

**Manchester City Council
Report for Information**

Report to: Economy Scrutiny Committee – 8 September 2022

Subject: Green Skills and Jobs

Report of: Director of Inclusive Economy

Summary

Manchester’s Work and Skills strategy set out the city’s approach to developing a work and skills system that meets the needs of residents and businesses, connecting businesses to talent and residents to sustainable and healthy work opportunities.

This report provides an update on the opportunities and challenges faced by Manchester as the city makes the transition to a zero-carbon future. The report focuses on the challenges and opportunities in the skills system and implications for the city’s clean and economic growth in the context of Our Manchester Strategy, Liveable and Low Carbon theme ambition to be a zero-carbon city by 2038 at the latest

Recommendations

Members are recommended to comment on the content of the report and proposed approach.

Wards Affected: All

Environmental Impact Assessment - the impact of the issues addressed in this report on achieving the zero-carbon target for the city

Climate change and zero-carbon is an important theme in the new Work and Skills strategy and this report seeks to set out the ambition to ensure that our residents have the skills needed to support the transition to zero-carbon and how the education and skills providers in the city will need to respond.
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Manchester Strategy outcomes	Summary of how this report aligns to the OMS
A thriving and sustainable city: supporting a diverse and distinctive economy that creates jobs and opportunities	The report aims to define how Manchester works together to create the demand for green skills, employment and training opportunities that supports business growth and connects employment opportunities to our residents.

A highly skilled city: world class and home-grown talent sustaining the city's economic success	The report will define how Manchester works together with training organisations and employers ensuring residents can gain the green skills and experience they need to be successful in the labour market, moving into more highly skilled, more sustainable and better paid opportunities.
A progressive and equitable city: making a positive contribution by unlocking the potential of our communities	Transitioning to a zero-carbon city will help to attract new investment and how we can ensure that more of our residents are able to benefit from the city's economic success.
A liveable and low carbon city: a destination of choice to live, visit, work	Ensure that our residents have the skills needed to support the transition to zero-carbon, and how our education and training providers can become equipped to deliver the necessary courses and qualifications to support this.
A connected city: world class infrastructure and connectivity to drive growth	Major investment in sustainable transport will be required which will support the city's net zero ambition and also has the potential to create significant numbers of new jobs.

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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 City Council - Council, *Climate Emergency Declaration*, July 2019
Economy Scrutiny, *Green Economy* (Nov 2019)
Economy Scrutiny, *Refresh of Manchester's Work and Skills Strategy*, (June 2021)
Our Manchester Strategy – Forward to 2025, Executive (March 2021)

1.0 Introduction

- 1.1. Manchester has declared a climate emergency and aims to be zero carbon by 2038. It is important to draw out how the new Work and Skills Strategy contributes to achieving net zero from an employment, skills and business perspective.
- 1.2. The Greater Manchester Combined Authority ([GMCA](#)) evidence indicates that the Low Carbon Environmental Goods and Services sector is thriving in Greater Manchester, with over 45,000 people employed, and estimated annual sales of £6.7bn.
- 1.3. Green skills, low carbon employment opportunities and business growth and innovation remain fundamental components of Manchester's current & future growth and are crucial to making sure that we build an inclusive economy in which all our residents can benefit from the city's success. Skills will be required to fill roles to drive domestic retrofit, renewables generation, zero carbon new builds, low carbon vehicles, infrastructure development and environmental activities.

2.0 Background

- 2.1. Manchester's Climate Change Framework and Action Plan is the city's high-level strategy for tackling climate change and runs from 2020-2025 and is currently undergoing a refresh of the high-level framework and actions. The Work and Skills Strategy will run alongside the Climate Change action plan, reinforcing its objectives of carbon literacy, investment in skills and training, and building the skills of our residents.
- 2.2. Manchester's Strategic Housing Strategy commits that 50% of homes built by 2025 will be low or zero carbon, at least a third of the city's 70,000 social homes will be retrofitted to low carbon standards by 2032, and a retrofit programme will be developed for all the houses in the city. The Work and Skills team will ensure that their strategy is aligned with the Housing Strategy and more importantly their emerging retrofit plan.

3.0 Policy Context

- 3.1. Defining the green economy remains a challenge with several different definitions and levels of understanding. The United Nations definition is an economy that is "low carbon, resource efficient and socially inclusive."
- 3.2. Defining and measuring green skills (or low carbon skills) is equally a challenge, as it is applicable across many sectors in some capacity, for example, transport, education, construction, digital and financial and professional services. Office for National Statistics have themselves stipulated [the challenges of defining a "green job"](#).
- 3.3. The green economy is defined as one in which value and growth are maximised across the whole economy, while natural assets are managed

sustainably see [skills for a green economy](#). Whilst there is a focus on some of the environmental or carbon reduction industries, there also needs to be a wider focus to include some of the generic skills that businesses need to improve resource efficiency (e.g., project and risk management, resource efficiency) and any technical skills or processes needed as they work towards reducing their carbon emissions.

- 3.4. The [UK Government Taskforce report set out the 10 point plan](#) in November 2020 to support 2 million green jobs by 2030. It forms part of the Government's Green Industrial Revolution, convened by ministers from the Department for Business, Energy and Industrial Strategy (BEIS) and Department for Education (DfE), and is made up of members from industry, trade unions, the skills sector. And the Net Zero Strategy [Build Back Greener October 2021](#) (October 2021) builds on the above report and sets out an ambition for its targets and policies to support the transition of local labour markets to ensure people have the right skills to make the most of these opportunities.
- 3.5. [Closing the UK's green skills gap \(Green Alliance\)](#) highlights the need for action to ensure the UK job market has the skills necessary for the green economy. It identifies specific gaps in skills and recommendations for the development of an integrated skills programme to marry the Government's environmental ambitions with its economic and social aims. The Findings;
 - Every major sector in the UK needs to close a significant skills gap to enable them to reach net zero.
 - The sectors with the most pressing emissions reductions by 2030 face the most immediate skills shortages, including **housing and transport**. Along with land use, these sectors already face shortages to deliver the status quo, let alone progress on net zero.
 - Eighty per cent (80%) of the current workforce will still be active in 2030. As well as attracting new green entrants there should be a focus on transferring existing skills and retraining for the green economy
- 3.6. Committee on Climate Change (CCC) presented a [Progress Report to Parliament June 2022](#) and have been critical of the Government policies. Whilst the Government has put forward policies to help workers adjust to a changing labour market, the report highlights that there are policy gaps and limitations in our understanding of future changes which can put at risk our efforts to decarbonize.
- 3.7. The Department for Education published a [Sustainability and Climate Change Strategy](#) (April 2022) that embeds green skills and climate in education and training. While this strategy includes a strong set of actions and policies, such as prioritising green skills in the Skills and Post 16 Education Act, it is unclear the pace and scale of implementation a result. Key actions points include:
 - [Climate education](#)
 - [Green skills and careers](#)

- [Education estate and digital infrastructure](#)
- [Operations and supply chains](#)
- [International](#)
- [Leadership, engagement and next steps](#)

- 3.8. Fundamentally the DfE Sustainability and Climate Change Strategy sets out how skills reforms will support more people into green jobs and help grow future talent pipelines. This includes:
- aligning apprenticeships to net-zero objectives through the Institute for Apprenticeships and Technical Education's (IfATE) Green Apprenticeships Advisory Panel
 - continuing the roll-out of T-Levels to support young people into green careers
 - driving STEM provision through our growing network of Institutes of Technologies (IoTs)
 - expanding Skills Bootcamps so that adults are able to upskill and retrain in key green sectors
- 3.9. Through the Skills and Post-16 Education Bill, Government is keen ensure employer leadership of Local Skills Improvement Plans (LSIPs) have regard to skills needed to help deliver on our net-zero target, adaptation to climate change, and other environmental goals.
- 3.10. Locally at a Northwest and Greater Manchester level there are a number of key initiatives the City is involved in including:
- [Net Zero North West](#) - a pan-regional group of businesses and universities aim to coordinate a skills response to climate change challenge and aim to develop the UK's first regional skills plan
 - [GM Green City](#):
 - [GMCA retrofit action plan](#):
 - [GMCA skills intelligence report for Low Carbon Buildings](#): August 2020
 - [GMCA green economy skills report](#): February 2022
 - [Your Home Better](#) – Retrofit options for the able to pay market.
- 3.11. Other organisations including the Business Growth Hub and the Greater Manchester Chamber of Commerce support businesses of all sizes in the city to access support, advice and guidance including access to finance. The Chamber is leading the development of the Local Skills Improvement Plan (LSIP) in GM to ensure that employers are at the heart of the GM skills system and to maximise opportunities from the recently published Skills White Paper and green skills will be one of a number of key priorities within the LSIP.
- 3.12. In summary:
- There is a wealth of local and national policy in in relation to net zero, green skills (see appendix 1 that summarises the key policy areas).

- National policy is not currently driving change at the pace and scale required, either in retrofit, new build standards with a lack of clear coherence in the skills for the future.
- The Committee on Climate Change has been critical of Government policy indicating that there are policy gaps and funding limitations affecting the ability to decarbonise.
- There are competing priorities [locally] for policy makers, for example balancing the demand for more housing with the need to increase zero carbon standards in new builds.
- The capital cost for retrofit, renewable energy or nature-based solutions alongside a lack of grant funding and an under-developed supply chain is discouraging businesses and residents from investing at a time of economic uncertainty and in the midst of a cost-of-living crisis.
- There are limited market signals to stimulate supply chain growth and the lack of pipeline is affecting the provision of skills development, further restricting capacity for action at scale.
- Manchester and Greater Manchester is committed to climate action and local policy interventions and funding is supporting the development of the skills in order to be able to scale up for the opportunities that will be derived within green economy.

4.0 Education and Skills: Challenges

- 4.1. There remains some uncertainty in terms of skills demand projections at a Manchester and Greater Manchester level. However, there is a level of assurance based on the Greater Manchester Skills Deep Dive, based on the 5 pillars of the low carbon economy;
- Low carbon buildings
 - Transport and Infrastructure
 - Energy
 - Waste
 - Natural Capital
- 4.2. The table below outlines the areas of focus that are most relevant under each pillar in terms of skills development for Manchester.

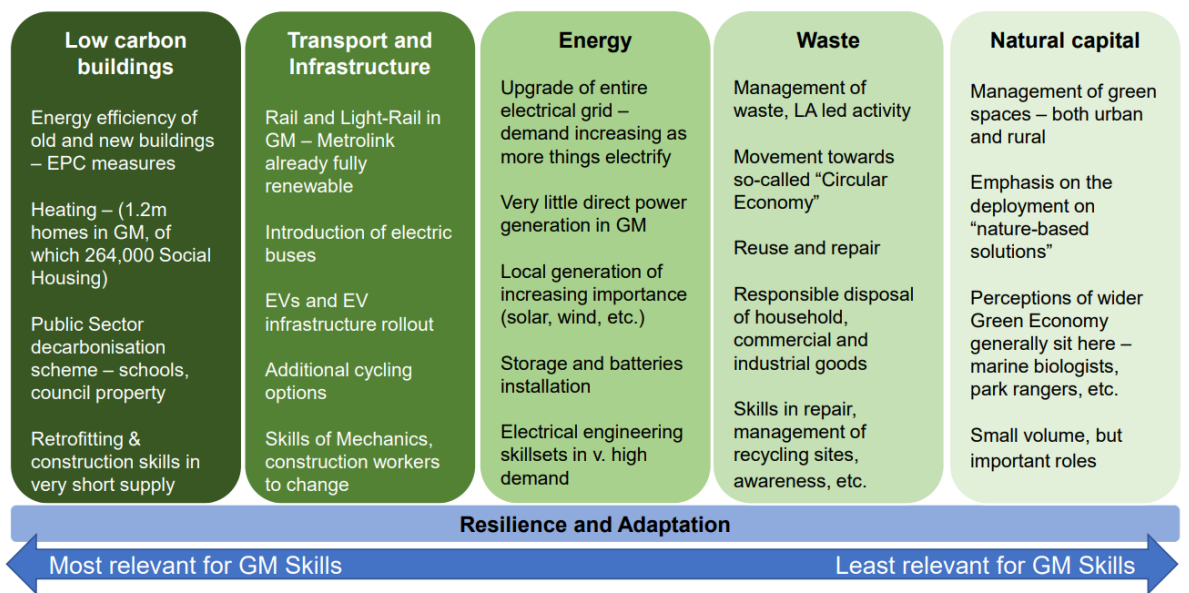


Figure 1 Key Pillars from GMCA green economy skills deep dive

4.3. The table below highlights the sectors where there is likely to be the greatest level of changes by occupation. A transition to net zero will impact most sectors, but this will be in varying degrees. Human-based sectors like education, health and social care, or hospitality will see little change, whereas sectors like construction, manufacturing, and logistics are likely to see the biggest changes.

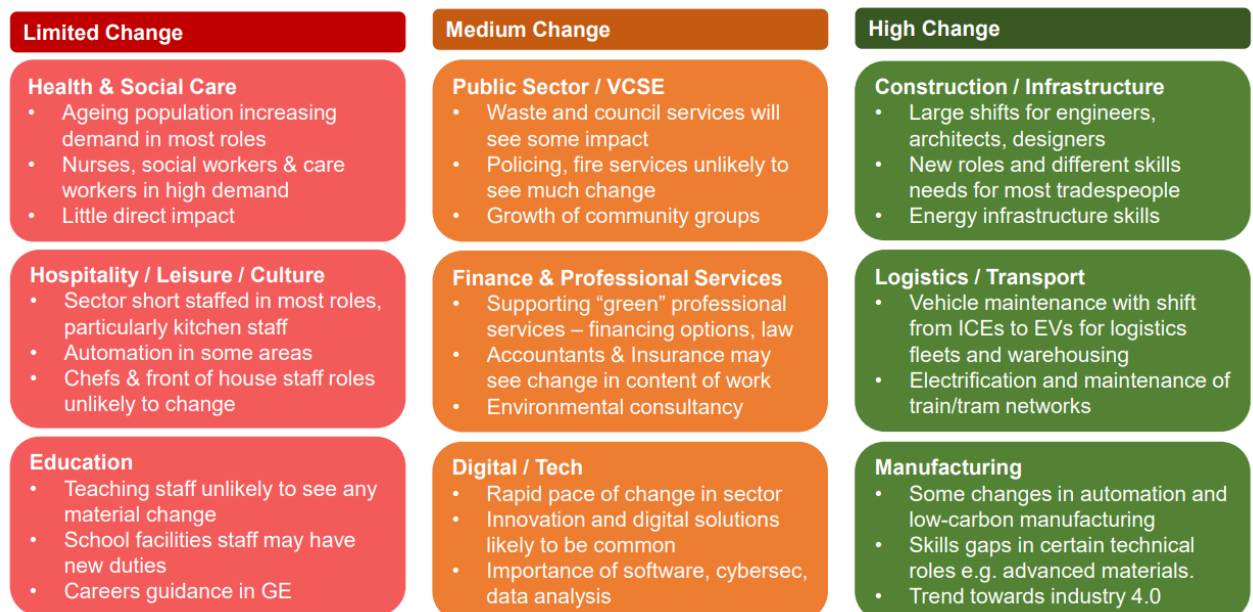


Figure 2 - Decarbonisation impact on occupations in key sectors -Source: GMCA Industry Labour Market & Skills Intelligence Report Green Economy Feb 2022

4.4. The education and skills system is a crucial factor in our ability to deliver on our ambition of being a zero-carbon economy by 2038. In addition to the environmental crisis there is a fundamental social and economic driver to ensuring our residents are equipped with the necessary skills to fill these roles in order to maximise employment & skills opportunities for Manchester residents.

- 4.5. Qualification structures are not quite agile or flexible enough to deal with the changes needed at scale and pace particularly in relation to apprenticeship/degree curriculum which can take time to approve. Short courses and modular qualifications could be a short-term solution and is continually being developed through Bootcamp training.
- 4.6. The need for upskilling is huge, but incentives do not support this. Many of the existing workforce in technical occupations e.g., mechanical engineers are already very busy with full order books and there is no incentive to train in new skills for the green economy.
- 4.7. There is a drain of talented STEM learners who remain in the education system as the UK is fundamentally a university-focused country, where degrees are prioritised over practical vocational or technical learning, needed in much of the construction & transport related sectors with the biggest green skills requirements in GM.

5.0 Moving From Carbon Intensive Industries

- 5.1. [Oxford Economics](#): Green Growth opportunities for the UK 2021 suggests that many of the new green jobs will emerge as a result of the transformation of existing roles. Certain carbon-intensive activities, such as those linked to fossil fuels, will need to scale back over the coming decade. Skills and training will therefore play a pivotal role in the UK's ability to deliver and capitalise on the net zero transition.
- 5.2. The city has a primary focus on reducing carbon from its carbon heavy buildings and transport. GMCA's decarbonisation impacts on occupations (see 4.3 figure 2) indicates that Manchester is less likely to be affected by the decarbonisation of carbon heavy industries as indicated in the Oxford economics study e.g., UK coal-fired power plants, coal, oil, and gas industries which will close by 2025.
- 5.3. It is difficult to calculate any net job losses as a result of a decline in carbon heavy industries, as new green jobs will continue to emerge. It is likely that in Manchester, many jobs will require a level of upskilling as opposed to complete job losses
- 5.4. Accelerating our shift to carbon neutrality will mean that some businesses that do have carbon intensive operations will need support on their journey to net zero - without constraining growth. The largest sector affected in Manchester is the manufacturing sector which account for approximately 750 enterprises in the City. We must ensure there is the capacity in the business support system for the Business Growth Hub to support these businesses in their journey to Net Zero.

6.0 Facilitating the opportunities

6.1. The refreshed Work and Skills Strategy sets out a commitment to develop a Green Skills Action Plan to support the transition to a zero-carbon economy to meet the increased demand for green skills. A key focus of this action plan is to ensure it is supported through a range of partners in the education and skills sector, including the University of Manchester, MMU, The Manchester College, GC Skills Company and One Manchester and will include the key priorities set out in the refreshed work and skills strategy:

- Use our collective influence and spending power to create demand for green skills such as in retrofit and construction, maintenance of green infrastructure, green energy and biodiversity, building on the Combined Authority's Green Economy Skills Deep Dive.
- Support and enhance ongoing carbon literacy and communications with businesses, schools, colleges and other learning and training providers by working with GMCA and commissioners to embed Carbon Literacy into new and existing programmes
- Use research and intelligence to ensure that information about future job opportunities in the zero-carbon economy is included in labour market information and guidance that is shared with schools, colleges, and other learning and training providers
- Work with training providers and employers to plan for and build capacity for identified future skills needs

6.2. A green skills action plan stakeholder event took place on 21 July to further develop the city's green skills action plan. The purpose of this session was to engage partners across Manchester to co-design and develop a green skills action plan for the city. The action plan will focus on how Manchester businesses and residents are supported with the skills needed to deliver the opportunities that will be derived from the city's objective of becoming a net zero City by 2038. See appendix 2 emerging green skills action plan.

6.3. Manchester City Council has good partnerships and relationships with schools, colleges, training providers and universities to drive and influence this agenda. The University of Manchester and Manchester Metropolitan University have a strong track-record of harnessing their expertise in this field to work alongside business and industrial partners, local and national government, community groups, charities, schools and colleges e.g. projects such as Future Economies, Industry 4.0 and the work relating to [Net Zero North West](#)

6.4. The Careers Education, Information Advice and Guidance network (CEIAG) is convened by the Work & Skills Team that brings career leads from schools and colleges to network and share best practice. "Green Skills" has been a regular theme in discussions with the network. A strong focus on the promotion of Science, Technology, Engineering and Maths (STEM) subjects, as a route for students to benefit from opportunities in the City's growth sectors. In addition to STEM, the network focuses on Skills for Life which promotes a city-wide approach for young people to develop the core skills needed for employment and life. These skills will help equip the City's young

people with the light green skills needed for the low-carbon economy. Groundwork has supported the work and skills team to develop an easy-to-read guide for educators and careers staff to help provide quality advice. The intention is to road test a toolkit for school careers staff through the network and pilot this in interested schools in the academic year 2022-23.

- 6.5. Bee Green Education Led summit in June 2022 provided advice, resources and tools to support Manchester's education settings to be greener. The Bee Green Education Summit provided Manchester's education leaders the opportunity to learn about different issues and solutions associated with climate change in educational settings. The successful summit was for head teachers, business managers and governors from all education settings across Manchester.

The summit will have various elements including:

- A live marketplace
- A large student zone
- Interactive workshops
- Local school green action planning

- 6.6. Apprenticeships offer an opportunity to respond to the need for green skills by developing new apprenticeship standards which allows employers to shape qualifications. In the City, as well as nationally the number of apprenticeship starts has reduced since Covid. The apprenticeship levy remains a source of funding for levy paying employers to upskill existing staff and recruit new talent with the skills needed for a low-carbon economy.

- 6.7. New “Flexi-Apprenticeships” will be available through Calico Enterprise who have been awarded a share of a £7 million government fund to support the creation of new flexible apprenticeships across the North of England. Calico Enterprise are working in partnership with Procure Plus and will focus their energies on the construction and retrofit sector.

- 6.8. T Levels provide technical & vocational skills designed to be a complementary route to apprenticeships and A-levels at post-16. They are matched to 15 sectors but not currently matched to all professions on the Shortage Occupancy List (SOL). Many of the skills gaps which currently exist in the low-carbon energy sector are listed on the SOL. The Manchester College is piloting a number of T-levels, including construction, which presents a specific local opportunity for Manchester. Investment in the Manchester College means that it is well placed to provide the high-quality relevant learning at a local level for Manchester residents – as referenced in the separate retrofit skills report on Economy Overview & Scrutiny agenda.

- 6.9. The GMCA commissioned Low Carbon Academy has benefitted from ESF (European Social Fund) funding of £1.1m to deliver the [Skills For Retrofit - Low Carbon Academy](#), which is part of North West Skills Academy. The Retrofit academy will train and upskill over a thousand individuals to retrofit buildings across Greater Manchester. The funding will launch a Retrofit Skills

Hub. Partners within the Retrofit Academy include, The Manchester College, Oldham College, Procure Plus and Fabric. Since launching, the Academy has supported more than 2,000 individuals across 900 businesses to become upskilled in the retrofit market. There are currently more than 400 people training for retrofit qualifications at the Academy.

The Low Carbon Academy Courses

- solar thermal installation
- heat pump installation
- NVQ's for retrofit
- understanding domestic retrofit
- retrofit assessor and advisor
- retrofit coordinator
- sustainable constructions skills

6.10. GMCA is currently re-tendering for the delivery of Construction & Green Skills Bootcamps until 31st March 2023, with the potential to extend until 31st March 2025. This is Department for Education (DfE) through the National Skills Fund (NSF) to help adults build skills for the economy of the future; complementing provision available through the Adult Education Budget (AEB).

6.11. Skills Bootcamps offer free flexible courses of up to 16 weeks giving people the opportunity to build up sector specific skills and fast track to an interview with a local employer. The key objectives of skills bootcamps are to:

- Address the needs of employers to fill skills shortage vacancies requiring specialist skills and improve business productivity.
- Address the needs of adults to retrain and upskill whatever their starting point.
- Provide clear line of sight to a new role / opportunity / contract.
- Diversify the talent pipeline by targeting groups underrepresented in key sectors.

Skills Bootcamps are targeted at all adults aged 19+ who are in-work, self-employed, unemployed, returning to work after a career break and prisoners on temporary release or due to be released within six months. With a focus on specific priority groups.

6.12. Carbon literacy training is being rolled out to all of the City Council's commissioned work club leads/staff members. Our Climate, Our City- Carbon Literacy Training will expand the knowledge of work club leads on climate change. Our long-term aim is for work clubs/ centres to become accredited and deliver talks on sustainability/carbon literacy training to residents attending the work club as well as other staff members. In addition, the council will support this by providing labour market information relating to the green economy

6.13. One Manchester Community Renewal Funded (CRF) Green, Employment & Skills Project has CRF funding until November 2022. This project creates new

paid for roles within the growing “green” sector where residents can benefit from a paid for work placement. The project is delivering 125 supported green jobs such as those relevant to: sustainability, retrofit, construction, environmental management, recycling & reuse, renewable energy, and electric vehicles. The project supports 3–6-month placements paid at the real living wage.

6.14. As at 24/06/22 the Green Skills programme has generated the following:

Expressions of interest (EOI) in total	899
Eligible candidates	431
NEET (under 18)	5%
NEET (18-24)	23%
Over 50s	26%
Lone parents	13%
BAME	43%
People with disabilities:	21%
No. work placements which have commenced with partner organisations	48

6.15. Green skills programme case study. Karin joined One Manchester's Green Employment & Skills programme as she was out of work and struggling to find a suitable job around her existing childcare commitments. Karin gained a job directly with the Groundwork Greater Manchester as an Environmental Education Assistant, delivering low carbon careers programme aimed at people aged 18-25 years old, to help get them into the green sector. Karen now loves what she does, and this programme has boosted her confidence and helped her to return to work.

See full story here [Karin's story- Green Employment and Skills Programme](#)

6.16. Manchester Adult Education Service (MAES) is working towards embedding sustainability into learning. MAES is developing an approach to embed sustainability into their curriculum and establish a whole-service approach to carbon literacy training and awareness. This will enable all learners to develop their skills and knowledge. MAES will recruit an environmental education project lead who will will work across the service to ensure that environmental and sustainability is integrated across the curriculum and identify a range of opportunities/community projects to allow adult learners to develop their understanding of carbon literacy in the community.

6.17. Manchester City Council can use its existing networks to communicate the benefits of investment in green skills clear and the opportunities this provides in terms of innovation, sustainability, efficiencies and productivity. The Business Growth Hub’s BEE Net Zero initiative has put in place all the support necessary for businesses to take steps now - [Bee Net Zero | The journey to becoming Net Zero.](#)

7.0 Conclusion

- 7.1. Despite a complex and challenging policy landscape and a lack of specific funding to accelerate skills development on a national level, Manchester is stimulating opportunities locally, such as One Manchester's Community Renewal Funded (CRF) Green, Employment & Skills Project, local skills bootcamps and the development of a partnership green skills action plan.
- 7.2. There is more work required to generally improve communications and better articulate the opportunities within the green economy. Work will take place with high schools to support careers advisers with an increased awareness alongside a longer-term communications campaign.
- 7.3. Manchester will build on events such as the BEE green Summit, and work with education and colleges to improve their awareness of the green economy.
- 7.4. Manchester's skills partners will be required to work closely with the Manchester Climate Change Agency to support the delivery of the skills priorities outlined in their recommended actions in the refresh Manchester Climate Change Framework.
- 7.5. Manchester will further develop the emerging codesigned Green Skills Action plan. The action plan will focus on how Manchester's training providers, businesses and residents are supported with the skills needed that will be derived from our ambitions to be net zero. The plan must be continually reviewed and adapted to ensure it is relevant to the changing skills and policy landscape alongside technological advancements. This provides a huge opportunity to drive forward a collaborative citywide approach with those truly invested in our ambitions to be net zero and to build traction and valuable input to help to overcome and tackle some of the challenges and deliver the skills needed for the future.

8.0 Recommendations

- 8.1. Members are invited to comment on the report.