
Report to: Business Innovation and Growth Panel

Date: 27 February 2020

Subject: **Tackling the Climate Emergency**

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1. Purpose of this report

- 1.1 To provide an update on the Combined Authority's and the Leeds City Region Local Enterprise Partnership's (LEP) work to tackle the Climate Emergency.
- 1.2 This paper also proposes some initial options for the Panel to consider in response to the Climate Emergency.

2. Information

- 2.1 **Appendix 1** is a presentation on the work of the Combined Authority and LEP to tackle the Climate Emergency.
- 2.2 The Combined Authority and LEP have declared a climate emergency and strengthened the city region's target to become net zero carbon by 2038, with significant progress by 2030.
- 2.3 To meet our 2038 target, and comply with the International Paris Agreement, the City Region needs to reduce annual carbon emission by 14.5 percent year and reduce emissions from 16 megatonnes of carbon dioxide to around two mega tonnes of carbon dioxide in the next ten years, with all remaining emissions reducing to near zero by 2038.
- 2.4 We have established a carbon budget, broken down into five-year periods, quantifying how much carbon can be emitted while still meeting the target. On current trends, the whole budget will be depleted in 7.6 years if urgent action is not taken.
- 2.5 It will not be easy and will require coordinated action by local government, industry, business and people of all ages. This is a programme of work that

will be delivered in a phased approach, with short term projects and longer term, whole system actions. All LEP panels need to play a role.

- 2.6 To help the City Region understand how to meet its target a carbon emission reduction pathway study has been commissioned. **See appendix 1** for more details. This will outline possible decarbonisation pathways for the industrial and buildings sectors within our city region. There is opportunity for the Panel to help steer and input into the preferred pathway's development.

Areas of interest for the Panel

- 2.7 The LEP's Resource Efficiency Fund has to date supported SMEs to reduce their energy, carbon, water and waste consumption. ReBIZ will be launched in 2020 to continue this support for a further three years. This paper aims to start a conversation with the Panel on what other actions need to be considered to support the City Region's businesses to play a role in tackling the Climate Emergency.
- 2.8 Economic opportunities will arise through tackling the climate emergency. The opportunity for people and business across the country is huge. The low carbon economy could grow 11 per cent per year between 2015 and 2030, four times faster than the projected growth of the economy as a whole and deliver between £60 billion and £170 billion of export sales of goods and services (Clean Growth Strategy 2017). This is spread across a large number of sectors: from low cost, low carbon power generators to more efficient farms; from innovators creating better batteries to the factories putting them in less polluting cars; from builders improving our homes so they are cheaper to run to helping businesses become more productive. More locally, through the work identified in the existing Energy Strategy and Delivery Plan, £11 billion in GVA and over 100,000 jobs could be created.
- 2.9 Innovation is key to addressing some of our biggest clean growth ambitions. As Professor Richard Jones, LIS Expert Panel member, has stated 'we need innovation to create affordable low carbon energy. Progress towards decarbonising our energy system is not happening fast enough, and innovation is needed to decrease the price of low carbon energy and increase its scale and increase energy efficiency.'

Clean Growth Audit

- 2.10 To take advantage of the above economic opportunities, whilst decarbonising our economy, the Combined Authority commissioned the Clean Growth Audit. It aimed to:
1. Identify the locations of energy intensive and carbon intensive industry are in the City Region
 2. Identify the current and future size of the clean growth sector in the City Region
 3. Recommend policies and actions to grow the clean growth sector

A summary of the Audit will be presented at the meeting for the Panel to consider. **See Appendix 2.**

Energy and Carbon Intensive Industry

- 2.11 The industrial sector relates to all activities that generate emissions from the manufacturing of goods. This includes the energy and carbon intensive industries that are located within the City Region. In 2017 the industrial (and commercial) sectors contributed 20 percent of City Region emissions. Currently a fifth of these emissions come from large energy intensives. It is a priority area to tackle in order to meet the city region net zero carbon target by 2038.
- 2.12 The Audit identifies where the most energy, carbon and resource intense companies are in the City Region. Four out of the six largest emitters are from the glass industry and two are from the chemical industry.
- 2.13 In light of the Climate Emergency there are a variety of ways in which industry will need to decarbonise. Some of these have been identified in the Energy Strategy and Delivery Plan e.g. fuel switching, advancing industrial energy efficiency and carbon capture, utilisation and storage (CCUS).
- 2.14 CCUS will have a key role to play in decarbonisation, especially in those industries where total decarbonisation will be difficult in the timeframes necessary. Drax Group are part of an ambitious plan to make the Humber the first net-zero carbon industrial cluster in the UK by 2040. The LEP will work closely with Drax Group and the Humber LEP to understand how these plans can extend to and benefit the Leeds City Region.
- 2.15 As a priority, the City Region needs to understand what support these industries will need to decarbonise and that the transition is just¹.
- 2.16 The panel are asked to provide comment and steer on what could be considered to support energy and carbon intensive industries in the City Region.

Clean Growth Sector

- 2.17 The study also identifies where our emerging clean growth sectors² is located across the City Region. This is summarised below:
1. **Clean agri-tech:** *adoption of advanced technologies to improve the sustainability and productivity of the agri-food supply chain by reducing emissions and material usage*
 2. **Bio-energy:** *production of heat and electricity using fuels such as biomass, waste and other by-products from different sectors*

¹ This term describes the need to secure “the future and livelihoods of workers and their communities in the **transition** to a low-carbon economy” (ITUC 2018a) as carbon-based generation is phased out in favour of renewable alternatives.

² ADD DEFINITION

3. **Hydrogen:** *systems of production and consumption of low-carbon gas/ substitute for fossil fuels*
4. **Low carbon transport:** *ultra-low emissions vehicles rail/bus/taxi and low carbon travel*
5. **Smart city:** *introduction of new IT and other technological innovations that can be applied to monitoring and managing existing infrastructure, assets and resources more efficiently*
6. **Circular economy:** *smarter approach to resource consumption; an alternative to linear economic production (make, use, dispose).*
7. **Construction:** *solutions to reduce the burden on the environment of the construction value chain*

2.18 The study contains a series of draft recommendations for the Panel to consider, including developing specific support for the above clusters:

- Collaborate with Humberside Industrial Cluster and will work closely with Drax Group and the Humber LEP to understand how their hydrogen plans can extend to and benefit the Leeds City Region
- Build on existing strengths and develop smart tech programmes
- Work with key anchor organisations to enable innovative circular economy programmes
- Build on the region's construction strengths to develop skills programmes
- Focus on opportunities brought by the potential high-speed rail institute

2.19 In addition, there is opportunity for the LEP's Employment and Skills Panel to also review the findings of this work and explore opportunities to develop bespoke skills provisions in the seven emerging clean growth sectors.

Other areas to consider

Current Business Support and opportunities – grants and innovation

2.20 To play a role in tackling the Climate Emergency, the Combined Authority and LEP approved in 2019 a corporate clean growth policy and action. The aim was to reduce carbon emissions across everything we as an organisation do. Whilst some actions relate to our operations, some relate to how we can work with partners to encourage carbon reduction across the City Region, and in particular there is a significant role for business to play. Although the major contribution businesses can make will relate to individual firm level operational decisions, one way the LEP could consider encouraging businesses to tackle the climate emergency and promote clean growth ³ outcomes is through conditions on our business grant programmes. Currently around 300 grant applications are made per year, and revisions to grant conditions could be

³ Growth whilst reducing / eliminating carbon emissions

utilised to encourage businesses to tackle the climate emergency, particularly in any successors to the Business Growth Programme from April 2021.

- 2.21 **Appendix 3** outlines how grant conditions could be utilised to encourage businesses to tackle the climate emergency, beyond current provisions. This is very much policy in development work and should be seen as opening up a discussion on policy options, and therefore at this stage there are still a number of unanswered questions and undeveloped ideas which will require further detailed work. The Panel are asked to provide steer on the work,
- 2.22 Consideration could also be given to the prioritisation of the Clean Growth agenda in the Connecting Innovation programme and other LCR innovation programmes, and with any future joint working with Innovate UK.
- 2.23 The Panel are also asked to highlight other areas not mentioned in the report that they are interested in exploring. One area may be new mass market support packages to help businesses adopt clean growth practices such as advice and support via blended models of on-line, telephone and one-to-many workshops and networking events. This could also include support for medium sized organisations, larger than SMEs but not classified as large/energy intensive.

3. Financial Implications

- 3.1 Given the scale of the projects identified above there are likely to be financial implications for the Combined Authority and partners. Each project as it develops will be subject to a robust business case. Exploring and securing funding will also form a large part of this work. Currently, insufficient funding is available to tackle the climate emergency fully; more investment is required from Government or through innovative funding models.

4. Legal Implications

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

5. Staffing Implications

- 5.1 Any actions suggested by the Panel will need to be prioritised against the resource available to work on business-related issues and existing work plans.

6. External Consultees

- 6.1 None

7. Recommendations

- 7.1 That the Panel notes work underway to tackle the climate emergency.

- 7.2 The Panel are asked to provide comments and steer on proposals in paragraphs 2.6, 2.14, 2.15 2.17, 2.21 and 2.22
- 7.3 The Panel are also asked to highlight other areas that they are interested in exploring to tackle the Climate Emergency.

8. Background Documents

None.

9. Appendices

Appendix 1 Tackling the Climate Emergency
Appendix 2 Clean Growth Audit
Appendix 3 Clean Growth Grant Options Paper.