

Chief Executives Group – North Yorkshire and York

12 February 2021

Green Industrial Strategy

1. Summary

- 1.1 The government announced its 10 point plan for a green industrial strategy in November 2020. This paper summarises the opportunities within York and North Yorkshire and activity to develop projects and proposals

2. Background

- 2.1 The LEP are undertaking research in collaboration with private sector partners, to identify a series of decarbonisation pathways for key sectors of our economy, including transport, buildings, industry, power and land use, land use change and forestry (LULUCF) and agriculture.
- 2.2 The research will inform the development of a Routemap Towards Carbon Negative, which will significantly support the implementation of Government's Ten Point Plan for a Green Industrial Revolution. Section 3 outlines some of the activity to date.
- 2.3 The table below outlines the government's 10 point plan and potential opportunities within York and North Yorkshire

Gov's Ten Point Plan for a Green Industrial Revolution	Y&NY Opportunity	Comment
1. Offshore wind: Producing enough offshore wind to power every home, quadrupling how much we produce to 40GW by 2030, supporting up to 60,000 jobs.		Research to date has identified opportunities in Y&NY for offshore wind around supply chain development, battery storage and skills provision. Offshore wind was not included within the Carbon Abatement Pathways study due to perceived limited ability to influence developments.
2. Hydrogen: Working with industry aiming to generate 5GW of low carbon hydrogen production capacity by 2030 for industry, transport, power and homes, and aiming to develop the first town heated entirely by hydrogen by the end of the decade.		In Y&NY, there is potential for hydrogen to play a significant role in the decarbonisation of industry, vehicles and heating homes. Within the devolution energy asks for (1) £8m of development funding for strategic low carbon energy generation projects, and (2) £42m Low Carbon Energy Generation Demonstrators The opportunity is referenced to develop hydrogen pilots, whilst the opportunity for hydrogen towns/developments is cross-referenced in the housing & town sections.
3. Nuclear: Advancing nuclear as a clean energy source, across large scale nuclear and developing the next generation of small and		University of York leading work exploring the potential of Nuclear Fusion through the UKAEA STEP Programme. Whilst leading expertise exists at UofY a limiting factor in

<p>advanced reactors, which could support 10,000 jobs.</p>		<p>propositions to government is an available site meeting the STEP programme specifications. Conversations continue with Local Authorities around potential sites. Sites must be a min 100 Hectares.</p>
<p>4. Electric vehicles: Backing our world-leading car manufacturing bases including in the West Midlands, North East and North Wales to accelerate the transition to electric vehicles, and transforming our national infrastructure to better support electric vehicles.</p>		<p>The Devo Deal includes £50m funding to roll out publicly available EV charging facilities and £10m for a Low Carbon Skills Programme.</p> <p>Y&NY LEP are currently convening LAs and other anchor institutions to initiate the development of an EV Charging Infrastructure Strategy.</p> <p>The LEP pipeline development work includes EV charging proposals.</p> <p>The LEP has also invested in EV Training Facilities at York College and Scarborough TEC.</p>
<p>5. Public transport, cycling and walking: Making cycling and walking more attractive ways to travel and investing in zero-emission public transport of the future.</p>		<p>The Devo Deal currently includes an ask for £52.5m funding to deploy ultra-low emission public transport across our region. There is also a reference to active travel in the 5-yearly integrated transport settlement of £250m ask.</p> <p>The LEP pipeline development work includes significant active transport (Local Cycling and Walking Infrastructure Plans LCWIPs) and public transport accessibility schemes</p>
<p>6. Jet Zero and greener maritime: Supporting difficult-to-decarbonise industries to become greener through research projects for zero-emission planes and ships.</p>		<p>Limited opportunity in York and North Yorkshire although Whitby Town deal proposes a maritime training centre.</p>
<p>7. Homes and public buildings: Making our homes, schools and hospitals greener, warmer and more energy efficient, whilst creating 50,000 jobs by 2030, and a target to install 600,000 heat pumps every year by 2028.</p>		<p>The Devo Deal includes an ask for a 5 year housing retrofit programme and 5 year public building decarbonisation programme.</p> <p>Individual authorities are also bidding into government funding pots.</p> <p>York, Harrogate, Craven and Selby have secured c.£0.5m Green Homes Grants Local Authority Delivery Scheme funding from phase 1b to decarbonise 105 residential buildings.</p> <p>Work ongoing with Scarborough, Ryedale, Hambleton and Richmondshire to access Phase 2 (LAD2) which is expected in March.</p> <p>See section 3 below</p>

<p>8. Carbon capture: Becoming a world-leader in technology to capture and store harmful emissions away from the atmosphere.</p>		<p>The Devo Deal includes an ask around supporting the roll out of BECCS and associated infrastructure in Y&NY.</p> <p>Ongoing engagement with Drax through Selby DC and LEP.</p> <p>A key opportunity if BECCS happens is the ability to send spurs off the BECCS pipeline to key sites providing a clear USP for both businesses who produce CO2 and Businesses who utilise it.</p>
<p>9. Nature: Protecting and restoring our natural environment, planting 30,000 hectares of trees every year, whilst creating and retaining thousands of jobs.</p>		<p>Significant ongoing work between the LEP, LNP, Local Authorities and National Parks.</p> <p>The devolution deal has a clear ask around development of a Natural Capital Investment Plan with a view to long term influence over the ELMS Tier 2 and 3 (ELMS is the CAP replacement)</p> <p>Discussions have also commenced in North Yorkshire with Natural England to start developing a Local Nature Recovery Strategy for the area.</p> <p>Global speakers at a regional conference http://save-our-soil.org/ including Farming Minster.</p> <p>Regional speakers include Wallace Sampson, Robert Goodwill, James Mason (W2Y), Andrew Walker (Yorkshire Water),</p>
<p>10. Innovation and finance: Developing the cutting-edge technologies needed to reach these new energy ambitions and make the City of London the global centre of green finance.</p>		<p>The Devo Deal includes a strong financial dimension for this agenda, including joint-working to raise a Green Bond and Natural Capital Innovation Challenge Fund to trial the demonstration of innovative investment mechanisms in nature based solutions and £2m funding for Local Area Energy Action Plans</p> <p>Over the last 6 months, Local Area Energy Plans have emerged as a key next step to spatially map out the decarbonisation of Y&NY's energy system using the findings from the Carbon Abatement Pathways study. The granular level of detail provided by the plan will allow us to establish a portfolio of projects that can be invested in.</p> <p>Annex 1 Provides an example report at a LA Level. The LEP is contributing £10k for the reports with a request for £3800 per Local Authority considered by DoDs.</p>

3. Progress

3.1 The key recommendations from the research to date include:

- **Hydrogen:** potential for hydrogen to play a significant role in decarbonisation, fuelling 50% of industry, 18% of vehicle and heating up to 183,000 homes (under the high hydrogen scenario).
- **Electric vehicles:** developing a regional strategy for EV charging infrastructure to ensure by 2038, 60-80% private cars are zero emissions vehicles, and private car use must be 30-40% lower than today.
- **Public transport, cycling and walking:** regional coordination of Local Walking Cycling Infrastructure Plans (LWCIPs) to enable 40% increase in walking and 810% increase in cycling by 2030 (distance travelled).
- **Homes and public buildings:** retrofit of 250,000 homes to reach EPC C or better and install 270,000 heat pumps; all public buildings to be retrofitted by 2027.
- **Carbon capture:** BECCS at Drax to be capturing 13.9MT CO₂ per year by 2030 – ambition to have captured 30.7 MT by 2030.
- **Nature:** 37,000 hectares of woodland to be planted and all peatland to be restored.
- **Innovation and finance:** a range of green finance mechanisms, such as Green Bonds and carbon markets are recommended to leverage private sector investment. The development of Local Area Energy Plans are also recommended to support the development of an investable package of low carbon energy projects.

Green Homes Grants Local Authority Delivery Scheme Phase 2 (LAD2) - decarbonisation of residential buildings update.

- 3.2 There has been little change in the status of this project as BEIS continue to stick to strict spend deadlines although TVCA have requested extensions. The application deadlines have been pushed back due to delays in contracting between BEIS and Local Energy Hubs with bid windows closing on the 19th February 2021 and 19th March 2021, with a month turnaround to notify of success, project launch dates are approximately 1st April and 1st May, putting further strain and limitations on delivery.
- 3.3 Due to this further delay, NYCC are exploring the possibility of conducting a full procurement exercise prior to bidding for the funds, allowing the NYCC-led consortium to deliver exactly what is needed in the region rather than compromising to fit with existing frameworks.
- 3.4 Tight timescales for delivery and supply chain constraints mean that it may be challenging for York and North Yorkshire to apply for the geography's full £5.35m allocation (across both the NYCC and CYC-led consortia). There is a significant reputational issue associated with this, both in relation to central Government and residents. Details of the scheme are already in the public domain so if Y&NY are seen not to be making the most of this funding opportunity it could generate negative impressions with residents and potentially

Local Area Energy Plan (LAEP)

- 3.5 LAEP's provide a spatial representation of key data to identify geographical needs and opportunities. The first stage in developing these is to commission a 'Local Area Energy Representation' (LEAR). The LEAR utilises publically available data such as heat maps, grid networks (gas and electric), industrial zones and transport routes to assist us to map the most effective locations for carbon emission reduction interventions. It is mapped to LSOA areas. The study would be produced by the Energy Systems Catapult.

[Attached is a link to an example Local Area Energy Representation for Peterborough](#)

- 3.6 Proposals are with Directors of Development to co-fund production of the LEARs alongside the LEP (LEP Contribution £10k, LA Contribution £3.8k)

Other Project Progress

- 3.7 The LA Climate Action Officer has commenced a series of briefings with LA colleagues to introduce the recommendations of most relevance to their service. This has included; with Economic Development Officers and Business Liaison Officers, with Heads of Planning and with the NY Waste Partnership. Collaborative meetings are planned in with Assets Management and Electric Vehicle lead officers. This process will be repeated as required for LA service colleagues as the Routemap develops into the programme and project development phases.
- 3.8 Anaerobic Digestion & Circular Economy Yorkshire (ADCEY): The University of York and the Biorenewables Development Centre have secured £600k from the European Regional Development Fund (ERDF) to support 31 AD projects. Companies can access the expertise and the state-of-the-art scale up and analytical facilities of the BDC and of Professor James Chong's research group at the University of York for help in researching or developing AD innovations.
- 3.9 Local Growth Fund feasibility studies: The AD feasibility projects (3 feasibilities run by WRM Ltd) have been completed and have highlighted two commercially viable large-scale upscaling operations at currently composting units in East Riding, and one small-scale farm unit in Harrogate, which is technically viable but currently not economically viable. The consultant has suggested revisiting the modelling as and when further clarity on changing subsidy regimes come to pass. The biomass pellets project is continuing and is due to finish in February.
- 3.10 Geothermal Heat Project: on 27 November 2020, Ryedale District Council (RDC) and Third Energy submitted their application for Heat Networks Distribution Unit techno-economic feasibility funding to explore the potential uses of geothermal heat from Third's fracking wells. HNDU asked for qualifications in mid-December, and the team are expected to hear shortly whether the bid has been successful.
- 3.11 Public Sector Decarbonisation Scheme: Either feasibility or full capital bids were submitted by Harrogate, NYCC, Craven, Hambleton, CYC, York NHS Trust and YDNPA. Most colleges and schools interested did not manage to submit a bid as pressures surrounding COVID-19 dominated workloads.
- 3.12 LENs River Skell Project: The National Trust and the Nidderdale AONB have been successful in their £1.4m bid to the National Lottery Heritage Fund. The Skell Valley Scheme has a total value of £2.5m, consisting of a number of projects to create a resilient landscape where nature thrives, people are empowered and heritage is celebrated. York and North Yorkshire LEP are one of sixteen partners in the scheme and will be specifically involved in the pilot of the Landscape Enterprise Network (LENs) approach to reduce flood risk in the area.

- 3.13 Working closely with climate action leads across York and North Yorkshire's local authorities, a number of activities and projects are underway to support carbon reduction, including:
- The development of a carbon literacy training programme for local authority officers, including online learning modules and more comprehensive training sessions.
 - Following securing £35k funding from the West and North Yorkshire Business Rates Pool, a study has now been commissioned to understand how local authority procurement can contribute to reducing carbon emissions.
 - Funded by securing a further £65k from the West and North Yorkshire Business Rates Pool, a study on potential sites for large-scale solar on local authority assets is now underway. Initial scoping will identify the three most viable sites for high-level feasibility studies.
 - The LA Climate Action Coordinator has commenced a series of briefings with LA colleagues to introduce the Carbon Abatement Pathways study recommendations. This has included; with Economic Development Officers and Business Liaison Officers, with Heads of Planning and with the NY Waste Partnership. Collaborative meetings are planned in with Assets Management and Electric Vehicle lead officers.
 - Green Homes Grants Local Authority Delivery phase 2 (LAD2): The team are supporting local authorities to develop housing retrofit projects, with the potential for York and North Yorkshire to access £5.36m of funding.
- 3.14 The team are supporting the planning for a Yorkshire and Humber Climate Commission. The Commission will seek to better understand collaborative action needed to tackle climate change, including Scope 3 emissions and the impacts of climate change. The Commission is expected to launch in March 2021.

4. Recommendations

Chief Executives are asked to note the 10 point plan within the Green Industrial Strategy and the progress against local opportunities.