



GREEN ECONOMY PANEL

MEETING TO BE HELD AT 4.00 PM ON TUESDAY, 29 JANUARY 2019 IN COMMITTEE ROOM A, WELLINGTON HOUSE, 40-50 WELLINGTON STREET, LEEDS

AGENDA

- 1. APOLOGIES FOR ABSENCE
- 2. DECLARATIONS OF DISCLOSABLE PECUNIARY INTERESTS
- 3. EXEMPT INFORMATION POSSIBLE EXCLUSION OF THE PRESS AND PUBLIC
- 4. MINUTES OF THE MEETING OF THE GREEN ECONOMY PANEL HELD ON 23 OCTOBER 2018
 (Pages 1 6)
- 5. CHAIR'S UPDATE

For Decision

6. CLEAN GROWTH AND KNOWLEDGE EXCHANGE (Pages 7 - 36)

For Information

- 7. ENERGY STRATEGY AND DELIVERY PLAN UPDATE (Pages 37 44)
- 8. ENERGY ACCELERATOR ADVISORY BOARD UPDATE (Pages 45 52)
- 9. HYDROGEN NORTH OF ENGLAND (Pages 53 56)
- **10.** CIRCULAR YORKSHIRE (Pages 57 68)

11. STRENGTHENED LOCAL ENTERPRISE PARTNERSHIPS (Pages 69 - 76)

12. MAJOR PROJECTS UPDATE

(Pages 77 - 82)

Signed:

Managing Director
West Yorkshire Combined Authority

Agenda Item 4



MINUTES OF THE MEETING OF THE GREEN ECONOMY PANEL HELD ON TUESDAY, 23 OCTOBER 2018 AT COMMITTEE ROOM A, WELLINGTON HOUSE, 40-50 WELLINGTON STREET, LEEDS

Present:

Simon Pringle (Chair)

Natasha Luther-Jones

Councillor Jenny Lynn

Councillor Andrew Waller

Jim Cardwell (Advisory Representative)

Rosa Foster (Advisory Representative)

David Gill (Advisory Representative)

Project Rome

DLA Piper LLC

Calderdale Council

City of York Council

Northern Powergrid

Environment Agency

Northern Gas Grid

In attendance:

West Yorkshire Local Nature Partnership Martin Farrington Wallace Sampson Harrogate Borough Council Alan Reiss West Yorkshire Combined Authority West Yorkshire Combined Authority Jacqui Warren West Yorkshire Combined Authority **Noel Collings** Jo Barham West Yorkshire Combined Authority Ruth Chaplin West Yorkshire Combined Authority Megan Hemingway West Yorkshire Combined Authority

10. Apologies for Absence

Apologies for absence were received from Councillors Maureen Cummings, Sarah Ferriby, James Lewis and Andrew Cooper and Dr Alice Owen, Nevil Muncaster, William Firth and John Williams.

11. Declarations of Disclosable Pecuniary Interests

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

12. Exempt Information - Exclusion of the Press and Public

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

13. Minutes of the Meeting of the Green Economy Panel held on 17 April 2018

Resolved: That the minutes of the Green Economy Panel held on 17 April 2018 be approved.

14. Chair's Update

The Chair reminded the Panel of the requirement for meetings to be quorate and, for clarification, the membership and voting rights of the Panel members was outlined.

LEP Review

The Chair gave an update on the Leeds City Region Enterprise Board (LEP) Review and the discussions which had been held at the LEP Board. It was noted that a proposal that complied with the Government's requirements had been submitted and a response was awaited.

The Panel was made aware that a report on Local Inclusive Industrial Strategy (LIIS) and the wider policy framework would be brought to the next meeting in January 2019.

Julie Haigh was introduced to the Panel and she outlined her role as liaison officer for the private members and as support for Roger Marsh, Chair of the LEP.

Proposal to Change Panel Name

It was noted that the Chair of Green Economy Panel felt that the term 'Green' may be viewed as outdated by some and that it may not reflect the Panel and it's role. Members were asked to consider and feedback suggestions for an alternative name and this would be given further consideration at the next meeting.

15. Local Inclusive Industrial Strategy

The Panel considered a report which provided an update on the development of the Local Inclusive Industrial Strategy (LIIS), informed by the outcome of the LEP Board away day held on 20 September 2018.

The Panel discussed the draft Policy Framework and LIIS in detail and it was considered that it should be more ambitious in respect of de-carbonisation. Members also stressed the need for funding to fill gaps in vocational training for post-14 year old students and that fracking must not be part of the strategy.

The Panel was advised that there are existing 'Re-100' businesses based in the City Region who have a target to buy all their electricity from 'green' sources by 2030. It was suggested that the Combined Authority link up with these businesses to achieve shared goals.

Members were advised that work was being undertaken to revise the draft Policy Framework and LIIS, including decarbonisation of all the economy and contributing to national commitments to tackling climate change. This will be circulated to Panel members.

A progress report and revised draft strategy would be brought to the next meeting.

Resolved:

- (i) That the update on the Local Inclusive Industrial Strategy (LIIS) and the key actions agreed by the LEP Board be noted.
- (ii) That the revised draft strategy be circulated to the Panel and a progress report brought to the next meeting.

16. Green and Blue Infrastructure Strategy and Delivery Plan

The Panel considered a report and received a presentation on the development of the Leeds City Region Green and Blue Infrastructure Strategy and Delivery Plan.

Members were asked to endorse the Strategy and Delivery Plan and they were given the opportunity to comment and ask questions and a full and detailed discussion was held. This included:

- The delivery of strategy which had been delayed due to resource constraints. It was stressed that appropriate resources must be provided.
- The benefits of the plan which would have a correlation to public health.
- It was recognised that transport programmes will play a key role in delivery.
- To be mindful that Brexit may have an impact.
- Effective monitoring and collation of a robust evidence base is also needed to show the impacts of the proposed work.

It was noted that further work would be undertaken to identify staffing and financial implications in order to deliver the projects identified in the Delivery Plan.

Resolved: That the Green and Blue Infrastructure Strategy and Delivery Plan be endorsed and recommended to the LEP Board and Combined Authority.

17. Energy Strategy and Delivery Plan

The Panel considered a report and received a presentation on the development of the Leeds City Region Energy Strategy and Delivery Plan (ESDP).

It was noted that the ESDP would contribute to achieving the key challenges of the Local Inclusion Industrial Strategy and was made up of the following four work packages:

- Energy state of the Leeds City Region.
- Technology Options Available.
- Energy Opportunity Areas.
- Delivery Plan.

A summary of each package was set out in the submitted report and Members discussed the headline outputs of the energy state of the Leeds City Region work packages, an overview of the key findings was attached at Appendix 2.

In respect of the science based targets, the paper proposed exploring and adopting a regional carbon reduction target in line with the Paris Climate Change Agreement of limiting temperature rises to below 2 degrees Celsius. Members supported the need to work towards setting regional carbon reduction target in line with the Paris Agreement. They acknowledged that might need to evolve as the science does. It was also noted that the current delivery mechanisms (i.e. Energy Accelerator, Energy Hub) alone will not enable the proposed targets to be fully achieved. Further work is now planned to help the LEP and Combined Authority consider adopting such a regional target, including stakeholder engagement and a possible City Region event next year.

Wallace Sampson, as the Chief Executive lead for Energy in the City Region, made the Panel aware of the work he is leading on for the Yorkshire and Humber Chief Executives. A paper was presented to their last meeting summarising current energy related work and future opportunities. The Chief Executives have agreed to develop a Yorkshire and Humber energy vision. This will be based on the results of the various LEP's emerging Energy Strategies. Work will also be fully aligned with the new North East, Yorkshire and Humber Energy Hub and regional opportunities identified.

Resolved:

- (i) That the Energy Strategy and Delivery Plan be endorsed and recommended to the LEP Board and Combined Authority.
- (ii) That it is recommended that the LEP and Combined Authority explore and work towards setting a regional carbon reduction target in line with the Paris Agreement.

18. Future Funding

The Chair outlined that the Future Funding report was a paper which would regularly come back to the Panel to ensure major projects and new funding opportunities were regularly discussed at the meeting.

Resolved:

- (i) That the report be noted.
- (ii) That update reports be provided at future meetings.

19. Major Projects Update

The Panel considered a report which provided an update on progress against the following Green Economy Panel's major projects and programmes:

- Energy Accelerator.
- Better Homes Yorkshire.
- · Warm Homes Fund Bid Round 2a.
- Resource Efficiency Fund.
- District Heat Network (DHN) Programme.
- North East, Yorkshire and Humber Energy Hub.
- Hydrogen 21 (H21).
- · Green GB Week.
- Clean Air Strategy Consultation Response.

In preparation for the establishment of the Accelerator, a team of expert advisors have been procured by the West Yorkshire Combined Authority (Combined Authority). They will provide three commercial sector leads and one cross sector technical lead to work on the Accelerator. They will be supported by a wide pool of experts that can be called upon depending on the projects in need of support through the Accelerator. A report will be brought to the next meeting on some proposed changes needed to the Accelerator's Advisory Group.

In respect of Hydrogen 21 (H21), it was reported that a H21 Leaders Event had been held in September. A booklet was circulated at the meeting for Member's information. An update would be provided at the next meeting.

A new H21 North of England report is due to be launched on 23 November. The H21 North of England presents a detailed engineering solution for converting the gas networks across the North of England to hydrogen.

Members were advised that work continued to establish the new North East, Yorkshire and Humber Energy Hub and a new part time officer had been appointed to support the Hub projects within the Leeds City Region. It was suggested that they be invited to the next meeting.

Members requested further information in respect of the Resource Efficiency Fund (REF). Councillor Lynn also advised the meeting that there is a new ERDF Priority Axis 4 (low carbon) call currently out.

Resolved:

(i) That the progress against the Green Economy Panel's major projects and programmes be noted.

20. Date of Next Meeting

29 January at 4pm in Committee Room A, Wellington House







Report to: Green Economy Panel

Date: 29 January 2019

Subject: Clean growth and knowledge exchange

Director: Alan Reiss, Director Policy, Strategy and Communications

Author(s): Kiran Parmar, James Brass, Jonathan Busch

1 Purpose of this report

1.1. To support the development of the Local Inclusive Industrial Strategy (LIIS) this paper updates the Panel on the knowledge exchange to Graz and summarises a new proposal for a clean growth audit that will form a robust evidence base to help embed clean growth into the LIIS. The paper seeks endorsement for this approach.

2. Information

Industrial Strategies

- 2.1. The Panel has heard previously about the LEP's work to develop a Local Inclusive Industrial Strategy (LIIS). Sitting at the heart of a new, long-term strategic policy framework, the emerging LIIS will focus on bold steps aimed at driving inclusive growth, boosting productivity and improving living standards for a post-2030 economy. The Industrial Strategy is expected to be published in Spring 2020. The latest version of the Policy Framework, which now includes Carbon Reduction as a "Golden Thread", is in Appendix 1.
- 2.2. The need for leadership, coordination and convening powers, stated within the UK Industrial Strategy, signals an increasing role for government in industrial development.
- 2.3. The Government's guidance emphasises a bottom up approach to industrial strategies, encouraging the production of an evidence base to draw out strengths and weaknesses. Local officers have begun work on the evidence base, looking at sector strengths in health and social sciences, and in advanced manufacturing and a growing expertise in technology.
- 2.4. Turning to clean growth, whilst this is cited as one of four 'Grand Challenges' within the UK Industrial Strategy and recognised as a global economic opportunity, it remains unclear where existing strengths and weaknesses lie in the private sector and in innovation activities within the Leeds City Region economic area.

Clean Growth

- 2.5. Of the four 'Grand Challenges' set out by Government, Clean Growth is globally significant, given the urgent need to tackle both climate change adaptation, mitigation and clean development. As the signatories to the Paris Climate Change Agreement implement decarbonisation plans, and global funds are mobilised, there will be an ever-greater need for low carbon capabilities and expertise. Trillions of dollars of investment in global energy solutions alone will be needed, highlighting the opportunity for UK business exports.
- 2.6. Work has already been done to identify the environmental and economic benefits of clean growth in the City Region. For example, the opportunity to transform the City Region's energy system has been quantified in the Leeds City Region Energy Strategy, approved by the Combined Authority and the LEP in late-2018, which identifies a potential increase of £11 billion GVA resulting in 100,000 new jobs. Similarly, the IPPR's Northern Energy Strategy marks energy as a key growth sector, highlighting strengths in advanced manufacturing and skills base, alongside world class university research.
- 2.7. Opportunities for the UK to lead the transition to clean growth will arise from competitive advantage. The Government's Clean Growth Strategy points towards:
 - the UK science base and capacity for innovation;
 - High value services in finance, law, consultancy, software and data;
 - Excellence in design and manufacture of products and advanced technologies;
 - policy and regulatory environment.
- 2.8. Capturing the global opportunity, while committing to decarbonisation, could produce growth rates of over 10 percent for the UK low carbon economy into the 2020s with between £60 and £170 billion in global export value. This underlines the clean growth challenge set out in the Industrial Strategy.

Knowledge exchange

- 2.9. In July 2018, officers of the West Yorkshire Combined Authority and Leeds City Region Local Enterprise Partnership (LEP), including the Chair of this Panel, and a team from Leeds University, travelled to Austria to learn about the Green Tech Cluster in the region of Styria (one of 9 Austrian states). The aim was to investigate 1) how clean growth, in this case a clean-tech cluster, has driven economic growth and is a core component of their functioning economy 2) learn and integrate findings to support clean growth opportunities into the forthcoming LIIS
- 2.10. Members of the delegation collaborated with partners at the University of Leeds, the Styrian Regional Government and the Green Tech Cluster in Graz on a knowledge exchange workshop. The workshop focused on the development and functioning of industry clusters in Styria, exchanging ideas, and reflecting on the implications for UK industrial strategies and the need to tackle climate change.
- 2.11. Styria is an interesting comparison for the Leeds City Region as it has a history of successfully managing decline of heavy and dirtier industries whilst

- maintaining advanced manufacturing industries and developing new internationally competitive green technology industries.
- 2.12. Styria has a total population of around 1.2 million compared to three million in the Leeds City Region. Its Gross Domestic Product (GDP) per capita is 114.8 percent of the European Union (EU) average compared to the Leeds City Region's 90.5 percent, and a research and development index (R&D) of 4.87 percent of GDP compared to the Leeds City Region's 1.07 percent. The UK Industrial Strategy aims to narrow this deficit by increasing the UK R&D investment rate to 2.4 percent by 2027.
- 2.13. The workshop explored the history and dynamics behind Styria's high rate of R&D investment and successful Green Tech Cluster. The Green Tech Cluster is an intermediary organisation part owned by the Styrian Regional Development Agency, the City of Graz and a local industry partner. It is funded by contributions from over 200 member companies who are active in Green Tech. The Green Tech Cluster organisation performs a number of functions that are valuable for its members:
 - "Green Tech Radar" to inform members on new developments in green technology, and on the state of the global market;
 - Branding and internationalisation to build awareness of Styria as a leading centre for green tech innovation and facilitate investment in, and export by, member companies;
 - Business networking to facilitate knowledge exchange and cooperation amongst the local business community;
 - Management of a Green Tech Hub which provides space and mentoring for start-ups, with links to 12 hubs in international locations including Cape Town, Brussels and Montreal;
 - Innovation support, providing small medium enterprises (SMEs) with targeted support for new innovation projects.
- 2.14. Subsequent analysis of the workshop outputs identified four key points of learning that should help shape the development of a local industrial strategy in the Leeds City Region. These are:
 - 1) Build on local culture Styria has a long history of innovation built on open collaboration between Universities and local industry.
 - 2) Harness Institutions and intermediaries Industry, Civic Leadership and Public Sector Organisations all have important resources and capabilities to contribute to regional industrial development.
 - 3) Develop local missions a clear vision for regional development with missions promoted by Civic Leaders that address social and economic challenges is valuable in multiple ways.
 - 4) Work with appropriate geographies the geography of Yorkshire is much more fragmented than Styria and this must be recognised in local strategies. Visions and missions should be developed for appropriate geographies.
- 2.15. The learning from the knowledge exchange project (see appendix 2), and wider research on industry clusters for regional development, point to the formation of industrial clusters, to accelerate innovation and sector growth.

- 2.16. Industry clusters have been a key part of the European Union Smart Specialisation programme for almost two decades, based on the principle that regional specialisation can create competitive advantages to promote economic development.
- 2.17. The cluster approach is favoured in recent policy by the Government, as reflected in the Strength in Places programme, Industrial Strategy Challenge Fund programmes and the Defra Resources and Waste Strategy which calls for the creation of Resource Efficiency Clusters.
- 2.18. Technology clusters can take a number of forms, and evolve to change form through their lifecycle. The Styrian Green Tech Cluster started with the presence of a strong industry anchor organisation, but has since become more decentralised with a bigger proportion of SME members.
- 2.19. Clusters are usually managed on the basis of a "Triple Helix" approach, which focuses on creating a creative space for innovation between government, industry and research institutions. An intermediary organisation is a useful body to realise such a strategy (see Figure 1).

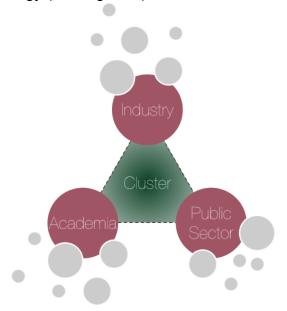


Figure 1 The Triple Helix approach to cluster management, which creates an intermediary organisation that harnesses the strengths of Civic Leadership, Industry and research institutions to foster innovation.

- 2.20. The Styrian Green Tech Cluster offers an approach that could be replicated in the Leeds City Region. However, a greater level of sector intelligence is firstly needed to ascertain the conditions for industrial clusters, and, in the case of green-tech; current and future sector strengths and innovation activities. The Clean Growth Audit proposed below will address this.
- 2.21. The learning from the knowledge exchange has informed development of the LIIS evidence base; in particular, though the design of a clean growth audit (see below). For example; the Styrian approach involved a 'top-down' and 'bottom-up,' strategy in order to address specific challenges while supporting grass-roots innovation. This suggests a need to balance the urgency of a low carbon transition, with sufficient scope for local strengths to emerge.

3. Clean growth audit

- 3.1. The Local Inclusive Industrial Strategy (LIIS) must choose a set of strategic priorities for Clean Growth. To support development and implementation of the LIIS, an evidence base is needed that:
 - Shows developments consistent with the Clean Growth Strategy and global industry trends driven by the Paris Agreement.
 - Identifies existing local industrial strengths.
 - Incorporates the findings from the knowledge exchange and builds on these.
- 3.2. Building on the work above, and to begin the creation of a robust evidence base for Clean Growth in the LIIS, a clean growth audit is proposed.

 This will:
 - Create an evidence base on the location and type of industrial activities that are the highest users of energy (energy intensives) and emit the greatest greenhouse gas emissions (carbon intensives).
 - Map where and who are currently operating in the low carbon and sustainability service sectors.
 - Identify current and future opportunities including existing or future cluster networks such as a green or clean technology (Cleantech) cluster (but not limited to this) and building on the findings of the Knowledge Exchange.
- 3.3. Four stages are proposed to capture this information (Figure 2).

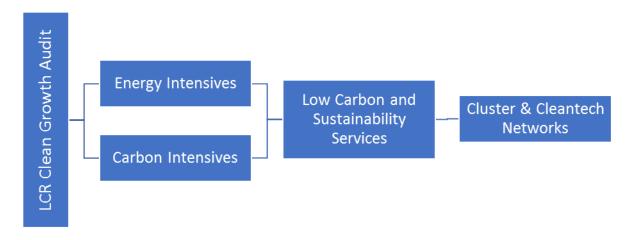


Figure 2 Clean Growth Audit proposal

A mixture of top down and bottom up approaches will be used, with support from the University of Leeds Sustainable Research Institute over the next five months.

3.8 Figure 3 below describes how the Knowledge exchange and clean audit will support the LIIS and identify new opportunities to potentially be developed

through the LIIS, this may include clean-tech cluster development and other opportunities identified in the evidence from the Clean Growth Audit.

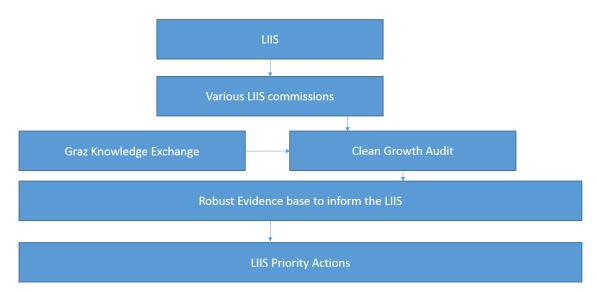


Figure 3 Local Inclusive Industrial Strategy evidence Base

4. Next Steps

Action		Timescale
1.	Commission Clean Growth Audit	January 2019
2.	Complete Audit	May 2019
3.	Integrate opportunities identified in the Audit into the LIIS	May – September 2019

5. Financial Implications

5.1. Activities supporting development of the Industrial Strategy evidence base are financed by internal budgets. Purchasing of supporting services - for example market analyses, will be subject to internal procurement, budgetary control and delegated approvals.

6. Legal implications

6.1. No legal and compliance implications have been identified

7. Staffing implications

7.1. Additional support will be available from Jonathan Busch from Leeds University's Sustainable Research Institute, who will be supporting this work over the next 6 months though the Knowledge Exchange project.

8. External consultees

8.1. The University of Leeds Sustainable Research Institute will be the partner organisation working alongside Combined Authority Officers in development of activities in Section 3 and 4.

9. Recommendations

9.1. The Panel are recommended to note the contents of the report and provide comments on the emerging findings, especially in relation to the information outlined in Sections 3 and 4.

10. Background documents

- 10.1. UK Government Industrial Strategy
- 10.2. UK Government Clean Growth Strategy

11. Appendices

11.1 Appendix 1 - Policy Framework

Appendix 2 – Local Inclusive Industrial Strategy: Decision Theatre Final Report: A Knowledge Exchange event between the Leeds City Region and Styria.



VISION

E A GLOBALLY RECOGNISED ECONOMY WHERE GOOD GROWTH DELIVERS HIGH LEVELS OF PROSPERITY, JOBS AND QUAL OF LIFE FOR EVERYONE"

BUSINESS ENVIRONMENT. IDEAS & WORKFORCE

- Private sector leadership to drive a more productive region
- A region at the forefront of science, innovation and new technologies, including ambitions to decarbonise all sectors of the economy through the 2020s.
- Nurture future talent, address skills shortages and provide the technical skills that will drive our economy.

TACKLING OUR 4 KEY CHALLENGES

- 1. Boosting productivity & earnings
- 2. Increasing levels of innovation & R&D
 - 3. Tackling stubborn deprivation
 - 4. Improving living standards

PLACE & INFRASTRUCTURE

- Invest in infrastructure to transform connectivity & the places where people want to live and work and businesses invest.
 - · Contributing to national commitments to climate change
- Vibrant, people-friendly regenerated town and city centres, with high quality green infrastructure and public realm.



INTEGRATED POLICY FRAMEWORK TO ADDRESS THESE PRIORITIES (COVERING POWERS & FUNDING)

BUSINESS, IDEAS & WORKFORCE

GROWING & PRODUCTIVE ECONOMY

(Science & innovation, R&D, enterprise, digital, trade and investment

LIFELONG LEARNING

(Skills, opportunity, progression, young people, education)

HEALTHY & INCLUSIVE WORKFORCE

(Good work, welfare, health & Wellbeing)

LOCAL INCLUSIVE INDUSTRIAL STRATEGY

DEVELOPING BIG IDEAS TO:

1. BOOST PRODUCTIVITY & EARNING POWER
2. CONTRIBUTE TO NATIONAL

PRIORITIES & GRAND CHALLENGES

PLACE & INFRASTRUCTURE

TRANSPORT, CONNECTIVITY & MOBILITY

(21st century transport)

ENERGY, CLEAN GROWTH & THE ENVIRONMENT

(Green & sustainable city region)

STRATEGIC HOUSING & EMPLOYMENT SITES

(Affordable housing, stronger communities)

QUALITY OF LIFE

(High quality culture and citizen experience)

(U)

PARTNER PLANS & STRATEGIES

INCLUSIVE GROWTH

IMPROVING PRODUCTIVITY

CARBON REDUCTION

PLACE LEADERSHIP

INTEGRATED INVESTMENT

GROWTH & PRODUCTIVITY

GOOD JOBS & EARNINGS

SKILLS UPLIFT

IMPROVING CONNECTIVITY

REDUCING DEPRIVATION

ENVIRONMENTAL SUSTAINABILITY

DIFFERENCE FOR WHOM (COHORTS/SEGMENTATION)

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Local Inclusive Industrial Strategy: Decision Theatre Final Report

A Knowledge Exchange event between the Leeds City Region and Styria

Dorota Hajdukiewicz, Jonathan Busch, Alice Owen and James Brass

EXECUTIVE SUMMARY

Project Summary

The Leeds City Region Local Enterprise Partnership and West Yorkshire Combined Authority are currently in the process of developing a Local Inclusive Industrial Strategy. This report presents the findings of a knowledge exchange project, where delegates from the Leeds City Region took part in a workshop with partners in Styria, Austria, to explore local industrial strategies. Styria is home to the Green Tech Cluster, a world-leading centre for innovation in green technology.

The Leeds City Region and Styria share some similarities, but also have quite different political, cultural and economic geographies. This means that, whilst there is much to learn from the Styrian approach to industrial strategy, it requires some translation for somewhat different context of the Leeds City Region. The following four recommendations capture key learnings from this project.

Recommendation 1: Build on Culture

A vibrant and distinctive culture not only creates a high quality of life, it can also be a strong basis for industrial development. Strong local cultures are often based on a distinctive industrial heritage, and this is true for many cities and towns in the Leeds City Region. These cultures may be indicators of existing informal institutions that can act as the basis for internationally competitive industries. In Styria, a culture of invention and collaboration reflects informal institutions and networks of collaboration between Universities, Civic Leaders and Industry that played an important part in the success of cluster strategies adopted in the late 1990s.

The value for industrial development in recognising local cultures can be in:

- 1. Pointing to existing institutions, which may otherwise be difficult to identify, but facilitate academic-public-industry collaboration and business networks,
- 2. Gaining public support and enthusiasm for development strategies,
- 3. Creating an internationally recognised and compelling regional brand.

Recommendation 2: Allow Intermediaries to Harness Institutions

The public sector, industry and the academy are all institutions with their own purposes, priorities and resources. Successfully managing industrial development requires the strengths of each of these institutions to be harnessed, in a space that limits the conflicts of their self-interests. Intermediary organisations, such as cluster organisations, that are

supported by all three institutions but sit outside them can be such a space: academic institutions contribute research and gain access to funding and educational opportunities, industry contributes productive capacity and gains access to academic research, and the public sector contributes legitimacy and funding and gains influence. Such a space also allows for risks to be taken and innovations to be developed.

Recommendation 3: Set Clear Missions

Municipal leaders should promote a set of clear missions to direct collaborative action across the public sector, industry and academia. A common vision of a "Green Tech Valley" was a strong driver for collaboration in Styria, with support across a wide range of organisations. For a mission to be successful, it should be designed with three criteria:

- 1. Draw on existing strengths of the regional economy new industries cannot be created in a vacuum, but existing industries can develop in related directions.
- 2. Address locally relevant challenges a mission has legitimacy when it is recognised as creating value for stakeholders.
- 3. Target frontiers of global development in a connected global economy, value is created in collaboration.

The development of strategies for the realisation of missions must be resilient and adaptable to changing economic, social and technological landscapes. Strategies must be congruent with missions, but not constrain action. As such, they should be living documents, maintained and updated through open engagement with stakeholders (who may also change).

Recommendation 4: Work with Local Geography

Political, Economic and Cultural geography all affect how industrial development can happen, and each is highly variable across the Leeds City Region. For a local industrial strategy to be inclusive and successful, it must work with appropriate geographies for different missions. Many towns and cities in West Yorkshire have strong regional identities that are tied to particular industrial heritages. Some industries, such as agri-tech and the bioeconomy, are spread across and beyond the entire region. The local inclusive industrial strategy must work with an understanding of these varying geographies and target actions according to this.

Industrial strategy is not a replacement for social policy, but it can be a useful complement. By understanding and seeking to target actions at appropriate industrial, cultural and political geographies, a local inclusive industrial strategy can ensure that the benefits of industrial development are felt in all parts of the Leeds City Region.

1 INTRODUCTION

A Knowledge Exchange and Decision Theatre Workshop took place on the 19th July 2018 in Graz, Austria, funded by the University of Leeds Social Science Impact Acceleration Account and the ESRC Centre for Climate Change Economics and Policy in partnership with the West Yorkshire Combined Authority (WYCA), the Green Tech Cluster and the Styrian Landesregierung. The event brought together participants from the Leeds City Region and Styria, with representatives from Universities, public sector organisations and industry. Throughout the day, knowledge and ideas were exchanged, with an aim to support the development of Inclusive Industrial Strategies and to identify opportunities for further collaboration between the regions.

The report is organised as follows:

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2 BACKGROUND INFORMATION

The Leeds City Region and Styria have some interesting points of comparison, and some important differences, in their economic geography, governance, industrial economies and smart city developments. Some key information, summarised in this section, was presented to participants in advance of the workshop to create a common understanding of the context within which the later decision theatre questions were answered.

2.1 Summary of Administrative and Economic Geography

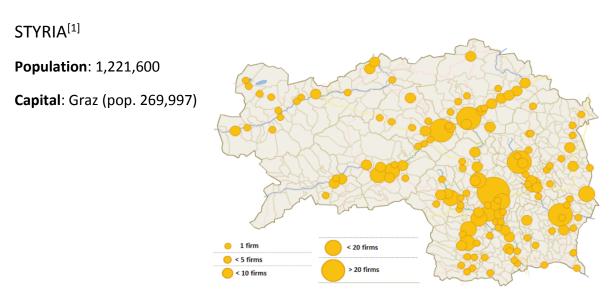


Figure 1: Distribution of Industrial Firms in Styria, 2013 (from [2])

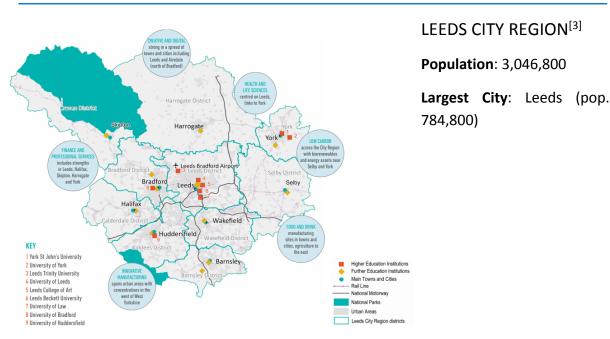


Figure 2: Leeds City Region Cities and Universities

Table 1: Summary of Administrative Geography Key Features and Statistics

UNITED KINGDOM	AUSTRIA	
Levels of Subnational Government		
2 [Combined Authority & Local Authority]	2 [Province & Municipality]	
Subnational Public Direct Investment (2014) [OECD Average: 58%; Germany: 68%]		
34%	44%	
Regional Government Responsibilities		
Combined Authority/LEP	Province	
Economic Development Transport	Economic Development Environment Planning and Zoning Social Services Municipal Waste	
Local Authority	Municipality	
Environment Planning Social Services Waste Collection & Management	Local Services Transport Infrastructure Household Waste Collection	

Table 2: Summary information on regional economies

LEEDS CITY REGION	STYRIA	
Size of Economy		
£64.6bn Per Capita GDP: 90.5% (percentage of EU average)	€43.3bn Per Capita GDP: 114.8% (percentage of EU average)	
GDP Change (PPS, 2007 - 2015)		
8.3%	17.5%	
Human Development Index (National Indicator, scale: 0-1)		

0.907, rank 14	0.885, rank 23			
High Level Growth Industries				
Innovative / Advanced Manufacturing Financial and Professional Services Health and Life Sciences Low Carbon and Environmental Industries Digital and Creative Industries Food and Drink	Green Tech Human Technology and Life Science Automotive Mechanical Engineering Electronics Wood and Paper			
Research & Development Ratio (% of GDP)				
1.07%	4.87%			
Private Sector Firms				
119,000 Over 32,000 VAT registered businesses, 99% of which are SME's	88,923 48.9% of these are 1-person firms			
Education & Skills				
Tertiary Education (aged 30-34)				
38.4%	38.6%			
Unemployment Rate (aged 15-74) & NEETs				
5.8% & 16.8%	5.1% & 7.6%			
Skill Gap Priorities				
Digital, Construction, Engineering	N/A			
Economic Strategic Priorities				
 Growing business Skilled people, better jobs Clean energy and environmental resilience Infrastructure for growth 	 Entrepreneurship and independence Systematic strengthening of innovative power Optimum usage of digitisation dynamics Internationalisation of location and companies International perceptions of the 'Styrian Brand' 			

2.2 Smart City Developments

1.1.1. Graz^{[4],[5]}

Graz is the only city in Austria currently implementing a Smart City project. This project intends to address the cities limited land availability for further development of residential areas whilst meeting its goal to become a zero-emission and carbon neutral city by 2050. The challenge for the city in meeting these objectives is to simultaneously manage the sustainability efforts and protect its status as a UNESCO World Heritage site. The City of Graz Smart City project comprises a series of developments and organisations, including:

- District heating networks utilising biomass, waste heat and solar energy
- Multimodal Mobility Planning integrating e-car sharing and rental, e-taxis and bicycles with an extended tram network



Figure 3: Science Tower Graz

- Waagner Biro Development the redevelopment of a former industrial district in the south of Graz, with €330 million of investment (including green residential buildings, a new tramway line, public park areas and the Science Tower)
- Green-Tech Cluster Styria with a membership of over 200 companies and research organisations, with expertise in bioenergy, solar energy, waste and resource management and green buildings

1.1.2. Leeds City Region

The Leeds City Region has a number of development projects that have some aspects of Smart City development, including Kirkstall Forge, Thorpe Park, the White Rose Office Park, the Aire Valley Enterprise Zone, Capitol Park at Tingley, and Leeds South Bank. The last of these – Leeds South Bank – includes a planned station for the High Speed Rail line 'HS2' between London and the North of England. With this investment, Leeds South Bank will be one of the largest redevelopment projects in Europe, aiming to create a world-class business location with digital infrastructure and to accommodate 35,000 new jobs and 4,000 new homes.



Figure 4: Leeds South Bank regeneration project concept

The West Yorkshire Combined Authority is developing a Digital Framework, part which aims to ensure development projects such as the Leeds South Bank achieve the goals of Smart City concepts. The business locations these redevelopments create should be suitable for digital service companies which are seen as a strong sector in the Leeds City Region. Enterprise zones, which offer reduced business rates and provision of the appropriate infrastructure, are also used as a tool to stimulate local economic development, particularly in high-tech manufacturing. To further support economic objectives, the Leeds City Region is delivering 31 strategic transport projects, improving affordable connectivity between

housing, employment and urban areas (including Park & Ride schemes, or Ring Roads improvements). It also aims to exploit 'smart technologies' such as provision of reliable travel information, ticketing, payment and better traffic management.

Two further Smart City projects are led by the University of Leeds^[6]:

- Multidisciplinary Pedestrian-in-the-Loop Simulator (PEDSIM) that aims to model and assess how autonomous vehicles will interact with pedestrians, to inform future mobility strategies for the Leeds City Region
- Virtuocity testing ground for mobility innovations and behaviour, to help future mobility strategies to anticipate user take up of new technologies

The City of Leeds was recently placed fifth in the UK Smart Cities Index, with the report finding the city being a front runner in terms of smart health initiatives in the UK.

3 DECISION THEATRE RESULTS

3.1 Session 1: Cluster Development Timeline

In the first session, the participants were asked to co-create a timeline of cluster development in Styria; reflecting on key events, challenges, stakeholders involved, leadership, funding, and communication. The discussion mostly focused on the development of the Green Tech Cluster, but also included input from other clusters that some participants were more familiar with. A summary of the key milestones that were considered most significant by participants in shown in Figure 5 below.

1. 1970s and '80s waste management directives create an environment for technology innovation.

2. Concept of clusters gains policy prominence in the 1990s. Existing strengths are identified and cluster organisations begin to be formalised.

3. The Green Tech Cluster was formed as a public-private partnership In 2005, creating a formal entity responsible for cluster management. 4. Cluster Maturity: the Green Tech Cluster has created an internationally recognised brand and carries out key cluster functions.

Figure 5: Key milestones in a cluster development.

The first milestone identified was the legal framework around waste management in the 1970s and 1980s, which created an environment for innovation in industries including glass recycling and sorting technology. The regional government's policies and strategies were informed from the bottom-up, based on changing attitudes and commercial opportunities.

The second milestone sees the early stages of clusters development, starting with the recognition of existing business networks as a position of strength and commercial opportunities. This process was driven by the growing prominence of cluster policies in EU and national governments. In the mid to late 1990s a number of existing and potential clusters were recognised in Styria (the Automotive cluster was the most developed of these at this point). The recognition of clusters was used to create a clear purpose and intent for the further development of these industries, including a recognition of the opportunities that would exist in global markets.

A third milestone can be identified as the point at which cluster organisations become formally established. The Green Tech Cluster (initially called Eco World Styria) was set up as a public-private partnership in 2005, and is now owned by the SFG (Styrian Economic Development Agency), the regional government of Styria, the City of Graz and industry partners including Andritz AG, Binder+Co AG and SFL technologies GmBH. The large industry partners are crucial in the early development of a cluster, they act as anchor organisations around which business networks develop. The involvement of the public sector is crucial to create alignment and coordination between public policy (such as the Styrian Economic Strategy) and the cluster strategy.

A final milestone that could be identified is the creation of an internationally recognised brand for the Green Tech Cluster. At this point, the cluster organisation is carrying out a number of important functions for the regional innovation ecosystem, including the fostering of business networks (which include collaboration between companies in supply chains) and knowledge networks (which include collaboration between research institutions and companies for research and development), maintaining an international brand recognition, business promotion and 'radar' of technology and market developments.

3.2 Session 2

The second session of the workshop was divided into two separate discussions, one about the development of "Strength in Place" strategies that identify regional industrial strengths and potentials, and the second about the linking of "Smart City" developments and industrial strategies. These topics were identified as two key challenges by stakeholders prior to the event.

3.2.1 "Strength in Place" Strategies

In this discussion, participants were asked to identify the elements of a "strength in place" strategy that would make it successful. They were prompted to consider five domains of factors that could be important:

- 1. Stakeholders & Networks
- 2. Resources (Financial, Physical and Organisational)
- 3. Policy & Strategy
- 4. Actions & Challenges
- 5. Public Engagement

In relation to organisational capacity, participants repeatedly mentioned a longstanding culture of research and innovation in Styria as crucial to the success of clusters in the region. It was felt that this cultural identity is an important prerequisite for the willingness of organisations in the region to collaborate within clusters, and to effectively apply their resources to collectively create and capture value [7]. Previous studies by Wirth et al. have shown that professional cultures are important in shaping the development of new industries

[8], and this seems to be an important part of the development of successful industry clusters in Styria.

In relation to the stakeholders and networks involved in developing regional strengths, it was discussed that the formation of cluster organisations is a process of formalising already existing industry networks so that they can be further developed. Participants in this session emphasised the bottom-up nature of this process, with industry leading on the early development of new clusters with the public sector becoming involved later. Strong leadership from a set of influential figureheads helps to draw in local government and Universities, which is also recognised as important in the co-creation of organisations, markets and innovation ecosystems [9]. And, as previously noted, a strong 'anchor tenant' – a large firm active in R&D – is often the starting point for a successful cluster. These anchor tenants have long been seen as crucial for converting academic research into commercial innovation [12] in the innovation systems literature, which explains their importance in the early formation of a cluster.

Cluster organisations were identified as carrying out many actions that help to develop regional industrial strengths. Innovation systems literature has studied the role innovation intermediaries on green innovation and economic development [11]. The activities of the Green Tech Cluster fit the functions this research identifies for innovation intermediaries: demand articulation, foresight, network building, capacity building, and institutional support (e.g. through advocacy for institutional change). This supports the view that cluster organisations with a focus on green innovation play an important role in the development of sustainable regional economies.

In terms of policies and public sector strategies, the most significant factors identified where a collaborative approach with industry and academia, an ability to be proactive in regulation and policy and the provision of services such as life-long education. Collaboration was another area where the cluster organisations were seen as central; they are positioned as neutral ground for bringing together industry, academia and the public sector for innovation and economic development. In this context, resources can be combined to achieve commonly agreed objectives, without being derailed by one particular parties' self-interest.

Finally, the resources put in place to support regional strengths are usually beneficial across diverse industries. It was discussed that an existing cluster culture creates an environment for developing new ones, for example the success of the existing clusters are now the basis for the Silicon Alps cluster, which was founded in 2015. To further encourage this, different clusters are encouraged to collaborate through regular cluster management meetings, events, and company visits. The 'silo-breaking' that this creates between different industries and technologies was also noted as valuable, and something that has also been fruitful in the Green Tech Cluster due to the diversity of companies it includes.

3.2.2 Smart City Development

The objective of Smart Cities is to promote core infrastructure, create a clean and sustainable environment, as well as to provide a better quality of life for its citizens. In this session, participants were asked to consider whether and how Smart City developments are related to regional industrial strength development and the activities of clusters. Five areas for consideration emerged in this process, and the discussions centred around them. These areas are shown in Figure 6.

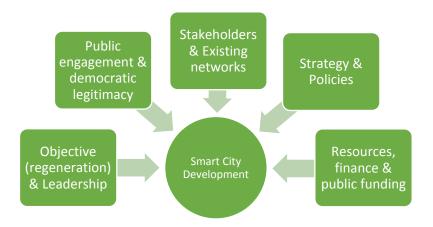


Figure 6: Smart city development discussion areas.

On the whole, participants felt that the connections between smart city developments and clusters were not always obvious, but that they could be used to promote some local industrial strengths. There are some strong synergies between the Graz Smart City project and the Green Tech Cluster, and these have been influential.

Participants agreed that there was an important role for leaders to influence architects, spatial planners, developers and contractors, so that regeneration plans respond to the needs of a target area, based on overarching principles of smart city development (although translating these principles into real terms in a local context is challenging). Some of the leaders that were involved with this process are also deeply engaged with the Green Tech Cluster. There was, thus, regular engagement between the City of Graz department leading the Smart City project and the Green Tech Cluster.

It was felt by participants that the City is, and should be, the problem owner and principal driver of the Smart City project. This is different to industrial strengths development where the cluster organisation's bringing together industry, academia and the public sector are important. There is, however, a role for industry and clusters in the project at two levels. The first is on a strategic level, allowing local tech companies to use the project as a testing ground for new technology development. The second is on an implementation level, where technologies developed by local companies contribute to improving quality of life of the Cities' residents, creating a market for new technologies.

Participants also discussed the importance of public engagement and democratic legitimacy for Smart City Development and Regional Industrial Strategy. For this, a positive narrative is needed to encourage enthusiasm and stakeholders' buy-in. In this, there is common interest between the Smart City project and the Green Tech Cluster. Both gain visibility, a stronger brand, and a positive narrative through participation in public consultation and decision-making processes.

A concrete example of collaboration between the Smart City project and the Green Tech Cluster is seen in the Science Tower. Located in the Smart City district, this now houses the Green Tech Cluster organisation and also provides space for start-up companies that will also receive support and mentoring from participants in the Green Tech Cluster.

3.3 Session 3 – Decision Theatre Questions

In this session, all participants were asked to collectively answer several questions posed to them. Several ideas were given for most questions, and these have been collected in the following.

Question 1 - How coherent and connected should industries be to be considered a cluster and who should drive the process of identification of existing industrial strengths and future potentials? What relationships and networks do they need? How important is all this for building a regional brand?

Usually, domain experts initiate and lead the process of identification of organically developed and yet uncoordinated networks, with government regulation sometimes helping to create local strengths and needs. The level of coherence within a cluster can be quite variable; some are organised around particular supply chains, such as automotive clusters, whereas others are focused on a type of product, such as Green Tech and Human Tech clusters. One of the benefits of the latter type is in promoting innovation through collaboration between different types of technologies. Creating a strong regional brand is very important, and clusters can contribute to this. In Styria, a strong regional identity of innovation and entrepreneurship has long been the basis for this regional brand.

Questions 2 – Should a regional industrial strategy be poly-centric and operate across scales? How much should centres collaborate or compete?

Commonalities and good connectivity in a region are crucial to regional industrial development and economic success. Imposing a pre-defined structure, however, is not necessarily a good idea. The specific regional context should determine the evolution of regional and local strategies. In Styria, there is a strong regional identify and matching

governance system. Graz is the dominant economic centre and an appropriate home to many industry networks. The Leeds City Region, by contrast, has many more cities and towns that support their own distinctive industrial economies. In this context, a poly-centric approach may be more appropriate.

Question 3 – What strategic approach is most effective in supporting the development of a new cluster; reorienting existing industry; attracting new anchors, or supporting local startups and spin-offs?

A multilevel strategy should aim to integrate outcomes at different levels (e.g., individual, organisational, sectoral) and work to guarantee continuity. Development of new clusters starts with a position of strength and optimise the potential of sectors or networks through well-aligned and commercially realistic governance and support. Rather than re-orienting existing industries, they should be supported to develop in new directions. Attracting new anchors is a poor strategy, as they can extract value and leave. Better to support local startups with a commitment to regional development.

Question 4 – What is the right balance between a strategy that identifies specific industries or challenges to support, and support for undirected grass-roots innovation?

Participants agreed here that a combination of top-down and bottom-up approaches is the most powerful way ensure the right balance in addressing specific challenges and supporting grass-roots innovation. It is important to allow flexibility in outcomes and not choosing winning innovators to be supported, but clear priorities for problems that need to be solved is also crucial.

Question 5 – If there is a strong vision for industrial development, how can this gain democratic legitimacy?

To ensure democratic legitimacy, a vision for industrial development should address issues and challenges that matter to the public. Narratives that connect industrial developments to the lives of citizens, in language that is accessible, are a powerful tool. Fruitful channels for engagement include labour unions, NGOs and community groups.

Question 6 – How can a strategy be developed and maintained that is both long-term in ambition and adaptive to policy, social, natural and technological changes?

To answer this question, participants reflected on and listed several ingredients for the successful strategy developed in Styria. As previously discussed, innovation and industrial

development is a part of Styrian culture, with over 200 years history of R&D culture. Strong leadership in both industry and government has been instrumental in creating long-term strategies. A long-term and adaptive strategy is likely to succeed if it builds on an existing local culture, and identifies important social challenges.

Question 7 – What are the most important policies and interventions to mitigate the negative social consequences of the closure of carbon-intensive industries?

Styrian partners highlight that they do not necessarily have carbon-intensive industries, but energy intensive industries. These industries can innovate and evolve to decarbonise their operations. In the Austrian steel industry, for example, the approach is to focus on niche and high-quality products with very specific industry applications. This makes it possible for decarbonisation to become cost effective.

Participants from both regions agreed that the most desirable policies and interventions mitigate and prevent negative social consequences, as well as support affected communities to adapt. Such policies can facilitate access to retraining and benefits, provide a safety net, invest in new industries/sectors and improve access to new workplaces. Moreover, partnerships with organisations providing financial help, such as credit unions, is likely to help those who lost trust in the banking system. Investments in mobility, infrastructure or digital will also ensure that communities are connected and have access to information and support is facilitated. Notably, participatory scenario-making, engaging the communities at risk, is a desirable way of ensuring that right policies are developed and put in place.

4 RECOMMENDATIONS

In this final section, we synthesise a set of recommendations for the development of a Local Inclusive Industrial Strategy for the Leeds City Region. These recommendations are based on some of the key learnings the participants took from the workshop.

Recommendation 1: Build on Culture

The success of the Green Tech Cluster in Styria is, in part, the product of a centuries old culture of investment in research and innovation. This has created informal institutions of collaboration between Universities, Civic Leaders and Industry. The adoption of cluster strategies in the 1990s acted to formalise these institutions but was enabled by them. When identifying "strengths in place" as the bases for internationally competitive industries, it is important to recognise such local cultures. The value for industrial development of such cultures can be in:

- 1. Pointing to existing institutions, which may otherwise be difficult to identify, but facilitate academic-public-industry collaboration and business networks,
- 2. Gaining public support and enthusiasm for development strategies,
- 3. Creating an internationally recognised and compelling regional brand.

Example 1: Textiles in Kirklees

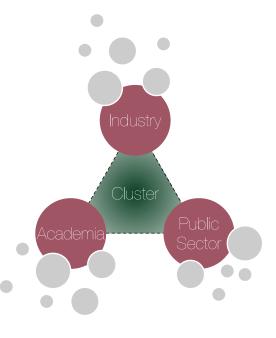
The industrial heritage of Kirklees is readily visible in the textile mills built during the industrial revolution that are a common part of town centres. The textiles industry still forms an important part of this regions' economy and is recognised as a priority in the latest strategic economic plan. The Textiles Centre of Excellence, based in Huddersfield, has over 90 members and provides training and innovation services.

Recommendation 2: Allow Intermediaries to Harness Institutions

The public sector, industry and the academy are all institutions with their own purposes, priorities and resources. Successfully managing industrial development requires the strengths of each of these institutions to be harnessed, in a space that limits the conflicts of their self-interests. Intermediary organisations, such as cluster organisations, that are supported by all three institutions but sit outside them can be such a space: academic institutions contribute research and gain access to funding and educational opportunities, industry contributes productive capacity and gains access to academic research, and the public sector contributes legitimacy and funding and gains influence. Such a space also allows for risks to be taken and innovations to be developed.

Example 2: Triple Helix Clusters

Cluster organisations are often formed following a "Triple Helix" strategy that creates an innovation space between academia, industry and government.



Recommendation 3: Set Clear Missions

Municipal leaders should promote a set of clear missions to direct collaborative action across the public sector, industry and academia. A common vision of a "Green Tech Valley" was a strong driver for collaboration in Styria, with support across a wide range of organisations. For a mission to be successful, it should be designed with three criteria:

- 1. Draw on existing strengths of the regional economy new industries cannot be created in a vacuum, but existing industries can develop in related directions.
- 2. Address locally relevant challenges a mission has legitimacy when it is recognised as creating value for stakeholders.
- 3. Target frontiers of global development in a connected global economy, value is created in collaboration.

The development of strategies for the realisation of missions must be resilient and adaptable to changing economic, social and technological landscapes. Strategies must be congruent with missions, but not constrain action. As such, they should be living documents, maintained and updated through open engagement with stakeholders (who may also change).

Example 3: Leeds Hydrogen Network

The UK has so far made little progress on the decarbonisation of heat, and future carbon budgets can only be met if this is addressed. The H21 Leeds City Gate project aims to address this by converting the Leeds gas network to hydrogen. The goal of this project, although not conceived as one, is a good example of a clear mission that brings together the public sector, industry and academia. It also builds on regional strengths in advanced manufacturing in Leeds, has the potential to significantly improve local air quality, and would establish leadership in an international market.

Recommendation 4: Work with Geography

Industrial strategy is not a replacement for social policy, but a useful complement. In Styria, industrial strategy is generally not considered as a tool for addressing economic imbalance or social exclusion. The significant differences in geography between Styria and the Leeds City Region mean that the same is not as true for the latter. The Leeds City Region is much less mono-centric in economic, political and cultural geography. Political leadership is divided across individual local authorities, as well as the combined authority. Many cities and towns have strong local identities, which are often tied to industrial heritage. And there are several Universities and significant industry clusters spread throughout the region.

In practical terms, this means an inclusive industrial strategy should work with appropriate geographical locations and scales for different missions. Example 1 of the textiles industry in Kirklees is a particular strength of that region, with a diffuse hinterland of related activities that stretches across and beyond the Leeds City Region. Example 2 of the Leeds Hydrogen network is focused on advanced manufacturing in the City of Leeds.

Example 4: Agritech and the Bioeconomy

A good example of an emerging industry with a complex geographical distribution is agritech. Developing the Bioeconomy is a priority for the North Yorkshire and York enterprise partnership economic plan, but activities in this sector are found across the whole Leeds City Region. Drax, one of the largest biomass electricity generation plants in the UK, is near Selby. Holmfirth, and the rural area surrounding it, is home to several established agricultural firms that innovate in green technologies and automation – Longley Farm installed a wind turbine as far back as 1980 and now experiments with drone technology. And the City of Leeds has a growing urban food industry, including social enterprises such as Growing Better that combined sustainable food production in controlled environment, with health benefits for the local community.

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Report to: Green Economy Panel

Date: 29 January 2019

Subject: Energy Strategy and Delivery Plan Update

Director(s): Alan Reiss, Director Policy, Strategy and Communications

Author(s): Jacqui Warren

1. Purpose of this report

1.1. To provide an update on the progress and next steps for the Leeds City Region Energy Strategy and Delivery Plan (ESDP).

2. Information

Background

- 2.1. The new and ambitious ESDP was adopted by the Leeds City Region Local Enterprise Partnership (LEP) Board on 22 November 2018 and West Yorkshire Combined Authority Board on 13 December 2018.
- 2.2. The City Region's Strategic Economic Plan (SEP) has been a leading strategy on tackling climate and creating clean growth. The SEP sets out an ambition 'to become a resilient zero carbon energy economy underpinned by high quality green infrastructure'. To understand how the City Region could achieve the SEP energy ambition the ESDP was commissioned, with support from the Department of Business, Energy and Industrial Strategy (BEIS).
- 2.3. Appendix 1 is a summary of the ESDP. It includes five priorities:
 - · Resource efficient business and industry;
 - New energy generation;
 - Energy efficiency and empowering consumers;
 - Smart grid systems integration; and
 - Efficient and integrated transport.
- 2.4. The ESDP includes an initial 36 actions that form the basis of this strategy's delivery plan, the top ten of which are included in Appendix 1.

- 2.5. In agreeing this progressive strategy and delivery plan, the Combined Authority and LEP discussed their ambition for Leeds City Region to be one of the first UK city regions to meet a regional carbon reduction target in line with the International Paris Climate Change Agreement of limiting temperature rise to below 2°C.
- 2.6. The ESDP currently sets out, at a high-level, a carbon emission reduction trajectory that the City Region would need to deliver against to comply with the Paris Climate Change Agreement.
- 2.7. To allow the City Region to be one of the first UK city regions to commit to a carbon reduction target in line with Paris Agreement, the LEP and Combined Authority are now keen to understand in greater detail what would be required and agreed to explore this further. This includes holding a regional summit (see below). The findings of this work will then return to this Panel, the LEP and Combined Authority for formal endorsement of a carbon reduction target for the region (see below).
- 2.8. Meeting a Paris Agreement target could take the City Region a long way towards the SEP's and partners' ultimate goal of becoming a zero-carbon energy economy, as well as add £11 billion to the region's economy and create 100,000 extra jobs through investment in clean energy.

Recent work

2.9. Since adoption of the ESDP an assessment of potential project delivery routes has been completed. This work aimed to identify projects in the ESDP which are suitable for delivery through the Energy Accelerator and North East, Yorkshire and Humber Energy Hub (Energy Hub). It also identifies projects that do not fit into these programmes.

2.10. Work is now ongoing to:

- Develop detailed work plans with Partners for the projects identified in the ESDP, including feeding some projects immediately into the Accelerator and Energy Hub for support.
- Explore further a regional carbon reduction target in line with the Paris Climate Agreement (or similar).
- Organise a Leeds City Region Summit to explore with regional stakeholders how to potentially meet a regional carbon reduction target in line with the Paris Climate Agreement (or similar).
- The work above will to be shaped and guided by the existing ESDP Steering Group. This informal group is made up of West Yorkshire Combined Authority Officers, Green Economy Panel members and BEIS representatives.
- 2.11. The table below outlines the next steps for the ESDP over 2019.

Action		Timescale
1.	Devise with Partners detailed work plans for prioritised actions within the ESDP	Jan – Dec 2019
2.	Suitable actions from the ESDP to be immediately fed into the Energy Accelerator and new Energy Hub	Jan – March 2019 and then on an ongoing basis as new opportunities arise.
3.	Carry out further work to explore the proposed Paris Climate Agreement target for the City Region.	Jan 2019 - Spring 2019
4.	Hold a Leeds City Region Summit	By Summer 2019
5.	LEP and Combined Authority approval for meeting a regional carbon reduction target in line with the Paris Climate Agreement (or similar) and subject to the outcomes of action 3 & 4 above.	By Autumn 2019

- 2.12. In addition to the work above, the Combined Authority's Senior Management Team has recently approved the development of a new corporate approach to clean growth tackling issues such as reducing carbon emissions and a wider suite of environmental impacts. This will complement the ESDP to ensure the Combined Authority can play its part in leading delivery of the regional zero carbon ambitions and ensure that, as an organisation, it delivers clean growth throughout its operations and services.
- 2.13. The corporate approach will include:
 - Adopting a new Policy and set of principles.
 - A new Action Plan covering resource efficiency, integrated decision making (through the Combined Authority's Assurance Processes), and integration into a range of corporate operations and services.

The full programme will be developed over 2019.

3. Financial implications

- 3.1. Given the scale of the projects identified in the ESDP and new Corporate Policy and Action Plan, there are likely to be financial implications for the Combined Authority. Further work will be undertaken to understand the scale of the financial ask, and this will be reported at a future Panel meeting.
- 3.2. The proposed Summit is also subject to the Combined Authority securing funding in 2019/2020 and / or securing external sponsorship.

4. Legal implications

4.1. No legal and compliance implications have been identified.

5. Staffing implications

5.1. No staffing implications have been identified.

6. External consultees

6.1. None.

7. Recommendations

7.1. That the Panel note the progress and next steps for the ESDP.

8. Background documents

8.1. None.

9. Appendices

Appendix 1 – Summary of the Energy Strategy and Delivery Plan

Leeds City Region Energy Strategy Executive summary

1. Introduction

This Energy Strategy and delivery plan is the response of City Region partners to the global challenge of providing a secure, affordable energy supply for our residents and businesses, while also lowering carbon emissions to help the UK meet its national (Climate Change Act) and international (Paris Climate Change Agreement) carbon reduction targets.

With its long history of energy generation – historically producing a major share of the UK's energy including 12% of electricity – Leeds City Region has the knowledge, skills and infrastructure to play a key role in meeting the UK's future energy requirements.

In this strategy and delivery plan, we set out how we will target investment over the next 10 years to meet our ultimate goal of becoming a zero-carbon energy economy, while also taking advantage of unprecedented change within the global energy sector to grow our region's economy and improve people's lives.

2. Where we are now: our strengths and challenges

Given its long history of energy generation, Leeds City Region has a number of distinctive strengths that will enable it to play a leading role in the UK's transition to a low carbon economy with the right investment.

Our strengths:

38%

reduction in carbon emissions since 2005

12%

of UK electricity generated here

£918m

GVA value of City Region's energy sector

31%

of electricity generated here from low carbon or renewable sources

7,900 people employed in energy

Range of support available to help households and businesses become more energy efficient

The challenges we must address:

- Continued reliance on fossil fuels – only 8.8% of energy consumed currently is provided by renewables
- Estimated 13% increase in energy demand over the next 20 years
- 12.5% of households in the City Region in fuel poverty
- Ensuring our energy-intensive industries (including the UK's largest manufacturing centre) remain productive and globally competitive
- Keeping energy costs manageable for businesses and households
- Reducing carbon emissions to meet national and international targets

3. Where we want to be: our vision

Our ultimate ambition – as set out in our Strategic Economic Plan – is to make Leeds City Region a zero-carbon energy economy.

In this Energy Strategy and its accompanying delivery plan we set out how we will target investment and innovation over the next 10 years and up to 2036 to make our region a world-leading centre for zero-carbon energy.

We will also make the most of our region's significant natural assets to develop high quality green and blue infrastructure, that will improve our resilience to the effects of climate change, such as increased flooding. Our plans to achieve this are set out in our Green and Blue Infrastructure Strategy and delivery plan.

The major opportunity:

If our region were to reduce carbon emissions in line with the targets set in the Paris Climate Change Agreement by 2036, we would see:

53%

£11 billion-plus increase in annual economic output

100,000 more jobs

Leeds City Region at the leading edge of climate policy in England

Long term climate goals achieved

including net zero carbon emissions by around 2050

4. How we will get there: our priorities

To achieve our zero-carbon energy economy ambitions we will focus on five priority action areas:



1. Resource-efficient businesses and industry – we will increase support to help companies reduce their energy costs and carbon emissions



2. New energy generation – we will develop an energy network that provides locally generated low-cost, low carbon energy to homes and businesses, including district heat networks and the landmark H21 hydrogen energy project in Leeds



3. Energy efficiency and empowering consumers – we will help households become more energy-efficient, lower their energy bills and reduce fuel poverty



4. Smart grid systems integration – we will develop the technology and infrastructure that enables people and businesses to use energy more intelligently



5. Efficient and integrated transport – we will target investment and influence transport operators to develop a sustainable transport network, including a greater proportion of electric and hydrogen-powered vehicles and increased opportunities for cycling and walking

5. Top 10 projects and initiatives

Our zero carbon energy economy ambition will only be achieved through collective action. These are the key projects partners across Leeds City Region will explore together over the next 10 years, ranked by estimated carbon savings:

Hydrogen vehicles

Hydrogen buses and refuelling stations on a key City Region bus route



874 ktCO

Industrial energy efficiency

Targeting high emission industrial sectors



590 ktCO₂

Electric vehicle charging and infrastructure

Across the City Region, focusing on rapid charge technology



565 ktCO₂

Carbon Capture Storage (CCS)

Building on the pilot bioenergy CCS project at Drax in Selby



335 ktCO₂

Industrial waste heat recovery

Targeting energy from waste plants and energy intensive industries



290 ktCO₂

Carbon budgets and carbon management plans

To help businesses and public sector bodies limit their emissions



180 ktCO₂

H21

Continued support for the development of this project to convert the existing natural gas network in Leeds to 100% hydrogen



116 ktCO₂

Street lighting programmes

Improving the energy efficiency of street lighting through use of LEDs and smart technologies



100 ktCO₂

Public estate renewables programme

Installing renewable energy generation in public sector buildings



60 ktCO,

District heat networks

Continued development of 11 district heat networks across Leeds City Region



53 ktCO,

Together with government action these projects would enable the region to meet 63% of a carbon reduction target in line with the Paris Climate Change Agreement. If the region were to sign up to the target we will need to identify the additional 37% of savings needed.

Total CO2 savings: 3,173 ktCO₂*

* The equivalent of taking 680,000 cars off the road for a year or driving a car to the moon and back over 16,000 times!

6. How the strategy will make a difference

Benefits of delivering this strategy for people and businesses in the region will include:



Increased economic growth and productivity

- Faster economic growth within the energy sector
- Improved ability to attract business investment and talent to the region
- Increased business efficiency and competitiveness



Inclusive growth that benefits everyone

- Lower energy costs for households and businesses
- More skilled jobs related to energy
- Significant reductions in fuel poverty



Reduced carbon emissions

- Reduction in carbon emissions and improved air quality
- Achievement of climate change targets
- Improved energy security with less reliance on imported fuel supplies

Find out more

Read our full Energy Strategy and delivery plan here

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#zerocarbonlcr









Report to: Green Economy Panel

Date: 29 January 2019

Subject: Energy Accelerator Advisory Board Update

Directors(s): Melanie Corcoran, Director of Delivery

Author(s): Jelena Covic – Project Manager

Patricia Davey - Programme Manager

1. Purpose of this report

- 1.1. To update the Green Economy Panel on the Energy Accelerator (EA) including:
 - The Contract for Funding for the Energy Accelerator (Project Development Services) between the European Investment Bank (EIB) and West Yorkshire Combined Authority (Combined Authority) on behalf of the Leeds City Region Enterprise Partnership (LEP).
 - The successful procurement of advisors
 - Implementing the Energy Accelerator and changes to the governance structure the delivery stage.

2. Information

- 2.1. The EA is a key initiative under Priority 3 of the Strategic Economic Plan (SEP) which aims to create a zero carbon energy economy by 2036. The lack of project development funding and expertise are currently preventing investment in low carbon capital projects in the City Region. The EA programme is providing a new project development support service that will remove these barriers. The EA will provide a service to the public, private, academic and community sectors to develop projects around three key themes:
 - Energy efficiency and renewable energy (new and retrofitted)
 - District heat networks
 - Street lighting

- 2.2. The EA will not itself deliver capital programmes, instead will bridge a current market failure by providing robust technical and commercial advice that will enable projects to develop and proceed to implementation. The EA will enable ~£98m of capital investment in low carbon projects to happen across the city region.
- 2.3. The total value of the project is estimated at £3.817m¹ funded by:
 - £0.820m Local Growth Fund (of which some is allocated as match funding towards the ELENA grant); and
 - EUR 3.513m (£2.997m¹) EIB ELENA funding.

ELENA funding

- 2.4. As reported in October 2018, the Contract for Funding was signed in July 2018 and came into force on 1 August 2018 for a period of 3 years delivery (until 31 July 2021). The value of the ELENA funding is EUR 3.513 million.
- 2.5. Over the past few months the Combined Authority on behalf of the LEP has signed the EIB contract and taken the following actions to establish the EA:

Activity		Timescales
1.	A full business case with costs (decision 5) was approved for the Energy Accelerator programme by the Combined Authority on behalf of the LEP	July 2018
2.	The project moved into delivery from Policy and the mobilisation of the Programme Delivery Team started.	August 2018
3.	Recruitment process for the Project Manager and Programme Assistant was initiated.	August 2018
4.	The OJEU procurement of external experts has been finalised and the contract with the consortium (Turner & Townsend) was signed.	23 October 2018
5.	The Project Manager has been recruited and started in the role	1 November 2018
6.	The Programme Board was established and the Initial meeting held.	28 November 2018
7.	Inception report (a contract requirement) was submitted to the EIB.	29 November 2018

¹ Based on EC's March 2017 exchange rate

8. The recruitment of the Programme	
Assistant was not successful; the	January 2019
position will be re-advertised.	

2.6. The proposed governance and the assessment process for the programme has been reviewed and the EA is being delivered by a new Programme Delivery Team. The team comprises of seven posts: three internal staff and the four procured part-time external advisors who will be supported by a wider team of external advisors:

Internal staff

- Programme Manager (30% FTE)
- One Project Manager (100% FTE)
- One Programme Assistant (100% FTE)

External advisors

- Three part-time Commercial Sector Leads (3 x 0.5 FTE)
- One part-time Technical Cross-Sector Lead (1 x 0.5 FTE)
- Consortium of Advisors

Governance

- 2.7. The structure of the Programme Delivery Team and the governance is a minor change to the structure that was previously presented to this Panel, and has been updated to reflect and align to the governance of projects and programmes within the Combined Authority. The governance process has changed to allow the Senior Responsible Officer (Director of Policy, Strategy and Communication) to sign off all Accelerator projects to enable swift decision-making so as not to impact the tight timescales for the programme.
- 2.8. The Programme Advisory Group was set up to provide strategic direction for the bid to secure Energy Accelerator funding from the European Investment Bank (EIB). As the funds are secured and the programme moves to the delivery stage, the Programme Advisory Group will be replaced with a Programme Board. The core responsibility of the Programme Board is to assess suitability of the proposed projects and recommend to proceed or reject projects, and its membership is designed to improve the efficiency and effectiveness of the decision-making in the project assessment process and reflects other Programme Boards led by the Combined Authority.
- 2.9. All governance for the programme is overseen by the Combined Authority and must go through the assurance process on behalf of the LEP. Once schemes are identified as potentially deliverable, recommendations for each project will be developed by the EA's Programme Delivery Team and the Programme Board. All support that goes through the EA will be approved by the Senior Responsible Officer. The GEP will also continue to receive regular progress updates on the EA.

- 2.10. The purpose of the Programme Board is to support and advise the Programme Manager in relation to the portfolio of projects and that the programme is being managed in accordance with the Governance Framework (including risk and change management).
- 2.11. The Programme Board is made up of:
 - Senior Responsible Officer (The Director of Policy, Strategy & Communication)
 - Policy Manager
 - Programme Manager
 - Project Manager
 - Programme Assistant

Current Position

2.12. Following the successful procurement of the external advisors at the end of October 2018, the last few weeks have been focused on mobilisation of the external experts, the high-level review of the initial pipeline of projects and the establishment of contacts with key stakeholders.

3. Financial Implications

3.1. There are no implications associated with this paper.

4. Legal Implications

4.1. There are no implications associated with this paper.

5. Staffing Implications

5.1. There are no implications associated with this paper.

6. External Consultees

6.1. No external consultations have been undertaken.

7. Recommendations

7.1. The Panel is asked to note the progress being made to deliver the Energy Accelerator and recent changes to its governance processes.

8. Background Documents

8.1. None

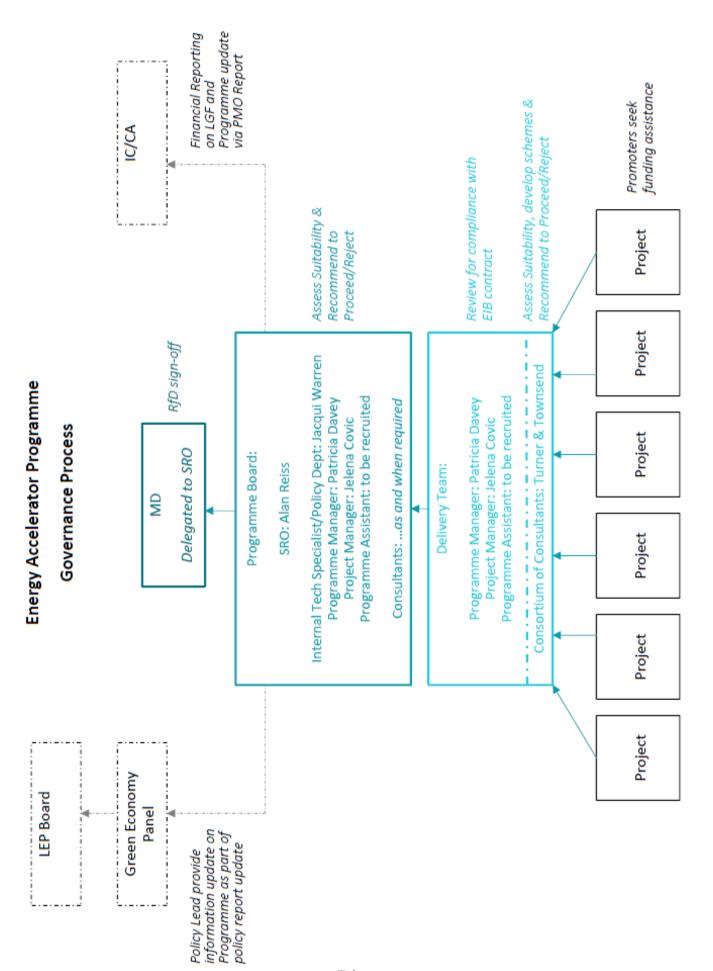
9. Appendices

Appendix 1. Energy Accelerator Programme Governance Process

Agenda Item 8

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Report to: Green Economy Panel

Date: 29 January 2019

Subject: Hydrogen North of England

Director(s): Alan Reiss, Director Policy, Strategy and Communications

Author(s): Jacqui Warren

1. Purpose of this report

1.1. To outline the new Hydrogen North of England Programme.

1.2. Keith Owen from the Northern Gas Networks will attend the meeting and present a summary of the new Hydrogen North of England programme.

2. Information

Background

- 2.1. Northern Gas Networks (NGN) Hydrogen 21 (H21) Leeds Citygate Project aimed to convert the existing natural gas network in Leeds, one of the largest UK cities, to 100 percent hydrogen. If implemented, this would be a highly innovative programme and the first of its kind in the UK.
- 2.2. Over the last two years the Panel have received regular updates on the progress of the programme. Great progress has been made including NGN being awarded £10 million from Ofgem to provide critical evidence to support the viability of converting the UK gas distribution networks to 100 percent hydrogen.
- 2.3. Building on the success of the H21 Leeds City Gate programme a new H21 North of England programme was launched on 23 November 2018. This is a detailed solution for converting 3.7 million UK homes and businesses from natural gas to hydrogen, in order to reduce carbon emissions.
- 2.4. Created by gas distributers Northern Gas Networks and Cadent, in partnership with global energy company Equinor, this hydrogen blueprint sets out how the UK is ready to lead the way in reducing carbon dioxide emissions through the world's largest clean energy project.

- 2.5. The UK has committed to reducing its carbon emissions to at least 80 percent of 1990 levels by 2050. Currently, over 30 percent of emissions come from domestic heating and cooking.
- 2.6. H21 North of England finds that converting the UK gas grid to hydrogen has the ability to provide "deep decarbonisation" of heat, as well as transport and power generation, with minimal disruption to customers.
- 2.7. This has the combined potential to reduce carbon emissions by over 258 million tonnes a year by 2050, equating to over 80 percent of the UK's remaining reduction target.
- 2.8. H21 North of England report proposes conversion will begin in 2028, with expansion across 3.7 million properties in Leeds, Bradford, Wakefield, York, Huddersfield, Hull, Liverpool, Manchester, Teesside and Newcastle over the following seven years.
- 2.9. A six-phase further UK rollout could see 12 million more homes across the rest of the country converted to hydrogen by 2050.
- 2.10. Keith Owen from Northern Gas Networks will present the new programme in detail to the Panel at the meeting.

Current support

- 2.11. The Combined Authority, Leeds City Council and Tees Valley Combined Authority created the H21 liaison group with NGN to support the development of the initial H21 Leeds Citygate programme. Support to date has included:
 - Letters of support for funding bids made by NGN.
 - Joint letters of support to central government.
 - Various events and senior stakeholder events.
 - An economic review demonstrating a range of opportunities for the group to explore.

3. Financial implications

3.1 No financial implications have been identified arising directly from this report.

4. Legal implications

4.1. No legal and compliance implications have been identified.

5. Staffing implications

5.1. No staffing implications have been identified.

6. External consultees

6.1. None.

7. Recommendations

- 7.1. That the Panel note the new programme and identify any support they would like to offer this new North of England programme.
- 8. Background documents
- 8.1. None.
- 9. Appendices



Agenda Item 10





Report to: Green Economy Panel

Date: 29 January 2019

Subject: Circular Yorkshire

Director(s): Alan Reiss, Director of Policy, Strategy & Communications,

Combined Authority & James Farrar, Chief Operating Officer, York

Author(s): Jacqui Warren (Combined Authority) and Katie Thomas & Tim

Frenneaux (YNYER LEP)

1. Purpose of this report

- 1.1. To provide the Green Economy Panel with a summary of York, North Yorkshire and East Riding (YNYER) Local Enterprise Partnership's (LEP) Circular Yorkshire programme.
- 1.2. Katie Thomas, Low Carbon and Circular Economy Lead for YNYER LEP, will present a summary of the Circular Yorkshire Programme to the Panel.
- 1.3. To gain feedback from the Green Economy Panel on future opportunities for collaboration between Leeds City Region and YNYER LEP areas in moving towards Circular Yorkshire and a circular economy across both geographies.

2. Information

Background to the Circular Economy

- 2.1. The following information has been written and relates to the work being undertaken by YNYER LEP.
- 2.2. Looking beyond the current take-make-dispose extractive industrial model, a circular economy aims to redefine growth, focusing on positive society-wide benefits. It entails gradually decoupling economic activity from the consumption of finite resources, and designing waste out of the system. Underpinned by a transition to renewable energy sources, the circular model builds economic, natural, and social capital.
- 2.3. The UK's National Industrial Strategy includes a commitment to moving towards a regenerative circular economy, as part of the Clean Growth Grand Challenge. The circular economy concept is recognised as a key lever to boost productivity, increase resource efficiency and restore natural capital.

2.4. The concept of 'circular cities' is now well advanced, with cities such as London, Peterborough, Amsterdam and New York leading city-scale circular economy initiatives. However, rural areas have been somewhat neglected in the global agenda to transition towards the circular economy. This is surprising considering the resource intensive industries active in rural areas. Whilst cities may be aggregators of materials, resources and innovation, rural areas are the providers of food, energy, water and products to power cities. Taking a more regional approach, provides the opportunity to explore the interdependencies between rural and urban areas and develop interventions that truly create circular systems.

LEP Review

2.5. As outlined in item 11, a new LEP covering the whole of West and North Yorkshire is proposed to be established by 2020. Both LEPs are already collaborating on a range of opportunities linked to energy. We also believe that there may be opportunities to widen this scope and work together towards a circular economy across both geographies. This paper begins to explore these opportunities and outlines the local work that both LEPs are undertaking and their next steps.

Local Context - York, North Yorkshire and East Riding - Circular Yorkshire

2.6. In York, North Yorkshire and East Riding the working mission is to:

Create a systemic shift towards a competitive economy that rebuilds capital – providing business opportunities and society-wide benefits within natural limits.

- 2.7. York, North Yorkshire and East Riding LEP have prioritised the circular economy as it builds on a number of local strengths:
 - **Bioeconomy:** the agenda builds upon the LEP's existing work and regional strengths in the bioeconomy.
 - **Food & Agriculture:** the over-representation of farming and food businesses in the area means that there is a unique opportunity to optimise resource and asset use across the whole supply chain, providing financial and environmental gains.
 - **Resource intensives:** York and North Yorkshire is home to a number of water, energy and material intensive businesses and assets. With economic strengths in manufacturing and agriculture.
 - Natural Capital: with two National Parks in the area and an abundance of agricultural land, there is substantial to create restorative and regenerative circular systems.
 - Innovation assets: extensive fundamental and applied research capabilities to address and solve the challenges in moving to a circular economy.
- 2.8. Applying circular economy principles at scale across the area is expected to contribute to a wide range of benefits, including:

- Increased resource productivity
- Reduced costs and increased competitiveness for resource intensive businesses
- Additional opportunities to generate commercial revenue streams
- Reduced finite resource consumption
- Reduced CO₂ emissions
- Increased export opportunities of circular knowledge and technologies
- Increased inward investment

Capital Approach to Circular Economy

2.9. The YNYER LEP have used a 'Capitals' approach to provide a framework by which we can understand the systemic shift needed to move towards a circular economy. This provides a comprehensive lens to conceptualise the interdependencies between economic, human and natural systems. See appendix 1 for an overview of these.

Summary of work to date

- 2.10. Katie Thomas will present Circular Yorkshire to the Panel. Work to date includes:
 - **Sector analysis:** to understand the strategic opportunities of moving towards a circular economy, a semi-quantitative approach was used to compare the circularity potential and economic importance of sectors.
 - Material flow mapping: using available waste data and relevant stakeholder insights a series of material flow maps were developed for specific sectors, identifying potential circular opportunities.
 - Stakeholder engagement: substantial stakeholder engagement has been undertaken on a 1-to-1 basis and a collaborative workshop with over 80 delegates to better understand the local opportunities, challenges and system change necessary to move towards a circular economy. Please see Appendix 2 for key themes identified.
 - Alignment with Local Energy Strategy: the circular economy has been included as a key underpinning principle within the YNYER Local Energy Strategy to support the decarbonisation of the economy.
 - Extension of the Resource Efficiency Fund: an outline application was submitted by West Yorkshire Combined Authority, on behalf of the YNYER LEP, to extend the enhanced Resource Efficiency Fund (REF2) into the four areas in North Yorkshire not currently covered by the programme: Ryedale, Richmondshire, Hambleton and Scarborough.

Next Steps

Action	Timescale
Develop a circular economy framework and strategy for York & North Yorkshire	November 2018 – April 2019
Establish an internal working group to embed CE principles across teams and build organisational capacity	December 2018 – Feb 2019
Establish and develop a small working group of board members and key influencers to guide the initiative	December 2018 onwards
'Jam' stakeholder event to collaboratively create an Action Plan	April 2019
Development and launch of CE Action Plan for York and North Yorkshire	January – July 2019

Local Context – Leeds City Region

- 2.11. To date the Leeds City Region has focussed on its ambition to deliver a zero carbon economy by 2036 through clean energy generation and environmental resilience. This was set out in the Strategic Economic Plan in 2016. A range of strategies and programmes have been developed to help meet the zero carbon energy ambition. These include:
 - Energy Strategy and Delivery Plan
 - Green and Blue Infrastructure Strategy and Delivery Plan
 - Four flagship programmes including the Energy Accelerator and the Resource Efficiency Fund.

All of the programmes encompass elements of a circular economy, however to date the explicit linkages have not been fully realised nor articulated.

Circular Economy Pilot

2.12. The concept of a Circular Economy is being advocated by the Government in its Industrial Strategy, Clean Growth Strategy and Resources and Waste Strategy. To help the City Region understand its role and opportunities that a CE could hold, a CE Pilot has been developed. This aims to understand the opportunities and support required to adopt CE principles and practices initially across SMEs, but potentially across the wider economy.

REF2

2.13. As outlined to Panel on 20 February 2018, there is a need for the current Resource Efficiency Fund (REF) to begin to support the development of

- circular businesses¹ and businesses wanting to move to a circular business model.
- 2.14. To understand what support is needed a pilot package of support is included in a new proposed REF. A European Regional Development Funding (ERDF) Outline application to continue delivery of the REF, post November 2019, across the Leeds City Region has been made. The application includes enhancements to the existing programme and new Circular Economy (CE) support for SMEs.
- 2.15. This includes a small pilot programme providing consultancy advice to around 30 to 40 SMEs to develop and grow circular economy business models.

Clean Growth Audit

2.16. As outlined in item 6, a clean growth audit is being commissioned to support the identification of the current clean growth sector and potential opportunities to grow this sector through the Local Inclusive Industrial Strategy. To support exploring CE opportunities, this study will also identify resource intensives industries and any potential cluster opportunities. This is a joint commission between the Combined Authority and YNYER LEP. This will help provide a robust evidence base for adopting CE principles and opportunities within the LIIS and wider policy framework for the Leeds City Region. Such findings will be reviewed and recommendations made on how to embed CE principles across the City Region. This will also include establishing robust targets and success measures.

Next Steps

2.18 The learning from this pilot and clean growth audit will allow the Combined Authority to then potentially develop policies and programmes of CE support and consider further work in line with Circular Yorkshire.

Action	Timescale
Subject to securing ERDF funding, commence the CE pilot as part of REFII programme.	November 2019 - 2022
Complete the clean growth audit and explore CE opportunities identified.	Jan – Aug 2019

¹ A 'circular business' is a business that operates within the circular economy. Accenture defines 5 types of circular business model: circular supplies (providing renewable, recyclable or biodegradable resource supplies), resources recovery (eliminating waste leakage), product life extension (e.g. repairing, upgrading, remanufacturing or remarketing products), sharing platforms (promoting collaboration) and product as a service (an alternative to "buy and own" where products are pay-for-use or leased).

https://www.accenture.com/gb-en/insight-circular-advantage-innovative-business-models-value-growth

Action	Timescale
Both LEPs to assign an officer to be part of the work outlined above, and to ensure complementary and coordinated action in the build up to the LEP mergers.	Jan 2019 – March 2020

2. Financial implications

3.1 There are no implications associated with this paper

Legal implications

4.1. No legal and compliance implications have been identified.

5. Staffing implications

5.1. There are no implications associated with this paper.

6. External consultees

6.1. None.

7. Recommendations

7.1. To discuss and provide feedback on the Circular Yorkshire work carried out by YNYER LEP and identify opportunities to explore in Leeds City Region.

8. Background documents

8.1. None.

9. Appendices

Appendix 1 – Capitals approach

Appendix 2 – Key themes from stakeholder engagement

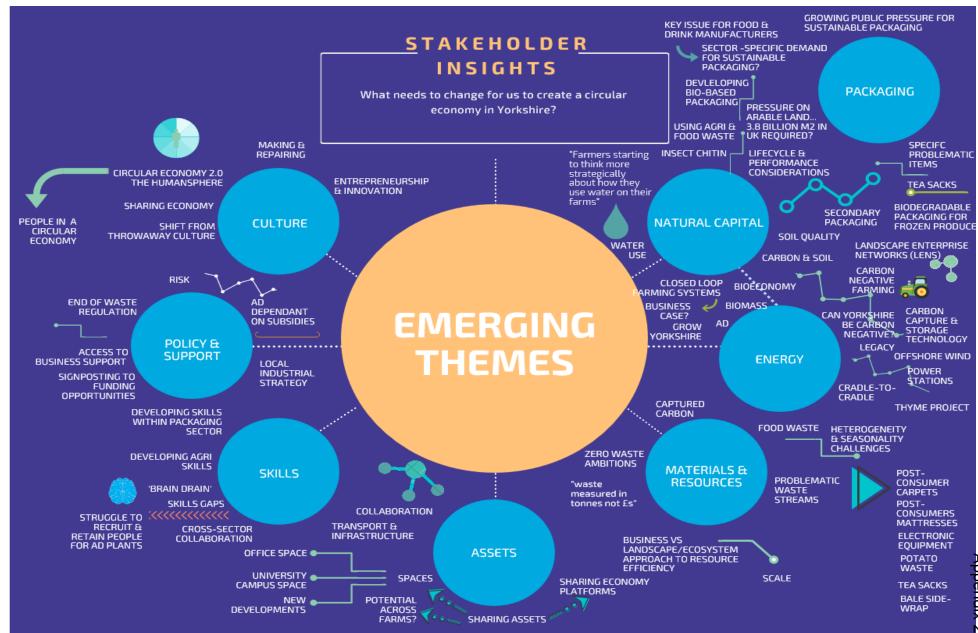
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Appendix 1: Capitals approach

Relevance of the circular economy to each of the capitals is outlined below. A full presentation will provided in the session to provide further details on this approach, particularly the relevance to local strengths and assets.

Capital	Circular Economy Relevance
Natural Capital	 Materials and resources flow in closed loop systems Natural capital is restored and regenerated
Social Capital	 Shared norms and values support the principles of the circular economy (E.g., sharing of products and assets, moving away from a throwaway culture) The circular economy delivers society-wide benefits, strengthening communities and other social institutions
Human Capital	People's skills, health and motivation support and benefit from moving towards a circular economy
Knowledge Capital	Knowledge and innovation capacities are developed to solve existing and future challenges associated with the circular economy transition
Manufactured / built Capital	The use of technologies, infrastructure and other physical assets is optimised in highly effective systems
Financial Capital	 The economic system is aligned with the ambitions of the circular economy Necessary investment is made to support households, businesses and other organisations participate in the transition





6

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Agenda Item 11





Report to: Green Economy Panel

Date: 29 January 2019

Subject: Strengthened Local Enterprise Partnerships

Director: Alan Reiss, Director of Policy, Strategy and Communications

Author(s): Christian Denison / Jonathan Skinner

1. Purpose of this report

1.1 To update the LEP Board on the latest position in implementing Government's recommendations for *Strengthened Local Enterprise Partnerships*.

2. Information

Local consensus on LEP geography

- 2.1 As noted at the LEP Board on 22 November, there is now local consensus that supports the development of a West and North Yorkshire LEP as proposed.
- 2.2 Following Ministerial discussions with LEP Chairs, the York, North Yorkshire, and East Riding LEP (YNYER) chose on 16 November to submit an alternative proposal that supports a West and North Yorkshire LEP. The Leeds City Region Enterprise Partnership Board reaffirmed its proposal (22 November) for that geography (fig.1), which was set out in a letter to the Secretary of State which is attached as Appendix 1.
- 2.3 A response from the Secretary of State, James Brokenshire MP, to Roger Marsh was received on 4 December 2018, welcoming the LEP's positive response to the review recommendations including the resolution of overlaps. It also confirmed that the LEP would receive an allocation, to support the implementation of the review and building the evidence base for the Local Industrial Strategy. This is attached at Appendix 2. Since this letter was received the additional funding allocation of £200,000 has been confirmed.



Fig.1 – the proposed geography of a West and North Yorkshire LEP

Implementation

2.4 There are two stages to implementation of the Government recommendations. The first stage is to implement recommendations to ensure that current arrangements for the LEP are compliant. The second stage involves those changes that need to happen in order to create a new LEP by April 2020.

Creation of a new LEP

- 2.5 In order to implement the new geographic proposals and other Government recommendations a Transition Subgroup with members from both YNYER LEP and LCR LEP has been established. The remit of this group will be to make recommendations at the March 2019 Board meetings of the respective LEPs about the working arrangements for a new LEP that covers North and West Yorkshire, to be operational from April 2020.
- 2.6 The Transition Subgroup is made up of:
 - YNYER David Kerfoot MBE DL (YNYER Chair), Prof Colin Mellors (YNYER LEP Board Member), Cllr Carl Les (YNYER LEP Board Member / Leader North Yorkshire CC) and James Farrer (Chief Operating Officer YNYER LEP).
 - LCR Roger Marsh OBE (LCR LEP Chair), Andrew Wright (LCR LEP Board Member), Cllr Susan Hinchcliffe LCR LEP Board Member / CA Chair / Leader of Bradford Council) and Ben Still (Managing Director LCR LEP).
- 2.7 The Transition Subgroup will operate in a way that is:

- Collaborative and transparent recognising the interests of both LEPs and the nature of North and West Yorkshire's diverse economies and communities, and the need for the working group to build trust across parties.
- Informed sharing openly, current ways of working to help partners reflect on 'the best of both' in order to shape future options.
- Prioritised ensuring Board-level direction and leadership on those issues that require attention first, with space for detailed options to be worked through by officers.
- Ambitious this change is being made for positive reasons, providing opportunity to explore and set-out transformative ideas for how a new LEP might operate.
- 2.8 The group is focussing on 8 areas, which combined will cover all of the Government's recommendations, to report on at the next LEP Board. These are:
 - 1. Transition and Leadership make recommendations on practical solutions to enable a new LEP to be operational by April 2020.
 - 2. Policy and Strategy make recommendations about the Local Industrial Strategy approach to ensure improved economic and social outcomes across all constituent parts of the new LEP.
 - 3. Identity, Communications and Engagement make recommendations on the new LEP's identity and approach to communication and engagement during the transitional phase and for the new LEP.
 - 4. LEP Membership make recommendations on LEP Board structures and membership in line with the LEP review requirements.
 - 5. Decision Making make recommendations on decision making for the new LEP.
 - 6. Programme Delivery make recommendations on the approach to managing existing programmes.
 - 7. Economic Services make recommendations about the approach to shaping and delivering economic services.
 - 8. Regional and National Influence make recommendations on relationships, opportunities and risks.
- 2.9 The Transition Subgroup will bring recommendations from the above workstreams to the March LEP Board for approval.
- 2.10 A more substantial report was submitted to the 23 January LEP Board. The Chair of the Panel will feedback on the discussion at that meeting.

3. Financial Implications

3.1 There are no financial implications directly arising from this report.

4. Legal Implications

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

5. Staffing Implications

5.1 There are no staffing implications directly arising from this report. Significant additional activity to deliver a new LEP for West and North Yorkshire is being met through reprioritisation of existing staff resources and – potentially – additional capacity funding from Government.

6. External Consultees

6.1 There have not been any external consultations.

7. Recommendations

7.1 To note the content of the report.

8. Background Documents

8.1 None

9. Appendices

Appendix 1 – Letter from Roger Marsh OBE to James Brokenshire MP, Secretary of State for Housing, Communities and Local Government.

Appendix 2 – Letter from James Brokenshire MP to Roger Marsh OBE.

Agenda Item 11



The Rt Hon James Brokenshire MP Secretary of State Ministry of Housing, Communities and Local Government 4th Floor, Fry Building 2 Marsham Street London SW1P 4DF

22 November 2018

secretary & source,

In my letter of 16 November I committed to updating you following the Leeds City Region Enterprise Partnership's (LEP) Board meeting on Thursday 22 November.

After a full and positive discussion, I am delighted to report that the Board reiterated its preference of 30 September to create a new LEP covering the whole of West Yorkshire, York and North Yorkshire. We believe this puts our area in the best possible place to realise extraordinary economic growth and sustained social transformation for all our communities.

Our initial submission included compelling evidence about why this geography best represents a functional and functioning economic area. To that I would add a further point from the LEP Board's discussion: we are proud of the impact LEPs have delivered since 2012, however the communities of West and North Yorkshire still have incredible untapped potential to offer the UK economy.

By combining forces across our diverse but connected rural, coastal and urban places, we will be in an even stronger position to take ambitious public investment decisions that are accountable to local stakeholders. We will also ensure that our area is at the heart of discussions on future local industrial strategy and maximise access to the UK's Shared Prosperity Fund for the benefit of our residents and businesses.

We are clear that any new LEP which results from a merger will operate differently to both existing LEPs, taking full account of the recommendations in Strengthened Local Enterprise Partnerships and building on the best elements of each current LEP. We have a clear plan to deliver a new, merged LEP by April 2020. Both LEPs have agreed to work together through a West and North Yorkshire transition working group to bring forward recommendations by March 2019. These recommendations will require



approval of both existing LEP boards to proceed to implementation of the future arrangements.

I trust this confirmation of the Leeds City Region Enterprise Partnership Board's position, alongside similar commitment from the York, North Yorkshire and East Riding LEP, means the question of geography is now resolved. I would therefore ask Government to confirm the allocation of capacity funding so that we can achieve a smooth transition to new LEP arrangements while also developing an ambitious local inclusive industrial strategy for our area.

I look forward to working with you to ensure that these new arrangements realise Government's ambitions for strengthened local enterprise partnerships, which play an even greater part in an economically thriving UK that works for all parts of the country.

Yours sincerely

Roger Marsh OBE

Chair, Leeds City Region Enterprise Partnership

cc: David Kerfoot MBE, Chair York, North Yorkshire & East Riding LEP

Ministry of Housing, Communities & Local Government

Mr Roger Marsh OBE Wellington House 40-50 Wellington Street Leeds LS1 2DE Agenda Item 11

Rt Hon James Brokenshire MP Appendix 2 Secretary of State for Housing, Communities and Local Government

Ministry of Housing, Communities and Local Government

4th Floor, Fry Building 2 Marsham Street London SW1P 4DF

Tel: 0303 444 3450

Email: james.brokenshire@communities.gsi.gov.uk

www.gov.uk/mhclg

3 December 2018

Dear Roger,

Copied to: Ben Still

I am delighted to see how you have positively addressed the recommendations from the LEP review. Thank you in particular for providing your geography proposal on 28 September and for submitting your implementation plans on 31 October.

LEPs will play a leading role in developing Local Industrial Strategies and delivering the UK Shared Prosperity Fund. As announced in the *Strengthened Local Enterprise Partnerships* publication, we are making up to £200,000 available in 2018-19 to each LEP to fund a timely and effective implementation of the LEP review, and the development of an evidence base for Local Industrial Strategies. We will be confirming your allocation shortly.

We are continuing to work with those LEPs that have not responded to the recommendations in full. Where overlaps are unresolved, LEPs will not benefit from the UK Shared Prosperity Fund.

Whilst I recognise the good progress you have already made through your implementation plans, you should keep working to ensure that all of the recommendations are delivered in full. My officials from the Cities and Local Growth Unit will support you with this.

To confirm our expectations moving forward, this year's performance reviews are based on the existing assurance framework that was published in 2016; with additional requirements following the Mary Ney review. I intend to publish a revised National Assurance Framework in December that reflects the changes outlined in the review and LEPs will therefore need to have fully implemented these changes by April if they are to be compliant and able to receive funding in the 2019/20 financial year.

I am looking forward to 2019 and the opportunities to extend all our efforts to drive local growth across the country.

RT HON JAMES BROKENSHIRE MP







Report to: Green Economy Panel

Date: 29 January 2019

Subject: Major Projects Update

Director(s): Alan Reiss, Director of Policy, Strategy and Communications

Author(s): Jacqui Warren

1. Purpose of this report

1.1 To provide an update on progress against the Green Economy Panel's major projects and programmes.

2 Information

Energy Accelerator (see Item 8 for a full update)

- 2.1 The Energy Accelerator (Accelerator) is a key initiative under priority three of the Strategic Economic Plan (SEP) which aims to create a zero carbon energy economy by 2036. It is a new innovative programme. The Energy Accelerator is a team of expert advisors that are supporting the development of low carbon projects. The Accelerator offers free support to the commercial and public sector in the following areas:
 - Energy efficiency and renewable energy (new and retrofitted)
 - · District heat networks
 - Street lighting

Better Homes Yorkshire

- 2.3 This is a City Region wide programme delivering energy efficiency and heating improvements across the City Region's homes. The projects within the programme are progressing well and to date almost 1,250 homes have received measures during 2018/19, against the target of 1,320. This brings the total number of homes improved through the programme to over 4,300.
- 2.4 The Combined Authority is working with partners to understand the funding streams available to continue delivery into 2019/20 and to establish Key

Performance targets accordingly. The third phase of the Energy Company Obligation (ECO3) has now been launched and Better Homes are progressing contracts to secure this funding into the programme. As with previous rounds, ECO3 is expected to make only a modest contribution towards the cost of measures.

Warm Homes Fund (WHF) bid Round 2a

- 2.5 The Panel endorsed the Combined Authority applying for Round 2a funding in September 2018.
- 2.6 The proposal included plans to install over 1000 first-time, full central heating systems to households in fuel poverty. Properties will be mixed tenure; both social and private rented, and owner occupied households. Funds will support the installation of a full gas central heating system and a gas mains connection where necessary.
- 2.7 Unfortunately the Combined Authority's application was unsuccessful. The Combined Authority and partners are now reviewing the application, including the levels of match funding and the overall value for money of the proposed programme, to inform the decision whether to apply for round 3 Warm Homes funding. This is currently open with applications due by 8 February 2019.

Resource Efficiency Fund

- 2.8 The Resource Efficiency Fund (REF) offers free expert advice and business support to small and medium sized enterprises (SMEs) to help them to implement energy and water efficiency and waste reduction measures.
- 2.9 Table 1 summarises the most up to date key progress indicators for the Resource Efficiency Fund.

Table 1: Progress as at 30 November 2018			
	Last Update (31/8/2018)	Current	Revised Programme Target (31/10/19)
Total Business Contacts	447	523	501
Assessments Commissioned	234	278	321
Businesses Supported	148	177	303
Businesses receiving non-financial support	127	154	200
Businesses receiving information, diagnostic and brokerage support	45	72	75
Grants Completed	84	95	133

2.10 Overall, businesses supported are at 94 percent of target to the end of December, and are expected to meet target this quarter.

REFII

- 2.12 On 28 November 2018 the Combined Authority submitted a European Regional Development Funding (ERDF) Outline application to continue delivery of the REF post November 2019, across the Leeds City Region. The application was made under Priority Axis 4b: Supporting Energy Efficiency and Renewable Energy Use in Enterprise, and includes enhancements to the existing programme and new Circular Economy (CE) support for SMEs. CE is a new approach that challenges inefficient production, returning materials back to the economy. It directly supports the aims of the national Industrial Strategy and new Waste Strategy. If successful, the new programme will run for three years.
- 2.13 In light of the LEP Review (see item 11), the Combined Authority, on behalf of the York, North Yorkshire and East Riding (YNYER) LEP, submitted an Outline complementary application to the YNYER LEP area's ERDF PA 4b call to deliver the REF into four new areas of North Yorkshire Richmondshire, Ryedale, Hambleton and Scarborough. If successful, the Combined Authority will act as the accountable body and delivery partner for this extended REF programme in North Yorkshire.

District Heat Network (DHN) Programme

- 2.14 The Programme continues to support the development of a number of active heat network projects in the City Region.
- 2.15 Since the last meeting of the Panel feasibility studies have been completed for Huddersfield Town Centre and Castleford Spatial Priority Area. Both studies indicate there is a case for the further development of heat networks in these areas.
- 2.16 For the Huddersfield Town Centre project Kirklees Council have indicated they will apply for Heat Networks Delivery Unit (HNDU) funding to progress to the detailed project development / outline business case stage of project development. The Council are considering whether to utilise the Energy Accelerator to undertake the work.
- 2.17 For the Castleford Spatial Priority Area project Wakefield Council have indicated they will provide the findings of the feasibility study to the housing developer of the main site within the Spatial Priority Area for further progression.
- 2.18 In addition to the completion of the two feasibility studies a high-level heat mapping / masterplanning study has been completed for Leeds Southbank. This work has investigated extending the in-construction Leeds PIPES scheme into the Southbank area of the city. A viable proposition has been identified and Leeds City Council will look to apply for HNDU funding to

progress to a feasibility study and detailed project development / outline business case. The Council are also working with the Combined Authority to understand how the project could be taken forward through the Energy Accelerator.

- 2.19 Bradford and Barnsley Councils are also applying for HNDU funding for detailed project development / outline business case (Bradford) and project management support (Barnsley). Both schemes are aiming to use the Energy Accelerator for further support.
- 2.20 The Leeds PIPES scheme construction programme is now 75% complete, planning consents are on track and the heat sales agreement with commercial partners are expected to be in place during Quarter four. The Combined Authority expect to transfer a four million pound contribution from its Growth Deal to the scheme early 2019/20.

Green and Blue Infrastructure (GBI) Strategy and Delivery Plan

- 2.21 The GBI Strategy and Delivery Plan was adopted by the LEP Board on 22 November 2018 and Combined Authority Board on 13 December 2018.
- 2.22 Since adoption work has started to explore a proposal for a shared regional resource to assist in the delivery of the Delivery Plan. A draft roles and responsibilities for the position was presented to the 17 January Yorkshire West Local Nature Partnership for comment.
- 2.23 Furthermore work has begun on the development of detailed work plans for each of the 12 actions identified in the Delivery Plan. Information on these work plans will be presented to a future meeting of the Panel.

Energy Strategy and Delivery Plan (ESDP)

2.24 See Item 7.

North East, Yorkshire and Humber Energy Hub

- 2.25 A North East, Yorkshire and Humber (NEYH) Energy Hub (Hub) is currently being established.
- 2.26 The Energy Hub will:
 - Provide much needed capacity to LEPs and local authorities to undertake
 the initial stages of development for priority local and regional energy
 projects and programmes (e.g. feasibility studies and business cases), up
 to a point where investment can be secured.
 - Take a collaborative and coordinated approach across multiple LEP areas.
- 2.27 An initial pipeline of projects suitable for Hub support is being developed.

 These have been identified through the Energy Strategy and Delivery Plan.

2.28 The Hub will provide an additional support service to the City Region, complementing the existing Resource Efficiency Fund and Energy Accelerator.

Hydrogen 21 (H21)

2.29 See item 9 for a full update.

3. Financial Implications

3.1 There are no implications associated with this paper.

4. Legal Implications

4.1 There are no implications associated with this paper.

5. Staffing Implications

5.1 There are no implications associated with this paper.

6. External Consultees

6.1 No external consultations have been undertaken.

7. Recommendations

7.1 That the Panel note the progress against the Panel's major projects and programmes.

8. Background Documents

8.1 None.

9. Appendices

None.

