Dr Sally Randles, Senior Research Fellow at the Manchester Institute of Innovation Research, was Principle Investigator for this project. We would like to thank Sally for her role and support. We would also like to thank Dan Welch for his assistance in editing this report.
What is Manchester Carbon Literacy?

Manchester was the world’s first industrial city. Today, Manchester is the first city to undertake to empower all its residents, workers and students with carbon literacy. Carbon literacy is an understanding of the carbon impacts of our actions - of climate change and our individual and collective contribution to it. It is the vital, underpinning knowledge required to create the behavioural shift we need in how we live, work and study.

*Manchester: A Certain Future*, the city’s climate change action plan, pledges Manchester to a 41% cut in CO2 emissions by 2020 and the creation of a ‘low carbon culture’. The Manchester Carbon Literacy (MCL) Project will work with communities, workplaces and educational establishments to help achieve this goal.

*Manchester Carbon Literacy will contribute to the creation of low carbon culture across the city*

A working group was convened over two years to develop the Manchester Carbon Literacy Standard for MCL training. Carbon literacy training will be delivered by organisations and initiatives independently, right across the city, supported by the MCL Standard, MCL resources, and the growing MCL network. The MCL Project aims to achieve its bold target of making one day’s MCL training available to everyone who lives, works or studies in Manchester within three years, through a cascading programme of peer-to-peer learning.

By the end of their learning, MCL Project learners will take action to:

- Create at least one significant action personally to reduce their personal carbon footprint
- Create at least one significant action involving other people to reduce the collective footprint of their workplace, community or place of education.

The Evaluation Project

In October 2011, Cooler Projects CIC, funded by the Manchester City Council and private sector sponsors Westford Mill, began work on a three-year strategy to implement the MCL Project. In the first stage organisations have been recruited across MCL’s three audiences – workplace, education and community – to conduct pilot projects. The purpose of the pilots was to assess the effectiveness of the MCL Standard, as well as to explore issues such as developing MCL accreditation and how best to communicate the identity of MCL training to diverse audiences across the city.

Cooler asked the University of Manchester for assistance in evaluating the effectiveness of the MCL model through an analysis of its approach and its implementation in pilot projects. This report is the final output of that process.

Firstly, an Evaluation Framework was developed, both assessing the MCL approach against academic research into behaviour change and offering a research design for pilot
evaluation. Secondly, between June and October 2012 the authors of this report conducted participant observation of training and 13 interviews. Interviewees were:

- Two managers and two trainers from Manchester City Council (MCC)
- Two managers and five trainee trainers from Manchester Adult Education Service (MAES).
- A member of Manchester Environmental Education Network (an organisation that provided resources to staff of both MCC and MAES)
- A member of Cooler Projects CIC

The Evaluation Project has provided Cooler with:

- evaluation of the experiences of trainers and learners from three project partner organisations
- a case study of one pilot project (MAES), with specific focus on whether the delivery of the training matched Cooler’s objectives
- an evaluation framework that has been tested on and refined through the case study

A Participatory Project

A fundamental understanding of this evaluation project has been that evaluation should be a participatory process. A summary of findings was presented to a meeting of project participants and other stakeholders in order to receive feedback, test the evaluation framework, and offer refinements.

Evaluation should be a participatory process

Trainers in the MAES pilot project reported that this was the first time they had received such feedback on training and found the process inspiring. Participants of that meeting found strong resonances with, and affirmation of, the summary findings. Their input nuanced those findings and this final report integrates feedback and discussion from that meeting.

Evaluation Project Funding

The project was made possible by funding through an Eco Innovation Voucher provided by the HEIF Environmental Sustainability Knowledge Hub Project, funded through the higher education innovation funding (HEIF) awarded to the University of Manchester. The scheme provided 30 days of researcher time.

The Eco Innovation Voucher scheme provides small and medium enterprises (SMEs) including social enterprises working on environmental sustainability within the UK, but primarily in the Greater Manchester area, with academic input that they would otherwise not have access to, with the overall goal to stimulate future collaborative research partnerships.

This Report

This report summarises the findings of the Manchester Carbon Literacy Evaluation Project. It addresses two central questions.
Firstly, to what extent do the different MCL stakeholders share an understanding of the project and the kind of change it is trying to achieve?

Secondly, to what extent has the MAES pilot project succeeded in implementing the goals of MCL? This was evaluated through participant observation of the training and through the interviews.

“I didn’t leave panicking that the world was going to end. I took home a real positive sense that everyone who was on the training realised that this was a message in a new way... It was people saying that we can begin to change, and I liked that.” (Training participant)

Five Key Messages

1. MCL’s decentralised leadership model is very well aligned with the ‘cascade’ approach and the project’s movement-building aspirations. But partners must feel empowered to act when appropriate and lines of ownership and responsibility must be clear.

2. Branding and identity should be adaptable to the contexts of different partners. MCL project coordinators should provide support to partner organisations to market the training.

3. The process of tailoring training is essential but challenging – it must both respond to the needs of diverse audiences and align with the MCL Standard. It should be recognised how much work such tailoring requires. This work should be supported through networking and sharing resources amongst partners.

4. Engaged trainers are essential. Engaged trainers can be developed and sustained by networks providing mutual support and through organisational cultures that support MCL ‘champions’.

5. If the newly carbon literate are to be empowered, rather than disempowered, there must be opportunities for action. Carbon literacy doesn’t mean just individual behaviour change. It means shared aspirations for collective, organisational and infrastructural change.

Key Findings

Understanding & Communicating MCL

Respondents working at the management or train-the-trainer level shared a common understanding of the core elements of the MCL Project. Some trainee trainers shared this understanding. Others focused on how MCL applied to the particular training they might do. Some newly trained trainers were uncertain about their own role and how the project would develop.

Understanding where ownership of MCL lay varied according to depth of involvement, with some assuming MCL was a City Council project.

The ‘Manchester Carbon Literacy’ label evoked differing responses. For some ‘carbon literacy’ was a compelling term. It has resonance among educators and activists. However some trainers felt the term would be distinctly off-putting to their learners.
Engaging with MCL

Three key factors led to successful organisational engagement at MAES. Firstly, the MCL project aligned with OFSTED’s adoption of ‘Education for Sustainable Development’ as a goal for the adult education sector. Secondly, MCL aligned with MAES’ organisational vision and mission. Lastly, MCL resonated with personally committed staff – not necessarily just committed environmentalists, but those who could see the benefits of MCL for their clients, for example in understanding home energy efficiency.

“We can see some scope for actually delivering this ourselves, because we’ve already got a cohort. We’ve got learners across the city, particularly the kind of people who need to watch out for their money...and be a bit more healthy. It saves money and it’s a healthy way of living. Why would you want to say no to that?” (Training participant)

Crossing as it does two of MCL’s audiences – education and community – as well as having its core expertise in training, Cooler felt that insights from the MAES pilot were of particular value. Despite its specific organisational characteristics, the strengths, challenges and opportunities experienced at MAES are likely to be relevant to many MCL partners.

Implementing MCL: Challenges and Opportunities

MCL’s decentralised model presents both opportunities and challenges. It is very well aligned with the cascading approach and with MCL’s movement-building aspirations. But it also requires ongoing support and resources, both from the Cooler ‘hub’ and from building peer networks.

In many cases the model requires financing from existing sources, which means integrating MCL training into pre-existing training. MAES successfully found ways to integrate MCL into existing training and activities, such as courses in Functional Literacy and Numeracy, English as a Second Language, and Employment Readiness.

The strength of this lies in tailoring the training to different audiences. But this is also a challenge not to be underestimated, as trainers stressed.

“Developing training tailored to the needs of different groups is a very time consuming process involving weeks of work...To create something that will make the change happen you can’t take a stock product. You’d get the numbers but not the change.” (Trainer)

Respondents generally understood the need to align the training with the Standard and were very satisfied with the Standard itself.

Trainee trainers also want more follow-up and expressed the need for help developing networks among themselves and among learners.
MAES is well positioned in relation to Manchester communities because of the diversity of its programmes, already embedded, for example, with community groups and social landlords. Given MCL’s goal to reach every resident, worker and student, MAES has a key role to play in contributing to the cascade effect.

“There are two parts to any training - people’s reaction as individuals and their reaction as their role in an organisation.” (Trainer)

Promoting organisational change and getting the necessary infrastructure and supports for collective action in place takes time. For newly empowered learners opportunities for carbon literacy and what Cooler call ‘carbon capability’ need to be aligned – or there is the real danger they will feel disempowered by lack of opportunity or support to act.

Manchester has a wealth of existing organisations, networks and initiatives to support MCL - to take one example among many, the Manchester Environmental Education Network. Learners, trainers - and this report’s authors - were inspired by the extent of activity in the city. This presents fertile ground for the MCL ‘cascade’ approach.

Training Design
Trainee trainers generally gave very good reviews of their MCC trainers. The training was felt to have engaged hearts and minds, balanced general knowledge and opportunities for application, and facilitated commitment.

“I was inspired by the training because it was oriented towards doing something.” (Training participant)

Efforts by both trainers and trainee trainers led to the development of some excellent activities and materials. Both expressed the desire that these resources be stored and shared “to save reinventing the wheel”.

The following aspects were identified as particularly effective and engaging by participants:

- participatory and interactive
- personal stories and personalising content
- emotional visuals
- dramatisation
- quizzes, puzzles and games
- positivity and optimism
- individual and collective commitment
- finding out about local initiatives – and learning from other places

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The Manchester Eco-house, a 1930s terrace house kitted out with everyday resource saving technologies, was used as the training venue. This was particularly important to participants as it put low-carbon living in a normal, everyday context.

“Some of the carbon footprint of certain household items I was really surprised by.” (Training participant)

Impact – Evidence of Change

There was clear evidence of specific behaviour change in response to the training. From everyday energy-saving behaviours to household decisions, such as installing cavity wall insulation.

Participants gained extensive understanding about the environmental impact of their everyday behaviours and developed ideas about positively modifying that behaviour. Participants also gained knowledge about the availability of different technologies, such as energy monitors. This was often in reference to the Eco-House venue.

There were also several examples of participants taking action as citizens, such as writing to the City Council about recycling provision.

“You don’t think about it while you’re making pasta that you’ve got to put a lid on it. Now I do.” (Training participant)

Knowledge should never be assumed. Even keen environmentalists learnt from the training - behaviours which may seem obvious are sometimes the ones that need highlighting.

“I want to talk to my housing association about putting up a solar panel on my roof, as it’s an ideal location. It’s south facing.” (Training participant)

There were several examples of the ‘cascade effect’ - where participants discussed the training or MCL with family, friends or colleagues.

“Most people are positive. Some people are sort of, they pull a face...But I suppose it’s just, you know, you have to keep reminding people, encouraging them.” (Training participant)

Most notably, the training affected beliefs about what could be achieved both individually and collectively. In particular, the training induced a strong sense of positivity and optimism regarding each individual’s ability to lower their carbon footprint.
Key Recommendations

1. Understanding & Communicating MCL
Shared ownership of the MCL project should be clarified to ensure effective implementation.

The project’s brand or identity (i.e. Manchester Carbon Literacy) must be dealt with sensitively. A creative solution between maintaining a core identity and tailoring the identity to target audiences needs to be achieved.

2. Engaging with MCL
MCL should look to exploit its open and adaptive model by seeking out organisations with which there are existing resonances. The passion and motivation of trainers is key to MCL’s success. Where individuals are highly motivated by their existing organisational mission MCL can ‘piggy-back’ on, and further enable, that passion. The MAES example demonstrates that it is not only passion for environmental issues that counts – trainers were equally motivated by the social, financial and personal development benefits that MCL training brought.

3. Implementing MCL
Networking, mutual support and mechanisms for knowledge exchange would help to develop and maintain the necessary level of engagement among trainers. Knowledge learnt and information gained should be formalised and shared after the training. A resource ‘hub’ would save trainers a lot of work and avoid different organisations reinventing the wheel.

Delivery organisations are likely to need assistance with marketing their MCL training.

Carbon literate learners need support to stay motivated for the long haul of organisational and infrastructural change. A network of other committed individuals could provide that.

4. Training Design
Splitting one day training into two half days. This format was very successful in the MAES pilot. Firstly, participants enjoyed the ‘homework’ (such as researching presentations) which increased their participation and sense of ownership, and gave them time to absorb and consolidate the information. Secondly, it allowed trainers to further adapt to learners’ needs.

Other suggestions were: four 2.5 hrs sessions; longer training; and more follow up or offer of advanced training.

Don’t assume a knowledge base. Trainee trainers want to be really sure of the ‘ABC’ of carbon literacy in order to pass this on confidently to learners.

5. Impact – Evidence of Change
Some weeks following the MAES training, participants received postcards to remind them of their commitments. Postcards served as a positive reminder of intentions that would otherwise have been forgotten. ‘Follow-ups’ and reminders are essential to ensure that behaviour change is achieved.