

NWUA Response to the NWDA Low Carbon and Environmental Goods and Services Sector Strategy

24th March 2010

1. **Do you agree with the definition of the sector (Section 2.1)? Are there any technologies or services we should be including which are not covered by the strategy?**

The definition is clear and unambiguous

2. **Do you agree with the key barriers to development (Table 8)? Are there any other market failures we should consider?**

Agreed, with the following additions;

Skills are a barrier to development for the following in addition to those already listed;

- Biomass – Lantra Sector Skills Assessment ¹ and Environmental Sustainability KTN²
- Energy Management in Buildings – Asset Skills Sector Skills Assessment³
- Smart Grids – EU Skills Sector Skills Agreement⁴ and also see article by Professor Peter Crossley⁵

In general - While there is significant provision across the region for what we might consider 'traditional' modes of delivery (at both undergraduate and postgraduate levels) there is a feeling that the region could provide a more co-ordinated and higher profile offer around continuing professional development (CPD) higher level skills provision for the E&ETS sector.

3. **Do you agree with the Vision, aims, strategic objectives (Section 6)? If not, what would you suggest as alternatives?**

In particular the key aim which maps over to the HE sector is "To raise the level of innovation activity and increase the rate of successful technology transfer from the regional research base" This aim is underpinned by the following objectives:

¹ Skills Assessment for the Environmental and Land-based sector, available at <http://www.lantra.co.uk/stakeholders/research-documents/skills-assessment/>

² Business Case: Energy from Waste - Environmental KTN 2007

³ Asset Skills Sector Skills Assessment available at <http://www.assetskills.org/Research/SectorSkillsAssessment2010.asp>

⁴ EU skills NW Sector Skills Agreement available at <http://www.euskills.co.uk/home/resources/550/North+West+SSA+Stage+5+Report>

⁵ <http://www.renewableenergyfocus.com/view/917/skills-shortages-for-uk-renewables-industry-revealed/>

- Innovation Support: Realise stronger communication between industry and the regional research base and improve the rate of technology transfer and successful enterprise;
- Skills: Attract high quality candidates to study in the region and encourage retention of graduates and skilled labour within the industrial base to develop the available talent pool;

These objectives are manifestly mainstream for the HE sector. However, the strategy document is rich in detail but lacks depth on exploring how the HE sector could be marshaled or engaged to help deliver on the objectives. Page 13 and 14 provides some narrative and on page 23 a description of the knowledge base is mapped out. However, this mapping is perhaps incomplete and could draw on other published material (such as NWDA surveys). The response of the North West to assisting the development of the Low (zero) carbon society will require the talents of whole HE sector, and this is not articulated sufficiently.

The comment below relates to the point on Table 9, 'Strategic Leadership' and the development of 'fore sighting' capability to undertake horizon scanning for new & emerging markets – particularly for the small scale renewable industry. An addition to the strategic objective is the need to strengthen the link between communities and energy independence, particularly for those with a reliance on oil. It is imperative that this framework takes into account the issues faced by rural communities dependant on oil and the price fluctuations and energy insecurities this brings.

4. Do you agree with the Strategic Framework and sub-sector priorities within the framework (Figure 5)? If not do you have evidence to support different priorities?

Yes – however there are additional sources of expertise in addition to those suggested already, which may have an impact on the decision making as to sub-sector priorities (See accuracy comments below).

5. Do you agree with the suggested new actions? Are there any other activities we should consider for inclusion in the action plan and why?

As per the response to Question 3, there will be a wealth of activities that could harness the talent and excellence within the HE sector in the NW to move towards a low carbon society.

In addition to the questions posed for the consultation, NWUA would like to put forward a number of accuracy comments;

NWUA had been contacted by Orion Innovations in relation to skills aspects of the strategy, not the wider research or knowledge transfer activities of HE.

There is a wide and deep base of HE expertise and capability across the NW that is important as the region moves forward to tackle the challenges of a low carbon society. NWUA operates an Academic Network (led by Dr Mark Bacon, Lancaster Environment Centre) across the whole Environmental Technologies Sector, which should be referenced in addition to the work of the Joule Centre concerning renewable energy (i.e. page 5, 20, 42).

P6 – Draft Part 1 RS2010 comment could be strengthened - "Responding to Climate Change is probably the biggest single challenge facing the world over the next 20 years. The first strand (Capitalise on the opportunities of moving to a low-carbon economy and address climate change) sets the overall context in which we will be operating....

P14 – now 8 HLSP projects within this sector – please add CPD in Smart Grids, Construction Solutions for the Low Carbon Economy and Engineering conversion and workforce proficiency for operation management in the energy sector

Please also add footnote – for further details please see

http://www.nwua.ac.uk/hlsp/funded_projects_energy_and_environmental_technologies.aspx

P23 - Availability of Regional Resources – Knowledge Base

It should be stressed that the listing is only a selection as the expertise available across the NW is far in excess of the examples listed. Published sources of capability include;

http://www.nwua.ac.uk/docs/pdf/Environmental_Capabilities_in_the_Northwest.pdf

And http://www.nwua.ac.uk/docs/pdf/ETS_2009_Feb20.pdf

Also see additional institutions for the specific strengths referred to in Appendix 2 below.

P26 -HLSP could be added to the listing;

Initiative	Scope	% share taken by LCEGS	Delivery Agent
Higher Level Skills Partnership	Development of employer-led higher level courses, meeting defined sector needs as articulated by SSCs. (EET is one of 7 focused sectors)	27%	North West Universities Association

P39 – NWUA is listed as ‘opportunities to work with other teams in the NWDA’, it should however be ‘existing projects / bodies’

Appendix 2 Additional expertise in relation Summary Segment Profiles;

P2- Wind – is there a justification why the score is 1 out of 4 for research, despite 6 institutions involvement?

P3 - Tidal – Liverpool John Moores University (<http://www.ljmu.ac.uk/BLT/BEST/93217.htm>) and University of Salford (<http://www.salford.ac.uk/course-finder/course/1386>) have expertise of relevance, bringing the total number of institutions to 8

P5 - Energy Management in Buildings – University of Bolton (<http://www.bolton.ac.uk/BEE/BuiltEnvironment/Home.aspx>), University of Central Lancashire (http://www.uclan.ac.uk/scitech/built_natural_environment/about_us.php) and Liverpool John Moores University (<http://www.ljmu.ac.uk/blt/>) have expertise of relevance, bringing the total number of institutions to 5.

P6 - Energy from Waste – University of Salford (<http://www.salford.ac.uk/course-finder/course/1386>) and Lancaster University (http://www.lec.lancs.ac.uk/research/sustainable_energy/) have expertise of relevance, bringing the total number of institutions to 7, which should have a reflection on the score of 1 out of 4 being revised upwards.

P7 - Smart Grids – University of Bolton (http://www.joulecentre.org/research/4th_call/Summary%20for%20website%20-%20Morton.pdf) has expertise of relevance, bringing the total number of institutions to 5.