#### ANNEX A1

# YORK AND NORTH YORKSHIRE PARTNERSHIP EXECUTIVE ITEM 6

#### 4th September 2009

## Low Carbon Economy – UPDATE

#### 1. <u>Purpose of the Report</u>

1.1 This report updates the Partnership Executive on the Low Carbon Economy developments in Yorkshire and Humber with delivery emphasis in York and North Yorkshire. Jim Farmery, Assistant Director for Business at Yorkshire Forward will be attending the meeting to verbally update members further

#### 2. <u>Background</u>

We define a lower-carbon economy as one where managed programmes of carbon-emissions reduction are embedded in organisational practices, across both the private and public sectors, in response to challenging targets.

- Due to high levels of industry and traditional power generation, Yorkshire & Humber is a high CO<sub>2</sub>-producing region—and emissions continue to rise here
- Moving to a LCE is set out in government targets
- Ignoring climate change will ultimately undermine the economy
- Acting now to reduce emissions and adapt to new circumstances (such as increased flood risk) will cost far less than dealing with the future consequences of climate change
- Global markets for low-carbon technologies could be worth \$500bn by 2050—but our region's share of this market is amongst the lowest in the UK

## Who is Yorkshire Forward trying to influence?

- Local authorities—because we need political will to change behaviour and deliver innovative projects at a local level
- Business & commerce—because we need businesses to commit to reducing carbon emissions
- Major greenhouse-gas emitters—to commit to significant emissions reductions
- Public agencies—in terms of sharing resources and ensuring that their plans and strategies contribute to the LCE
- Government departments—such as Defra, BERR and DCLG (Department of Communities and Local Government), to ensure that our views are reflected in planning decisions

2.1 The Yorkshire and Humber (Y&H) Region faces a number of challenges associated with delivering sustainable development and a low carbon economy based on sustainable and environmental technology. Government White Papers have set both the policy framework and specific targets for the next ten years. Most of the targets require action to be taken at regional level, and accordingly these targets have been incorporated into the Y&H Regional Economic Strategy (RES) and the Regional Spatial Strategy (RSS).

## 3. Yorkshire & Humber Sustainable Futures Company Ltd (SFCo)

3.1 In order to assist in delivering these regional targets, the Yorkshire & Humber Sustainable Futures Company Ltd (SFCo) was formed by Yorkshire Forward.

The vision of SFCo (soon to be re-named CO<sub>2</sub>Sense) is to put Yorkshire & Humber at the centre of developing a global low carbon economy with the key aim of delivering Yorkshire Forward's sustainable development priorities. SFCo aims to position the region at the centre of the developing global low carbon economy and deliver Yorkshire Forward's sustainable development priorities. Four programmes within SFCo concentrate on the LCE:

- Resource Efficiency Yorkshire (REY) is a new £9.8 million programme working to help regional businesses and markets gain competitive advantage through resource efficiency improvements. Over the next three years REY will support regional businesses to use water, energy, and waste more efficiently, to introduce greener approaches to design and sustainable procurement. REY's key aim is to support the regions businesses to profit from resource efficiency – to spread the word that carbon sense makes commercial sense. There are four principal work streams:
  - 1. Policy, Research and Evaluation making sure we put most effort into what's most important
  - 2. Regional Resource Efficiency Partnership integrating national, regional and local activity to benefit business
  - 3. Resource Efficiency Business Support helping businesses take action to improve their resource efficiency (create demand)
  - 4. Support to Resource Efficiency Sector Businesses helping companies in the resource efficiency sector to find new business and grow (build the supply)
- **Future Energy Yorkshire (FEY)** has been established to secure the economic opportunities arising from new and renewable energy technologies and projects across Yorkshire and Humber. FEY works with both public and private sector partners to fill knowledge gaps, bridge market failures and bring to fruition significant new energy projects, businesses and technologies, and also provide training and development opportunities.
- Carbon Action Yorkshire (CAY) encourages major organisations within the region (collectively responsible for half of the region's carbon emissions) to commit to action to meet the target of a 25% cut by 2016. At present, only 24% of medium to large organisations in the region have quantified emissions from their activities, and only 45% of these have taken steps to reduce emissions<sup>1</sup>. CAY will assess carbon-related risks and opportunities; secure quantifiable carbon reduction commitments; calculate baseline carbon emissions and benchmark emissions reductions; develop new low carbon products, services, technologies; characterise markets for low carbon products and services; and test these with partner organisations.

#### • Carbon Capture and Storage (CCS)

CO2Sense has recently taken on the responsibility for a Carbon Capture and Storage (CCS) programme. CCS is a process where  $CO_2$  is extracted from the emissions of, for example, a power station or a factory. This  $CO_2$  is compressed, and transported to permanent storage in a depleted gas field or saline aquifer in the North Sea. The main project activities are:

- Developing a world-leading example of a CCS cluster that could reduce the UK's greenhouse gas emissions by 10%, and give a significant boost the region's economy through the down turn.
- Securing and developing a carbon capture and storage (CCS) facility and network. Although this will not be operational before 2014 at the earliest, the first enabling investment could be secured by the end of 2009/10.
- Working with partners in the region, such as Powerfuel Power Ltd, who are at an advanced state to implement CCS given the appropriate level of support.
- Working at national and international levels to raise the profile of the opportunity to develop CCS in the region and gain access to financial support through our commercial partners, European Commission, EIB and UK Government.

3.2 For a detailed list of the projects that are being delivered as part of the SFCo/CO<sub>2</sub>Sense Programme in York & North Yorkshire please see attached Appendix SFCo North Yorkshire Projects and examples of case studies.

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