

27<sup>th</sup> June 2020

## Summary note – Green City Partnership Board

### PRESENT:

Liz Ballard (LB) – Sheffield and Rotherham Wildlife Trust  
Emma Bridge (EB) - Community Energy England  
Councillor Mike Chaplin - (MC), SCC  
Greg Fell – (GF) SCC  
Councillor Peter Garbutt (PG), SCC  
John Grant – (JG) Sheffield Hallam University  
Fiona Griffiths – (FG) SHU  
Prof Lenny Koh – (LK) University of Sheffield  
Councillor Tim Huggan - (TH), SCC  
Councillor Mark Jones (Chair - MJ)- SCC  
Laraine Manley – (LM), Place Portfolio, SCC  
Andy Sheppard – (AS) Arup  
Cllr Alison Teal - (AT), SCC  
Martin Toland - (MT) Amey  
Rick Watson – (RW) Sheffield Climate Alliance  
Nigel Wilson – (NW) Veolia  
Mark Whitworth – (MW) Climate Change and Sustainability,  
SCC

### Attending guests

Guy Hitchcock – (GH) Ricardo  
Jen Rickard – (JR) City Growth, SCC  
Jen Kelly – (JK) - Arup  
Raphael Sabille – (RS) Ricardo  
Victoria Penman – (VP) Economic Development, SCC

### Apologies:

Edward Highfield, Tom Sutton

1.	<b>WELCOME, INTRODUCTIONS AND AGENDA REVIEW</b>  The Chair of the meeting (Councillor Mark Jones) welcomed all those in attendance.
2.	<b>MINUTES OF LAST MEETING</b>  The minutes of the meeting held on 20 <sup>th</sup> February 2020 were agreed as a true record. There were no matters arising.
3.	<b>ZERO CARBON COMMISSION – WORK PACKAGE ONE</b>  Mark Whitworth introduced the consultant team who are on the call (Andy Sheppard Sustainability Consultant from Arup, Guy Hitchcock from Ricardo

and Ioannis Tsagatakis from Ricardo) and the background to and purpose of the zero Carbon commission which is to develop an evidence base which will provide a carbon baseline, a gap analysis to understand the scale of the challenge to reach net zero by 2030, and

The commission is divided into four work packages:

- 1) detailed GHG baseline inventory
- 2) Gap analysis
- 3) Options and interventions for achieving zero carbon emissions
- 4) 3.1 city level
- 5) 3.2 council specific
- 6) Climate governance arrangements for Sheffield

AS introduced Jen Kelly from Arup who is leading on WP4 on the governance and is observing to see how the Board works.

AS introduced the four work packages and the timescales for the programme (available in the attached slides).

Guy Hitchcock presented the evidence for the baseline (available in the attached slides).

TH asked whether there is a log of applications for local renewable energy generation project applications that would allow us to know what is coming on stream in the future as he feels that increasing local renewable energy generation should be part of any strategy.

GH and AS responded that this package considers the baseline, but that following packages will be considering this. Arup will look at planning applications, but this will only give sight of plans for the next year or so when the plan needs to be looking forward to 2030.

GH explained that the CO<sub>2</sub> emissions that are calculated are related to energy consumption, and that will apply to the carbon intensity of the grid. (0.46) if energy is generated locally, it generates both energy that is used locally before it reaches the meter, and energy which is exported to the grid. This means that the energy usage will actually be higher than is seen in the numbers (although the locally generated and used electricity will be renewable). This will be taken into account in the calculations. The more we generate locally and use locally, the more a place is protected from the grid - for example, if there is a move to air source heat pumps, there is the potential for them to be zero emission, but that depends on the electricity that they use being zero emission, so if the grid is not decarbonised until 2045, that will impact on Sheffield's ability to reach net zero before then.

It was noted that there will be elements of carbon reduction that are outside of Sheffield's control (such as the grid) and that we may need to generate enough energy locally to offset what comes from the grid.

RW noted that there is an improvement in energy emissions, but asked if this could be masking the exporting of emissions through our consumption patterns. GH responded that this programme only looks at Scope 1 and 2 emissions.

MJ agreed that we don't want to be outsourcing our emissions or pollution and expecting others to clean it up and asked how it would impact on targets if Sheffield was a net exporter of energy, recognising that carbon sequestration through tree planting was one way to offset consumption, but wasn't enough alone. GH confirmed that it would be possible to have negative emissions if sufficient energy were generated locally.

RW noted that new build is inherently more efficient than older stock, but that we are still not being ambitious with requirements for housing and commercial new build (recognising that legislation may limit scale of ambition) and asked what the impact would be if buildings, including Heart of the City, were built to passivhaus standards.

AS responded that new builds have to have an EPC, but we really need to focus on both new and older buildings. 45-80% of buildings that will be around in 2050 have already been built, so the buildings that will be around in 2030 around 95% or more have already been built, so while it is likely that recommendations will push for new building to be driven towards high standards as far as policy and legislation allows, there also needs to be a focus on existing buildings, including a lot of hard to treat pre-1930s buildings.

MJ - asked whether there is a legitimate argument for linking Heart of the City to the district heating network.

AS noted that Arup will be recommending in their role as design engineers for Heart of the City, that some buildings are connected to the District Heating Network. For other buildings it won't be recommended for practical engineering reasons. In theory, the district heating network is extremely low carbon and that they have recently changed how they calculate their carbon emissions which has resulted in a significant drop compared to how they were reporting before, and a lot of people are saying that district heating is the way to go and as long as the emissions are practically down to zero it's a great way to go.

JK agreed that in the short to medium term it is a viable option although noted that in the long term, aims to move towards zero waste would mean that ultimately the aim would be that there would be no produce to fuel the network.

AS noted that the focus should be on energy reduction rather than carbon reduction.

LB asked if there are measurements of carbon sinks and the impact of land use and asked if part of the baseline should consider existing natural assets that sequester carbon. LB also noted that although methane is emitted at a much smaller percentage than carbon, that it is more potent as a greenhouse gas.

GH agreed that methane is 23 times more potent than CO<sub>2</sub> and responded that the figures quoted are CO<sub>2</sub> equivalents. Land use is accounted for, and the land use that is reducing carbon has increased. A small but helpful element.

JK notes that it is important to consider that the leading science is showing that for example, peat land that is in poor condition can actually be emitting carbon so it is quite likely that much of the Peak District is emitting Carbon. It is important to be cautious about this when considering land use outside of the built environment.

LB responded that this was her concern, that the maps showed that the data for much of the moorland says that data is not available, and that an understanding of this would allow us to know what can be done. Should natural capital accounting be part of the process for establishing the baseline?

MC noted that he sits on the Peak Park Authority and quarterly reports are produced on climate change and that there is a job to do to see which elements fall within the Sheffield boundary and which interventions are already being put in place.

LB and JK suggested solutions which would allow for the analysis to be developed.

JG noted that the reduction in landfill activity will mean a reduction in landfill gas capture over time, and asked why there was no figure for Blackburn Meadows generation.

MJ noted that one of the Parkwood quadrants is now dormant and asked if there would be low hanging fruit in terms of energy generation.

GH agreed that as a source of energy generation will reduce over time, and

	<p>that it is already smaller by an order of magnitude than the ERF. AS noted that Arup were still seeking data from Blackburn Meadows but had not managed to obtain it so far. It is possible that this may be commercially sensitive. If necessary an estimate can be created using engineering expertise.</p> <p>TH asked how many local grids there are and whether the local plan should be looking to create local grids.</p> <p>AS replied that this will be considered in later work packages when options are considered. He believes there are not many private distribution networks in the city. Will need to ensure that we avoid double counting.</p> <p>EB notes that Ofgem is actively discouraging local energy networks but other cities are working to find ways round this. Community Energy England are holding an event with Northern Power Grid to explore this further.</p> <p>MJ noted that the Local Electricity Bill is going before parliament and that Northern Power Grid seemed supportive. AS said this would be considered in WP3.</p> <p>RW noted that Sheffield City Council (SCC) Sheffield City Region (SCR) are intrinsically linked, but that there is no representation from SCR on the board and felt that this should be considered. RW noted that some Sheffield Climate Alliance members had expertise and concerns, for example about the exclusion of Scope 3 and 4 (avoided) emissions and asked whether the process could be more inclusive and how the expertise of the Climate Alliance could be better utilised, which would enable the Climate Alliance to have a more positive and less reactive relationship with the council.</p> <p>AS said that different cities have different approaches. He recognises that scope 3 emissions are a concern, they are even less within the control of the local authority than scope 1 and 2. Andy noted that there are a range of organisations that are included in the engagement process.</p> <p>MW responded that the engagement section will be the most important section. It was noted that there is a piece of work taking place with the University of Sheffield around Scope 3 emissions, but this work goes back to the Tyndall Centre's carbon budget work which was based on scope 1 and 2 emissions. Scope 3 will be considered in future work.</p>
4	<p><b>COVID ECONOMIC RECOVERY PLAN</b></p> <p>JR presented slides reporting on Sheffield's development of an economic recovery plan. The impact on people (some groups have been particularly affected, for example people from BME backgrounds and young people and</p>

those in education and training). Different sectors have been impacted differently, particularly the high street as a result of lockdown, and many people are furloughed.

SCR are developing a fairly short term plan with their long term planning being developed through their Strategic Economic Plan which will be consulted on in the relatively near future and the GCPB may want to take part in that consultation.

Sheffield's recovery plan is being developed by the Council alongside a Business Recovery Group comprised of business people and organisations including the Chamber of Commerce. This is an opportunity to feed in to this.

EB flagged that there is a lot of good work happening with NGOs and there is a lot of evidence coming forward to demonstrate that a green and just economy is key to a successful economic recovery.

MJ agreed and emphasised that this needs to be more than a recovery - we need to move beyond where we are.

TH noted that car use hasn't reduced significantly for the last 30 years and that this opportunity should be taken to get people to cycle and walk to prevent car use from increasing as people avoid buses.

RW the Climate Alliance can offer expertise- an invitation to use their networks.

LB noted the Build Back Better campaign as a useful common language. The potential for a lost generation needs to be avoided, and there is a need to have people with the skills needed to address climate change across the nature sector but also low carbon technology, retrofit. It's key to act quickly to capture the energy around this at the moment.

GH notes that to get to carbon zero by 2030 is a massive change and needs to be started now. Work with Bristol found they needed to halve their car use and convert totally to electric to reach carbon zero by 2040. Decarbonising heating will require an entire industry currently installing and servicing gas boilers to be reskilled. There will be many elements that should feed into a recovery plan.

EB - there's a lot of work happening nationally, she is happy to make links if that's helpful. It is important to have both a green recovery and a just recovery.

TH would like to see energy boosted, but also that we use this as an opportunity to get people walking and cycling because otherwise car usage will increase rather than decrease - important to be fleet of foot.

RW - encouraging JR to come back to the Climate Alliance for their expertise.

LB - build Back Better is a good reference point for common language around

	<p>Green recovery plans. There is possibly a lost generation of children and young people coming out of school and university into a world of high unemployment. Feels like there's an opportunity to encourage skills and investment for the natural and low carbon sectors. Potential to galvanise public. Important to capture this opportunity between now and Christmas.</p> <p>GH - to get to zero Carbon is a massive change and to do this, it needs to feature in this. Important to get the industry in place to be able to achieve this. Bristol needed to lose half their car journeys and switch entirely to electric by 2040 and there will be a whole new industry needed to maintain these.</p> <p>MJ – emphasised the opportunity presented for the city to have a green recovery and transition to a clean economy.</p> <p>MW - work that has been carried out with Core Cities indicates that with investment into jobs in retrofit, materials and products, £500m of investment in the sector could create in the area of 10,000 jobs across the cities.</p> <p>LK - endorses the call for a green recovery and urged the recovery to consider supply chains and take advantage of potential government funds to support regions to 'level up'. LK will share work that she has done in relation to supply chains.</p> <p>AT - a big part of both Labour and Green Party manifestos were the Green New Deal and encourage Jen to read this if she hasn't already.</p> <p>RW - there is a huge skills gap to train builders to build in a sustainable way. New build shouldn't be including gas buildings. How can we address the impact of the increase of home deliveries, particularly by diesel vehicles. But with all of this, we need to take the people with us - a shift in perception is needed. A citizen's assembly is one way, but there are other ways, including community led activity. It's important to look at consumption behaviour, and to involve people in making decisions rather than having top down policy decisions.</p>
8	<p><b>AOB/CLOSE</b></p> <p>EB raised that <a href="#">Community Energy Fortnight</a> starts on 13<sup>th</sup> June. VP will circulate link with further information</p> <p>RW Covid has highlighted the issue of food supply fragility. Food sustainability is likely to be a growing issue but this falls through the gaps in Sheffield, he is not clear what the Board's role is but there should be one.</p> <p>MJ There are ambitions here that could be explored further in future.</p> <p>MJ thanked participants and presenters.</p>

	<b>Date for next meeting</b>
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	27 <sup>th</sup> July 2020
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