



Tyndall Centre Workshop: Local Authorities and the Climate Emergency

This report relates to a Tyndall Manchester Local Authority event on the climate emergency. The key topics that were covered were; effective communication of climate change, creating and utilising co-benefits as part of a wider climate action plan, and accelerating carbon reduction through engagement with the private and not for profit sectors. Questions at the event explored how to create organisational momentum and engage the wider public with the work local authorities are already doing and their future plans. The report finishes with a number of resources that can be used by anyone working in the climate action sphere of local government, providing information and action plans that may be applicable to your situation.

INTRODUCTION

On 16th March 2020 Tyndall Manchester, part of the national Tyndall Centre for Climate Change Research based in the University of Manchester, hosted an event for councillors and workers from local authorities entitled 'Local Authorities and the Climate Emergency'. The motivation for the event came from a recognition that whilst many authorities have declared climate emergencies, there are still significant challenges for authorities in developing and deploying plans to significantly, and rapidly, reduce emissions. Conversations and interviews held with councillors from across Greater Manchester and the rest of the UK, at the beginning of this year revealed common obstacles. These included difficulties creating momentum among citizens, how to best utilise co-benefits to the advantage of policymakers, building innovation into plans, and engaging the private sector in planning for and delivering change. Tyndall Manchester developed an event aimed at addressing these themes

that aimed to provide a space for frank discussion and sharing of experience between attendees from different parts of the North West and beyond.

Although this event was originally planned to be in-person, allowing time for conversation around each individual table and interactive exercises, due to the rapidly evolving COVID-19 situation the event was transferred to a virtual environment. Over 50 local authority participants attended and took part in an interesting and interactive event, as well as having the opportunity to provide further input and raise further questions following the evening. Tyndall Manchester hosted five speakers: Chris Jones (Tyndall Manchester), Mark Atherton (Greater Manchester Combined Authority), Jonathan Ward (Nottingham City Council), Simeran Bachra (CDP), and Paul Bircham (Electricity North West). The event was funded through a Research England grant and built on work done already at the Tyndall centre as part of the BEIS funded SCATTER project, and the work of CAST (the Centre for Climate and Social Transformations), funded by the ESRC. Links are provided to this work at the end of the report.

SPEAKER BIOGRAPHIES

Chris Jones, Tyndall Manchester

Chris is the Knowledge Exchange Fellow for the Tyndall Centre for Climate Change Research at University of Manchester. Chris acts as a link between Tyndall Manchester's research, industry, and policy makers. Over the past year Chris has been working with local authorities on setting Paris Agreement aligned climate change policy. Chris' background is in understanding the role of low carbon energy systems in tackling climate change.



Mark Atherton, Greater Manchester Combined Authority

Mark joined the Association of Greater Manchester Authorities (AGMA) in May 2012 as Director of Environment for Greater Manchester and transferred to GMCA in May 2017. In this role, Mark provides strategic support to the Greater Manchester Low Carbon Hub by leading the development and delivery of strategies, policies, research, and demonstration projects for environment and low carbon work areas (Green City Region-Priority 7 of the Greater Manchester Strategy). Mark holds a science degree in Organic Chemistry and Industrial Ecology (Hons); and Master's Degrees in Leadership for Sustainability (MA) and Hydrobiology (M.Sc.) plus several management qualifications.



Jonathan Ward, Nottingham City Council

Jonathan is Principal Energy Policy Officer at Nottingham City Council; a role that encompasses a range of policy, strategy, project, performance, and partnerships work. The role has a remit that covers Energy, Carbon reduction, Climate adaptation, Fuel Poverty, Sustainability, low-carbon economies and Smart cities and Innovation. Jonathan chairs the city's Domestic Energy Efficiency and Fuel Poverty partnership and represents the City Council on a range of city, regional and national working groups across these themes. Jonathan has a background in research, local government, and the charity sector, and has been active as both a practitioner and volunteer in sustainability, climate change and cities issues for nearly two decades.



Simeran Bachra, CDP

Simeran Bachra serves as the UK cities manager for CDP (formerly known as Carbon Disclosure Project). Simeran supports cities in the UK to understand how disclosing their targets, emissions and actions will help monitor their progress towards achieving the goals of the Paris Agreement. She works with partners to help deliver tools to provide insight to local authorities on how they can accelerate climate action. Simeran is also a member of the Bristol Advisory Committee on Climate Change and Manchester's Zero Carbon Advisory Group. She has supported an increase of 170% in the number of cities globally disclosing to CDP since 2015. Simeran has a Masters in Global Affairs from the University of Toronto.



Paul Bircham, Electricity North West

Paul drives Electricity North West's commercial thinking and the development of new customer propositions and services. With over 20 years' experience of driving change and developing innovative new business models within the energy, utilities and infrastructure industries, Paul is uniquely placed to offer insights on how energy companies will need to adapt to solve the challenges of a socially conscious and lower carbon economy. Paul's current portfolio of responsibilities includes regulatory liaison, government affairs and stakeholder engagement, commercial strategy and innovation, investment planning, procurement, and corporate services.



WORKSHOP REPORT

All speaker presentations and the recording of the event are available at <https://youtu.be/ee8jsG82-5k>. This report summarises each speaker's presentations focusing on the key points and transferable experiences, as well as responses given in reply to submitted audience questions. The report concludes with a brief discussion of the feedback from the post-event survey that was sent to attendees, particularly noting how this will help to frame future research and events led by Tyndall Manchester. We would still welcome any further comments or questions that you may have after reading this report. Please contact Amrita Sidhu at Amrita.Sidhu@manchester.ac.uk.

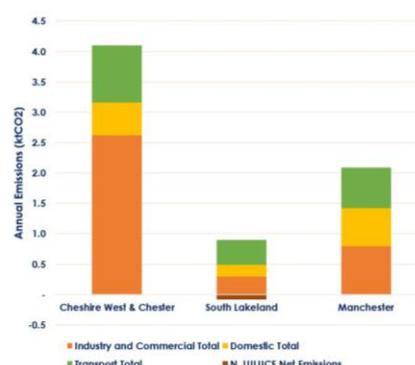
Everything you have ever wanted to know about carbon targets in 10 minutes

Chris Jones (Tyndall Manchester, Co-Director of Operations and Knowledge Exchange)

In Chris' work for Tyndall as the co-director of Operations and Knowledge Exchange fellow he has had lots of experience working with local authorities on carbon target setting. Chris began by giving a frank description of the scale of the current climate crisis that we are facing, framing the difficulty of balancing often long-term climatic impacts with the short-term economic feasibility of transition. Chris pointed to Paris Climate Change Agreement commitment to limit warming to 2°C (degrees Celsius) and pursue efforts to limit it to 1.5 °C. This commitment requires significant and immediate emissions reductions and frames the [Tyndall Centre carbon budget](#) and SCATTER tools. Additionally, by introducing the concept of equity particularly in the context of the Global South, this task is made more pressing for those of us in UK or other economically and high carbon countries. Chris also emphasised the importance of any change being measurable, a theme that reoccurred throughout the rest of the event.

Apart from reducing emissions what else can be done to meet carbon targets?

- Carbon offset credits?
 - Good to support others
 - Not a substitute for reduction in local emissions
- Tree planting?
 - Good for many reasons
 - Minimal role in balancing out energy CO₂ emissions



Meeting carbon targets can only be done through reducing energy emissions

Chris highlighted the importance of care with language used when describing climate mitigation and adaptation, in particular the terms net zero or carbon neutral which are often used interchangeably. Local authorities have a key role in engagement and education of residents, for whom these terms are likely to be unfamiliar. It is also imperative to be careful and realistic with claims and pledges made to the public, giving an honest description of the extent of change inherent in planned transition actions. The final warning was to almost all industries and stakeholders. The reality of an interconnected economy means that in most cases 'net zero' will have to mean **zero carbon** from energy use. In response to questions on carbon offsetting and whether it has a place in the actions of local authorities, Chris cautioned that offsetting as a concept often is used to substitute for reducing emissions and prevents the driving of most, if not all, emissions to zero.

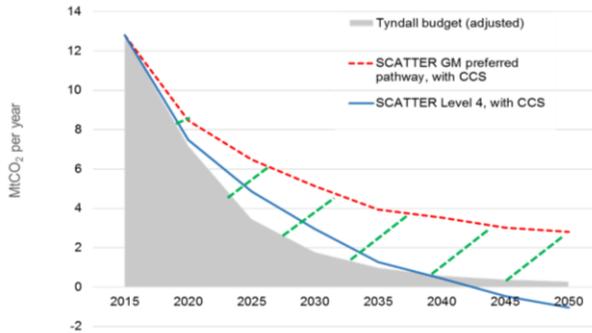
Mark Atherton (Greater Manchester Combined Authority (GMCA), Director of Environment)

Delivering Greater Manchester's 5 Year Environment Plan - how can Local Authorities support and drive action?

Mark first took us through the structure of GMCA and a brief history of their work with Tyndall and other academic bodies. This raised the point, returned to again in the questions, of the importance of this relationship and the openness to collaboration for local authorities with the academic and non-profit sectors when planning climate action. Mentioning Greater Manchester's 'A' listing by CDP, a topic later expanded on by Simeran, Mark outlined the timeline that has led the city to its five year action plan. Co-developing the timeline with a wide range of stakeholders enabled the plan to be spring boarded into action in 2018, before a period of expert engagement to inform the development of the plan as it is now. The extent of the decarbonisation challenge facing Greater Manchester, was revealed by expert engagement with GMCA using the SCATTER toolkit developed by Anthesis to examine multiple action pathways for Greater Manchester. This revealed the extent of the challenge. Even the current plan will lead to a substantial overshoot of the city's carbon budget as calculated by Tyndall Manchester researchers. This prompts only one conclusion, that big changes and innovation are needed now.

Mark then moved on to describe what was leading to this overshoot and how the combined authority is targeting the required level of change. He discussed the targets and therefore largest drivers of necessary change within the plan as vehicles and heating of buildings. In order to tackle these areas, there is need for continued lobbying of action at national levels (for instance around delivery of zero carbon electricity through the national grid), important actions can be taken at the local level. These include deploying renewable energy generation and improving utilisation of local materials and resources to improve efficiency. Citizen engagement is crucial, for example to look at ways to increase the use of public transport over other modes.

Models are useful in informing the pathway....



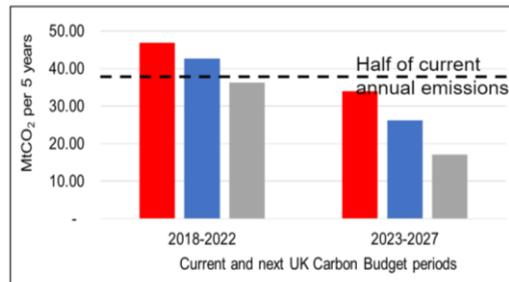
**2016-2050
Total
Emissions**

**SCATTER
L4
111.9 MtCO₂**

**Tyndall
94.5 MtCO₂**

**SCATTER
GM
191.8 MtCO₂**

**they show us that we all
need to take action now...**



SCATTER timeline and carbon budget for Greater Manchester

To meet the Greater Manchester targets, action is clearly required across the whole conurbation. GMCA is doing six things in particular to drive this: supporting innovation in technology, taking new approaches to finance and behaviour, leading by example to reduce emissions across the LA estate, building on public and private sector partnerships, engaging, and educating residents and communities, and upskilling our workforce. To achieve this Mark detailed GMCA's mission-based approach, and 'challenge groups' created in the region's governance structure for delivery of the 5 Year Environment Plan. Following the talk, the main questions related to creating organisational momentum, how to drive forward change in places where there was not 'carbon leadership' from 'the top' and avoiding inertia. In that regard Mark particularly pointed towards carbon literacy training that has been taking place in GMCA as well as engaging constructively with colleagues across all other departments. Decarbonisation has to be delivered across every department, and the biggest danger for his team is to be isolated in their own department.

***Jonathan Ward (Nottingham City Council,
Principal Energy Policy Officer)***

***Experiences of the Climate Agenda
and Utilising Co-Benefits at Nottingham City Council***

Jonathan's talk centred around two particular elements of his experience over the last decade since Nottingham City Council first adopted a climate strategy. The strategy is based around targets that can primarily be achieved through local actions. The planning stage of climate actions in Nottingham have since been enabled primarily through the usage of the Anthesis SCATTER toolkit. The SCATTER toolkit generates a greenhouse gas emissions inventory for your local authority area, aids

development of a credible decarbonisation pathway in line with emissions reduction targets, and provides outputs that can be used for engagement to create a collaborative carbon reduction approach for local authorities. This allowed for greater understanding of the relative importance of different sources of emissions and which targeted actions would be most effective at mitigating these emissions. The city climate charter sets out the parameters of action and was established through a process that considered what a fair share of responsibility for carbon actions would look like across the city (by sector and area). The other crucial part of the SCATTER tool is to show how effective proposed interventions would go to meeting an agreed carbon budget and the gap that remains, creating organisational pressure and, hopefully, momentum. Similarly to Manchester, if Nottingham were to continue on a business as usual trajectory, the city's carbon budget be completely spent by 2028. SCATTER showed that ideally the plan should achieve a carbon reduction trajectory of 22%, or at the very least 12.5% to fit within the remaining city carbon budget and make an equitable contribution to the national agenda.

Benefits of leadership on climate response and clean growth

- Less exposed to risks and costs from a changing climate and the price of carbon
- Competitive advantage from increased self-sufficiency, efficiency and productivity
- Attracting investment & new businesses
- Greater control over the city's future
- Ability to share and export knowledge



Energy Services supports organisations to switch to renewable and low carbon energy solutions
Jonathan.ward@nottinghamcity.gov.uk | 0115 8762511 | www.energyservices-ncc.co.uk



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Advantages of leading on climate actions for Nottingham

Jonathan emphasised that to enable widespread adoption of policies to deliver substantial climate action co-benefits must be understood, communicated, and realised. The Nottingham action plan was developed in consultation with the public and across independent departments, e.g. transport or built environment, as climate issues cannot and do not sit in silos. One of the key selling points of climate action is the ability to deliver on other priorities at the same time (co-benefits). Using cost-benefit analysis, for example, demonstrates that value can be added with interventions in the health or transport sector in particular. In the Nottingham context Jonathan talked about particular actions that could target areas of the city where there is the lowest level of home ownership. Often, the communities that are the most exposed to climate risks are those with the least resilience, therefore as part of the

city's responsibility to its citizens it is most important for climate actions to be protecting those who are most at risk.

The vision of Nottingham's climate charter was to adopt a city green partnership approach that worked within wider planetary boundaries, centred not just on reducing negative impact, but optimising action for co-benefits. Nottingham's academic institutions are key partners in the development of the plan and the partnerships with the city's commercial centre are very important. A significant part of the plan was to position the city as a testbed for new technologies and ideas, innovation has already been important in public ownership of transport and biogas facilities. The climate charter works to maximise the attractiveness of the city to new businesses as well as position the city to take full advantage of the benefits of a cleaner economy in the future. Jonathan made particular mention of the city green partnership's annual review process that allows space for creativity and development of new ideas. He noted that in reality many of the actions are the first steps for problems we do not yet have complete answers for.

Simeran Bachra (CDP, UK Cities Manager)

What are Cities and Local Authorities doing?

How can they use the revised 31 action and co-benefits guide?



Example slide from the 31 Actions toolkit

Simeran spoke on two particular themes, first outlining the work that CDP are doing currently in the field of reporting, especially in cities. Currently cities account for 2% of landmass but 55% of the population, 66% of energy usage and 70% of emissions. This is why CDP and other non-profits are working to engage local authorities particularly in cities and, for local authorities, can be utilised as a hub of ideas and

creating connections in the environmental sector. In 2019 CDP helped 19 UK Local Authorities to disclose their emissions, as well as scoring 105 cities worldwide, representing 170 million people across 31 countries. The scoring process enables local authorities to understand their emissions profile as well as target actions that move them forward. Currently Greater Manchester is scored an 'A'. To achieve such a rating a city must act in four key areas; disclosure (identifying climate impacts and information gaps), awareness (understanding, measuring and reporting climate impacts), management (undertaking mitigation actions to increase resilience) and leadership (setting and meeting ambitious climate action goals). In the UK five local authorities have reached this level: Greater Manchester, Greater London, Coventry, Leicester, and Bournemouth.

The second part of Simeran's presentation was focused on the recently released Ashden, Friends of the Earth and CDP 31 Actions Toolkit, linked below, which is available to all local authorities and details possible policy and strategic actions to progress the climate change agenda. It aims to overcome the cognitive dissonance that can often accompany a step like the declaration of a climate emergency by giving a series of practical, applicable actions. The toolkit covers eight categories: Money, Building, Transport, Estates, Generation, Waste, Land Use, and Influencing Others. For each category, actions are identified along with the potential co-benefits such an action could deliver and an estimate of associated carbon savings. Where possible, examples of where actions have been used by a local authority are provided.

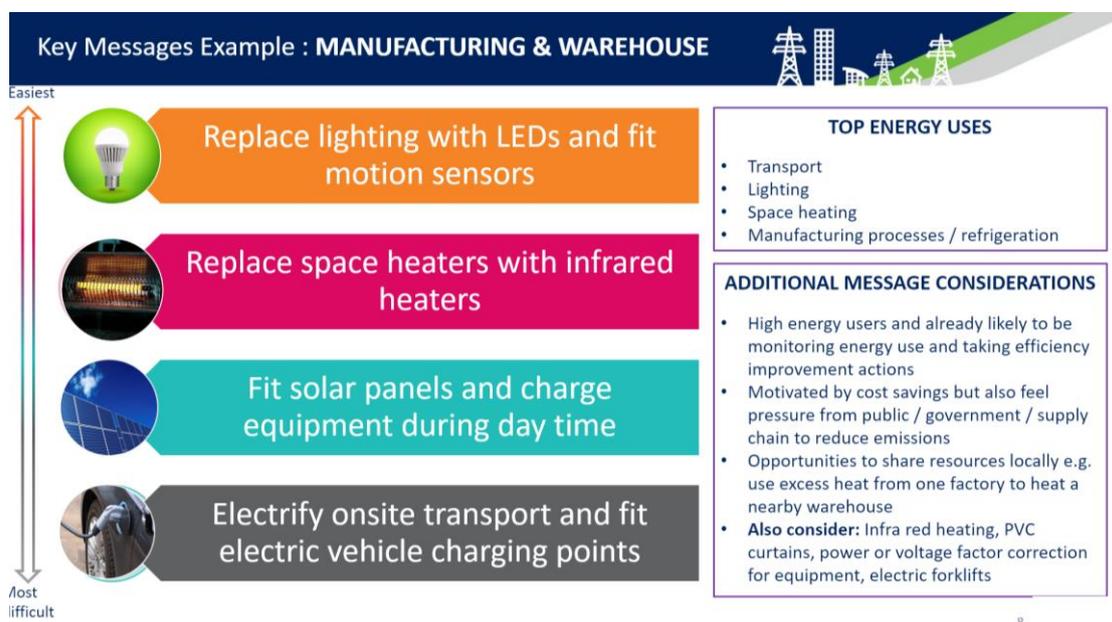
***Paul Bircham (Electricity North West,
Commercial Strategy and Support Director)***

***Electricity North West's plans
to facilitate the transition to zero carbon***

Paul's presentation focussed on how businesses and private enterprise are already supporting the efforts of Local Authorities in promoting and developing the climate agenda and can continue to do so. Annually ENW publish a future energy scenarios analysis, for their network area of 5 million people, further broken down into much smaller regions. It details how they will connect new and embedded energy sources can come on to the network and provide network capacity for increased energy demand from new technologies. In terms of interaction with local authorities, the 2020 report is the first to include GMCA's action plan and the part ENW is playing within this, as the Greater Manchester area accounts for nearly half of the electricity demand in the North West that flows through its network.

Paul moved on to the transition to electric vehicles (EV), which represents the largest change in load for their network. The [2019 Distribution Future Electricity Scenarios \(DFES\) report](#) shows that by 2030 half of all vehicles will have to be electric, and all vehicles to be low carbon by 2050 to meet the 2050 carbon target. This will

result in electricity demand on the network being significantly higher (by 50% in 2050), in some areas nearly double that currently envisioned by National Grid's green energy ambition forecast. The good news is that capacity for EV exists now, enabling EV to be central to any mitigation target in the North West. ENW stresses that headroom is available across nearly all substations and so local authority ambition to meet their goals partly though EV adoption should not be concerned about capacity on the local network. By 2038 (the DFES target for 50% EV adoption) the network will be ready for the first half a million EVs. However, ENW sees itself as having a key role in facilitating the low-carbon transition for network users, beyond managing the distribution network, working collaboratively with local authorities across the region. It is also delivering two exemplar net zero depots in the North West to reduce its own emissions and share learnings and best practice with other stakeholders.



Key messages and actions to give manufacturing/warehouse businesses

During the questions, Paul was firstly asked about things that might block a smooth transition, particularly in the private sector. From his point of view, it is often a problem of lack of information available to those running business, particularly in terms of cost-benefit savings, for example LED lighting. He pointed to work ENW has done in interacting with SMEs and domestic customers, particularly their targeted five first actions for decarbonisation. These actions range in investment cost and size, allowing business owners to take responsibility for their own decarbonisation plans. Paul finished by reassuring the group that capacity constraints on the network affecting the installation of solar PV would also not be an issue in the North West. He highlighted the importance of local authorities engaging with private business who control a large amount of the assets, particularly in terms of buildings that local authority action plans would be targeting.

Feedback and Future Actions

Following the event, we asked for feedback from attendees on two particular topics: transferable lessons from their previous experience working in the climate sphere, and **challenges in delivering action**. Responses highlighted useful experience amongst GM Local Authorities in setting science-based climate change targets, developing climate change action plans and working in partnership with a range of stakeholders to do so. Discussions during the event, and responses to the survey, highlighted that many working in local authorities would welcome opportunities to come together to learn from each other and share. The survey also revealed a need within local authorities for climate change focused education, both of staff expected to delivery actions and of citizens, with drivers for climate actions not always aligned across different levels and sectors within local authorities. Despite some positive experiences of there being a strong socio-economic case for climate actions, there remains a need for assistance with financing new actions within local authorities themselves and beyond.

Feedback we received on the event was enthusiastic when asked about what kind of support Tyndall could offer in particular ideas included future webinars and hosting discussion/sharing experience centred events. For any further points or requests for information email Amrita Sidhu at Amrita.Sidhu@manchester.ac.uk.

Additional Resources

Link to the Full Presentations/Recording:

Chris Jones - <http://documents.manchester.ac.uk/display.aspx?DocID=49251>

Paul Bircham - <http://documents.manchester.ac.uk/display.aspx?DocID=49252>

Jonathan Ward - <http://documents.manchester.ac.uk/display.aspx?DocID=49253>

Simeran Bachra - <http://documents.manchester.ac.uk/display.aspx?DocID=49254>

Mark Atherton - <http://documents.manchester.ac.uk/display.aspx?DocID=49255>

Recording - <https://youtu.be/ee8jsG82-5k>

Arup Local Authority Climate Emergency – What Next (document produced by Arup based on knowledge obtained in their work with Local Authorities, gives a breakdown of the steps needed to manage a climate action well, creating long-term, sustainable change):

<https://www.local.gov.uk/sites/default/files/documents/ARUP-Climate-Emergency-What-Next.pdf>

BEIS Local Energy Team Huddle for officers (link provided during the question session as a place for officers in Local Authorities to engage with each other over climate actions and develop relationships):

<https://www.apse.org.uk/apse/index.cfm/local-authority-energy-collaboration/beis-local-energy-team/join-the-beis-local-energy-team-huddle/>

CAST (the website for the Centre for Climate Change and Social Transformations, a partner centre to Tyndall that is currently engaged in work with local authorities and includes a number of briefing papers on topics covered at this event including public engagement and citizens assemblies):

<https://cast.ac.uk/>

CDP City – Business Guidebook (guide produced by CDP, and recommended during the questions by Simeran, detailing how to create effective partnerships with the private sector and using these to accelerate change in your area):

<https://static1.squarespace.com/static/5d8d237fa303ad270d0a501a/t/5d8f1a28ccc8fd4ecd406f37/1569659449493/city-businessclimateallianceguidebook.pdf>

ENW Business Actions (recommendations given for private business across a number of sectors as mentioned in Paul's presentation, each sector is given 4-5 different ideas of actions, at multiple price points that could save both money and energy):

<https://www.enwl.co.uk/zero-carbon/decarbonise-your-business/>

ENW Distribution Future Electricity Scenarios (report mentioned throughout Paul's presentation detailing ENW's view of the North West's future energy requirements and ENW's role in facilitating the transition to a low carbon future):

<https://www.enwl.co.uk/get-connected/network-information/dfes/>

Ashden, Friends of the Earth, CDP 31 Actions (includes links to both the PDF flip-book and excel sheet giving a more detailed run down of the actions mentioned by Simeran as well as, whenever possible, examples of UK local authorities undertaking those actions):

<https://www.ashden.org/programmes/top-31-climate-actions-for-councils>

Leeds Climate Citizens Jury (Information on the successful Leeds Citizen Jury panels run over 2019, page includes the final reports from the events as well as a FAQ section providing information on the process and selection of the panel, a demonstration of creating momentum and engagement with citizens in our areas):

<https://www.leedsclimate.org.uk/leeds-climate-change-citizens-jury>

SCATTER Toolkit (noted by Chris, Jonathan and Mark, the SCATTER, Setting City Area Targets and Trajectories for Emissions Reduction, toolkit is a web based tool free to UK local authorities that helps to assess, disclose and reduce their area's emissions):

<https://scattercities.com/>

Tyndall Centre for Climate Change Research (the site for the wider Tyndall network, shows the ongoing work of the centre as well as offering details of previous work in the local government sphere):

<https://www.tyndall.ac.uk/>

Tyndall Manchester (the site for the Manchester based team from the Tyndall centre, provides details of our ongoing work and upcoming events as well as details for the team with links to get in touch with us):

<https://www.tyndall.manchester.ac.uk/>

Tyndall Carbon Budget Tool (uses the commitments in the Paris Agreement to create recommendations as to the carbon budgets for regions and individual local authorities based on the latest climate change and carbon budgeting science):

<https://carbonbudget.manchester.ac.uk/>

Thanks

Thank you to all the attendees who were able to adapt to the virtual environment, and in particular those who gave interviews and fed into the development of the event. Thank you to all the speakers for giving their time and experience as well as being willing to be involved in the discussions. Lastly thank you to the organising team, particularly Amrita Sidhu, for all the work they have put into this event, both iterations.