumbria: expansion in line with capacity predictions and repowering existing lines. Electricity North-West model in their Distribution Future Electricity Scenarios paper 2022 that by 2050, the installed capacity for generating wind through both onshore and offshore technologies in Cumbria will have risen to 623MW which suggests an increase of 15% on current capacity in the next 27 years. The low population density of Cumbria makes it ideal for the development of onshore wind farms as the disruption to residents is reduced which will increase the likeliness of community buy-in and engagement in the scheme.

RenewableUK analysis suggests that of 18 operational wind farms in England more than 20 years old, 9 of these are in Cumbria; these could be repowered. This process of 'repowering' requires planning permission but gives the opportunity for existing sites to undergo an upgrade and would enable increased generation of the existing electricity production.

Changes to the National Planning Policy Framework (NPPF) have been made so that onshore wind projects in England that are supported by local people will be approved more quickly. In Cumbria there is an ambition and appetite for community ownership of energy projects, enhancing the potential for onshore wind energy generation. The Developing Local Partnerships for Onshore Wind in England (DESNZ) report references that the BEIS Attitudes Tracker 2023 states that 79% of people support the use of onshore wind and that 43% would be happy for an onshore wind farm to be built in their local area, with 12% unhappy and 32% either unsure or neutral.

The potential challenges for Cumbria

The topography of Cumbria is characterised by hilly and mountainous terrain which can be a challenge for onshore wind generation. High altitudes in some areas cause concerns around the issue of 'ice throw' where ice builds up and is thrown from blades, and sufficiently quick wind speeds can result in the wind turbines wearing out at a faster rate, increasing maintenance costs. Additionally, in some of its rural areas, Cumbria has limited road access and connectivity is poor. This makes the construction and operation of onshore wind turbines difficult and costly due to the need to move heavy equipment and materials to the onshore wind farm sites. There are two national parks within

Cumbria: The Lake District in its entirety and a portion of the Yorkshire Dales as well as areas of National Landscape (previously Area of Outstanding Natural Beauty) providing a further challenge for obtaining planning permissions as well as moving materials during construction phases.

Another key challenge is the limited grid capacity of the electricity transmission network in Cumbria. This means that onshore wind generation infrastructure already present is limited by how much it can be expanded, and new projects may not be feasible or may experience a delay in connectivity to the grid. The UK National Grid does not currently have sufficient infrastructure and energy storage systems may be needed in areas extending beyond the current range of their infrastructure; therefore, significant investment would be required to allow for higher demand of this renewable energy in the county. This likely means that smaller onshore wind schemes, typically with an installed capacity of less than 1MW should be prioritised for deployment, as they avoid much of the grid constraint issues.

Permissibility for repowering existing sites presents a challenge to deliver the necessary upgrades to the wind turbines, particularly within the national parks and National Landscape areas (previously Areas of Outstanding Natural Beauty) where conservation efforts now provide restrictions and renewable projects will only be accepted where 'the objectives of designation of the area will not be compromised by the development, and any significant adverse effects on the qualities for which the area has been designated are clearly outweighed by the environmental, social and economic benefits' (North Pennines AONB management plan 2019-2024). Some small-scale projects are able to obtain planning permission more easily, however the planning permissions required for onshore wind deviates across the local authorities.

In summary

The use of wind as a source of renewable energy in Cumbria is set to increase by 15% of its current installed capacity by 2050. The headroom of the Harker substation in north Cumbria will be increased in 2026 with a further 5 sites in Cumbria being reinforced increasing capacity in Cumbria by 246.7MW by 2028. Developers have an opportunity to be part of this growth plan for generating onshore wind in Cumbria. By way of both addressing public acceptance concerns whilst also managing capacity limitations, smaller, community focused schemes, under 1MW of installed capacity offer a route forward and can be progressed now, with larger schemes needing to correlate with improvement works on the grid.



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idal and wave

Tidal and wave - Technology overview

Tidal and wave power are types of renewable energy that are generated from the ocean's movements.

Tidal power is derived from the rise and fall of ocean tides, which create a force known as tidal energy. This energy can be captured and used to generate electricity, using turbines that are submerged underwater. The turbines use the motion of the tide to turn generators, which convert this energy into electrical power. Tidal energy is a sustainable and renewable energy source, but it is location-specific, requiring areas with large tidal ranges to generate significant amounts of electricity. There are three different means of producing tidal energy: tidal streams, tidal barrages, and tidal lagoons. Tidal streams are fast flowing bodies of water created by tides and turbines are used to generate energy from these. Tidal barrages use a large dam often constructed across tidal rivers, bays, and estuaries. Turbines inside the barrage are able to harness the power of the water flow. Energy generation from tidal lagoons is similar to that of a barrage however they can be constructed across the natural coastline. Tide energy is highly predictable and often complementary to other forms of renewables like wind and solar.

Wave power, on the other hand, uses the motion of ocean waves to generate electricity. Wave energy is captured using a device that is typically located on the surface of the ocean, which converts the wave energy into electrical energy. Wave energy is a renewable source of energy that is predictable, making it a reliable energy source. Like tidal energy, wave power has some location restrictions, as it requires areas with consistent and strong wave patterns. Facilities that generate tidal power have a much longer lifespan comparative to other renewable technologies at 75-100 years.

Due to the challenging conditions the technology must sustain, it is currently one of the most expensive renewable technologies.

The UK context

The UK features the second-strongest tides in the world after Canada. Even though generation is low compared to other technologies, the UK is a leader in tidal and wave deployment and is the third top tidal producing country after South Korea and France.

Tidal and wave power are constant and predictable, making it a more reliable source of power for the UK National Grid. It can provide electricity when sources such as wind power are unavailable, therefore bridging the gap in supply and allowing the UK to operate entirely on renewables. According to UK Government's Department for Energy Security and Net Zero (DESNZ) report (Wave and tidal energy: part of the UK's energy mix) tidal energy has the potential to bring an additional 30-50GW of energy to the UK.

Despite the fact the report states that tidal and wave power have the potential to deliver 20% of the UK's electricity needs, generation from tidal and wave energy only made up 0.004% of the 2022 total. As at the end of 2022, there are 19 tidal and wave energy installations in the UK creating only 22.4MW of capacity, with further schemes currently in various stages of planning, most of them being under 100MW in expected capacity. The UK Government-backed UK Marine Energy Council published a paper in 2020 titled Technological Innovations and Climate Change: Tidal Power in which experts predicted a £25bn export market by 2050 worldwide, and 26,600 marine energy jobs by 2040. In September 2023, in its fifth round of the Contracts for Difference (CfD) scheme, the UK supported 11 tidal energy projects with a record capacity of over 53MW with developments expected to come online from 2027 onwards.

Current role in Cumbria

The country's strongest tides are generated in the Bristol Channel, and along the coast of North Wales and Northwest England - the latter being where Cumbria is situated. The geographic location of Cumbria means it has significant tidal energy potential due to its proximity to the Irish Sea and the strong tidal flows associated with it. Despite the promising conditions and the huge potential for the industry in West Cumbria, there are currently no tidal and wave schemes in operation nor under active consideration.

The opportunity for Cumbria

The potential for tidal and wave energy in Cumbria has not yet been exploited and there are currently no implemented projects in Cumbria, despite being sighted as having one of the UK's strongest tides. There is ongoing development work in the region to explore this area in further detail (see case studies). If multiple tidal and wave projects were deployed in Cumbria, the region could generate a significant portion of its electricity demand from these sources. Tidal and wave energy offer significant advantages over other sources of renewables such as solar, wind, and bioenergy, by providing a reliable and predictable source of energy. Although there are challenges to address with the deployment of such projects, if well managed, they could undoubtedly bring significant benefits to the region. Whilst currently in its infancy in the UK, there are already a number of technologies on the market paving the way for new, innovative developments to be established by motivated start-ups. Mocean Energy have developed a compact wave energy converter called the Blue Horizon, which aims to generate up to 50KW of clean energy from offshore wave power. The system is embedded with an energy storage system that produces consistent and reliable power delivery, helping create a highly flexible and stable wave power energy network.

AWS Ocean Energy, another wave energy start-up, has developed a technology that uses the motion of the waves to drive a pump and pressurises water through a turbine, generating electricity. Implementing tidal wave technology could further boost the economy of coastline towns and attract tourists with a study looking at the Severn estuary in Wales estimating that a large tidal barrage in that location could attract around 200,000 visitors per year. The development in new technology demonstrates that the industry is growing at pace which will likely bring down costs in the future.

The Wyre Tidal Gateway, located in Lancashire, is a tidal hydro energy plant with an installed capacity of 160MWH, providing power to 80,000 homes in the area from a relatively small estuary. In addition to this, several potential developments in tidal energy along the west coast of England demonstrate the further potential that tidal and wave projects could bring to Cumbria.

The potential challenges for Cumbria While tidal and wave energy present a promising opportunity for renewable energy generation in Cumbria, several challenges exist with harnessing these technologies. Some of the challenges include high upfront costs, with a Levelised Cost of Electricity (LCoE) of £0.25/kWh due to the complexity of the technology to design and manufacture materials that can withstand some of the harshest natural conditions, which is twice as expensive as other expensive technologies such as Bioenergy. Despite its long coastline, not all coastal areas in Cumbria are guaranteed to be suitable for tidal and wave systems. Some areas may have high seabed erosion rates and strong currents, which can make the installation and operations of these systems challenging. Balancing the identification of a suitable site where the environmental conditions, the technical parameters and the physical conditions align with the regulatory environment is challenging and requires significant assessment. These factors make tidal and wave projects riskier and more costly for investors, highlighting the need for carefully targeted policies and incentives to boost their viability. However, with continued innovation and reduced costs, tidal and wave energy present Cumbria with a significant opportunity to create sustainable energy, support economic growth and job creation, and reduce carbon emissions. Addressing the challenges through regulatory and environmental innovation and greater understanding, can unlock the full potential of the marine energy resources abundant in the region. In summary With experts predicting that tidal and wave technologies will be capable of producing 20% of the UK's electricity needs, but only representing 0.004% of the current generation, there is a huge opportunity for growth in this area. Cumbria sees some of the UK's strongest tides placing it in prime position to be a leading county in tidal and wave capacity. Traditionally tidal and wave projects have been highly costly, reducing their appeal. However, the current drive for startups bringing new innovative technologies to the market could be the key to unlocking this technology in Cumbria along with the opportunities it will bring for local economic growth. 15 Cumbria Distributed Energy Strategy

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Solar Photovoltaics (PV) - Technology overview

Solar photovoltaics is a technology that converts sunlight directly into electricity through use of solar panels. The process involves photovoltaic cells absorbing the energy from sunlight, creating a flow of electrons that produce electric current.

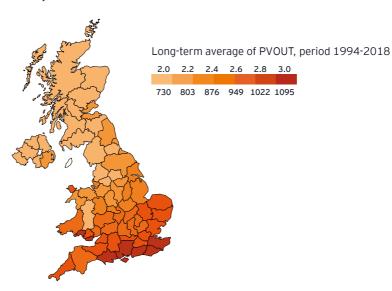
Photovoltaic cells are usually made from silicon which are connected together to form a solar panel. When sunlight hits the solar panel, it dislodges electrons within the semiconductor material, which causes a flow of electric current. The electricity produced can be used on site or fed back into the grid. Contrary to popular belief, this process continues to happen on overcast days, albeit at a lesser degree. Panels operate on three scales: rooftop domestic, rooftop commercial/industrial, and large-scale ground-mounted/standalone Solar PV. All solar panels are "inverter based", leading to low fault levels compared to synchronous generation, making them easier to connect to the grid.

Rooftop panels tend to be for self-supply of electricity "behind the meter", with surplus electricity generated either being stored in a battery for later use or sold back to the electricity grid. These panels usually have a capacity of a few kW.

In contrast, solar farms largely generate electricity to feed into the domestic grid, but electricity can also be stored in batteries if available. Due to their size and scale, they have a larger capacity than rooftop panels, usually between 2MW and 20MW, however it is not uncommon to see installations over 50MW. For every 1MW of solar capacity, approximately 5 acres of land is needed, and every 5 MW installed will power approximately 1,500 homes for a year. A small/community solar farm is categorised as under 5MW, and farms over 50MW are considered large "Nationally Significant Infrastructure Projects" (NSIPs). For this report, a small solar farm will be up to 10MW.

Both groups have a lifespan of approximately 25 years.

A map of the Photovoltaic Power Potential in the UK



Solar photovoltaic systems have the advantage of producing clean energy from a renewable source. Solar panels can be installed on rooftops or open spaces, "making them ideal for both residential and commercial applications. The long lifespan and low maintenance balance of Solar PV provides both a practical and with an LCOE of $\pounds 0.04$ kWh, they provide a cost-effective solution. As of the end of 2022, there was 14.7GW of solar capacity in the UK across 1,249,511 installations. This accounts for 4.2% of total electricity generation in the UK in 2022

The UK Government intends to achieve a fivefold increase in solar energy by 2035 to a capacity of 70GW. This will be targeted through the Energy Security Strategy which aims to "ramp up" the deployment of both rooftop and ground-mounted systems. In 2018, the Feed in Tariff (FIT) scheme closed, and was replaced by the Smart Export Guarantee, paying for the power that small-scale solar generators export to the grid. The UK Government Energy Security Strategy is backed by a number of funding opportunities generating significant interest to invest in further research, development in and deployment of this technology. In September 2023, in its fifth round of the Contracts for Difference (CfD) scheme, the UK supported 56 new schemes, adding 1,928 MW of installed capacity by 2028. Electricity North-West predict in their Distribution Future Electricity Scenarios paper, published in 2022, that by 2050, the installed capacity for generating electricity through Solar PV in Cumbria will have risen to 324 MW which suggests an increase of 169% on current capacity.

As a result of government policy and widespread adoption, Solar generation has high economic viability, recovering initial investment cost well within its expected useful life and low complexity of installation resulting in a large supplier base for installation.

Current role in Cumbria

By the end of 2022, Cumbria's installed PV capacity was 121MW, and its electricity generation was 107GWh, both contributing 0.8% to the UK's total solar capacity and generation. There were 120 Solar PV farms in Cumbria as of the end of 2022, with capacities ranging from 0.5MW to 19MW, with a median capacity of 8MW. 'Aspatria' is Cumbria's largest solar farm in the North-West of the county with an operating capacity of 19MW over 87 acres.

The opportunity for Cumbria

While Cumbria is known for its rainy and cloudy weather, it still has considerable potential for Solar PV installations, both in terms of its land area and energy productivity.

According to data from the UK government, the average amount of solar irradiation in Cumbria is roughly comparable to other areas in the UK, generating upwards of 800 to 1200 kWh per metre squared annually. With innovative solar panel technology continually improving, Solar PV installations in Cumbria could generate clean and renewable energy at scalable levels.

Although Cumbria's weather patterns present some challenges, development in solar technology such as high efficiency, and lower light PV modules requiring less solar irradiation, means that improvements are possible to leap ahead. Policies that support research, development and investments will contribute to the potential of solar power in Cumbria's energy transition.

There are two main opportunities for Solar PV in Cumbria: Rooftop Solar and Solar Farms (Ground mounted solar).

One of the most significant advantages of rooftop Solar PV is its ability to reduce electricity costs for consumers and limited additional infrastructure requirements. A standard domestic solar panel installation has the potential to lower a household's electricity bill by up to £400 per year, making it a cost-effective way to generate electricity. In addition, Microgeneration Certification Scheme (MCS) accredited solar enables customers to sell surplus electricity back to the grid, contributing to their overall return on investment.

Solar farms offer an opportunity to benefit from dual-purpose land, which can accommodate sheep grazing or agrovoltaics crops to be grown under panels, offering a flexible and reversible solution, even for Cumbria's hilly terrain.

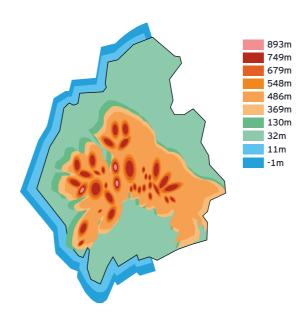
Solar farms also have a short payback period with the typical estimate for a solar farm's payback period ranging from 7 to 10 years. The long-term benefits of investing in solar energy, such as reducing carbon emissions and supporting sustainability goals, alongside the flexibility it brings to land-use and opportunities to expand local economies, make implementing Solar PV installations in Cumbria highly economically attractive and viable.

There are a number of considerations for identifying the most appropriate sites for Solar PV in Cumbria:

1. Cumbria's geography and natural significance

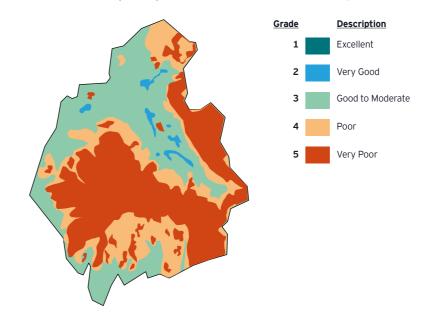
▶ Physical criteria for an appropriate site are a site that is flat (<5°), south facing, and unshaded. Most of Cumbria is rural and mountainous (with the Lake District and Pennines being expansive and prominent features) ruling out these locations on this basis, notwithstanding considerations of these sites being under degrees of protection. Based on these criteria, the areas that would be the most appropriate are along the west coast with the lowest elevation. In this instance, it is probable that available and appropriate land would be smaller due to proximity to large towns and cities, rresulting in the installation of small solar farms with a capacity of up to 10MW (<50 acres) at more frequent intervals.

A map of the topography in Cumbria



▶ Land classification also affects the potential for solar farm installation in Cumbria. Land in the UK is graded by the Agricultural Land Classification (ACL) scheme as Grades 1 - 5, where grade 1 is most fertile. Most solar farms in the UK are situated on land that is designated as 3b (good to moderate). Grade 1, 2, and 3a land is designated as "best and most versatile land"; it is permitted but not advised to develop farms on this land for food security reasons, and developments may not be granted planning permission. The map below displays Grade 3 land in green; as such, approximately 40-50% of Cumbria's land falls in this classification but considering elevation too (overlaying map above), this again constricts development to the west coast of Cumbria.

The North West Region Agricultural Land Classification Map



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- 2. Brownfield sites are ultimately the preferred location for solar farm development as they do not affect crop production, nor further visually impact the environment, and it is likely that planning permission will be more readily provided. Cumbria has multiple sites available that would be suitable for small solar farms. As a representative example, Cumberland has 21.5 acres of brownfield land at the site of a former factory, which could house a 4.3MW capacity solar farm.
- 3. Other general considerations are also significant for Cumbria such as impact on forest environments and general landscape impacts which may limit the size of feasible solar farm installations. These factors are important for all solar farm sizes, and planning permission for solar farms in Cumbria has been declined on these grounds; in 2015, planning permission for a 35 acre (~7MW) site in Workington on the west coast was rejected due to concerns over the impact on wildlife, noise, and the factors mentioned previously. This does not negate the assertion that smaller solar farms are more suitable for expansion in Cumbria as the median solar farm capacity is 8MW, and environmental impacts are likely to be greater with larger solar farms.

Rooftop solar has the advantage of generally not being affected by the factors described above, inherently making it a good choice for a county like Cumbria with a lot of environmental significance. In support of this is the Cumbria Rooftop PV Viability Map, developed by the Cumbria Action for Sustainability group, supporting residences in 11 communities to assess roof suitability for solar panel installation. A particular opportunity lies in rooftop solar on larger roofs, such as non-domestic or commercial buildings, for a few reasons:

- Solar panels on non-domestic or commercial buildings could contribute over 50% of solar capacity to the UK Government's goal of increasing the installed capacity for Solar PV to 70GW of by 2035 to the DESNZ report ('Untapped potential' of commercial buildings could revolutionise UK solar power) due to the acres of space that could be leveraged for multipurpose use.
- A 2021 Cumbria Action for Sustainability (CAfS) study mapping potential roof spaces suitable for solar power generation in Alston Moor (Westmorland and Furness) found that the largest 25% of roof spaces could be responsible for generating 57% of the solar power for the area.
- 3. There are fewer installers for small rooftop projects making commercial installations more attractive.

The potential challenges for Cumbria

A major challenge for expanding solar energy in Cumbria is its dependence on the development of Solar PV technology, which relies heavily on consistent direct sunlight to generate energy efficiently. Current Solar PV installations often provide an intermittent energy source, supplying little to no electricity at night-time. This makes it unpredictable and unreliable as a sole energy source. Cumbria's reputation as one of the wettest counties in the UK means that overcast and cloudy weather make it difficult for Solar PV panels to reach their potential energy output particularly during periods of low light over winter months.

Rooftop solar has high upfront cost of installation, which can be prohibitive for many homeowners. While there are grants available for eligible households in Cumbria to help cover costs, additional planning permission requirements in specific areas further complicate the process. Living in a listed building, a conservation area, or within the Article 4 area of Keswick means that planning permission is mandatory. This can result in discouraging some residents from installing rooftop solar panels.

Solar farms require additional infrastructure, presenting their own challenges, including finding large swathes of land to accommodate installations and capacity to connect to the grid. Cumbria's unique geography, public footpaths, common land, and areas of scientific interest often limit suitable land for solar farms, particularly in very rural communities. Environmental considerations surrounding wildlife habitats, biodiversity and carbon emissions also need to be considered by developers.

Despite these challenges, solar power continues to be an important source of sustainable energy, and with technological advancements and appropriate policies, it has the potential to make a significant contribution to Cumbria's distributed energy mix for the future. In early 2024, Cumbria Local Enterprise Partnership will launch a Base Camp North solar demonstrator scheme that will provide further information to the public and to local businesses regarding the role that solar can play in rural Cumbria.

In summary

The landscape in Cumbria contains many areas that are suitable for Solar PV installations, including farmland, industrial fields, and the rooftops of non-domestic buildings such as commercial, schools, warehouses and car parks, making it possible to diversify the energy mix in the county. Despite the challenges, the rapid development of solar technology means innovations are being made to address the current limitations. Advancements in solar technology are continually making systems more effective at generating electricity, increasing reliability, and offering cost-effective solutions even in low-light environments. Electricity North-West predict an increase of 169% on current installed capacity for Solar PV in Cumbria by 2050 providing a huge opportunity for new investment in this technology. The underlying economic and commercial case for solar is already strong, and there is a significant pipeline of projects in planning and delivery. As such, limited additional activity is required to accelerate deployment of solar across Cumbria.



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Cumbria Distributed Energy Strategy



UK National context

Despite the vast potential for geothermal energy to be produced in the UK, only 0.3% of the country's annual heat demand is met by this resource. Low adoption has been due to the high upfront costs (over 75% of which from exploration and drilling), and due to the challenging task of finding or creating permeability

Geothermal energy is not recognised as a natural resource under UK law, it is not part of the UK Government's 10-point plan for a Green Industrial Revolution (2020), and there are no clear rules for plant ownership, management, and regulation. The high capital expenditure related to equipment, exploration, and drilling is not currently supported by the government at a scale and consistency near the necessary level required to increase investors' confidence to fund deep geothermal projects.

Despite this, in 2021, in association with the industry body for Renewable Energy and Clean Technologies (REA), the UK Government commissioned a new industry report on the economic and environmental importance of UK deep geothermal resource by ARUP Group. The report found that if the UK were to undertake the development of 12 deep geothermal projects by 2025, they could generate heating for 50,000 homes, create 1,300 jobs and generate more than £100 million of EVA for local communities mainly in the North of England, Midlands and South-West.

By 2050, enabled by deep technical expertise transferred from the UK's oil and gas industry, it is estimated that 360 sites could be operational, generating £1.5 billion of investments, 35,000 jobs, 15,000 GWh for over 2 million homes and annual carbon savings of 3 million tons, presenting an exciting opportunity for new market development. In September 2023, in its fifth round of the Contracts for Difference (CfD) scheme, the UK supported 3 new geothermal schemes which will add 12MW of installed capacity to the UK grid by 2028.

Current role in Cumbria

There are currently no deep geothermal power plants in Cumbria, either operational or in progress.

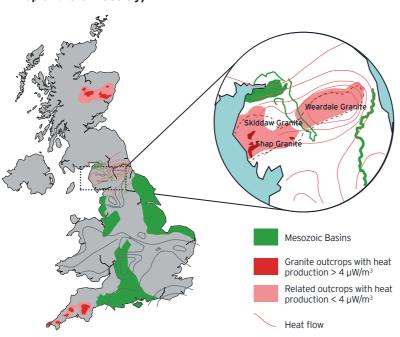
The opportunity for Cumbria

Cumbria is host to lithology such as the carboniferous sandstone in Carlisle and the Granite Batholith in the Lake District, which indicates potential sites for deep geothermal. Carlisle has an average geothermal gradient of 25 degree Celsius/ Km (national average is 28C/Km), and the confidence level of this estimate is ranked in the top 4 out of 10 (according to 'Geothermal Energy Opportunities of the UK'), suggesting that in order to reach an appropriate temperature for utilising geothermal technology, developers would need to drill to larger depths compared to other areas of the country. Despite this, carboniferous sandstone has a softer geological makeup and is comparatively easier to drill. An alternative location for geothermal sites could be within the Lake District which is host to granitic batholiths (according to a sensitivity analysis for deep geothermal in the UK published in Geological Society Publications). Sinclair Knight Merz (SKM) estimates that 2.3GWh of electricity, and 8GWh of heat energy annually, could be generated from the Lake District's granite. In contrast to the carboniferous sandstone, granite's composition presents a larger challenge for drilling, due to its tough lithology.

The technology presents several additional benefits such as stable cost basis since it is not exposed to input cost volatility like other technologies, it is highly accepted across the community as a favourable heat source, there is also an opportunity to leverage the existing skill set in the oil and gas industry which would all contribute towards a low carbon, productive, and highly reliable energy sector.

The United Downs Deep Geothermal Power Project, located in Redruth, Cornwall is the UK's first geothermal power plant which will become operational in 2024 and is set to deliver around 3Mwe of renewable electricity for a large housing development site. This project consisted of drilling two deep, directional wells; the production well to a depth of 5275m and the injection well to a depth of 2393m into the area's natural Cornubian granite batholith. Granite is not naturally permeable and thus locating faults and fracture zones that may display enhanced permeability at depth was also required. The site was selected in 2010 partially for its geology, strongly faulted, radiogenic granite. This is the deepest hole ever drilled in the UK.

A Map of the UK Geology



The potential challenges for Cumbria

Deploying deep geothermal energy in Cumbria presents several challenges, notably in geology, cost, environment, infrastructure and regulation. The technology presents the highest capex, is amongst the lowest long-term labour creation prospects, and has the greatest uncertainty with regards to economic viability. Unless geothermal features are visible, it is exceedingly challenging to determine whether a site is viable for energy extraction without incurring significant exploration expenditure. In order to establish the viability of deep geothermal in each area, feasibility assessments would need to be completed which would require drilling at each site. This would be particularly challenging to conduct within the national parks and the National Landscape areas (previously AONB) due to the permissions required and within Carlisle, the area with greatest heat demand, due to the population density of Carlisle.

The unique geology of the Lake District makes it challenging to identify areas suitable for geothermal energy development. Moreover, due to the high upfront cost of deep drilling, financing may be a challenge for smaller projects, alongside potential environmental risks and regulatory compliance and obtaining buy-in from local communities and the Lake District National Park.

Infrastructure development could also prove difficult, with areas of geological potential possibly conflicting with high-value scenic or cultural landscape designations or sensitive historical sites.

In comparison to other technologies, long-term employment generation will be lower due to the labor-light underlying process by which geothermal energy is converted into heat and electricity. Additionally, currently only 1% of Cumbria's households are connected to heat networks, this compares with the national average of 2%. This suggests that geothermal heat would need to also consider large connectivity schemes to be able to supply heat at scale in the area and as such has significant dependencies with the development of 4th and 5th generation heat networks.

In summary

Although challenging, the difficulties associated with geothermal technologies do not make deployment impossible. Geothermal promoters and policy makers are increasingly aware and addressing these concerns, evaluating environmental considerations and the practicality and cost-efficiency of drilling. Deep geothermal energy has the potential to revolutionise regional energy systems by generating renewable and reliable power with a reduced carbon footprint.

Despite the relative immaturity and lack of operational geothermal plants across Cumbria, it's likely to play an increasingly prominent role in generation, due to its reliability and predictability when compared with other more volatile renewable technologies.

Thus, with technological advancements and appropriate policies, the barriers to deploying deep geothermal energy could be alleviated. Planning well-balanced projects, with effective viability analysis and close collaboration with all stakeholders, could pave the way for successful deployment of deep geothermal technology in Cumbria.

This technology should be considered as part of the medium to long term mix in Cumbria, with a short-term objective of securing a pilot project to test viability.



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Heat networks

Fourth-generation heat networks - Technology overview

A heat network, also called a district heating network, is a system for delivering heat from a central source to a group of buildings or properties.

Heat networks eliminate the need for each building to generate heat individually, reducing energy consumption, and promoting renewable energy sources. Fifth generation networks introduced shared "chill" and are known as heating and cooling networks.

There are five generations of district heating networks:

- 1st and 2nd generation: This network primarily uses heat only or combined heat and power (CHP) plants to generate heat and electricity and transmit heat through pipes to nearby buildings. They run at high temperature, leading to thermal losses through distribution.
- 2. 3rd generation: This network introduces renewable energy sources like geothermal, biomass, and solar thermal energy to produce heat for buildings. They run at high temperature, leading to thermal losses through distribution.
- 3. 4th generation: Fourth-generation heat networks are an innovative approach to district heating systems that are characterised by their ability to integrate multiple sources of low-carbon heat, including waste heat from industry, geothermal heat, solar thermal energy, and heat pumps. Unlike traditional heat networks, which rely on centralised fossil fuel-powered combined heat and power (CHP) plants, fourth-generation heat networks use a variety of renewable and waste heat sources, which are of varying temperature and quality. The flexibility provided by this design enables fourth-generation heat networks to deliver heat from each energy centre at different temperature

levels to meet the specific requirements of each connected building.

- 4. 5th generation: Fifth-generation heat networks are significantly different to fourth generation and have two major advantages that typically mean they are better for the environment, residents and are more economically viable than their predecessors:
 - 1. The technology provides both heating and cooling through the use of hot and cold pipes, meaning excess heat can be extracted from e.g., a data centre and transferred into a home and the excess chill extracted from a home back into the data centre creating an efficient loop of heating and cooling demand, often utilising waste heat e.g., from air conditioning units. They run at much lower temperatures and are typically "topped up" by a water source heat-pump in the building, reducing thermal losses and increasing resilience.
 - 2. The technology is more distributed and decentralised in nature, hosting many smaller heating and cooling sources, rather than a single major energy centre. This results in reduced investment cost, higher efficiency due to reduced heat loss, and needing less infrastructure and space to deploy, providing a more modular solution to district heating.

Heat networks have the potential to reduce carbon emissions, increase energy efficiency, and provide more affordable and sustainable heating and cooling solutions. By using a central heating source, heat networks can serve multiple buildings at once, which makes them a reliable and efficient option for energy consumption reduction and promoting the adoption of renewable energy sources.

UK National context

In March 2018, there were 13,995 heat networks in the UK, supplying heating to 476,951 customers with 3000 operators mainly in London and other large cities. Relative to the existing size of the heat market, 2% of heat in the UK is generated by heat networks. To reach net zero by 2050, the Climate Change Committee has modelled that 18% of the UK's heat supply will need to come from heat networks.

To facilitate the ease of this nine-fold growth, the UK government is allocating circa £660m in various funding opportunities – heat networks are a key priority for the UK government in the drive to decarbonise heat. There is a 2014 Heat Network (Metering and Billing) Regulation (HNR), and in 2022 the Energy Security Bill was passed, requiring OFGEM to regulate the suppliers of heat networks and the potential for a price cap to be implemented.

Heat zoning regulations will come into force by 2024/2025, whereby if an area sits within one of the identified zones, public sector buildings or new developments will be mandated to connect to a heat network. The scope for growth is huge, with around £80 billion of both private and public investment expected and around 5 million homes to be connected over the coming years.

By 2025 it is expected that 25% of the heat and power used in London will be generated by localised decentralised energy systems and district heat networks connecting to zero carbon and waste energy sources.

Current role in Cumbria

Due to the overall low population density in Cumbria, heat networks have not been employed as much as other areas in the UK. Based on 2021 ONS Census data, population densities range from 26 persons/km² in Eden to 865 persons/km² in Barrow-in Furness with an average of 73 persons/km².

As of 2023, the only planning permission to build an electric heat pump powered heat network has been granted to the University of Cumbria's Carlisle Citadel Campus.

However, the Department for Energy Security and Net Zero (DESNZ) has facilitated a heat network zoning pilot in Carlisle, alongside 27 other English local authority partners, with results due shortly. This pilot aims to develop heat networks in zones where they provide the lowest cost, low-carbon heat to the end consumer through regulation, mandating powers, and market support.

The opportunity for Cumbria

The opportunity for Cumbria is centred around the technology's potential to create local employment. Job creation is likely to be high value adding and long term as it would require specialised skills such as project planning, design engineering, system controlling and maintenance.

Additionally, heat networks will generate heat at low costs, improving living standards in Cumbria. Customers will pay a median annual cost of £300 less a year than gas customers. This would be significant for Cumbria as in 2018, prior to the cost-of-living crisis, Cumbria had a 13% rate of fuel poverty, compared to a North-West average of 12.3% and an England average of 10.2%. However, due to heat networks' supply being commercial as opposed to domestic, operators are not protected by the price cap compared to gas. Through the Energy Security Bill, the price cap is proposed to be extended to heat networks.

There is currently limited scalability due to the majority of households being situated in rural areas, however, it has large potential in more population and heat-demand dense areas. Areas with a large number of new-build flats also pose an opportunity to install heat networks.

The potential challenges for Cumbria As mentioned, heat networks are best suited to higher-density areas, ensuring that high capital costs can be recouped, and less heat is lost in pipes enroute to buildings. They can play a significant role in towns and cities, new build projects e.g., business parks, and areas close to sources of waste heat. Cumbria has a lower percentage of dwellings that are flats/maisonettes (11%) compared to the rest of the North-West (17%) so if heat networks were implemented, it may be localised to areas of high population density e.g., parts of Carlisle and Barrowin-Furness. Additionally, as of March 2020, 60% of wards were classified as rural and over half of the population live in rural communities. Trench excavations for piping may entail having to cross physical barriers such as railways, major highways, and waterways. This is likely to cause disruption to locals and may impact tourism. It also involves applying for planning permission, alongside other permissions, which may extend the project duration and incur greater costs. In summary The Climate Change Committee predict that by 2050, 18% of total domestic building stock will be assigned to a heat network. By 2035, 50 TWh of heat will be generated through low carbon heat networks. 4th generation heat networks as stand-alone technologies are currently cost prohibitive outside of densely populated areas with large sites that can be used as a centralised energy source. The opportunity for 4th generation heat pumps is dependent on the success of the heat zoning pilot that DESNZ is hosting in Carlisle. Page 76 Cumbria Distributed Energy Strategy

Heat Networks (5G) – Technology overview Fifth Generation (5G) heat networks are radically different from 4G heat networks. Heat production is decentralised, using heat pumps in each house or building. They operate at low temperatures and generally require supplementary immersion heating for hot water. Cooling is integrated via a 2-pipe interchangeable system of heating and cooling between buildings. A typical system may operate with flow temperature of 20-30 degrees Celsius and a return of around 10 degrees Celsius. The heat supply integrates waste heat and renewable energies at low temperatures. Traditional heat networks are subject to significant heat losses as the heat transfer fluid within the network is often at much higher temperatures than its surroundings, which is a large source of inefficiency.

UK National context

There has been an increasing shift to the latest heat network technology and fifth-generation heat networks now have the potential to improve the thermal efficiency of the heating system while reducing energy costs and carbon emissions through their modular solution. Moreover, the deployment of fifth-generation heat networks provides an opportunity to promote local economic growth and provide stable, long-term energy prices.

Current role in Cumbria

5G heat networks are currently not established in any part of Cumbria due to being a novel technology with very few installations around the UK in general.

The opportunity for Cumbria

5G heat networks as a renewable technology have a number of benefits. They are not constrained in the same way as other heat networks which must supply heat at the temperature required by the most demanding end user. Instead, they are able to generate and supply low temperature and benefit from higher efficiencies, while those requiring higher temperatures are able to meet their own heating needs. They exhibit zero fossil fuels and combustion emission and have no visible infrastructure. Additionally, there are reduced expenses of pipework insulation and reduced installation costs through shared infrastructure compared to individual ground source installations.

5G heat networks have a high scope for growth in Cumbria due to their ability to work in areas that have a lower density of heat demand compared to previous heat network generations, and increased cost efficiencies. This poses an opportunity for areas that will experience a lot of development; this can be seen in Carlisle in 2023 with plans approved for 150+ high specification new homes in the south-east, and a multi-million-pound leisure development in the city centre made of shipping containers. The UK Government's Heat Network Zoning Pilot in Carlisle will generate an approach to identify areas of adequate heat demand and potentially mandate certain buildings to connect to a heat network (if within a zone) within a specific timeframe. This emonstrates the potential of fast growth in application of this technology in the distributed energy mix in Cumbria.

From a socio-economic perspective, the job creation potential is higher than that of 4G; local short-term jobs are created during the construction of the network, and long-term jobs are created to maintain the system, ranging from highly skilled engineering jobs to soft skill focussed roles.

To meet this demand, there is a government-backed £5m Heat Training Grant for heat network skills which would support increasing local employment and the number of Cumbrian residents that are in education or training.

The potential challenges for Cumbria

There are also limitations to 5G heat networks. The infrastructure relies on a decentralised structure that has community buy-in as well as enough qualified technicians to install heat pumps across multiple sites. While 5G heat networks could be a promising and scalable renewable technology for more population and heat-dense regions of Cumbria, efficiently distributing low-carbon heat, the implementation may face challenges in terms of initial infrastructure costs and retrofitting existing systems. This technology is more suited for high energy density areas and heat mapping needs to be undertaken for Cumbria to understand patterns of heat demand and heat sources.

In summary

The huge benefit that 5th generation heat networks offer that their predecessors can't is its ability to be modular. This makes it much more inexpensive to implement as the decentralised nature does not require a number of large energy centres, opening the opportunity for smaller-scale networks across communities that can be added to in a timed and cost considerate manner.

Bloeneray Bioenergy - Technology overview Bioenergy is renewable energy that is derived from biological sources, such as organic matter, plants, wood, and agricultural and animal residues. Bioenergy is a form of energy that is produced through various processes, including combustion, digestion, or fermentation of organic materials. There are different forms of bioenergy, including: 1. Biofuels: Biofuels such as biodiesel, ethanol, and biogas are derived from organic matter and can be used to power vehicles or for heating purposes. **Biomass:** Biomass energy is derived from plants or organic matter which can be burned or converted to other forms of energy. This includes wood, crop residues, municipal waste, and dedicated energy crops such as Miscanthus. **3. Biogas:** This is a mixture of gases produced by the breakdown of organic matter, such as waste, manure, dedicated energy crops or food scraps in anaerobic digesters. The biogas produced can be used as fuel for electricity generation or heating. Furthermore, according to the type of feedstock, bioenergy is divided into ▶ **1st Generation:** food-crops, edible organic matter that would otherwise be consumed as food by people, non-edible organic matter such as certain crops (e.g., Miscanthus, Willow, and Poplar) **2nd Generation:** non-food feedstock, waste (animal and plant-based), and by-products such as used cooking oil ► 3rd Generation: algae ► 4th Generation: genetically engineered feedstock The most economical feedstock options are first and second generation, and therefore dominate as bioenergy inputs, and are expected to continue to do so throughout the next decade and to the 2050s as cost-sensible alternatives are not expected to be successfully scaled up any sooner due to technological challenges. According to the UK Parliament Post - Biomass for UK Energy, when combined with carbon capture and storage (BECCS), bioenergy may deliver negative emissions. The Climate Change Committee (CCC) expect demand for biomass in the UK to rise significantly in the coming decades to supply bioenergy with carbon capture and storage (BECCS).

UK National context

There are over 200 large biomass power stations in the UK, and bioenergy generated by anaerobic digestion, animal and plant waste supplied 7% of total UK electricity during 2022. The technology is key to the UK's aim to reach net zero, and the government has recently issued its UK Biomass Strategy (2023) showing support for the technology, and for the development of carbon capture technologies to offset emissions through 2050.

Anaerobic digestion (AD)

Anaerobic digestion (AD) is a process in which organic materials, such as food waste, animal manure, sewage, and agricultural residues, are broken down by microorganisms in the absence of oxygen to produce biogas and digestate.

The process occurs inside a sealed tank where the organic material is broken down by bacteria and other microorganisms into biogas, a mixture of methane, carbon dioxide, and other gases, and digestate, a nutrient-rich by-product that can be used as fertiliser.

There is a significant number of different biomasses available, each of which is derived from either plant-based organic matter, animal waste, or other waste, and the characteristics of each biomass, determine its suitability for the creation of either one or more of the 3 final outputs: electricity, heat, and transport.

Electricity:

In the UK **74**% of renewable electricity is produced from plant-based biomass.

tai. •

In the UK 54% of the heat input from biomass is plant-based.

Transport: Fuel, mainly comprised of biodiesel and bioethanol. In the UK biodiesel is mainly produced from food waste and by-products (96%), bioethanol is mainly derived from sugar beet and wheat.

Currently, the UK imports around 31% of the biomass used in its power plants, cited the fact that the Department for Environment Food and Rural Affairs sited in the UK Food Security Report 2021 that 71% of the UK's viable farming land is currently used for agricultural production, of which 72% was grassland and 26% was cropland, demonstrating a huge opportunity to develop biomass internally. At £0.14/kWh, bioenergy has the third lowest LCOE (leveled cost of electricity) among the 8 technologies studied. In 2022, most plant-based biomass produced was used for electricity, accounting for 29% and 37% of total UK renewable inputs for electricity and heat respectively, which is a growth of 227% and 155% respectively from their 2010 total UK renewable input. At the same time, the MW installed capacity to process plant-based biomass has increased 1,328%, to 4.7GW from 2010 to 2022, with actual generation trailing this growth close behind and rising 1,312% to 23,416GWh during the same period.

While half of the biodiesel production is exported and derived from food waste and food by-products (over 90%), bioethanol is 100% reused in the UK's transport industry, with 77% going to road transport. A key question is whether miscanthus is a suitable alternative to current biomass used for biodiesel (food waste and by products) and bioethanol (sugar beet and wheat). As the government moves to minimise the impact on food security, biodiversity, and soil carbon-store value, food and feed crops are subject to higher regulations than waste products. In fact, the latter enjoys double reward for the supply of waste-based fuels compared to food and crop-based biomass. There is also a 4% limiting cap on the amount of crop that will be counted towards renewable

transport targets, this target will recede to 2% by 2032 of total fuel supply by supplier which reduces the competitiveness and therefore demand for these crops as a result.

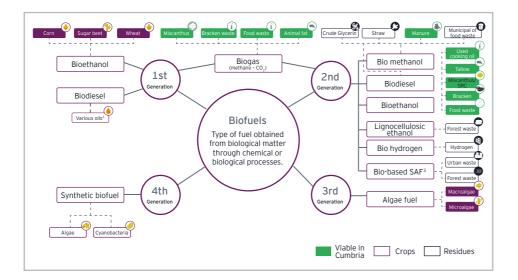
Miscanthus

Miscanthus is a tall perennial grass that is primarily grown for biomass and bioenergy production. The plant grows to heights of up to 12 feet, making it one of the tallest perennial crops available, meaning it can produce significant biomass per hectare, making it a highly efficient crop for energy production. In addition, the plant is relatively easy to grow, requiring minimal irrigation, fertilisation, and pest control. Moreover, it is tolerant to a range of soil types, from poor quality uplands to arable lands, enabling use of land that is not suitable for production of other crops.



In 2022, the bioenergy industry in the UK received £37m in government funding to support innovative biomass projects, and the sector is expected to reach £10bn in market size by 2030, growing at 7% compound annual growth rate (CAGR) from 2023 levels. 46,000 jobs have been created in the UK bioenergy market to date, and as many as 54,000 additional jobs are expected to be created by 2050 (Department for Business Energy & Industrial Strategy).

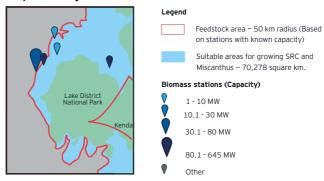
A map of the four generations of biofuels (EY 2023 diagram)



Current role in Cumbria

Cumbria has five biomass stations, with an estimated combined capacity of approximately 100 megawatts (see Miscanthus map below).

Map showing the suitable locations for Miscanthus Cumbria



Cumbria has a population density of 73 inhabitants per Km², far lower than the national average, which increases the number of sites suitable for biomass production, refinement, and potentially fuel, electricity and heat production at scale without jeopardising social welfare through pollution or noise risk.

The opportunity for Cumbria

There are two main options for bioenergy development in Cumbria to be considered: generation of biomass or biogas through either second-generation crop such as Miscanthus or second-generation waste material such as bracken waste or farm waste from materials such as manure.

First-Generation Bioenergy in Cumbria

Map imagery (see above) suggests that Cumbria has vast, suitable areas for growing Miscanthus, particularly around the Lake District national park, in Carlisle, Cockermouth, Workington, Whitehaven, and Barrow in Furness.

According to the Climate Change Committee, these areas have the highest potential in terms of income generation for rural communities, and thanks to Cumbria's 5,000 farms, it makes the county an ideal place for decentralised feed stock and bioenergy production.

Miscanthus is a perennial crop, which means that it does not need annual replanting. The crop reaches optimal yields capacity 2-3 years from initial plantation where it can produce 15-20 t/ha at 20% moisture content. Its growth potential depends on climate temperature, water availability within the soil, and the rainfall levels, therefore sunlight and moisture are important.

Soil: Miscanthus tolerates wide PH levels, with optimal ranges being between 5.5 and 7.5. Because it is harvested in late winter/early spring, it is important that the site does not get excessively waterlogged during the period which can cause damage to the soil structure and prevent harvesting machinery from operating. Generally, avoid heavy clay soils.

Temperature: the cutoff point is 6 degrees celsius, below this temperature the plant stops yielding, however, genetically modified clones of the Giganteus (Miscanthus species) can survive temperatures as low as -14.

Water availability: this is split into two components, rainfall, and

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soil water retention.

Cumbria Distributed Energy Strategy

Both factors are strong determinants of Miscanthus yields. Care is advised when selecting the optimal density of rhizome planting as high canopy density levels could prevent rainfall from reaching and infiltrating the soil, resulting in yield losses as high as 90Kg/ha for each millimeter of soil water deficiency.

Furthermore, given that the crop will grow to heights of up to 3.5m and live for at least 15 years, other factors such as visual impact, wildlife, archeology, and public access must be considered when selecting the plantation site.

Miscanthus has several advantages over other non-food crops. For instance, as a rhizomatous plant, nutrients are naturally translocated from the above-ground biomass to the underlying rhizomes, reducing the amount of fertilizer needed for subsequent seasons, which is a significant cost advantage. Another advantage over SRC is that it can be harvested earlier after plantation (2-3 years, vs 4-5 years for SRC), building on the yield capacity's superiority to give Miscanthus projects a much faster payback period. Based on an estimated high-level investigation, if Cumbria were to utilise its 508,000 ha currently used for its traditional farming operations (79% of which is livestock based), to grow Miscanthus instead, local farmers may be able to generate a higher £790/ha in operating profit, compared to the traditional farms' £362 (118% higher), see table 1 below.

Table 1 – EY Analysis demonstrating an estimated high level income comparison of Miscanthus and traditional Cumbria farms (data taken from DESNZ – Digest of UK Energy Statistics Annual data for UK, 2022)

Farm type	Mischantus farm (£)	Cumbria farms (£)
Total revenue	530,572,635	1,144,000,000
Total cost	130,825,764	960,000,000
Totalprofit	399,746,871	184,000,000
Revenue/ha	1,044.43	2,251.97
Cost/ha	257.53	1,889.76
Profit/ha	786.90	362.20

Second-Generation Bioenergy in Cumbria

Modern biomass technologies have made it possible to extract energy from waste materials such as animal manure and bracken waste, transforming them from sources of waste into valuable and sustainable resources. Approximately 35,000 acres (6% of the total area) of the Lake District is covered by bracken, which is suitable for creating bioethanol, and could create up to 227,000 tons (377,000 for year 1) of fresh biomass annually and could create over 300 jobs, and £10 million in revenue (on a long-term basis) at a profit margin (before tax) between 28% and 40% in Cumbria. As for the long-term viability of the resource, 1 cutting per year for 3-4 years will reduce the annual yield output to 60% of the initial output, and cutting more than once a year will reduce the yield capacity significantly after 3-4 years. Despite the higher operating costs related to cutting, transport and equipment, studies have shown that the venture could experience payback as early as 4 years and yielding up to 32% in IRR.

Given the invasive nature of bracken, with strong links to negative health effects on animals and humans, as well as destruction of biodiversity and toxicity to the water system, its managed removal could result in sustainable income generation, which is likely to achieve government support as the invasiveness of the fern does not currently have a sustainable remedy, and it is reducing biodiversity throughout the UK at alarming rates. Moreover, because it is classed as waste, it would receive double the incentive of food-stock and feedstock to produce biofuels, and the restrictive limits of the RTFO rules would not apply.

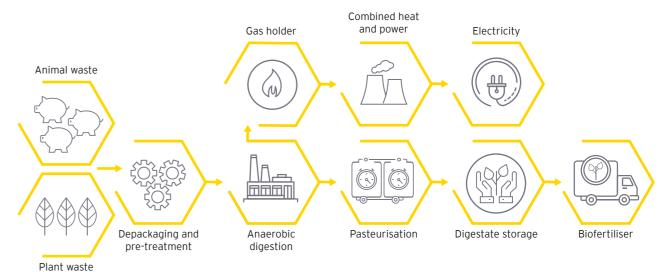
Biofuels

Both First and Second-generation materials pose a good opportunity for Cumbria to develop their biofuel market, creating either biomass pellets or biogas.

Biomass pellets are made of compressed organic waste materials, such as wood or agricultural waste, that are generated from various sources such as sawmills, paper mills, and agricultural activities. Power plants that use biomass pellets to generate electricity are becoming increasingly common in the UK. These facilities burn biomass pellets in high-temperature conditions, generating steam that drives a steam turbine connected to a generator, producing electricity.

Biogas currently makes up 10%, 4%, and 8% respectively, of the UK's electricity, heat, and fuel output from renewables, and after years of technological advancements, and due to the more recent geopolitical development in Eastern Europe, biogas is now cheaper than natural gas by approximately 30%. In the UK, most biogas is derived from anaerobic digestion (46%), landfill gas (38%), and sewage gas (16%). Anaerobic digestion (AD) is the process employed to break down organic matter such as animal, food, and plant waste to produce biogas, biomethane, and biofertlisers.

Biomass production diagram (EY)



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Another by-product of anaerobic digestion is digestate, a biofertiliser, which has high potential for exports as the world moves away from Russian fertiliser and would allow local Miscanthus growers to use it as fertiliser.

There are now 650 operational AD facilities, up from 68 in 2011, and the estimated capex for AD plants is close to £4.9 million/MWe capacity installed (£4,900/KWe) which are usually part-funded by a mix of capital providers, a significant one being the government through schemes such as GGS and RHI.



Hydropower Hydropower - Technology overview Hydropower is a renewable technology that uses the power of moving water to produce electricity. The energy generated by hydropower is derived from the kinetic energy of moving water, such as rivers Hydropower works by channelling water through a dam or other waterretaining structure, which creates a controlled flow of water. This water is then passed through turbines that convert the movement of the water into electrical energy. The electrical energy generated by this process is either stored for later use or transmitted immediately to the electric grid. There are three primary types of hydropower: **1. Conventional hydropower:** This type of hydropower uses the flow of water to turn a turbine, which then generates electricity. Conventional hydropower typically requires a dam to regulate the flow of water and maintain a consistent water level for the turbine. This method is the most common type of hydroelectricity generation used globally but has large associated costs as well as a number of environmental challenges. Pumped storage hydropower: Pumped storage hydropower works by pumping water uphill from a lower reservoir to an upper reservoir during times of low electricity demand, then releasing it through a turbine to generate electricity when demand is high. This method is essential in balancing the grid during intermittent renewable energy generation periods, like from solar and wind. This form of hydropower relies on high-head topography and traditionally is associated with larger-scale projects although some case studies now example

community-led projects.

to its less invasive mechanics.

3. Run-of-river hydropower: Run-of-river hydropower tends to be smaller

of fewer than 10MW. These systems can be used to power off-grid locations like farms or remote communities and also for domestic

purposes like powering homes. Small hydropower plants usually

in scale and are installed on rivers and streams with a typical capacity

operate in a run-of-river mode where water is directly sourced from the

river as it flows downstream, rather than from dammed reservoirs. This option is considered the most environmentally friendly of the three due

UK National context

Hydropower offers a consistent and predictable source of energy to the UK energy mix. By the end of 2022, the UK had 1,576 Hydro powered installations with a capacity of 1,890MW offering 1.8% of the total energy produced in the UK in 2022. Renewable energy sources like wind, solar and bioenergy have received significant attention in the UK, but Hydropower is often overlooked based on the associated high costs with applying large scale schemes in the UK. While large-scale hydropower projects require large and costly dams or reservoirs, small-scale hydro (between 100kW to 5MW installed capacity) can be harnessed from smaller streams and rivers without major alterations to the landscape, making them a viable option for the UK distributed energy mix.

Small-scale hydro offers a highly predictable and consistent solution to the energy generation mix in the UK whilst removing a lot of the adverse effects to the local environment that are often found with large scale hydro. The benefits of which offer a flexible and reliable energy source which can supplement the baseload provision as required.

Current role in Cumbria

As of 2022, there were 62 hydropower schemes implemented in Cumbria with an installed capacity of 7.2MW of energy, representing 0.4% of the UK's hydropower installed capacity. During 2022, 22.5 GWh of electricity was generated in Cumbria.

The opportunity for Cumbria

Cumbria is known for its extensive network of rivers, lakes and streams, providing a consistent source of flowing water. Its abundant water resources, mountainous terrain and topography provide a set of unique geographical and environmental characteristics that present a number of opportunities for community-level hydroelectricity projects.

Cumbria is home to several lakes with a substantial water volume and potential energy that could be harnessed as energy storage or efficient energy generation solutions. The Lake District National Park could be considered as a host for Pumped Storage Hydropower or Hydroelectric Dams. In addition, there are a number of lakes with that have fast flowing rivers and streams entering them at height, making them potential candidates for Run-of-River Systems. As a UNESCO World Heritage Site, any hydro projects considered would need to be environmentally sensitive and well-integrated into the natural landscape. The national parks and National Landscape status brings traditionally challenging conditions to meet in order to obtain planning permission, de-incentivising large-scale pumped storage and run-of-river hydro projects. However, the park's ambition to reach net zero by 2037 along with the opportunity to promote sustainable tourism here, offering a sustainable solution to the energy demand fluctuations due to the seasonal tourism that the sites exhibit, creates an opportunity for compromise for small-scale hydro projects to provide a balance between site preservation and localised energy generation.

Run-of-River projects

Despite the permissibility challenges that the national parks bring, there are already a number of small-scale run-of-river projects set within the Lake District National Park that have an installed capacity of 5MW of energy with an additional 20 sites within the park identified as feasible locations for similar style projects.

Cumbria has a network of rivers and streams, as well as tributaries to the larger rivers, such as those near Kendal and other towns, that could be considered to develop small-medium sized Run-of-River projects to generate electricity.

Combe Gill is a small-scale hydro

low head site located in the
Lake District National Park that
is currently under construction
and is set to produce 230KW of
electricity. This demonstrates
that planning permission for small
scale hydro in the Lake District is
becoming more obtainable and that
small-scale projects are a suitable
technological solution which
creates minimal disruption to the
local environment.

Pumped storage

Pumped storage facilities offer an energy storage solution and work like a giant rechargeable battery, helping to smooth out variability in energy supply from intermittent renewable energy sources, such as wind and solar. Small-scale pumped storage (100kW - 5MW) could help to provide stability to the renewable energy generation mix in Cumbria.

While there aren't currently any pumped storage hydro schemes in Cumbria, the region does have the potential for several new projects in the future, particularly in disused quarries or other suitable locations. The combination of hills, mountains, and lakes make Cumbria an ideal location for pumped storage schemes.

Cumbria has several locations that could be suitable for pumped storage projects. Some of the potential sites include:

1. The Lake District:
The Lake District has a number of reservoirs and lakes that could be used for pumped storage projects.

2. West Cumbria: The hills and mountains in West Cumbria provide potential sites for Pumped Storage projects. There are several existing water reservoirs in the area that could be used for Pumped Storage.

3. Abandoned quarry sites: Quarry sites are an additional location that could potentially be repurposed for Pumped Storage facilities. There are a number of quarry sites dotted across Cumbria, offering a starting point for feasibility assessments.

These sites show that there are several potential areas where small-scale Pumped Storage projects could be developed in Cumbria, utilising either existing lakes or nearby hills and mountains for the necessary head.

Short term prospects for hydropower in Cumbria

Due to the significant restrictions that grid connectivity brings, most hydropower schemes would not be viable as part of a short-term energy proposition. Instead, Cumbria could consider deploying multiple small-scale Run-of-River schemes that generate under 1MW to avoid both the long wait times to process applications to connect to the national grid, as well as any restrictions and delays caused by low substation capacity. Based on the current data, all sub-stations in Cumbria could cater for a small-scale Run-of-River connection, however further consideration would be needed if multiple small-scale schemes required connectivity into the same sub-station. Small-scale Run-of-River schemes also benefit from reduced costs on implementation, maintenance and environmental impacts.

Long term prospects for hydropower in Cumbria

There are a number of opportunities to leverage the natural topography of the region and deploy larger hydropower schemes such as Pumped Storage in a number of locations across Cumbria. Along with the permissions and permits associated with larger sites, Pumped Storage projects would need to consider the potential wait for connectivity to the national grid which can be up to 10 years. There are however a number of sites that could be considered for Pumped Storage and depending on the size and location of the facility, connectivity wait times could be considerably lower.

The potential challenges for Cumbria

While small-scale hydropower projects are generally considered to have less environmental impact than large-scale projects, they can still have both ecological and environmental challenges as well as regulatory and connectivity restrictions that must be carefully considered.

Environmental and ecological assessments to ensure preservation and protection

- Habitat fragmentation: Small-scale hydropower projects can lead to the fragmentation of river systems and the disruption of local ecosystems. Fish populations and other aquatic species may be impacted, which can have knock-on effects on other species that rely on them for food.
- 2. Water quality: Small-scale hydropower projects can impact water quality in some situations. Turbines and other equipment can cause sedimentation and other changes that impact water clarity and quality. This can negatively impact aquatic species and downstream water users as well as increasing flood risk.
- 3. Flow variability: Hydropower projects can alter the natural flow of rivers and streams, which can impact local ecosystems. Flow variability can impact the migration of fish, sediment transport, and other important ecological processes.

Regulatory and permitting requirements

The Environment Agency is responsible for regulating the water-related environmental permits in England. When planning small-scale hydro projects, developers will need to obtain the relevant permits; an Abstraction licence (relating to water abstraction), an Impounding licence (relating to a diversion of watercourses and discharges into the water bodies), A Fish Pass Approval (if you plan to modify the way that fish pass through the body of water) and An Environmental Permit for flood risk activity (when you build in, over or next to main rivers) to ensure that that the project's environmental impact complies with the water quality standards, habitat protection, and other environmental regulations. Any projects that intend to use weirs or upland watercourses are restricted to building weirs that exceed 1.5metres in height. Hydropower projects face Environment Agency's increase in fees for permits up to £13,392 to get a licence from April 2023, up from the previous cost of £1,500 which is an increase of c800%, significantly hampering the economic viability of small-scale schemes.

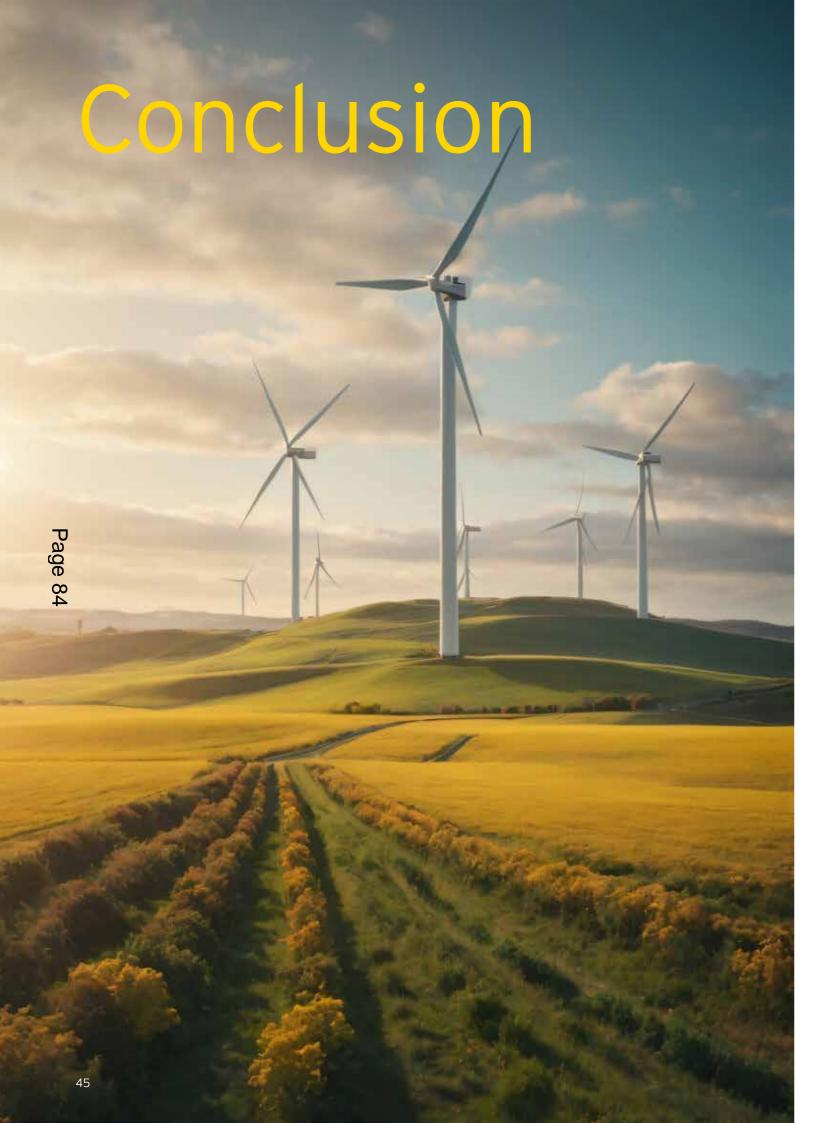
Grid connection

Cumbria is in a slightly unique situation in comparison to most of the rest of the UK in that its local energy generation exceeds its demand. There are a number of projects underway to upgrade the capacity of the grid at different locations across Cumbria which will be completed in the next 10 years. There are also long connectivity wait times for new schemes that intend to generate above 1MW of energy, including a lengthy permissibility four step process via National Grid to be considered ahead of connectivity. Due to which, these issues could increase the time to see return on investment and thus may constrain the scale of the scheme in which developers choose to progress in the short-term.

In summary

Cumbria's abundant water resources, natural elevation and rich history of hydropower provides an opportunity for Hydropower to play a significant role in Cumbria's distributed renewable energy strategy. Hydropower can provide a sustainable and reliable source of energy that complements other technology sources such as wind and solar, whilst promoting economic growth, stimulating regional development and generating local jobs. By taking advantage of the potential for hydropower, Cumbria can establish a more resilient energy system.

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Cumbria has an opportunity to become a leading example of how environmental sustainability and economic growth can be achieved in tandem with accelerating investment and delivery of distributed renewable generation at a local level. In order to maximise its natural advantages and accelerate the clean energy transition to a more distributed model, there are three areas of focus to develop further:

1. To streamline the connectivity application process

There are a number of challenges across the UK in connecting to the National Grid. One difficulty that is generating further delays is correctly navigating the planning and permitting requirements in a timely manner. In the coming months, National Grid will adopt a new process to review the existing backlog of projects awaiting connectivity and will push back on any projects lacking appropriate governance. Thus, working with the local authorities and the Environment Agency to streamline the planning and permitting process for renewable energy projects in Cumbria could help to accelerate the deployment of new renewable energy projects in the region. This will create a quicker route to implementation, which can help to make the investments more reliable and reduce uncertainty and risk for potential investors.

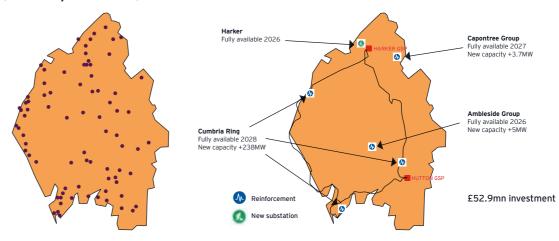
To support improved integration of distributed renewable technologies going forward, Cumbria should encourage the use of emerging technologies like energy storage, smart grids, and demand-response systems to improve the integration of distributed renewable energy sources into the grid. As research and investment into these emerging technologies grow, our ability to better utilise machine learning to create a more integrated and predictive platform for distributed renewable energy generation will support the grid to maximise the energy mix. Cumbria can encourage the use of these technologies to empower households and businesses to better manage their energy usage and reduce their dependence on fossil fuels.

2. To encourage stakeholder alignment

In order to overcome the challenges associated with receiving permissions and permits for each form of technology deployment in Cumbria, key stakeholders should convene to align on the strategic direction of renewable energy deployment in Cumbria, unifying the approach and goals of the region. This is especially important in relation to emerging markets, where limited or no supply chain exists, like bioenergy.

This is particularly relevant for collaborating with Electricity North-West to ensure that Cumbria LEP are well informed and updated on the timings of the planned upgrades to the network, which is generating long connectivity waiting lists. This will support the reduction of connectivity waiting lists, whilst streamlining both design and planning of future work, enabling more informed decisions earlier in the project design phase.

The Cumbria ring substation and planned upgrades maps (Electricity North-West)



3. To promote methods for securing investment

There are a number of public funding options readily available in Cumbria, designed to incentivise and promote renewable energy projects. By taking advantage of these opportunities, developers can significantly reduce the financial risk associated with renewable energy projects, promote economic growth and development in Cumbria, and accelerate the transition towards cleaner energy sources such as:

Grant funding and loans:

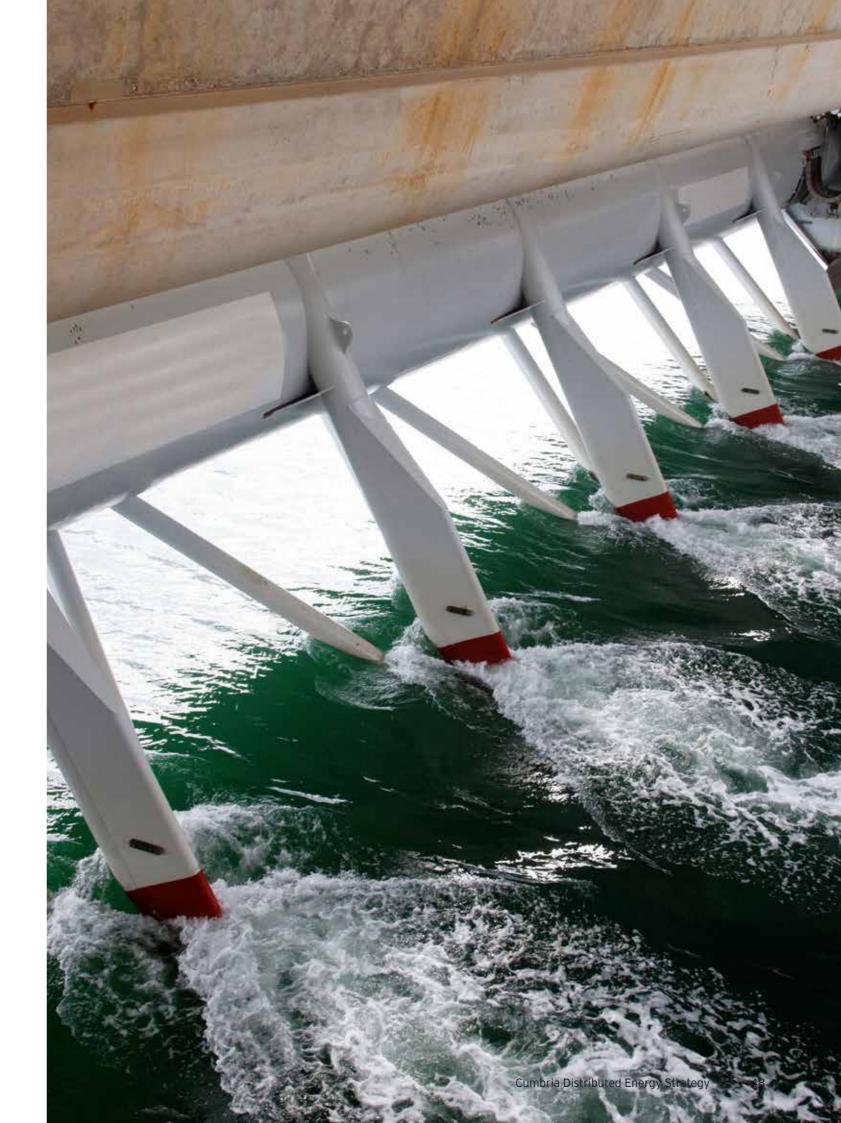
- The UK Government's Department for Department for Energy Security and Net Zero (DESNZ) and The Department for Business and International Trade (DBIT): DESNZ has several schemes aimed at reducing the carbon footprint in the UK such as:
 - I. The Net Zero Innovation Fund: As part of the UK's 10 Point Plan for a Green Industrial Revolution, the Net Zero Innovation Portfolio was formed which provides a funding solution of £1billion to a portfolio of priority technologies and systems to accelerate the commercialisation of low-carbon technologies.
 - II. The Clean Growth Fund: A £20million commercially run venture capital fund, which aims to speed up the deployment of innovative clean by making direct investments in companies seeking to commercialise promising technologies.
- 2. UK Infrastructure Bank (UKIB): UKIB is a government-owned policy bank created in 2021 that offers competitive and tailored low-rate loans with flexible payback options to the private sector to finance the green industrial revolution.
- **3.** The North-West Net Zero Hub: The North-West Net Zero Hub has recently launched a new Community Energy Fund, providing communities with the opportunity to launch new small-scale renewable energy projects in their local areas.

Public sector collaboration:

4. The Green Premium: There is an opportunity to collaborate with local authorities to support the build of business cases that highlight the green premium associated with deployment of new renewable technologies in the local area, making a case for the wider cost benefits associated, unlocking financial support directly from the local authorities.

Securing private sector investors:

There are a number of opportunities to unlock private investment in deployment of renewable technologies if the opportunity can be de-risked sufficiently. Insetting provides an opportunity for private sector firms to offset their carbon emissions by investing in local green projects.



Key stakeholder action plan Page 86

Cumbria has a unique opportunity to play a leading role in introducing a decentralised, distributed renewable energy mix of technologies to the energy generation for the region. There are a number of technologies that offer promising advantages by leveraging the topography of the region. The next section provides an action plan for both landowners and the Cumbria Local Enterprise Partnership to undertake in order to enable delivery of the technologies across the region.

Actions for landowners and businesses

- **1. Be curious:** join events, sign up to newsletters and interact with the opportunities to develop your understanding of the local opportunities and upcoming projects that are launching.
- 2. Understand your potential opportunities: Look at the land that you own, consider how each technology could be deployed there, consider the benefits and challenges for each and use the materials signposted by both the Cumbria Local Enterprise Partnership and Local Authorities to develop robust business cases for your priority technology.
- **3. Understand your local energy demands:** keep up to date with the way in which energy is being developed in the local area. Know where your local substations are and identify any connectivity challenges and upgrades that will reduce these.
- **4. Maintain engagement with key stakeholders:** Keep engaged with all key stakeholders such as the CLEP, Local Authorities, the local energy distribution network and any relevant community groups to leverage knowledge and insight whilst sharing any lessons learned.

Technology	Potential for Cumbria	Actions for Cumbria Local Enterprise Partnership
Overarching activities	Distributed energy presents a significant opportunity for Cumbria to accelerate the	Launch the Decentralised Energy Strategy and engage with key stakeholder groups, including local and central government, industry leaders and investors.
	transition to cleaner energy and create economic and social value for residents and local business. It is however a broad	Consider establishing community forums or similar, to engage at a more local level, recognising how critical local support is in delivering distributed energy schemes.
	area, and prioritisation and focus is required. The LEP and	3. Develop standardised collateral, including opportunity templates and plans, to enable various stakeholders' groups to develop their own proposals.
	local government partners will need to play a key convening and enabling role if deployment is to be accelerated.	4. The LEP to develop a portal or online tool to allow for tracking and proactive support of local indicatives, playing a key convening role, and matching off- takers and suppliers to derisk investment at a local level, and support the DNO to prioritise its support.
Hydropower	The development of small- scale hydropower schemes across the region as a means of short-term generation	I. Convene with key stakeholders such as the British Hydropower Association, The Lake District National Park, the Environment Agency, Local Authorities, The National Trust and Forestry England as well as other local major landowners such as farmers to develop a strategic view and prioritisation list of potential sites for development.
		II. Promote hydro feasibility studies as part of the NW NZ hub Community Energy scheme.
		III. Collaborating with the key stakeholder to promote the use of existing schemes as case studies to demonstrate the elements required to implement a project, agreeing with stakeholders a guide to develop a hydropower scheme in Cumbria with clear signposting to each element.
	The development of Pumped Storage as a means of long- term energy storage	IV. Maintain sight on small-scale Pumped Storage projects developed across the UK to provide case studies for deployment.

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Bioenergy 1. The development I. Identify areas for energy crop cultivation: Assess areas in Cumbria suitable for of First-Generation energy crops such as miscanthus, identifying land availability and the potential bioenergy utilising the impact on surrounding ecosystems. growth of bio crops such as II. Develop a convening stakeholder partnership: Including the Local Authorities, Miscanthus to develop either The Environment Agency, the Farmers Union and local landowners to share bio pellets or Biogas knowledge and ensure integration across economic growth, energy strategies, environmental regulations are aligned. 2. The development of Second-III. Assess waste resources: Conduct a comprehensive inventory of the amount Generation bioenergy and types of waste materials generated in the region. This assessment should utilising Cumbria's waste include waste from agriculture, forestry, and other industries. materials such as manure IV. Identify case studies both inside and outside the county to deliver each form or bracken waste to of bioenergy to use and establish the process involved, lessons learned, and produce biogas both the signposting and support required to enable future schemes at scale. V. Align with this key stakeholder's group to agree which type of bioenergy is most appropriately aligned with the overall strategic ambition of the area. **Onshore wind** To develop more wind farms I. Whilst awaiting the upgrade to Harker & Hutton GSP sites that will generate in line with Electricity Northmore capacity in 2028, the Cumbria Local Enterprise Partnership can engage Wests' 2050 projection for with new developers to better understand how the role of the supply chain onshore wind could support deployment. II. Cumbria Local Enterprise Partnership should support the development of partner organisations to increase awareness for landowners across the region of roof top solar opportunities. III. Collaborate with the local authorities to develop a strategy for supporting small-scale deployment and connectivity locally. Consider deployment on I. Whilst awaiting the upgrade to Harker & Hutton GSP sites that will generate rooftops and brownfield sites more capacity in 2028, the Cumbria Local Enterprise Partnership can engage with new developers to better understand how the role of the supply chain could support deployment. II. Cumbria Local Enterprise Partnership should support the development of partner organisations to increase awareness for landowners across the region of roof top solar opportunities. III. Collaborate with the local authorities to develop a strategy for supporting small-scale deployment and connectivity locally. IV. Develop solar together schemes to increase the energy storage capacity for solar, whilst increasing installed capacity. Tidal and wave Maximise the natural coastal I. Engage with the Local Authorities to understand the role of the Local region and strong currents in Enterprise Partnership as the technology develops further. Cumbria to deploy tidal and II. Maintain links with existing case study developments across the UK such as wave technology Merseyside Tidal project through the Offshore Energy Alliance and Cymru Egino to seek opportunities to develop a similar delivery model for Tidal & Wave projects in Cumbria. Deep geothermal Maximise on the natural I. Maintain sight on the live Geothermal study in Cornwall in order to maintain geology of Cumbria to awareness of the technology and keep up to date with any developments that explore potential sites for might support deployment in Cumbria. deep geothermal deployment II. Engage with the Local Authorities to understand the role of the Local Enterprise Partnership as the technology develops further. 4th generation Deployment in population dense I. Once the findings of the UK Government's Heat Network Zoning Pilot in heat network areas such as Carlisle and Carlisle which will generate an approach to identify areas of adequate heat Barrow-in-Furness demand is released, convene with key stakeholders to understand the role of the Local Enterprise Partnership in supporting deployment 5th generation heat network II. Engage with new developers to understand how the role of the supply chain

and local skills could support deployment.

Now:

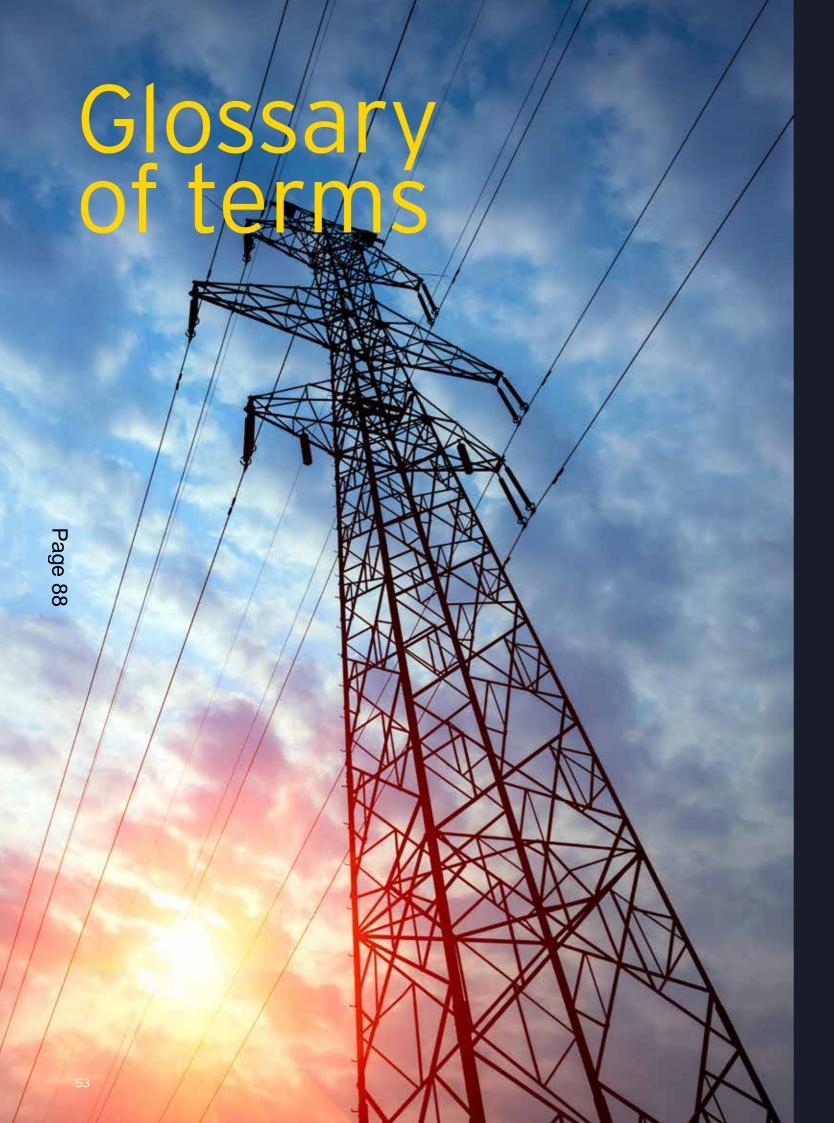
- 1. Convene with key stakeholders to understand the approach to investment, delivery and building new value chains.
- 2. Integrate with both Cumberland Council and Westmorland & Furness Council to ensure that each Council's economic strategies both align and compliment the signposting and information that Cumbria Local Enterprise Partnership provide.
- 3. Collaborate with Electricity North-West. The Environment Agency and the local communities to identify potential sites for developing small-scale hydropower and bioenergy projects.
- 4. Conduct detailed feasibility studies to identify the areas suitable for developing bioenergy and hydropower projects to determine the more economical sites along with the social, economic, and environmental impacts of projects at each location. The CLEP leading the development of the first few pilots will unlock further investment and de-risk the opportunities for partners.
- 5. Complete hydrological assessments to evaluate the water flow patterns, determine the most appropriate sites to implement hydropower schemes as part of the site feasibility assessments.
- 6. Promote the framework for developing and implementing community-led small scale energy projects along with the funding options available such as the recently launched North-West Net Zero Hub Community Energy Fund, and how to apply.

Next:

- 1. Develop policies and incentives to promote the adoption of bioenergy and hydropower energy in Cumbria, including providing financial incentives, such as feed-in tariffs and grants, for energy generation from these sources.
- 2. Encourage the adoption of bioenergy across the farming community and provide information on how farmers could transition their business focus.
- 3. Foster public-private partnerships to fund hydropower and bioenergy projects in Cumbria.

- 1. Increase the percentage of energy generated from bioenergy and hydropower in Cumbria's energy mix by implementing a target to increase these renewable energy sources by 2030.
- 2. Invest in research and development to advance technologies related to bioenergy and hydropower energy generation to support innovation that will ultimately improve efficiency and reduce costs.
- 3. Work towards a long-term goal of becoming a trailblazer in an established distributed energy regional market, driving the local economy and retaining the local population.

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Agrovoltaics: Agrovoltaic energy, also known as agrophotovoltaics, consists of using the same area of land to obtain both solar energy and agricultural products.

Bioenergy and Carbon Capture (BECCS): involves capturing and permanently storing CO2 from processes where biomass is converted into fuels or directly burned to generate energy. Because plants absorb CO2 as they grow, this is a way of removing CO2 from the atmosphere.

Cumbria Action for Sustainability (CAfS): A local climate change charity in Cumbria.

Contracts for difference: The Government's primary mechanism for supporting new low carbon power infrastructure.

Development Consent Order: Under the Planning Act, a Development Consent Order (DCO) is the means of obtaining permission to construct and maintain developments categorised as NSIPs.

Department for Energy Security & Net Zero (DESNZ): is a ministerial department focused on the energy portfolio from the former Department for Business, Energy and Industrial Strategy (BEIS).

Distributed Renewables: is the term used when electricity is generated from renewable energy sources, near the point of use instead of centralised generation sources from power plants.

Electricity North-West: is the local distributed network operator (DNO) for Cumbria region.

Installed capacity: the maximum net generating capacity of power plants and other installations that produce electricity.

Levelised cost of electricity (LCoE): a measure of the average net present cost of electricity generation for a generator over its lifetime.

Local Planning Authority (LPA): is the local government body that is empowered by law to exercise urban planning functions for a particular area.

Microgeneration Certification Scheme (MCS): an industry-led quality assurance scheme, which demonstrates the quality and reliability of approved products and installation companies.

National Planning Policy Framework (NPPF): sets out the Government's planning policies for England and how these should be applied.

National Landscape (formally Area of Outstanding Natural Beauty or AONB): areas of countryside that have been designated for conservation due to their significant landscape value.

Net Zero: the balance between the amount of greenhouse gas (GHG) that's produced and the amount that's removed from the atmosphere.

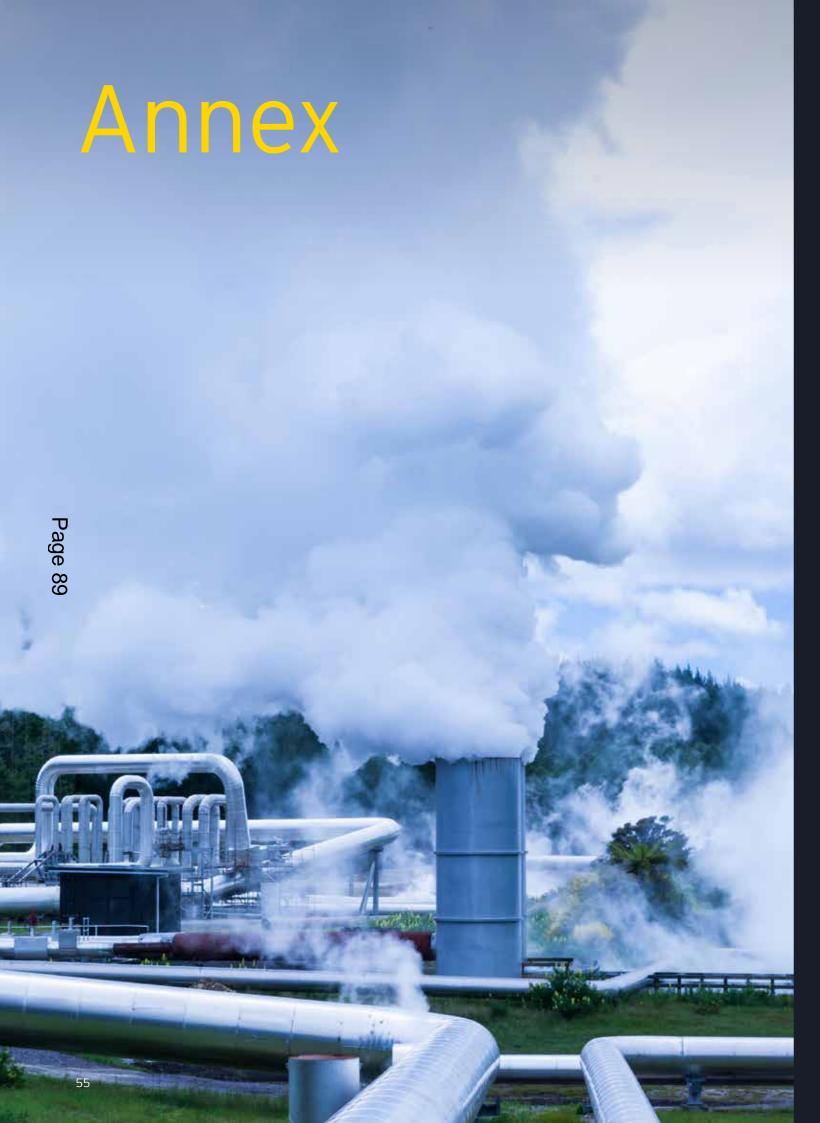
North-West Net Zero Hub: is a regional programme to promote investment in energy projects. It works with public sector organisations to improve the business case for their energy schemes. The North-West Net Zero Hub supports communities to take action and participate in the climate agenda.

Repowering wind turbines: removing old turbines and replacing them with newer, more efficient models with a greater wind turbine power output. Since newer models tend to be more efficient, repowering allows each wind farm to generate more electricity.

Renewable generation: energy derived from natural sources that are replenished at a higher rate than they are consumed.

Solar irradiation: the power per unit area (surface power density) received from the Sun in the form of electromagnetic radiation in the wavelength range of the measuring instrument.

Solar together: Solar Together is a unique group-buying scheme for solar photovoltaic (PV) panels and battery storage.



Data: All technology installed capacity and generation data sited within this report has been extracted from the National Statistics publication, Energy Trends which was produced by the Department for Energy Security & Net Zero (DESNZ) 2022. All Contract for Difference data was extracted from the UK Governments Contract for Difference Allocation Round 5 (AR5) results which covered applications received between March 2023 and September 2023.

Maps: All maps have been created by EY relying on publicly available secondary sources.

Government papers cited:

- Department for Environment Food and Rural Affairs sited in the UK Food Security Report 2021
- ▶ DESNZ: The UK Government's Net Zero Growth Plan Powering Up Britain 2023
- ▶ DESNZ: Powering Up Britain Energy Security Plan 2023
- ▶ DESNZ: Wave and tidal energy: part of the UK's energy mix
- ▶ DESNZ: BEIS Attitudes Tracker 2023
- ▶ DESNZ: Digest of UK Energy Statistics Annual data for UK, 2022
- ▶ DESNZ: 'Untapped potential' of commercial buildings could revolutionise UK solar power
- ► DESNZ: UK Biomass Strategy (2023)
- ▶ The Skidmore review 2022
- ► The Green Finance Strategy 2023
- ▶ UK Marine Energy Council 2020: Technological Innovations and Climate Change
- UK Government's 10-point plan for a Green Industrial Revolution (2020)

Public bodies referenced:

- ► Climate Change committee
- Cumbria Local Enterprise Partnership Clean Energy Strategy 2022
- North-West Net Zero Hub
- ► Electricity North-West 2023
- Cumberland Council and Westmorland and Furness Council: North Pennines AONB management plan 2019-2024
- The Environment Agency
- ► The Lake District National Park

Charities and third sector groups referenced:

- 2021 Cumbria Action for Sustainability (CAfS)
- Renewable UK

Private papers referenced:

- ► ARUP Group 2021
- Drax Group
- UK published in Geological Society Publications
- Sinclair Knight Merz (SKM)
- McKinsey & Company 2019
- Elevation API
- Open Street Map
- Geothermal Energy Opportunities of the UK 2023 (Alex Jefferies, Mark Ireland, Corinna Abesser and Jon Gluyas)

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PRIORITY	ACTIVITY	LEAD RESPONSIBILITY	TIMESCALE	OUTCOME	UPDATE
1. Business leadership	1.1 Finalise arrangements for the Strategy Group, including meeting frequency, dates and recurring agenda items.	CLEP	Complete	Effective structure in place to deliver visible business leadership on decarbonisation.	Strategy Group established and programme of meetings developed.
Pa	1.2 Review the membership of the Strategy Group to identify any gaps in representation, including sectors, size and geography.	CLEP	Complete	All sectors, geographies and business types are included in governance activity thereby extending 'reach' into all business communities.	Membership is now in place.
age 91	1.3 Develop a schedule of topical 'Thought Leadership' communications relevant to business decarbonisation in Cumbria.	CLEP	Ongoing - at least 4 released during 2024.	Clear demonstration of leadership on issues facing Cumbria Businesses.	Feature article published in In-Cumbria.
	1.4 Identify ambassadors from the Strategy Group to lead on elements of the agenda.	Strategy Group Members	January 2024	Visible leadership on each aspect of business decarbonisation.	Discussions opened at January 2024 meeting. These will be continued.

PRIORITY	ACTIVITY	LEAD RESPONSIBILITY	TIMESCALE	OUTCOME	UPDATE
Map and	2.1 Review current sources of data and methodology/ frequency of updates.	CLEP	Complete	mechanisms to quantify	Paper presented at January 2024 meeting, with this being taken forward.

PRIORITY	ACTIVITY	LEAD RESPONSIBILITY	TIMESCALE	OUTCOME	UPDATE
	2.2 Identify any regions with best practice for tracking.	CLEP	March 2024	Understanding of geographical best practice to inform Cumbria's activity.	Contact established with the Energy System Catapult.
	2.3 Develop a baseline position and a trajectory for carbon reduction	CLEP	April 2024		Partly covered in January 2024 paper. Further work to be undertaken.

PRIORITY	ACTIVITY	LEAD RESPONSIBILITY	TIMESCALE	OUTCOME	UPDATE
Energy tensive doustries and Exctivities	3.1 CLEP to host energy intensive industries workshop with industry and academic partners.	CLEP	Complete	Cumbria's most energy intensive industries are supported to deliver their decarbonisation plans.	Workshop held with 12 Ell in Cumbria and 6 Research Technical Organisations. Clear intent for collaboration and commitment to the development of an Action Plan.
	3.2 Identify potential industrial decarbonisation initiatives to accelerate implementation.	CLEP	Present plan by March 2024 First Site Peer Network Meeting February 2024.	Action Plan developed to include: Company level decarbonisation roadmaps. Specific company level decarbonisation initiatives with RTOs. Raising profile of grid connection wait times. Effective Peer learning network.	Work on developing an action plan is underway.

	3.3 Follow up with DESNZ to raise profile of Cumbria industry.	CLEP	Ongoing	DESNZ recognises the opportunity presented by diffuse energy clusters.	Raised awareness of status and importance of Cumbria's Energy Intensive Industries.
Page 93	3.4 Broker introductions between decarbonisation technology providers and energy intensive industries.	CLEP	Ongoing	Close to user mechanisms in place to help businesses to decarbonise.	Introduction successfully brokered between Kimberley Clark and Carlton Power, with further plans being put in place to broker similar introductions.
	3.5 Improve Electric Charging provision and other alternative fuelling sources (e.g. hydrogen)	CLEP/ENW/Local Authorities.	Ongoing	Business transport and logistic fleets helped to decarbonise.	Working on hydrogen charging point with developer.
	3.6 Explore opportunities to decarbonise logistics as an energy intensive sector.	CLEP	February 2024	International best practice informs plans to decarbonise the logistics sector	CWE appointed to undertake research into international best practice on decarbonisation.
	3.7 Review grid capacity and connectivity to ensure businesses can decarbonise their operations.	CLEP	Ongoing	Sufficient grid capacity to incorporate local clean energy generation as a mechanism to decarbonate.	Electricity Northwest presented to the CLEP Board in January 2024. National Grid are updating their Cumbria grid assessment. CLEP will pull together ENW and NG outputs.
	3.8 Support Spirit Energy to develop its Morecambe Bay Net Zero facility.	CLEP	Ongoing	The UK's largest carbon capture storage facility is developed and implemented.	CLEP has hosted a House of Lords Event to promote the facility; brokered introductions to key partners locally and nationally and integrated the facility into wider strategic plans.

PRIORITY	ACTIVITY	LEAD RESPONSIBILITY	TIMESCALE	OUTCOME	UPDATE
4. Net Zero Navigator	4.1 Add first version of Net Zero Navigator to LEP website and establish schedule to update/review content.	CLEP	Complete	Clear decarbonisation advice in an easy to use format that is tested with SMEs to demonstrate effectiveness.	First version of Navigator available and ready for launch.
	4.2 Focus group the v1 Net Zero Navigator with prospective SME users.	CLEP	March 2024	An SME led focus group to test that navigator adds value.	Consultations with CLEP Sector Panels and other prospective users to begin focus groups.
Page 94	4.3 Explore the potential of developing a more advanced diagnostic tool for future iterations of the Navigator.	CLEP	March 2024	A more advanced diagnostic tool to help businesses identify steps they can take to decarbonise, based on specific business factors.	To be taken forward after consultation process completed.

PRIORITY	ACTIVITY	LEAD RESPONSIBILITY	TIMESCALE	OUTCOME	UPDATE
5. Business to Business Support	5.1 Integrate business decarbonisation advice into all business support activity as part of the standard business support menu.	CLEP	Ongoing	All businesses contacting CLEP have access to advice on decarbonising their business.	This is one of the key menu advices provided as part of diagnostic activity.
	5.2 Profile case studies on the updated CLEP Net Zero webpage, and through social media.	CLEP	February 2024	Provides clear examples of leading by example to encourage other companies and to demonstrate progress to wider stakeholders.	This is being implemented on an ongoing basis.

PRIORITY	ACTIVITY	LEAD RESPONSIBILITY	TIMESCALE		OUTCOME	UPDATE
	5.3 Complete the implementation of the business decarbonisation strand of Innovate for Success and evaluate the impact of this.	CLEP	March 2024	•	CO2e reduction of more than 4,160 tonnes over 10 years. Net present social value (NPSV) impact of £1,041,769 Suite of exemplar businesses demonstrating the impact of demonstrating in	15 projects are either underway or completed. Completions have delivered in line with expectations.
	5.4 Implement the rural transformatory workstreams to deliver decarbonisation objectives.	CLEP	Ongoing			All three transformatory workstreams are being implemented with Working Groups established for each of these.

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© PRIORITY	ACTIVITY	LEAD RESPONSIBILITY	TIMESCALE	OUTCOME	UPDATE
6. Establish Funding Routes	6.1 Develop a proposal for the Strength in Places Dairy Chain initiative to support decarbonising activity in the farming sector.	CLEP	March 2024	£300,000 investment in innovating and decarbonisation in the farming sector.	Initial meeting held with SRUC to explore initiative and timescales for next round.
	6.2 Assess sources of funding and financial support for decarbonisation to develop guidance for Cumbria businesses and produce roadmap.	CLEP	March 2024	 Collaboration with CPI (Centre for Process Innovation) to provide expert advice for IETF (Industrial Energy Transformation Fund) bids. Clear and up to date guidance to Cumbria businesses on funding mechanisms. 	Collaboration with RTOs (Research Technology Organisations) underway.

PRIORITY	ACTIVITY	LEAD RESPONSIBILITY	TIMESCALE	OUTCOME	UPDATE
	6.3 Incorporate learning from NZNW Green Finance Review led by Lancashire LEP.	CLEP/NW Net Zero Hub.	March 2024	Up to date independent review of green financing to assist Cumbria businesses with investment of decarbonisation schemes.	
	6.4 Signpost businesses to the decarbonisation funding available from the Shared Prosperity Funds in Cumbria.	CLEP	Ongoing	Businesses have access to funding in 2023/24 and 2024/25.	This is being done on an ongoing basis.

PRIORITY	ACTIVITY	LEAD RESPONSIBILITY	TIMESCALE	OUTCOME	UPDATE
Programme	7.1 Plan and establish a programme of events covering the breadth of the 10 Point Plan.				Three events are being designed and will be delivered in 2024.

PRIORITY	ACTIVITY	LEAD RESPONSIBILITY	TIMESCALE	OUTCOME	UPDATE
Accreditation and Training	8.1 Conduct an initial review into current best practice and availability of schemes and training provision.	CLEP		Businesses are provided with high quality training provision and receive formal recognition and validation of their activity.	Paper presented to January 2024 meeting. Work is now being taken forward on this.

PRIORITY	ACTIVITY	LEAD RESPONSIBILITY	TIMESCALE	OUTCOME	UPDATE
9. Facilitate First Steps	9.1 Produce guidance for the Net Zero Navigator on 'easy wins' that firms can implement at the start of their decarbonisation journey.	CLEP	Complete	A simple starting point for any business in Cumbria for decarbonisation journey.	Issued and ready for review with SME Focus group.

PRIORITY	ACTIVITY	LEAD RESPONSIBILITY	TIMESCALE	OUTCOME	UPDATE
Address Challenges	10.1 Produce a communications plan for the CLEP's net zero workstream, including business decarbonisation.	CLEP	March 2023	Clear communication process to businesses and stakeholders through a range of communication channels.	This is being delivered in line with priorities.
97	10.2 Develop a risk/issues register.	CLEP	Ongoing – update regularly	Clear representation of the risk/issues and development of action plans to address these.	This has been produced and is reviewed as a standing item on each Strategy Group meeting.

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Report to LEP Overview and Scrutiny Committee

Meeting Date 27th February 2024

Key Decision No Public/Private Public

Portfolio Cllr Mark Fryer, Cumberland Council

Directorate Place, Sustainable Growth and Transport

Lead Officer Darren Crossley – Director of Place, Sustainable Growth and Transport

Title Integration of LEP activities to Local Authorities

1. Summary:

This report provides an update following the Government announcement that it would cease to provide core funding the LEPs from 1 April 2024 and instead would support local authorities to take on the functions currently delivered by LEPs. This report provides an overview of the plans and activity to integrate Cumbria LEP functions into the Local Authorities, following the latest Government guidance.

2. Recommendations:

It is recommended that Cumberland LEP Overview and Scrutiny Committee note and comment on the activity to integrate LEP activities to Local Authorities for Cumberland and Westmorland and Furness Councils.

Tracking

Executive:	19 th March 2024 (Executive)
	28 th March 2024 (Joint Executive Committee)

Scrutiny:	26 th February 2024 (Joint Overview and Scrutiny	
	Committee)	
	27 th February 2024 (LEP Scrutiny Committee)	
Council:	n/a	

3. Background

Role of Local Enterprise Partnerships (LEPs)

- 3.1 Local Enterprise Partnerships (LEP) are the bodies across England tasked with leading economic growth activities in their local areas. The Cumbria Local Enterprise Partnership (CLEP) operates across the whole of the Cumbria footprint and has been in existence since 2014.
- 3.2 Following a ministerial review of LEPs, the Government published the 'Strengthened Local Enterprise Partnerships' Report in July 2018. The report set out a number of recommendations around governance and operation including the need for LEPs to have a legal personality and a single accountable body.
- 3.3 CLEP became a company limited by guarantee in December 2018, and shortly after all of Cumbria's then Local Authorities holding corporate membership and, as members, were entitled to appoint directors. Following LGR, both Westmorland and Furness and Cumberland have acceded to the Board with the Leader of Westmorland and Furness now holding the position of Vice Chair, reflecting the financial assurance responsibilities that the authority has assumed in its accountable body role.
- 3.4 CLEP has an extensive governance structure reflecting its responsibilities for strategy, investment, delivery, co-ordination and advocacy.
- 3.5 CLEP's role as the strategic lead for economic growth has resulted in the production of a number of key policies and plans, all of which have been consulted on widely and ensured input and ownership from business, the third sector and public sector partners. Most recently, it developed Restart, Reboot, Rethink in response to the need to deliver post-pandemic economic recovery.
- 3.6 CLEP also leads on specialist economic intelligence and modelling work, partnering with Local Authority officers. Activity includes the purchase, management and analysis of key datasets including Experian forecasts and the DfE Data Cube.
- 3.7 LEPs were originally established to facilitate the management of major capital funding programmes in local areas. In total, almost £80m of Government funding was delivered in Cumbria by CLEP between 2015 and 2021, mainly across the following key programmes:
 - Cumbria Infrastructure Fund (Growing Places Fund) A £6.16m evergreen, revolving investment fund which was originally focussed on creating jobs and homes. All funding has been invested and is in the repayment stage which leaves it as 'recycled, clean' money for more flexible future investments.

- Growth Deal (Local Growth Fund) £60.3m capital programme which is financially complete and in the benefits realisation stage with regular reporting to Government until March 2025. Growth Deal supported a range of projects including Barrow Waterfront, investment in flood defence works at strategic employment sites and creation of new skills facilities.
- Getting Building Fund A £10.5m capital programme which is financially complete and in the benefits realisation stage with regular reporting to Government until March 2025. The programme supported two projects – A595 improvements at Bothel and Marina Village.
- Northern Cultural Regeneration Fund £15m legacy fund launched by the
 Department for Culture, Media and Sport (DCMS) in August 2017. Its primary
 funding goals are to encourage sustainable cultural and creative regeneration in the
 North of England and to benefit areas in the North of England that have historically
 had low levels of cultural and creative investment.
- There are other key programmes such as Growing our Potential and Northern Cultural Regeneration Fund, funded by the Cumbria Infrastructure Fund (CIF). CIF was established to promote the delivery of key infrastructure needed to unlock developments that help to generate jobs and homes. The CIF totalling £6.1m came to an end on 31st March 2023.
- 3.8 Cumbria County Council acted as Accountable Body for CLEP from its inception. This wide-ranging role incorporated significant support to CLEP in terms of assessment, assurance, programme financial management, contracting, monitoring and reporting. After LGR, Westmorland and Furness Council has taken over this role. Whilst the majority of the capital programmes are financially complete, the Council continues to provide support ongoing monitoring, reporting and compliance support.
- 3.9 More recently, Government has elected to channel larger economic growth programmes such as UK Shared Prosperity Fund (UKSPF) through Local Authorities and LEPs have transitioned to deliver revenue-based, specialist skills and business programmes. Westmorland and Furness Council, through its Assurance and Economic Programmes Team, currently acts as Accountable Body for a number of these and provides ongoing support for their compliant management.

These current programmes are as follows;

- Growth Hub Delivery of the Government's 'free at the point of access' business support service. CLEP received £0.231m for 2023/24 to deliver a range of low, medium and high intensity assists through a combination of inhouse and sub-contracted provision.
- Careers Hub Supported by DfE and local match funding, the Hubs bring together a range of education, local authority and business partners to deliver high quality careers advice to help young people prepare for the next step on their learning or employment journey. The budget for 2023/24 is circa £0.2m.
- Skills Bootcamps Provision of flexible courses of up to 16 weeks to help people aged 19+ achieve sector-specific skills between levels 3-5 and fast-track to an interview with a local employer. Valued at circa £1m p.a. CLEP is currently delivering Wave 4 with discussions in place regarding Wave 5 for 2024/25.
- Department for Business and Trade Key Account Management –£50,000 p.a. to engage with and maintain effective relationships with key foreign-owned businesses.
- Innovating for Success £1m programme utilising recycled funding from the Cumbria Infrastructure Fund focusing on innovation and decarbonisation in

- businesses. Programme has supported 32 businesses and is in the benefits realisation phase.
- Barrow Town Deal Business Support £0.5m contract via Barrow Town Deal to deliver a range of business support services aimed at adding value to Growth Hub provision and supporting growth in key local sectors.

Future of LEPs - Transfer of Functions to Local Authorities

- 3.10 CLEP has been in existence since 2014, however on 17 March 2023 Government launched a consultation into the 'Future of LEPs' noting 'it was minded' to cease core funding to LEPs and to integrate LEP functions into local democratic institutions in line with government's commitment to extend devolution across England.
- 3.11 On 4 August 2023, the Government announced that it would cease to provide core funding the LEPs from 1 April 2024 and it would support local authorities to take on the functions currently delivered by LEPs. Government support local authorities to deliver the core functions currently delivered by LEPs namely, business representation, strategic economic planning, and the delivery of government programmes where directed.
- 3.12 Government expects these functions to be exercised by upper tier local authorities (working in collaboration with other upper tier local authorities as appropriate), where they are not already delivered by a combined authority, or in areas where a devolution deal is not yet agreed.
- 3.13 To support the policy change, Government published technical guidance in August 2023 and on 19th December 2023 published the final piece of guidance on the core functions of business representation and local economic planning. Both guidance documents should be used by local authorities in developing their integration and delivery plans for 2024/25 and beyond.
- 3.14 A letter from Minister Young and Minister Hollinrake dated 19th December is attached as **Appendix A**, the letter contains the links to the guidance available and confirms Government will provide up to £240,000 to a single local authority who will act as the Accountable Body, and deliver the functions previously delivered by LEPs namely business representation, local economic planning, and the delivery of Government programmes where directed subject to final business case and integration plan approvals.
- 3.15 This core funding is separate to any programme funding that may be provided to support the delivery of, for example, Growth Hubs or Careers Hubs. Funding for the delivery of Government programmes as directed will be communicated to authorities by the responsible Government department or body as per usual processes
- 3.16 The guidance sets out the following key messages;
 - (a) That government's sponsorship and core funding of LEPs will cease in April 2024.

- (b) LEPs may continue to operate as private enterprises but government will no longer fund LEP's and will instead support local authorities to take on LEPs core functions, namely business representation, strategic economic planning and responsibility for the delivery of government funded programmes where directed.
- (c) The creation of an Economic Growth Board for a functional economic area (FEA) geography (minimum 500,000 population) made up of local business leaders and representative bodies to create an economic strategy for the area.
- (d) Government expects areas to publish their (existing, new, or updated) strategy within six months of receiving funding. The strategy should be published on the combined authority website or where multiple upper tier local authorities are working together, the authority appointed to be the accountable body should publish the strategy on their website.
- (e) Delivery of Growth Hub Activity Local Authorities are expected to work together to ensure seamless Growth Hub provision across the area, which will continue to support businesses and to provide a convening point for broader business support provision. The delivery area must be broadly related to the business and economic area footprint.
- (f) Delivery of Careers Hubs Local Authorities to work together to ensure Careers Hubs delivery continues so far as possible over existing geographies.
- (g) Management of Legacy Capital Programmes the Accountable Body to be responsible for ongoing monitoring requirements.
- (h) Existing Enterprise Zones The future functioning, management, and governance of these should be agreed locally, in line with any pre-existing arrangements and to ensure a smooth transition of operation and funding.
- 3.17 At the Joint Executive Committee (JEC) on 13th November 2023 the JEC noted that further work would be required to develop the transitional arrangements between Cumbria Local Enterprise Partnership and the Joint Executive Committee before 31 March 2024 and to plan for further integration beyond 1 April 2024.
- 3.18 On 13th November 2023, the Joint Executive Committee (JEC) agreed the following recommendations:
 - a) That the Joint Executive Committee is the best governance structure to take on responsibility for the transition of LEP functions to the two Authorities to continue on a Cumbria geographical footprint and the delivery of those functions across Cumbria and recommends to the Cumberland Executive and the Westmorland and Furness Cabinet that they agree a change to the terms of reference of the Joint Executive Committee to reflect this.
 - b) To the continuation of the Accountable Body and Assurance Team operating as a hosted service under the Inter Authority Agreement to support the management of LEP legacy funding and management of future funding from 1st April 2024 and to amend

the Service Schedule in the Inter Authority Agreement relating to the Accountable Body and Assurance Team to reflect this.

- c) Delegating authority to the Chief Executives of both Authorities in consultation with the Leaders of the Councils for approval of the integration plan for submission by 30th November 2023 (since updated to reflect the latest Government Guidance)
- d) Note that further work will be required to develop the transitional arrangements between CLEP and the Joint Executive Committee before 31 March 2024 and to plan for further integration beyond 1 April 2024.
- e) Programme to integrate LEP activities into Local Authorities for Cumberland and Westmorland and Furness Councils.
- 3.19 Since the Joint Executive Committee decision and on receipt of more detailed Government guidance, senior officers from Cumberland and Westmorland and Furness Councils are working closely with the CLEP to develop a transition programme to integrate LEP activities into Cumberland and Westmorland and Furness Councils by 1st April 2024.
- 3.20 This has included an overarching LEP Integration Programme Board and setting up the following core workstreams:
 - a. Assurance and Contracts led by Assistant Chief Executive, Westmorland and Furness Council
 - b. Finance led by Section 151 Officers in Cumberland and Westmorland and Furness Councils
 - c. Staffing and TUPE led by Assistant Director HR and OD, Cumberland Council and working with Cumbria LEP as transferor.
 - d. Joint Executive Committee and Economic Growth Board led by Director of Place, Sustainable Growth and Transport, Cumberland Council and Director of Thriving Places, Westmorland and Furness Council, working with the CLEP Board and a small CLEP working group.
 - e. Communications and Website led by Communications and Digital teams
 - f. Each Workstream is currently identifying and delivering on critical activities for 1st April 2024, whilst also acknowledging the actions that will fall post-1st April 2024 to deliver on the Implementation Plan.
- 3.21 Key activities to implement ahead of 1st April 2024 include:
 - a. Staff engagement and transfer of Cumbria LEP staff in accordance with the TUPE Regulations, with CLEP as the transferor and Cumberland Council as the transferee.
 - b. Understanding the current CLEP budgetary position, resolving the Cumbria LEP Company Status and an approach towards assets and liabilities between the two authorities
 - c. Established governance to ensure that the Joint Executive Committee can provide the basis for joint working and collaboration on strategic economic growth across the Cumbria geography

- d. Development of an SLA between Cumberland and Westmorland and Furness Councils for the Accountable Body and Economic Programmes Team, currently hosted within Westmorland and Furness Council, to take into account the changes in Accountable Body and Assurance arrangements as a result of the LEP sitting within a Local Authority on a pan-Cumbria basis
- e. Establish a website and ensure robust communications across both authorities and wider public

Governance

- 3.22 The Chief Executives of both Authorities in consultation with the Leaders of the Councils submitted the integration plan into central government, noting that further work will be required to develop the transitional arrangements between CLEP and JEC before 31st March 2024. A report will be considered at JEC on 28th March 2024.
- 3.23 The governance arrangements will lead to the CLEP Board transitioning to a Cumbria Economic Growth Board with transfer of LEP functions to Cumberland Council. Westmorland and Furness will retain responsibilities for an Assurance function.
- Until there is a full transition of functions, the current CLEP Board members and 3.24 associated sub-groups have been asked if they will continue to be the primary consultative and advisory body on strategic economic growth for the functional economic area of Cumbria, providing insight and advice in shaping the future Cumbria Economic Growth Board and any sub-boards/advisory groups. There is ongoing dialogue with the CLEP Board on these arrangements.
- 3.25 The interim governance structure will also include the Joint Officer Board. The proposal is for the Joint Executive Board to set the strategic direction and oversight of the Cumbria-wide core economic functions formerly delivered by Cumbria LEP, namely business representation, strategic economic planning, and responsibility for the delivery of government programmes where directed.
- 3.26 To ensure seamless delivery of LEP programmers and functions, the delivery arm will take place through the Cumbria Economic Growth Team as the Accountable Body within Cumberland Council operating on a pan-Cumbria basis (currently the Cumbria LEP team). Westmorland and Furness Council will continue to provide monitoring and assurance pertaining to existing CLEP programmes and funds for which LEPs are responsible. This assurance will be provided the Section 151 Officer in Cumberland Council, as the proposed Accountable Body.
- The Joint Executive committee will provide a strong voice for the Economic Functional 3.27 Area (EFA) of Cumbria on strategically important economic issues and influence, and align government, public and private investment. If any devolution arrangements are progressed, the Joint Executive Committee will evolve more formally into a Level 1 Joint Committee, where Local authorities work together across a Functional Economic Area, which then enables the constituent councils to proceed through the steps necessary to meet the governance requirements for a Level 2 or Level 3 devolution deal.
- 3.28 It is proposed that the Joint Executive Committee will have oversight and monitor the budget for the Cumbria wide economic growth functions, the management of which is the responsibility of the Accountable Body. The committee will also have oversight, monitoring and review of the Cumbria wide economic programmes, grants, assets, Page 105

functions and programmes transferred from the LEP and oversight of any new funding, programmes or grants as directed by Government or agreed by the Joint Executive Committee.

- 3.29 On the 19th March 2024, Executive will be asked to:
 - To agree to amend the Terms of Reference of the Joint Executive Committee provide the basis for joint working and collaboration on strategic economic growth across the Cumbria geography.
 - To agree that the Joint Executive Committee will have oversight of the transfer and future delivery of the LEP functions, assets and responsibilities (in accordance with recent Government decisions).
 - To agree that Cumberland Council is the Delivery Authority and Accountable Body to discharge the functions and responsibilities and ensure a seamless transition.
 - To enter into such legal agreements as are required to give effect to the arrangements for the discharge of functions and responsibilities and to provide for effective communication and co-operation between the Council and Westmorland and Furness Council.
 - To amend the Inter Authority Agreement as required.
- 3.30 On the 28th March 2024, the Joint Executive Committee will be asked to:
 - To agree that the Joint Executive Committee will have oversight of the transfer and future delivery of the LEP functions, assets and responsibilities (in accordance with recent Government decisions).
 - To agree that Cumberland Council is the Delivery Authority and Accountable Body to discharge the functions and responsibilities and ensure a seamless transition.
 - To amend the Terms of Reference to provide the basis for joint working and collaboration on strategic economic growth across the Cumbria geography.
- 3.31 Following this approach, the Joint Overview and Scrutiny Committee will also provide overview and scrutiny in respect of those functions exercised by the Joint Executive Committee.

Future / Look Ahead

3.32 It is proposed that to comply with the Government guidance a Cumbria Economic Growth Board (CEGB) will be formed, as a partnership of key stakeholders from the public, private and third sector with a scope and remit across all areas of inclusive growth in Cumbria. The primary role of the CEGB will be to provide a business sector perspective and strategic insight and advice on the Cumbria wide economic programmes and initiatives, shaping business, trade and investment support around local business and economic needs.

- 3.33 This Board will fulfil the principles set out in the Government's guidance ensuring that there is a business voice within a democratically accountable governance structure, and will support the integration of LEP functions into Local Authority. A series of thematic sub boards and advisory groups will sit underneath the Economic Growth Board. The sub boards and advisory groups will provide a powerful business voice, for the wider business community and representatives of key economic growth sectors. The sub boards and advisory groups will include organisations, businesses, and individuals with the ability to identify and respond to local economic challenges and opportunities.
- 3.34 Through an open and transparent appointment process, applying Nolan principles, the Joint Executive Committee will be expected to appoint the Members, Chair and Vice Chair of the Cumbria Economic Growth Board and agree the Terms of Reference.
- 3.35 Government expects areas to publish their economic strategy within six months of receiving funding to support the development of Economic Functional Areas (EFAs). The strategy should be published on the authority's website which will act as the Accountable Body. The Economic Growth Board and affiliated sub-groups is expected to lead and shape the development and delivery of relevant pan Cumbria economic strategies and interventions, including the Cumbria Economic Growth Strategy. The strategy will be approved by the Joint Executive Committee.
- 3.36 Each authority will continue to lead and deliver economic development within their own geographies. Examples include economic development and inclusive growth activities, economic growth strategies, programmes, projects, town deals, UK Shared Prosperity Fund (UKSPF), Strategic Infrastructure and Local Plan.

Implications: Not applicable.

Contribution to the Cumberland Plan Priorities - Cumberland Council's vision is that it takes a fresh approach to the delivery of inclusive services that are shared by residents and communities. By enabling positive outcomes for health and wellbeing, prosperity and the environment, it is possible to fulfil the potential of people and area.

The Council believes passionately in the delivery of excellent public services, and in order to this it is essential to be clear about the values and behaviours needed to drive change and achieve high standards.

Relevant Risks – Risks are currently being identified and monitored as part of the Programme management approach.

Consultation / Engagement – Both authorities are engaging with the Cumbria LEP to develop the transitional arrangements as part of the programme governance approach.

Legal – Legal Services are providing legal advice relating to the Governance, decision making and the legal agreements required to support the proposals relating to the LEP Integration. The Legal implications of the LEP transition are being worked through as part of the overall programme. More detail on the proposed legal implications will be included in the LEP transition report to both the Cabinet and the Joint Executive Committee in March 2024.

Finance – The financial implications of the LEP transition are being worked through as part of the overall programme. Both section 151 Officers are working together to ensure the accountabilities and financial transactions required from the transition are effectively actioned. More detail on the proposed financial implications will be included in the LEP transition report to the JEC on 28th March.

Information Governance – There aren't direct information governance implications.

Impact Assessments –

Have you screened the decision for impacts using the Impact Assessment? **N/A** If you have not screened the decision using the Impact Assessment, please explain your reason. **Not key decision**

Contact details:

Contact Officer: Darren Crossley, Director of Place, Sustainable Growth and Transport Email:

<u>Darren.crossley@Cumb</u> erland.gov.uk

Appendices attached to report:

Appendix 1 – Letter from Government on the transfer of LEP functions

Background papers:

Note: in compliance with section 100d of the Local Government Act 1972 the report has been prepared in part from the following papers:

LEP integration guidance 4th August 2023 LINK TO GUIDANCE

LEP integration guidance 19th December 2023 LINK TO GUIDANCE



Jacob Young MP
Minister for Levelling Up
2 Marsham Street
London
SW1P 4DF



Kevin Hollinrake MP

Minister for Enterprise, Markets and Small
Business
Old Admiralty Building
London
SW1A 2DY

19 December 2023

To: Combined Authority Mayors, Local Authority Leaders, the Mayor of London, and LEP Chairs

Dear all,

TRANSFER OF LOCAL ENTERPRISE PARTNERSHIP (LEP) CORE FUNCTIONS TO COMBINED AND LOCAL AUTHORITIES

On 4 August 2023, Minister Hollinrake and the then Minister for Levelling Up wrote to you to confirm that, from April 2024, the Government's sponsorship and funding of LEPs will cease, and we will instead support combined and upper tier local authorities to deliver the functions currently delivered by LEPs. This empowers democratically elected local leaders to work with the private sector to support local businesses and drive local economic growth.

To support you through this policy change, we published <u>technical guidance</u> in August 2023. We have now published the final piece of <u>guidance</u> on the core functions of business representation and local economic planning. These two pieces of guidance should be viewed as complementary, with both documents relevant to the integration of LEP functions. As such, any statements in the original guidance are still applicable and both guidance documents should be used by local authorities in developing their integration and delivery plans for 2024/25 and beyond.

In October 2023, our officials issued a local authority / LEP integration plan template for completion by the end of November. The purpose of the template was to aid the process of integration and transition and inform the direction on any future government funding. We would like to thank you for providing the necessary information in response to this request. Our officials are now reviewing these plans as part of the approvals process, which will conclude early next year.

We are now pleased to confirm that in 2024/25, Government will provide eligible combined authorities and upper tier local authorities with up to £240,000 to deliver the functions previously delivered by LEPs – namely business representation, local economic planning, and the delivery of Government programmes where directed – subject to final business case and integration plan approvals (where plans are required and/or not yet approved). We recognise that this represents a small reduction in 2023/24 funding levels – this reflects the efficiencies we expect the integration of functions into combined and local authorities to deliver.

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Eligibility for funding is conditional on LEP functions being delivered over sensible functional economic areas or whole county geographies. Where multiple upper tier local authorities are working together over a single functional economic area, they have selected one local authority to take responsibility for submitting the integration plan. Subject to approval of the plan, that authority will now be considered the accountable body for funding in 2024/2025. Funding beyond 2024/25 will be subject to future Spending Review decisions.

This core funding is separate to any programme funding that may be provided to support the delivery of, for example, Growth Hubs or Careers Hubs. Funding for the delivery of Government programmes as directed will be communicated to authorities by the responsible Government department or body as per usual processes.

We are also pleased to confirm that in 2024/25, Government will provide the LEP Network with up to £150,000, subject to business case approval, so they can continue to provide their support to aid the transition process.

To ensure the integration process already underway continues to progress as smoothly as possible, please do continue to direct questions and queries via the LEP Network or to your Area Lead within the Cities and Local Growth Unit. We would also like to take this opportunity to reconfirm that local authorities and LEPs should seek their own legal advice on issues related to staff; that LEP Directors should seek their own legal advice regarding personal liabilities; and that the management and transfer of any LEP assets should be agreed locally between the LEP and its Accountable Body, in line with any pre-existing arrangements and in accordance with any legal requirements. Where there are no existing arrangements, Government expects that any reserves and assets built up using public funds will remain within the public domain.

Government remains committed to empowering democratically elected local leaders by integrating LEP functions into local democratic institutions. We would like to thank LEP Chairs, their Boards, and their staff for all the work they have done to drive and support local growth across England since 2010. In addition, we would like to thank you all for your work to date and your continued efforts to facilitate this transition.

Jacob Young MP

Minister for Levelling Up

Kevin Hollinrake MP

Minister for Enterprise, Markets and Small Business Page 110