CLASP

Climate Change Local Area Support Programme

Greatest Hits Briefings | January 2011

No.5 Greatest Hits for Low Carbon Economic Development

Delivering the Low Carbon Economy through local authority economic development and regeneration in local areas

This briefing is intended as a guide to the Low Carbon Economy in the North West. It summarises key points from regional research, strategies, sub-regional documents and effective practice.

Its intended audience is people working in economic development, regeneration, planning and development, policy, sustainability as well as council members and those who are supporting businesses and involved in establishing Local Economic Partnerships (LEPs).

The briefing provides practical information support and is linked to a detailed research report Developing Strong Links Between the Low Carbon Economy and Economic Development in Local Authorities.

Download the full report from
http://www.climatechangenorthwest.co.uk/assets/_files/documents/dec_10/cli__1293054218_FINAL_REPORT_CLASP_-_Interim_E.pdf

Contents: (Click to navigate)

Northwest REGIONAL DEVELOPMENT AGENCY

Liverpool City Council

nwIEP north west improvement and efficiency partnership

No.5 Greatest Hits for Low Carbon Economic Development

1. Background

"Innovation will drive lower emissions and less use of raw materials, and out of that innovation will come the economic growth of the future."

Rhian Kelly, Head of Climate Change, CBI[1]

As the UK claws its way out of recession and takes on board the policies and budget cuts of the Coalition Government aimed at reducing the country's deficit, people working in local authorities and the public sector are being asked to deliver services and tackle social issues in new ways with lower budgets.

Many LSPs in the North West are starting to take roles in developing low carbon economies and are recognising that failure to do this could have detrimental impacts on the local economy[2]. This has been highlighted in several 'mini-Stern[3]' reports for sub-regions including Cheshire & Warrington, Cumbria, the Liverpool City Region and Greater Manchester. Such reports highlight risks to the economy but also opportunities for growth and job creation.

Many people working in local economic development and regeneration see the Low Carbon Economy as a means of stimulating economic development, inward investment and job creation and a way to tackle social issues like fuel poverty, as well as a way to reduce carbon emissions and tackle climate change locally.

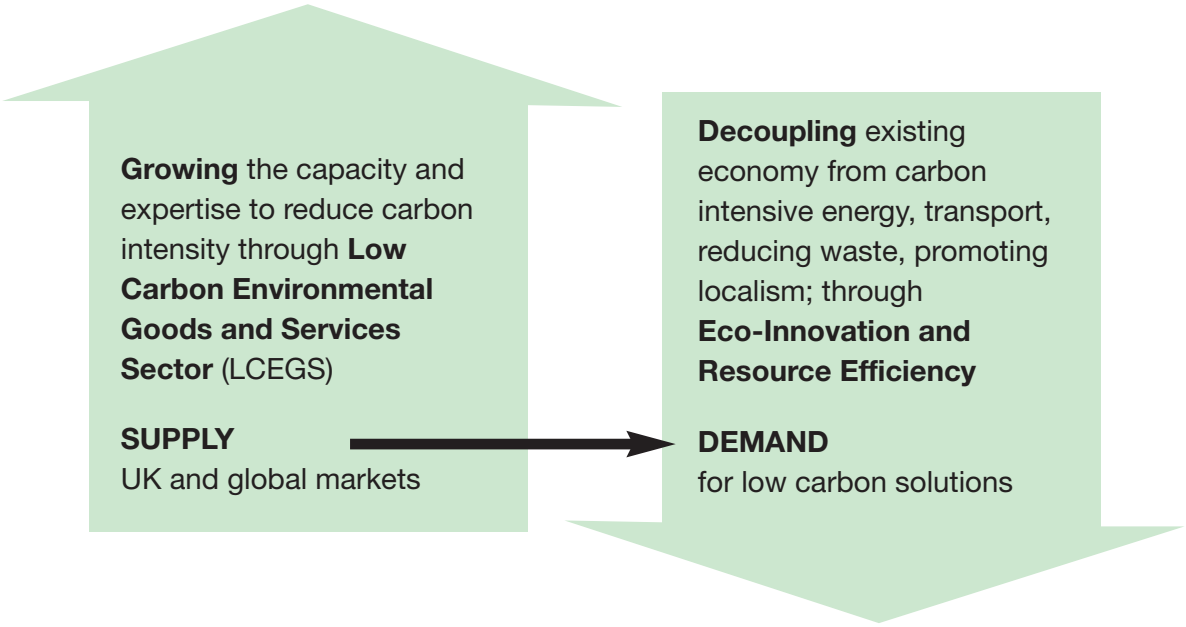
We need to act decisively to support low carbon economic growth here in the North West, or other countries and UK regions will provide more attractive propositions for this major inward investment and skills development opportunity.

2. What is the Low Carbon Economy and how will it happen?

The concept of a Low Carbon Economy is relatively new in economic development terms. It addresses both:

- the supply of products and services from the Low Carbon Environmental Goods & Services (LCEGS) Sector and
- decoupling the link between economic growth and increases in the use of resources and carbon emissions through eco-innovation and resource efficiency.

No.5 Greatest Hits for Low Carbon Economic Development



So what does a Low Carbon Economy look like?

- All resources (in particular energy) are used efficiently – reducing demand while continuing to provide goods and services
- Energy is produced using low carbon energy sources and technologies
- Wherever practical local needs are served by local production – food, materials, energy
- All waste is minimised – reduced, reused or recycled
- There is high awareness of and compliance with environmental and social responsibility initiatives – industry, commerce and individuals

Based on a definition from **www.lowcarboneconomy.com**

The transition to a Low Carbon Economy will be managed through the development of:

- Low carbon energy production and distribution (renewables and nuclear)
- Low carbon transport (public transport and electric cars)
- Low carbon housing (new housing to be carbon neutral by 2016, existing homes to be improved)
- Low carbon workplaces (low energy buildings, recycling, green travel)[4]

Sticks

Regulation and legislation will increasingly drive the Low Carbon Economy. It will also be driven by rises in costs of energy and resources as well as an increase in the cost of carbon and waste disposal. The EU Emissions Trading Scheme, Climate Change Levy and Carbon Reduction Commitment are all examples of schemes that apply to larger energy users which have to measure, report and pay for their carbon emissions, making it expensive not to reduce energy consumption.

No.5 Greatest Hits for Low Carbon Economic Development

In the long run, companies should expect to source all their energy needs from low, or zero-carbon sources, and to sell products and services with little or no climate impact. But for many businesses, both large and small, energy efficiency remains the best and most cost-effective method of reducing carbon emissions[5].

Carrots

The Low Carbon Economy will be enabled through policy, investment, skills development and innovation to develop its potential for our economy and society.

This ranges from developing high-tech products to large scale insulation and recycling.

e.g. Feed in Tariffs (FITs), which reward the export of electricity produced by renewable generation (e.g. wind, solar PV), is an example of policy driving investment in renewable energy installation and stimulating a rapid increase in demand since its introduction in April 2010. Thanks to a recent change in the law, local authorities can now sell electricity generated through renewable sources and benefit from Feed in Tariffs.

Since April 2010 npower has seen an 80% rise in inquiries about solar photovoltaic (PV) panels, and has been installing them at an ever increasing rate as householders and businesses recognise the financial returns on generating their own power.

3. The current status of the Low Carbon Sector in the North West

The Low Carbon and Environmental Goods and Services (LCEGS) Sector Strategy for the North West provides a framework for the support and growth of Northwest businesses within the LCEGS sector. It also contains a summary of sub-regional sector expertise which local economic development officers and those working on developing Local Economic Partnerships (LEPs) would find useful. The document can be downloaded from: **http://www.nwda.co.uk/pdf/LCEGS%20Sector%20Strategy-full%20report.pdf**

The overall growth in the LCEGS sector in the region was estimated to be 4.9% between 2006 and 2008 compared with a UK average of 3.6%. Thanks to its natural resources in wind and tidal energy, strong industrial legacy in nuclear and waste/biomass processing, large population/skills base and large manufacturing sector, the North West has a strong platform from which to continue strong growth in the future.

The LCEGS Sector Strategy has assessed regional priorities for support based on a number of key criteria and has produced a strategic framework covering the period 2010 to 2013 – see box below.

No.5 Greatest Hits for Low Carbon Economic Development

LCEGS Sector Priorities for the NW

Invest
- Nuclear
- Smart Grids
- Tidal
- Solid State Lighting (including LEDs)
- Low Carbon Vehicles – see Advanced Manufacturing Action Plan

Build
- Offshore Wind
- Biomass (including Energy from Waste)
- Energy Management in Buildings (including retrofit insulation to homes and industrial buildings)

Support (core portfolio)
- Water/Wastewater, Waste & Recycling, PV (photovoltaic), Alternative Fuels, Carbon Capture and Storage (CCS)

Low Carbon and Environmental Goods and Services Sector Strategy for England's Northwest Final Report May 2010

Opportunities for the North West

The Northwest **nuclear sector** has technological expertise in engineering, generation, decommissioning and environmental remediation[6]. This sector has an ageing workforce, which means that even more jobs will be created as growth and retirement occur simultaneously, which has implication for the skills required from the new workforce.

In the **renewable energy sector**, there is potential to benefit from the investment in offshore wind, tidal, biomass and energy from waste by building on existing supply chain strengths, encouraging new market entrants and attracting inward investment.

There will be a strong increase in the development of **Smart Grids** which enable energy companies to manage energy supply and demand as renewable energy generation comes on line. This will create a demand for a range of technologies and services including smart meters, specialist switchgear and control systems.

Low/zero carbon buildings also provide a growth opportunity for energy management products/services and micro-generation. Installing and maintaining energy efficiency technologies in thousands of homes could generate 5,000 new jobs in the region and a further 850 in energy management by 2015, adding to the approx 13,000 already in those sectors[7].

Solid state lighting especially light emitting diodes (LEDs) may be a niche opportunity for the region based on expertise in Cumbria and East Lancashire.

No.5 Greatest Hits for Low Carbon Economic Development

There is also growth potential in other large LCEGS sectors such as **waste recycling and water treatment**.

The North West has a strong low carbon and environmental capability in its knowledge base within its universities and private sector organisations – see box below for examples.

Regional Knowledge Assets in Low Carbon include:

- Environmental Technologies Academic Network
- Lancaster Environment Centre at Lancaster University
- The Energus Centre, the delivery arm for National Skills Academy for Nuclear and an integral part of the University of Cumbria's Energy Coast campus
- Dalton Nuclear Institute
- The Joule Centre for Energy R&D
- The Energy Innovation Centre at Capenhurst
- Centre for Construction Innovation
- Northwest Technology Centre of Excellence (support to recycling and reprocessing industry)
- Sustainable Consumption Institute, University of Manchester

An important regional strength in the context of the LCEGS sector is Envirolink Northwest which provides a wide range of information and practical support to businesses in this sector to help them to grow in both UK and export markets. Envirolink also works to stimulate the local market for LCEGS through its market development programmes. http://www.envirolinknorthwest.co.uk/Envirolink/Main.nsf?OpenDatabase

Different sub-regions have key expertise in the LCEGS sector:

Cumbria has engineering capabilities to support the offshore wind sector from its ports in Barrow and Workington, as well as a strong wood fuel and biomass supply chain and experience of deploying biomass (community and off-grid) and anaerobic digestion. It also has a cluster of companies working on solid state lighting, plus some tidal feasibility experience.

Lancashire has promoted wood fuels and supported the biomass supply chain, has advanced engineering skills relevant to all sectors and, like Cumbria, has companies developing solid state lighting.

Liverpool City Region has seen strong activity in developing a tidal scheme on the Mersey and developing a demonstration facility, interest in Energy from Waste (EfW) plants and a cluster of fuel cells and automotive development companies.

Greater Manchester has three of the UK's major wood reprocessing firms and large volumes of other waste streams to form the basis of a strong biomass and EfW cluster. There are also strong demand and supply capabilities for building technologies, the Low Carbon Economic Area for the Built Environment and a core of professional services to support the LCEGS sector in terms of legal, consulting and finance.

No.5 Greatest Hits for Low Carbon Economic Development

Cheshire and Warrington is developing large scale EfW plants, is a focal point for development of electrical engineering capability for grid connection, distribution and transmission (e.g. through the Energy Innovation Centre at Capenhurst) and has a concentration of business and professional services companies, especially consultancies.

"The Low Carbon Economy is about capitalising on the economic opportunities linked to delivering CO_2 reductions in both the domestic and commercial sectors. It is not just about the wind turbine or insulation manufacturers, it is about attracting the companies that install and maintain these new technologies and the associated services related to them. It is about strengthening the local supply chain."

David Kemp, Development Manager, Regenerate Pennine Lancashire

4. How will the rest of our economy be affected by the transition to a Low Carbon Economy?

It is critical that local areas understand how their businesses are affected by low carbon regulation/legislation and by rising energy and other resource costs. It is also important that they understand their supply chains and clusters for whom the Low Carbon Economy is an opportunity.

The Mini-Stern report for Liverpool and the Liverpool City Region highlights the different groups of businesses affected. Other areas could benefit from a similar approach based on an analysis of the local economy.

The Economic Impact of EU and UK Climate Change Legislation on Liverpool and the Liverpool City Region (June 2009)[8] highlighted the impact on four groups of sectors in Merseyside

1. Strong and potentially adverse direct impacts: high energy intensive manufacturing:
Carbon price rises, need for capital intensive long term investment to reduce energy use and carbon emissions costs in the future.

2. Medium direct impacts: large energy using manufacturing, services sector bodies and transport/logistics:
Large energy users will be affected by the Carbon Reduction Commitment[9], including supermarkets, hospitals, large to medium sized manufacturing firms (such as the food and drink sector) and large local authorities and education institutions. Hauliers are likely to face pressure from customers on CO_2 emissions by demand for more efficient fleets.

3. Significant indirect impacts from legislation on goods/services produced by sectors:
Automotive and its supply chain – impact of EU regulation for a cap of 130g/CO_2/KM by 2015 will have significant implications for all relatively fuel inefficient vehicles and their supply chains.

No.5 Greatest Hits for Low Carbon Economic Development

Construction activity and materials – within 4 to 5 years the impact of the new regulations for low/zero carbon buildings will provide major opportunities and threats to existing construction firms as they try to adapt to the new skills required.

4. Positive impacts and opportunities
Impacts of legislation and regulation will further enhance existing and create new employment and business opportunities in the Low Carbon Goods and Environmental Sector. There are 400 firms with around 8,700 staff in the Liverpool City Region.

Companies are making products and providing services to an **increasingly regulated** market, which means new skills and eco-innovation are required. The Liverpool City Region example above, shows that this affects the very competitive global automotive manufacturing and local construction industries. As well as running their own operations efficiently, the products they make have to deliver fuel or energy efficiency.

Booths has 26 supermarket stores across the North of England. The company has been mapping out the climate change impacts of its operations and supply chains since 2007 and working systematically across the business to address its impacts. Its action plan includes working with transport logistics researchers at Lancaster University to identify distribution efficiencies. Other actions include improved refrigeration, waste and packaging reduction, and changes to product sourcing and supply chains from farm production to checkout[10].

The £500million MediaCityUK project is being developed and managed in Salford, by Peel Media, a division of **Peel Holdings**. MediaCityUK is the first development in the world to become a BREEAM approved sustainable community and achieve the highest environmental rating in the world through the use of a highly efficient low carbon site, and CHP system (for the local generation of heat, cooling and electricity) which will save approximately 20,000 tonnes of CO_2 per annum.

Eco-innovation will be critical to the transition to low carbon, for example, the aerospace industries we have in the region are experts in 'lightweighting' to reduce fuel consumption and have skills and knowledge that can enable them to share this concept in other sectors. Linking skills between sectors and with universities is critical to supporting such innovations.

North West Eco-Innovation Case Study

Garage Door Restore
Garage Door Restore is a company based in Blackpool. Customers often had existing doors that functioned well, but needed cosmetic refurbishment. The company devised an aesthetic covering to allow existing garage doors to be reused and renovated, reducing the need for regular re-painting, and reducing waste to landfill.

No.5 Greatest Hits for Low Carbon Economic Development

Garage Door Restore was supported by the High Growth Programme and Eco-Innovation support, which helped produce estimated savings of 124,000 linear meters of marine ply batons and 38,000 litres of adhesive, and reduction in installation time and overall weight. Due to the low cost of this approach demand has increased and there is high demand for the new product giving rise to the creation of over 100 jobs nationwide and 49 branches opening nationally. They are now developing a new insulated door for new build homes.

Resource and Energy Efficiency support for businesses in the North West is provided by ENWORKS (www.enworks.com) for SMEs, and by the Carbon Trust for larger businesses.

The **Third or Voluntary & Community Sector** also has an important role to play, both through stimulating local initiatives and via social enterprises involved in recycling and sustainable energy (e.g. bulky goods re-use, organic waste composting and installing insulation and draught proofing in low income homes).

Offshoots Permaculture Project, Burnley
This project started in 1997 housed in the old walled garden of Towneley Park in Burnley, then a derelict council depot and tree nursery. Work by dedicated volunteers has now created a thriving one acre organic fruit and vegetable garden with five different forms of eco-friendly buildings powered by renewables. Now managed by Groundwork Pennine Lancashire, it involves the community in many ways including gardening, composting and running courses.

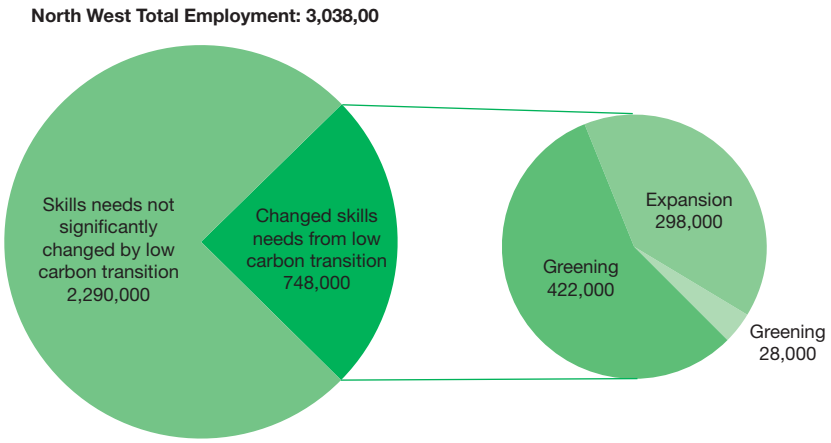
5. What skills do we need to deliver a Low Carbon Economy?

While the North West has universities and institutions delivering R&D and high end skills development, recent research has shown that a quarter of our entire workforce needs to learn new skills to adapt and take advantage of the Low Carbon Economy.

The total number of workers in the NW requiring some form of skill enhancement in order to make the transition to a Low Carbon Economy is approximately 750,000, or around 25% of the whole workforce. That is 70,000 people each year to 2020[11].

No.5 Greatest Hits for Low Carbon Economic Development

Whole economy change in skills need



Biggest skills needs areas are:

- Energy Efficiency and Demand – green construction & energy efficient products
- Transport – automobile & aerospace manufacture, logistics and transport planning, eco-driving and other efficient transport
- Low carbon technologies and energy supply

If local authorities want to attract inward investment by LCEGS sector companies, then they need to demonstrate that local organisations and businesses have the skills they need, from research and development capabilities to project management and manufacturing.

Consider if there is a role here that local economic development and regeneration can take in helping to support communication about the growth sectors with the HE and FE institutions in the North West and locally so that the right skills are being developed.

See the "**what you can do**" section on skills for ideas

6. Rapidly changing economic context for Low Carbon Economy

The policy context is constantly changing. Some policies announced by the Coalition Government include:

The Green Investment Bank The Green Investment Bank Commission has suggested that some £550 billion is required to shift the UK to a Low Carbon Economy, through investment in supply chains and infrastructure. The Commission suggests the bank catalyses low carbon investment by unlocking project finance, providing green bonds to access larger pools of capital from institutional investors, selling green ISAs and improving government support for low carbon innovation and commercialisation[12].

No.5 Greatest Hits for Low Carbon Economic Development

The **Green Deal** for households will be established through the Energy Security and Green Economy Bill to help individuals invest in home energy efficiency improvements that can pay for themselves from savings in energy bills (Pay As You Save). The Green Deal is expected to be available from Autumn 2012. The government expects that up to 100,000 insulation jobs will be created by 2015, against the current 27,000 working now in the insulation sector[13].

The government has introduced a two year Regional Growth Fund (worth £1.4 billion) to create jobs and growth in places currently heavily dependent on the public sector - this could include support for activities such as housing growth and market renewal, which could support low carbon homes retrofitting and building as well as developing a market for renewable energy.

The government has also clarified that councils will be able to borrow against future growth in Business Rates to fund infrastructure projects. Local authorities are also able to raise money through the use of local authority bonds.

7. What do Local Authorities, LSPs and LEPs need to do now?

Local authorities are reviewing their roles, and with LEPs under development, it might be hard to work out the role that the public sector should take with regard to the Low Carbon Economy. A growing sustainable local economy is obviously desirable, and good skills levels and jobs are needed in all areas for a healthy functioning area.

Local authorities can help create the conditions for a thriving Low Carbon Economy through:

- **leadership and communicating messages of why it is important**
- **engaging with emerging LEPS and with the business and community and voluntary sectors**
- **planning policy**
- **inward investment**
- **acting as a customer and catalyst, through energy planning, transport planning and establishing energy service companies**
- **boosting the LCEGS sector and creating jobs through insulation and boiler replacement schemes that target fuel poverty and support wider sustainable living in the community.**

At a minimum it can provide a role as a facilitator, bringing together companies, enabling the sharing of information and research, and supporting the development of skills and innovation.

No.5 Greatest Hits for Low Carbon Economic Development

8. Strengthening links between the Low Carbon Economy and economic development activities

a) Understanding how low carbon can drive the local economy
b) Finding out what is happening already
c) Identifying what you need to do

8a. Understanding how low carbon can drive the local economy

- **Map your area's business, infrastructure, strengths, threats, skills and resources.**

Use existing intelligence to understand how the Low Carbon Economy affects your local area's economy. Use documents like The Low Carbon and Environmental Goods and Services Sector Strategy to identify your sub-region's key areas for LCEGS sector growth, map your LCEGS sector businesses, map your intensive energy users and those industries affected by increasing regulation (e.g. automotive and construction). Some of this work may have been done if your sub-region has a mini-Stern report. It is important to stress that mapping the LCEGS businesses needs careful planning. Data is not always reliable or available for many of the sub-sectors but there are a wide range of information sources which can be used starting with Envirolink Northwest which has a comprehensive database of LCEGS businesses in the region.

- Review policies and incentives that you can maximise for greater impact.

Checklist for the LCEGS sector

◊ Do LCEGS sector companies know they are in this growth sector? (many companies do not realise that they are potentially in the low carbon supply chain or sector)
◊ Is there a local supply chain to help these companies grow?
◊ Are they aware of market opportunities locally and globally?
◊ Are companies aware of support available (e.g. from Envirolink, Eco-innovation or Knowledge Transfer Programmes (KTPs)).
◊ Are there skills shortages blocking local growth?
◊ Is the right workspace, employment land and infrastructure available for growth?
◊ Are these businesses supported by investment or do they need support?
◊ How do they want to be supported and by whom?

Case Study - Knowsley Council

In April 2009 Knowsley Council commissioned a study of renewable energy potential across the Borough. This assessed the environmental and economic benefits and constraints of a range of low carbon energy supply technologies, and identified the most appropriate and cost-effective options for suitable sites. It also considered the potential for local jobs and skills development as well as the economic benefit to business and homes through lower energy costs. The study informed the development of the Local Development Framework, and identified the potential to grow the existing thriving renewable energy sector in the Borough which has existing businesses providing component parts, fuels and technologies. The study identified that Knowsley also has the infrastructure and labour force with transferable skills to ensure it is a key area in the region for employment in the renewable energy sector[14].

No.5 Greatest Hits for Low Carbon Economic Development

- **Identify Intensive and large energy users**

Identifying the heavy energy and resource users in your industry sectors, and bringing them together to share information and good practice may be useful. Your own facilities or energy managers will also be working on energy and resource efficiency and may have lessons to learn or share from other companies.

Companies may be able to provide joint supply chain mentoring, through the Carbon Trust, Enworks, Groundwork or the local Chamber to support other local businesses. It should be recognised that these firms are also likely to be members of industry associations which also provide support to reduce carbon emissions especially if they are involved in the EU ETS or Climate Change Levy Agreements.

See also **Briefing No. 6** Engaging with Businesses.

- **Consider the impact of increased regulation**

Do you have key sectors like construction and manufacturing which may be subject to increased regulation? How are these sectors responding, can they support each other through innovation, do they have skills shortages?

North West Eco-Innovation

Trak-Rap is a company based in Skemersdale, Trak-Rap has developed a new type of wrapping machine for transit packaging between factory and supermarket. This machine avoids the need for energy intensive 'shrink wrapping' by utilising a stretch-wrapping process instead.

- **Support business diversification**

You may identify companies supplying products or services that can convert across to the Low Carbon sector which will support jobs and expand the LCEGS sector. Jobs identified that can convert include:

- Electrician → Solar PV fitter
- Plumber → Renewable heat or solar thermal installer
- Aerospace technician → Wind turbine technician
- Architect → Zero carbon buildings architect

Products that could find new markets span a huge range. Two examples from Liverpool include providing industrial lubricants and uniforms to the growing off-shore wind sector.

No.5 Greatest Hits for Low Carbon Economic Development

Pennine Lancashire's Microgeneration Business Diversification Programme
In May 2010 Regenerate Pennine Lancashire launched an innovative scheme to help companies branch out into the renewable energy sector. The Microgeneration Business Diversification Programme is the first of its kind in the North West. It is aimed at giving up to 15 businesses across Pennine Lancashire the skills and training they need to compete for and win contracts in the microgeneration sectors. These skills are increasingly important to housing new-build and refurbishment schemes as well as to commercial and industrial projects in the North West. Regenerate worked with East Lancashire Chamber of Commerce to identify and map the skill and accreditation requirements of construction supply chain companies. The mapping work highlighted a need for different types of technology training to allow companies to progress towards accreditation. It also found a requirement for accreditation against the Microgeneration Certification Scheme (MCS) itself, where companies already had relevant skills and training. Regenerate Pennine Lancashire, Regenerate's 'No Limits - Constructing the Future' project and Envirolink Northwest jointly funded the programme. So far the scheme has supported 11 businesses, created 32 jobs and safeguarded 169 jobs.

- **Focus in**

You don't need to target all companies in your area. Target your LCEGS sector companies, companies which can make a transition to exploit low carbon opportunities, through innovation or marketing goods and companies under more regulation before you start to tackle the rest of your local economy.

Liverpool Green Business Network
Liverpool City Council used its Year of the Environment to form an environmental group including the Chamber, Liverpool Vision and Groundwork to engage with the risks and opportunities to business, including SMEs. It produces an electronic newsletter and a Little Green Book[15] as a directory for businesses wanting to become more efficient and learn more about the Low Carbon Economy. It has a pledge the businesses can sign committing them to become greener, over 100 have signed up this year.

- **Maximise the impact of national policy:**

The URS Assessment of Potential Carbon Savings Achievable in the Northwest Region by 2020 recommends maximising the impact of national policy. Examples include: promoting and developing local district heating/CHP schemes, establishing ESCOs (Energy Service Companies) possibly drawing upon the benefits of initiatives such as Feed-In Tariffs and the Renewable Heat Incentive, and using your own estate to generate electricity.

Look at the potential that new policies such as the Green Investment Bank, Green Deal and Regional Growth Funds can deliver to the low carbon transition in your area. Consider whether you are best working on a sub-regional/city region level to maximise the size of projects and achieve scale to attract additional investment.

No.5 Greatest Hits for Low Carbon Economic Development

Case Study - Cumbria Vision

Cumbria's Mini-Stern report identified that the county has large areas of under-managed woodland, significant numbers of buildings off the gas grid (for which conversion to woodfuel would be economically viable), and some expertise in biomass heating. Feasibility studies can demonstrate the financial savings to business, but these often require some initial investment. Thereafter, the development of this sector is constrained by lack of capacity to design and install these systems and particularly by the concerns of prospective customers over the long term security of the local fuel supply chain. It was identified that by addressing this opportunity, Cumbria could create several hundred new jobs, whilst reducing CO2 emissions and reducing dependence on oil and coal.

Cumbria Woodlands has been driving this agenda forward, undertaking training with front line energy staff in various businesses and housing organisations to undertake feasibility surveys and to inform the client of the opportunities to benefit from installing biomass. However, there has yet to be a transformational shift to biomass in Cumbria. It remains a subject assigned great strategic importance time and again, yet there has not been the 'big push' by economic development stakeholders. The forthcoming Renewable Heat Incentive should mark the start of an acceleration in deployment of biomass. A comprehensive assessment of the potential demand and supply of biomass from Cumbrian woodlands is still required.

- **Develop sectors** that complement what your area needs to do to reduce energy use and make a transition to a Low Carbon Economy, and that can also tackle worklessness or skills development. That means, looking at what your potential spending as a local area is on insulation, boiler replacements, renewable energy installations, recycling, consultancy, energy advice and so on. Work on developing these skills and getting the jobs in your local area. The Mini-Stern reports carried out should help to identify some of these areas.

"It's not low carbon or jobs, it's going to bring us jobs and help existing business be more efficient, it's not a nice-to-have"

Fact Box

- Businesses and Public Sector employers in the Northwest spend around £2.9 billion per year on energy, and a further £2.8 billion on transport fuel.
- On average, organisations waste up to 20% of the energy they buy (equivalent to 5% of sales for many businesses), costing the Northwest economy over £580 million/year.

No.5 Greatest Hits for Low Carbon Economic Development

8b. Finding out what is happening already

Having identified the potential and impacts of the Low Carbon Economy on your area and mapped what existing programmes and policy could benefit these, look at what is happening already and see what you need to add in terms of information, knowledge, research and strategy, and most importantly, practice.

Existing strategy and plans:

- ? Has your area has been included in some of the sub-regional **Mini-Stern** reports detailing the economic implications of climate change for the sub-regional economies? How is it planning to respond to this?
- ? What are current economic strategies, plans and developments?
- ? Do they take into account recent economic impacts such as the budget reductions in the public sector, the lull in construction, changes to planning requirements such as the Code for Sustainable Homes, the introduction of Feed in Tariffs, the impact of carbon and energy price rises on energy-intensive sectors, the potential for growth in certain sectors?
- ? What is your strategy on skills?
- ? What is your strategy on tackling worklessness?

New investment:

- ? How does the team assess the sustainability of investments and developments?
- ? Do energy supply, low-carbon buildings, travel minimization and travel planning feature in discussions with investors?
- ? What are steps are currently being taken to foster a Low Carbon Economy?
- ? Does anything else in economic development and regeneration work contribute to reducing emissions, increasing energy efficiency, reducing transport or encouraging environmental technology companies?

New Policy Areas:

- ? What is the local area doing in terms of the LEP?
- ? Did the bid include a focus on the Low Carbon Economy and enabling growth in the LCEGS sector and enabling transition of other sectors to a lower carbon future?
- ? Is there an opportunity to push this further through the Local Economic Assessment?
- ? What are the plans for bidding to the Regional Growth Fund, can these include assessment of potential new jobs in the Low Carbon and Green sectors?
- ? Can this include a review of potential growth areas?

No.5 Greatest Hits for Low Carbon Economic Development

8c. Identifying what you need to do

In CLASP workshops with economic development, regeneration and sustainability officers we identified six key areas for action.

- Leadership & Governance
- Infrastructure
- Skills
- Supply Chain and Business Engagement
- Planning
- Finance

Leadership & Governance

- Training
- LEP embed low carbon in work
- Map LCEGS sectors and skills needs to tackle joblessness
- Map areas of procurement and introduce sustainable procurement and supplier support

Infrastructure

- Set up ESCOs
- Invest in new forms of generation
- Support social enterprises and communities in small scale generation
- Cluster heavy industry to recycle waste products including heat

Skills

- Work with Jobcentres,colleges and schools to support low carbon skills development
- Develop low carbon skills in public sector
- Skill up staff who have contact with businesses in low carbon awareness
- Promote skills to 'green' existing jobs
- Build up 'entry level' skills for employment in retrofitting, renewables installation

Supply Chain & Business

- Create networks of linked businesses
- Promote local low carbon supply chain to business and public sector
- Foster innovation in new or recycled products - eco-innovation

Finance

- Identify potential income streams for local authority through renewable energy
- Identify innovative approaches to investment

Planning

- Work with Forward Planning on sites for LCEGS business investment, accessible, energy planning etc
- Communicate lower running costs of high standard buildings
- Encourage renewables installation through planning policy
- Establish a low carbon business development zone

No.5 Greatest Hits for Low Carbon Economic Development

Leadership and Governance

Through leadership, training and awareness everyone needs to consider how their services, regeneration, building projects and policies support a low carbon future.

Training on this relatively new and complex subject area will be needed for people to understand the potential for economic development and jobs creation.

Since budgets are tight, bringing people together for a learning lunch or discussion may be a good start.

Discussions or training could include:

- Introduction to the Low Carbon Economy
- Linking economic development and the Low Carbon Economy
- Financial savings that can be generated in moving to a low carbon estate
- How to integrate local authority's low carbon ethos into procurement
- What is the state of our local low carbon supply chain?
- What is the potential for Low Carbon Economy in our area based on our business and skills base?
- What can we do to further this agenda in simple terms?
- What more information do we need and how can we get it?

Ensure that the **Local Economic Assessment and Local Enterprise Partnership** embed the Low Carbon Economy and measures to tackle climate change as a driver for sustainable economic development. Use regional research, Envirolink data, Mini-Stern reports, energy studies and local authority procurement programmes (e,g. for housing insulation and renewable energy) as evidence. Begin work to develop an understanding of, and the capacity to deliver, low carbon economic development. Communicate the need to include this to get buy in and support from senior officers and leadership.

Tackling Worklessness - Map expanding and contracting business sectors and related skills to understand the potential in the local economy to move towards a lower carbon approach. Map against the skills needs discussed above.

Map areas of **procurement** that could support local jobs and business related to tackling climate change. Encourage the LSP to develop a sustainable procurement policy that also supports the local economy and actively engages suppliers in energy efficiency, identifying innovation and supporting local employment.

Infrastructure

Set up ESCOS (Energy Service Companies)

Invest in new forms of energy generation

Support social enterprise and communities in producing small scale generation projects

Cluster heavy industry to recycle waste products including heat

No.5 Greatest Hits for Low Carbon Economic Development

Skills
Work with Jobcentres, colleges and schools to support the development of skills for a Low Carbon Economy through training for young people and unemployed people.

Include skills development of public sector workers to further the Low Carbon Economy – across the Local Authority but also across your partners.

This should include business support staff or any officers who liaise or monitor businesses – they should be able to identify potential low carbon opportunities and direct businesses to relevant support or to other businesses who could benefit from sharing resources and information.

Don't just focus on new jobs; but also greening existing jobs to maintain employment and businesses in your areas.

Ensure skills for entry level employment opportunities to the Low Carbon Economy e.g. retrofitting, renewables.

Supply Chain and Business Engagement

Create partnerships or associations that link businesses together, as Knowsley has done through its Business Environment Network.

Knowsley Business Environment Network
Brings companies together to share a common interest in developing and implementing environmental and sustainable practices for business benefit. QVC, the online shopping channel company, and Sonae, a manufacturer of particleboard for the furniture and construction industry, met at the Network. Both companies are based on the Knowsley Industrial Park and have struck a deal for QVC to sell excess wood pallets to Sonae to use in product manufacture.

Foster innovation and adoption of low carbon approaches by existing business - help existing businesses responding to gaps in the market, identifying new ways to make products out of recycled materials, through research and innovation and creating new products and services. Close working with existing companies to support their development into a Low Carbon Economy will be important.

Support supply chain events that promote the LCEGS sector to potential markets.

Meet The Supplier Events for Energy Efficiency and Renewables
Through the Pennine Lancashire Energy Managers network, Regenerate supported a PLACE[16] bid to NWIEP to assist local authority partners to undertake energy efficiency projects on council owned assets. A cornerstone of the successful bid was local economic opportunities for Pennine Lancashire supply chain. Regenerate secured further funding and support from Envirolink Northwest to hold a meet the supplier event for partner authorities and their LSP partners allowing councils to open discussions with suppliers, manufacturers and installers of appropriate and relevant energy efficiency and renewable energy technologies. Five public sector organisations attended, and 20 companies were supported.

No.5 Greatest Hits for Low Carbon Economic Development

Social enterprises, low carbon community groups and Transition Towns should be included in the approach to sustainable economic development. They are often able to attract new finance, tackle social issues and address skills needs in areas of regeneration and might be a player in the development of local energy projects, insulation and recycling schemes.

Planning

Engage with the Forward Planning team to discuss **business infrastructure**. What premises or services are needed to attract companies to invest in the area? New business start up units or incubators, technology and business parks should be planned and designed to high energy efficiency standards and located in places accessible by public transport, walking and cycling. Consider energy plans as part of this work.

Communicate the lower running costs of premises built to high standards of energy efficiency. Demand this in planning policy.

Make planning regulations easier to encourage renewables.

Identify a **regeneration area or economic development zone** that could become a low carbon exemplar to test ideas and innovation.

Finance

Identify potential income streams for the local authority through new opportunities from renewable energy.

Identify innovative approaches to **investment** – A Green New Deal suggests that local authority bonds could provide a major source of finance for low carbon programmes, arguing "this source of funding, and local democracy, could be promoted relatively easily if the returns on the money saved from low carbon investments, minus their costs, were used to repay such bonds"10.

Maximise potential for investment from new delivery models such as community owned schemes.

Scale up with other areas and the sub-region to create big scale projects that attract investors.

Ensure the Green Investment Bank, Green Deal, FITS, Renewable Heat Incentive and Regional Growth Fund are exploited full to support economic growth in your area.

No.5 Greatest Hits for Low Carbon Economic Development

The CBI View

The Confederation of British Industry (CBI) produced reports and timelines in April 2009, **Going the distance: the low-carbon economy roadmap** which detail how they see a transition to a Low Carbon Economy up to 2020 from a business point of view. They include recommendations to use government purchasing power to encourage, widespread installation of smart meters to measure and manage energy demand, a renewal of nuclear power and investment in renewable power generation, rewards for consumers in switching to efficient appliances, emissions trading for shipping and a move to electric vehicles. It is always useful to use business-based information if you're discussing these issues with your economic development team, chamber or business associations.

http://climatechange.cbi.org.uk/uploaded/Roadmap_SummaryDistance.pdf

Partners

In developing local economic strategies or programmes to develop a Low Carbon Economy, key partners to engage are:

- Local Chamber of Commerce
- Envirolink Northwest
- Groundwork or ENWORKS
- Local Enterprise Partnerships
- Integrated Transport Authorities
- Jobcentre Plus
- Homes and Communities Agency
- Highways Agency
- Young Persons Learning Agency
- Local colleges and university
- Neighbouring councils and LEPs who may have linked supply chains or associated business clusters
- National business support organisations
- Energy Saving Trust (who provide eco-driving, green fleet reviews, and other energy efficiency measures advice)

No.5 Greatest Hits for Low Carbon Economic Development

9. Further resources and support

CLASP
The Climate Change Local Area Support Programme (CLASP) is a programme of support which aims to assist North West Local Authorities and LSPs in tackling climate change mitigation and adaptation. During 2010 – 11 it is providing additional support through the Climate Change Skills Fund for planners, members and others focusing on renewable energy and planning.
www.clasp-nw.info

ENWORKS
Provides resource and energy efficiency advice to SMEs in the North West.
www.enworks.com

Carbon Trust
Provides specialist support to business and the public sector to help cut carbon emissions, save energy and commercialise low carbon technologies. Also provides loans and financial information.
www.carbontrust.co.uk

Energy Saving Trust
EST provides a wide range of information and advice on energy efficiency, renewable energy and low carbon transport to domestic users. This includes operating the national network of EST Advice Centres and supporting community groups through its Green Communities programme. EST works closely with local authorities on energy efficient housing and fuel poverty.
www.energysavingtrust.org.uk

Envirolink
Envirolink Northwest is a not-for-profit organisation working in the North West to:
- Increase the levels of technology transfer and innovation within the sector
- Increase the level of knowledge and skills in the current and future sector workforce
- Promote the sector in regional, national and international markets

www.envriolinknorthwest.co.uk

North West Eco-Innovation Programme
The North West Eco-Innovation Programme provides free, tailored support to help SMEs exploit the market for sustainable products and low carbon solutions.
www.businesslink.gov.uk/northwest/eco-innovation

Local low-carbon and resource-efficient economies members' workbook
This workbook was published in May 2010 and is a very clear, useful resource for use in work in local areas on the Low Carbon Economy.
http://www.idea.gov.uk/idk/core/page.do?pageId=20853402

The Prince's Mayday Network
The Prince's Mayday Network, convened by Business in the Community, is a collaboration of businesses at all stages on the low carbon journey: some leading, some just starting out. It provides information and support especially to smaller businesses.
www.maydaynetwork.com

No.5 Greatest Hits for Low Carbon Economic Development

The Northwest Greatest Hits for carbon savings series includes the following briefings:

Researched and written by Quantum Strategy & Technology for CLASP

No.5 Greatest Hits for Low Carbon Economic Development

References

1. Business and Sustainability; The Times, 3 March 2010

2. The Manchester 'mini-Stern' report suggested that failure to adapt to the new reality of tackling climate change could have cost the local economy £21bn by 2020

3. Mini-Stern reports are local reports examining the economic impacts of climate change – the name is taken from the Stern Report 2006 looking at the national costs of climate change to the UK economy

4. The UK Low Carbon Transition Plan, http://www.decc.gov.uk/en/content/cms/what_we_do/lc_uk/lc_trans_plan/lc_trans_plan.aspx

5. Making Sense of The Low Carbon Economy, White Paper, Forum for the Future, 2007

6. http://www.nwda.co.uk/areas-of-work/sustainable-development/energy-and-ets.aspx

7. Assessment of the Skills Need and Provision for a Well Adapted and Low Carbon North West, December 2009

8. The Economic Impact of EU and UK Climate Change Legislation on Liverpool and the Liverpool City Region (June 2009, Regeneris Consulting & Quantum Strategy & Technology)

9. CRC Energy Efficiency Scheme – see footnote number 22.

10. www.booths.co.uk/green-issues

11. Assessment of the Skills Need and Provision for a Well Adapted and Low Carbon North West, December 2009

12. http://www.climatechangecapital.com/news-and-events/press-releases/green-investment-bank-commission-report-ccc-e3g-joint-announcement.aspx

13. DECC Press Notice: 2010/115 Huhne heralds green homes revolution.

14. http://www.knowsley.gov.uk/PDF/KMBC_report_rev230709.pdf

15. http://www.liverpoolchamber.org.uk/greenbook.html

16. Pennine Lancashire and Chief Executives (PLACE)

CLASP – The Northwest Climate Change Local Area Support Programme
www.clasp-nw.info

Northwest REGIONAL DEVELOPMENT AGENCY

Liverpool City Council

nwIEP north west improvement and efficiency partnership

CLASP.