

---

**Manchester City Council  
Report for Information**

**Report to:** Economy, Employment and Skills Overview and Scrutiny Committee – 17 November 2010

**Subject:** Job Creation in a Low Carbon Economy

**Report of:** Strategic Director of Neighbourhood Services  
Head of Environmental Strategy

---

**Summary**

Creating an increasing number of “green jobs” is a critical element of developing the low carbon economy in Manchester. This report provides a background to the issues that are driving the creation of a low carbon economy, a summary of what may be meant by “green jobs”, and an overview of some of the plans and programmes in development that can begin to deliver them.

The paper outlines what the components of an integrated “green jobs strategy” might be, noting that a wide range of activity is in development and that new national policies and the outcomes of the Comprehensive Spending Review present challenges and opportunities that require an adjustment of approach. The opportunity to start developing a dedicated “green jobs strategy” is identified in the proposed drafting of a Greater Manchester Climate Change Strategy and the establishment of a new officer group in the Council.

**Recommendations**

The Committee is invited to note the contents of the report and to provide comments on how a future strategy for job creation in a low carbon economy might be developed.

---

**Wards Affected:** All

---

**Contact Officers:**

Name: Richard Sharland  
Position: Head of Environmental Strategy  
Telephone: 0161 234 3232  
E-mail: [richard.sharland@manchester.gov.uk](mailto:richard.sharland@manchester.gov.uk)

Name: Angela Harrington  
Position: Regeneration Manager Employment & Skills  
Telephone: 0161 234 1501  
E-mail: [a.harrington@manchester.gov.uk](mailto:a.harrington@manchester.gov.uk)

**Background documents (available for public inspection):**

The following documents disclose important facts on which the report is based and have been relied upon in preparing the report. Copies of the background documents are available up to 4 years after the date of the meeting. If you would like a copy please contact one of the contact officers above.

- Manchester – A Certain Future 2009
- Greater Manchester Low Carbon Economic Area – Delivery Plan
- Mini-Stern Report 2008
- Innovas Report : Low Carbon Goods & Services Sector Analysis.
- Manchester City Council - Climate Change Delivery Plan 2010
- The Power of Procurement - CLES Report on Procurement in MCC

## **1.0 Introduction – “Green Jobs” in A Low Carbon Economy**

The global economy incorporates many technologies, but, currently, those directly or indirectly using fossil fuels are central to most industrial, economic and domestic processes. The scale of the economy and its dependence on fossil or carbon fuels is the primary cause of the increased emissions of greenhouse gases, particularly CO<sub>2</sub>, that have created human-induced climate change.

A ‘low carbon’ economy is one that is much less dependent on fossil fuels. It will be characterized by a much more diverse mix of technologies – many of them fueled by ‘renewables’, by very substantially lower emissions of greenhouse gases and by a widespread and embedded high level understanding of the environmental impacts of technologies, lifestyles and behaviours.

The current high level of dependence on fossil fuel high carbon technologies is complex. This primarily lies in the production and consumption of energy but also on the production and application of a wide range of oil-based and synthetic materials such as plastics.

The transition from a fossil-fuel based economy to a low carbon economy will be a process of change that requires a focus on both long term goals and short term steps and milestones. The 2020 time horizon has been widely adopted including in Manchester: the Greater Manchester Strategy which sets a 2020 target to “achieve a rapid transformation to a low carbon economy” and “reduce CO<sub>2</sub> emissions by 30 – 50 %” and in the city, *Manchester – A Certain Future* which sets targets to “reduce CO<sub>2</sub> emissions by 41%” and to “establish a low carbon culture”.

These Manchester targets closely reflect those set out in the UK Climate Change Act, and they both recognize a longer term process of change with substantially more radical goals and implications. The UK Climate Change Act sets out a target of “in excess of 80% reductions in greenhouse gases by 2050”.

These Manchester strategies and targets are underpinned as much by economic drivers as by the requirements of the UK Climate Change Act and the ethical imperative to act on climate change. The Mini-Stern review in 2008 estimated that a value of £21 billion could be placed on the opportunities for Greater Manchester in moving toward a low carbon economy in the decade to 2020. In part, this estimate was based on the city securing ‘first mover advantage’ and attracting low carbon investment.

This sets the context for strategies for “green jobs” and provides the starting point for establishing a common understanding of what is meant by “green jobs”. In a low carbon economy, the majority of employment could be defined as “low carbon jobs” or “green jobs”. It is by no means certain whether a low carbon economy will deliver higher levels of employment, it follows that many “green jobs” will not be new or additional job opportunities, but replacement jobs – employment roles that have been “greened”.

Thus, three generic elements of what might be included under the heading of “green jobs” in a low carbon economy :-

- **‘New’ green jobs.** Employment in new, often renewable, technologies or in technologies that use fossil fuels more efficiently or in ‘closed loop’ technologies that maximize the re-use and recycling of materials. These technologies will require different structures and skills and organizations: and there will be ‘specialist’ ‘green jobs’ involved in the development and delivery of these technologies and in the supply chains that support them.
- **‘All jobs are green’.** In addition to the development of ‘green jobs’ in new technologies, there will be some changes to all organizations and all work to accommodate the direct and indirect impacts of ‘decarbonisation’. Within each trade and profession, the current – usually implicit and unmeasured – relationship with environmental impacts will be replaced with a much more explicit understanding which affects all day-to-day processes and decisions. In a low carbon economy, all jobs will have a “green” element to them *too*.
- **‘New’ Structures and processes.** In a low carbon economy, energy and natural resources will have a much higher value than they have in a fossil fuel economy. Combined with continued development of intelligence and biotechnologies, this will result in different patterns of efficiency, changes in travel and mobility, in the means by which goods and services are provided and consumed and thus in the patterns and structures of work, recreation, education. “Green jobs” will operate within a changing frameworks of ‘work’, with more agile and home working, more localized services and production.

In addressing the employment implications of achieving a ‘rapid transition to a low carbon economy’, all three of these generic elements need to be considered. They are all benefits or attributes of a low carbon economy and part of the means of getting there. Strategies for “green jobs” need to address the creation of ‘additional employment opportunities’, ‘replacement employment opportunities’ and about creating the change in knowledge, skills and culture that will contribute to realizing the opportunities of ‘first mover advantage’.

## **2.0 Background - Plans & Reports in Manchester**

The creation of more ‘green jobs’ in Manchester and Greater Manchester has been an objective in several key strategies, plans and reports since 2008, in particular those related to the Greater Manchester Low Carbon Economic Area (LCEA).

In Greater Manchester, the mini Stern report of 2008, provided economic background for the headline commitments within the Greater Manchester Strategy approved in 2009. In 2010, an Innovas Solutions Report analysed the strength and potential of the Low Carbon Environmental Goods and Services Sector and this provided some of the economic background to the Delivery Plan for the Greater Manchester Low Carbon Economic Area (LCEA), approved in June 2010.

The Innovas Report identified the UK Low Carbon total market value as £112 billion in 2008/09, employing over 897,000 people across the UK. Nearly £5bn of this is identified as Greater Manchester’s share of this market, a 4% share equivalent to 39,000 jobs. The report forecast an increase in these jobs to 49,000 by 2011/12, with

more than half of these in low carbon technologies like alternative fuels and buildings.

The Greater Manchester LCEA Delivery Plan is focused on the built environment. The Plan sets out to increase activity through a suite of low carbon workstreams: one of these includes some detailed projections on employment creation in a potential five year residential retrofit programme. This sets out a number of energy efficiency measures in up to 850,000 homes across Greater Manchester: at a high end scenario where the whole programme is delivered this would create 8,400 jobs in residential retrofitting over five years and a potential total of 34,000 across all workstreams and supply chains. Moderate, low and organic growth scenarios would result in less activity – but could still generate between 1,800 and 5,200 jobs, most in the supply chain or installation.

In Manchester, the climate change action plan, *Manchester – A Certain Future*, approved in 2009 has been followed up by the Council's Delivery Plan, approved in October 2010. These plans have been developed in parallel with the Council's Core Strategy, which will go out to final consultation shortly. While none of this group of plans and strategies set explicit targets for 'green jobs', a number of actions and priorities incorporated in them will contribute significantly to creating a framework within which "green jobs" will be stimulated.

The Council's Delivery Plan includes a number of priorities and actions devised to stimulate the low carbon economy. These build upon existing policies and programmes and provide a framework for action across the Council one of whose outcomes will be to stimulate 'green jobs'. Examples include the Council's Procurement Policy, which has proven impact in supporting local employment. The policy already includes some low carbon criteria, but this will be developed in partnership with local supply chains to further improve environmental performance, developing the demand for more "green jobs" in the local supply chain.

The commitment to work with partners to develop low carbon programmes and attract investment also builds upon initiatives already in hand across Greater Manchester. The residential retrofit outlined in the LCEA Delivery Plan will be stimulated by a newly secured ERDF programme; work is under way to develop a low carbon investment portfolio for the Evergreen Fund and to make a submission for technical assistance support from the European Investment Bank (EIB).

### **3.0 Components of an integrated "Green Jobs" Strategy.**

Establishing an integrated 'green jobs strategy' is an essential component of delivering the long term vision for a low carbon Manchester. Some elements of such a strategy are already evident in plans and strategies, others are in development and some first steps are in delivery. There is also a growth in recognition, understanding in all sectors that the transition to a low carbon economy will only be achieved through partnership and joint working.

Most of the strategies and plans in Manchester have been developed during a period of economic pressure and in anticipation of further reductions in public sector finances. While the Coalition Government is introducing radical changes in the

structures of organizations and in the resources and mechanisms available for support and delivery, it has emphasized the importance of taking action on climate change and set out commitments to supporting growth in the low carbon economy.

While the substantial reductions in public expenditure will reduce activity in some areas and changes in organisational structures could precipitate delays and adjustments, the Government's Comprehensive Spending Review included a number of measures that will support aspects of a local strategy for green jobs. The proposals for a Green Investment Bank, for the Green Deal and for Renewable Heat Incentives and Feed-in-tariffs will all assist the business case for low carbon programmes that will support "green jobs."

In spite of the pressures on public finance, the demand for new green technologies continues to grow and research indicates this can translate into significant job numbers. Transformation of the energy industry – generation, efficiency, distribution – over the next decade is forecast to create large numbers of new jobs: much of this is forecast to be in substantial expansion of offshore wind and nuclear capacity, most in the second half of the decade. This growth in generation and distribution will be matched by parallel changes in consumption, with the market for energy efficiency – retrofitting and new build – increasing as energy costs grow and low carbon standards rise.

Several key elements of a 'green jobs strategy' have been put together in the Delivery Plan for the Low Carbon Economic Area, with its focus on the built environment. Workstreams that focus on energy – district heating systems, smart grids, microgeneration – and on retrofitting – residential as well as public buildings across Greater Manchester represent an initial phase of delivery and demonstrator programmes and technical support services.

### **Delivery Programmes**

Stimulating local demand in the low carbon economy by developing work programmes that create 'green jobs' is a key mechanism for positioning Manchester to increase employment opportunities. A range of initiatives are under way, though there is further development to do to prepare these programmes for investment. An AGMA partnership of RSLs and Councils has set out the framework for a residential retrofitting scheme and secured initial investment through a new ERDF programme; research development of proposals for a city centre District Heating network will result in a detailed business case in 2011; submissions have been made to pilot Smart Grid technology in the Corridor, and a first phase charging network for electric vehicles. The scale of these current programmes is unlikely to generate much work beyond the existing provider base. Creating significant number of 'new green jobs' will be dependant on scaling up of these opportunities in future years, but national schemes like the Green Deal may provide the leverage to bring that about.

### **Attracting Investment**

Preparing low carbon work programmes so they are ready for delivery – whether in energy infrastructure, retrofitting buildings or new technologies – is key to attracting and securing the investment necessary to develop the market and create

employment. Building pathways and models for investment and initiating demonstrator projects is equally important. Several initiatives are in development in Manchester, including preparation of a low carbon prospectus for the north west Evergreen fund, a submission to the European Elena programme for technical assistance and a routeway through the regional Growth Fund. These will be developed alongside interest in the Green Investment Bank and the opportunities to exploit Feed-In-Tariffs and the Renewable Heat Incentive.

## **Training and Skills**

In recent years, a number of initiatives have incorporated the development of 'green collar' skills and training within their programmes. Environmental learning has been prominent in Manchester's schools and schemes such as the Future Jobs Fund have included a proportion of 'green' initiatives. The LCEA Delivery Plan set out to co-ordinate and focus some of this activity by setting frameworks for the commissioning of skills funding for adults and 16-19 year olds, building stronger links between new academies, colleges, university courses and vocational training. New Government policy is focused on a market-based approach that provides fewer opportunities to shape the supply of training and more emphasis on developing the programmes with skill requirements. Adjustment to this new approach will take time: partners are starting to look at how environmental elements of apprentice schemes may be developed and a partnership proposal to co-ordinate basic skills schemes under the 'Carbon Literacy' target outlined in *Manchester – A Certain Future* is under consideration.

## **Stimulating Low Carbon Business Culture**

The development of future green jobs, including the 'greening' of all jobs is closely linked to the mainstreaming of a low carbon culture. Demonstrator projects like the refurbishment of the Town Hall Extension/Library combined with the Council's sustainable procurement policy, ongoing environment business support and the promotion of low carbon behaviours all contribute to this process. Procurement policy has evidenced how the Council's £900m procurement spend can generate substantial benefits for local providers and the local economy. The recent introduction of environmental standards and the Delivery Plan's commitment to work with local suppliers to increase these will complement the support provided by the Environmental Business Pledge, currently reaching 1400 businesses in the city, and a recently agreed 'green events charter'.

## **4.0 Next Steps**

There is a wide range of local strategies, schemes and initiatives in place or under development that incorporate actions that will contribute to the delivery of "green jobs". Some of these are targeting new employment in expanding green technologies, some are contributing to increased environmental understanding in existing jobs, some in changing the structures of work: many, to all three of these. There is no specific 'green jobs strategy' in Manchester at present, but a recently-formed officer group is now starting to develop a brief around better integration and co-ordination of initiatives.

The recent changes in Government policy and the impacts of the Comprehensive Spending Review are creating new challenges and opportunities in this field, but a period of adjustment and development will be necessary. It is likely that AGMA's operational scale will become even more important than before in building substantial programmes and attracting investment and a coherent "green jobs strategy" may be more effective at that level. Recent agreement by AGMA's Environment Commission to produce a Greater Manchester Climate Change Strategy by May 2011 constitutes a step in that direction.