

Climate and City Resilience Committee

Thursday, 10th August, 2023

MEETING OF THE CLIMATE AND CITY RESILIENCE COMMITTEE

HELD IN THE LAVERY ROOM AND
REMOTELY VIA MICROSOFT TEAMS

Members present: Councillor R-M Donnelly (Chairperson),
Councillors Anglin, Bell, R. Brooks, T. Brooks,
Carson, Doherty, M. Donnelly, D. Douglas,
S. Douglas, Kelly, Maghie, McAteer, McCabe,
McKeown, Smyth and Walsh.

In attendance: Mrs S. McNicholl, Deputy Chief Executive/Strategic
Director of Corporate Services;
Ms. D. Caldwell, Commissioner for Climate and City Resilience;
Ms. A. Diver, Climate Programme Manager;
Mr. D. Martin, Belfast Region City Deal – Programme Director;
Mr. R. McLernon, Climate Programme Manager City;
Ms. B. Roddy, Project Support Officer – Climate;
Ms. C. Shortt, Monitoring, Learning and Reporting Officer;
and Mr. G. Graham, Democratic Services Assistant.

Also attended: Mr. A. Sudmant, Research Fellow, University of Leeds.
Mr. J. McHenry, Vu City.
Mr. S. Pagani, GIA. Architects.
Dr. A. Jacobs, GIA. Architects.
Mr. K. Francis, GIA. Architects.

Apologies

Apologies for inability to attend were reported on behalf of Alderman Copeland and Councillor Bower.

Minutes

The minutes of the meeting of 15th June 2023 were taken as read and signed as correct. It was reported that those minutes had been adopted by the Council at its meeting on 3rd July.

Declarations of Interest

Councillor T. Brooks declared an interest in that she was employed by Queen's University Belfast who had been invited to present to the Committee on the potential for rooftop Solar PV, on Council buildings and rooftops, across the city.

Rooftop solar PV potential in Belfast
Presentation by Vu.City

Mr. McHenry provided an update on a Shared Island project, undertaken in partnership between Belfast and Cork City Council, to explore the potential for Solar PV on Council buildings.

Mr. Pagani provided the Committee with information on the background and expertise of GIA in the Solar PV industry. He stated that the company had over thirty years of experience in the business and that their specialism was the harnessing of energy from both sunlight and daylight. The Members were informed that GIA's research and development team had allowed them to develop technology to generate solar electricity from a diverse range of roof areas, in a city environment, and to do so within a framework of accuracy and scale.

Mr. McHenry provided the Committee with an overview of the research undertaken in regard to the ten Council buildings selected for potential rooftop Solar PV installation. He stated that, as part of that detailed investigation, an assessment had been undertaken using two methodologies namely:

1. A standard Assessment procedure; and
2. A Climate Based Daylight Modelling technique.

The Members were informed that €500 million had been set aside for capital funding covering the period 2021-2025, some of which had been earmarked for the North/South climate initiative between Belfast and Cork. Mr. McHenry highlighted the different attributes associated with the various solar panels on the market, currently, including conversion and output efficiencies. He stated that it was estimated that the Northern Ireland spend was £8.7 billion on energy per annum and referred to the potential savings associated with the increased use of solar PV panels across the city.

It was reported that 160,000 households were in fuel poverty, and he referred to the targets and timescales, specified within the Climate Act (NI) 2022, to reduce greenhouse gas emissions. Mr. Pagani provided the Committee with an outline of the Site Performance Assessment required to ascertain the viability and suitability of rooftops, across the city, to accommodate the installation of Solar PV Panels. He referred to the labour-intensive exercise associated with determining which rooftop areas were suitable for Solar VP adaptation, including shading and future building construction which could impede sunlight and the efficiency of the Solar PV panels. Mr. Pagani referred to the technology used to separate the various components of a rooftop surface area in order to maximise the usable space for the installation of rooftop Solar PV panels.

Mr. McHenry provided the Members with a list of the various Council buildings which were under consideration for the installation of Solar PV panels and the potential estimated Solar PV generation, using both SAP and CBDM methodologies. The Committee was informed that, by using GIA, the Council was using the services of a company with a tried and trusted track record, with the capability to operate at scale.

He stated further that the GIA operated with a high degree of accuracy in terms of its projected energy generation from the installation of its Solar PV panels.

A Member stated that some of the savings attributed to the Girdwood Hub had the potential to form an integral part of the Council's Leisure Transformation Programme. A further Member requested if there was comparative data in regard to the savings made in terms of energy costs associated with the installation of Solar PV panels in cities with a comparative climate profile to Belfast and what criteria was used to identify those sites identified for the potential installation of roof-top Solar PV panels.

In response, Mr. McHenry stated that Council buildings, with the highest energy consumption, were used to identify where the highest energy cost savings could be realised. The Monitoring, Learning and Reporting Officer confirmed that the Council had undertaken an exercise, in conjunction with the energy team, to identify roof design which had included an off-site assessment of those selected buildings. She confirmed that the Council was progressing towards stage 2 of the funding application process.

A Member raised a question in regard to the storage and redistribution of excess energy produced. In response, the Climate Commissioner reported that the Council's Energy and Carbon Manager had confirmed that due to high infrastructure costs associated with energy storage and, given that the Council had the capacity to use all of the green energy produced, it was a more efficient use of resources to expand the installation of additional Solar PV panels.

In response to a question from a Member in terms of comparative data with Cork city, the Monitoring, Learning and Reporting Officer stated that Belfast was ahead of Cork in terms of its data collection exercise and stated that the Committee would be provided with an update, on comparative progress, in terms of green energy production between the two cities. Mr. McHenry, in response to a further question from a Member, stated that, depending on quality and design, some PV panels could have a lifespan of up to twenty-five years with a projected average payback period of ten years.

The Climate Commissioner stated that an application for stage two funding would provide the Council with the resources to commence the installation of roof-top Solar PV panels on those Council selected buildings. She stated that a comprehensive data collection exercise would be required, prior to submission of an application for phase two funding. In response to a question from a Member in regard to the potential restrictions on the installation of Solar PV panels and permitted development, Mr. McHenry stated that such a circumstance, should it arise, would be subject to the particular development proposal. He confirmed that the maintenance of Solar PV panels was minimal and that the Council might wish to engage with a maintenance contract to deliver that service.

The Commissioner for Climate and City Resilience stated that she would consult in the matter with the Energy and Carbon Manager and report back, at a future date, with a proposal on the maintenance of Solar PV panels.

The Committee was informed that individual commercial entities had diverse energy usage profiles in that, while the commercial sector tended to experience high energy usage, other sectors, such as leisure centres, tended to use energy beyond standard daytime hours. To that end, Mr. McHenry suggested that the Council might wish to consider energy storage and redistribution in order to guarantee a continuous supply of green energy to those commercial enterprises.

The Monitoring, Learning and Reporting Officer reported that the Department for Energy (DfE) had undertaken research in terms of the potential cost savings associated with the installation of Solar PV panels on residential properties and agreed to report back, on the energy cost savings, associated with that project.

The Chairperson, on behalf of the Committee, thanked the Members of GIA and the representative from Vu City for the detailed and informative presentation and they departed from the meeting.

Noted.

Belfast Region City Deal Net-Zero Roadmap

Mr. Martin provided the Committee with an introduction and outline of the areas for consideration, in regard to climate change, highlighted within the Net-Zero Roadmap. He emphasised the importance of actions necessary if the Council was to achieve net-zero emissions by 2050. To that end, he reported that the Council had agreed to commission an analysis of net-zero options and stated that the roadmap would set the strategic direction for the Council by assisting with future decision making and the provision of an evidence base to direct policy on decisions around climate change and mitigation measures.

Mr. Sudmant informed the Members that the net-zero roadmap was a bottom up, place-based assessment, specific to Belfast and the surrounding region. He explained that the roadmap was focussed on a technical and economic analysis and had been developed in conjunction with stakeholders.

The Committee was provided with detailed analysis as part of the steps necessary to achieve net-zero. It was reported that the Belfast Region emits 8.9 megatons of CO₂ per annum. He confirmed that carbon emissions had reduced by thirty per cent since 1990 and was expected to reduce by fifty per cent between 1990 and 2050. Mr. Sudmant informed the Committee that the technology existed, currently, to mitigate against the majority of the remaining emissions. The Members were informed of the economic and employment benefits associated with a transition to green energy production, including a £1.3 billion energy saving potential by 2050.

Mr. Sudmant highlighted the fact that the Belfast Region (city deal area) had a higher emissions profile than the UK, largely as a result of the impact of agriculture and farming practices. He referred to the opportunity to reduce emissions, emanating from the housing sector, and the financial benefits associated with the introduction of mitigation measures, attached to carbon production, connected to agricultural practices.

The Committee was informed that up to twenty per cent of emissions, attached to the residential sector, could be mitigated and attributed to a financial return. He stated that some measures taken to reduce carbon emissions were not cost-neutral but highlighted the social benefits associated with a reduction in carbon emissions such as, clean air and improved health. Mr. Sudmant emphasised the benefits of mitigation

measures which added to public value, despite not being cost effective to implement. He referred to the significant challenges required to reduce greenhouse gas emissions attributed to the agricultural sector, including changes to land-use and modified agricultural practices.

In response to a question from a Member in terms of achieving easy wins and the impact of not having a functioning Assembly, to drive climate change, the Programme Director confirmed the need for substantial investment, both public and private. The Commissioner for Climate and City Resilience highlighted the legal and binding obligation, under the Climate Act, which holds governments accountable to achieve specified statutory emission targets by 2050.

The Committee, in recognition that Local authorities could not achieve their climate ambitions in isolation of other statutory agencies, agreed that a joined-up approach, involving a multitude of organisations and stakeholders, was essential.

The Chairperson, on behalf of the Committee, thanked the Project Director and Mr. Sudmant for their detailed and informative presentation and the Committee noted the information provided.

Belfast Agenda - overview of climate and environment interventions

The Climate Commissioner submitted the undernoted report which provided an overview of the climate and environmental interventions contained within the Belfast Agenda. She stated that modification to the document, following a detailed consultation exercise, had resulted in a much greater emphasis on climate ambitions and emission targets, for the Council, and the city in general:

“1.0 Purpose of Report or Summary of Main Issues

1.1 To provide members with an overview of the climate and environment interventions included within the Belfast Agenda ahead of the public consultation.

2.0 Recommendations

2.1 The Committee is asked to:

- I. Note the climate and environment interventions included within the Belfast Agenda;**
- II. A further update will be provided to Members following the public consultation.**

3.0 Main report

3.1 Background

In the refreshed Belfast Agenda the environmental and climate considerations have been strengthened to reflect the feedback from the wide range of stakeholders that have been consulted. At the city level this work has been overseen by the Resilience and Sustainability Board as part of the wider

community planning partnership. In particular the carbon targets adopted by Council last year have now been embedded in the city's ambitions for 2035. Creating a sustainable nature-positive city is now one of the five main themes with three key priorities over the next four years:

1. Re-naturing the city and improving the food system
2. Creating a sustainable circular economy
3. Innovating to Net Zero

3.2 Re-naturing the city and improving the food system

Under this priority, there are three strategic intents:

- Increase carbon capture and sequestration across Belfast, while reducing flood risk, enhancing biodiversity and improving the health of residents across the city through the One Million Trees project;
- Develop a demonstrator site in Botanic Gardens to test nature-based solutions through the UPSURGE project to strengthen climate resilience;
- Promote the uptake of nature-based solutions across the city to support climate resilience by integrating climate adaptation into strategic plans and urban agendas, by building adaptive capacity to deliver nature-based solutions, by scoping a city-wide regeneration programme to replace impermeable surfaces with green infrastructure, contributing to biodiversity and civic amenity, and by identifying funding opportunities to scale up nature-based solutions

3.3 Creating a sustainable circular economy

Under this priority, there are six strategic intents:

1. Enable the city to decarbonise at scale using the Belfast Local Area Energy Plan to develop a pipeline of investable local energy projects arising from the Local Area Energy Plan and identifying and responding to emerging funding and financing opportunities;
2. Promote sustainable circular economy approaches through the Shared Island funded Circular Economy Feasibility and Business Case in partnership with Dublin City Council, the UP2030 project (which aims to embed net zero in urban planning) and by reducing the carbon / environmental impact of municipal waste;

3. Promote a Just Transition to Net Zero in Belfast by addressing the social risks of the transition (eg. employment shifts, impact on supply chains etc.), identifying social opportunities and co-benefits of the transition and through meaningful dialogue, co-creation and participation in net zero planning through community planning structures and involvement of key community, business and other statutory partners;
4. Increase the use of Electric Vehicles in Belfast and improve access to charge points through the Belfast EV Strategy;
5. Reduce energy consumption (and bills) of housing and public /commercial buildings through the retrofit of buildings; and
6. Decarbonise the heat supply to buildings in the city via a Heat Network and local energy projects.

3.4 Innovating to Net Zero

Under this priority, there are five strategic intents:

1. Develop a Net Zero Park on Queens Island as a stand-out global hub and testbed for innovating and investing in advanced green solutions for energy, transport and manufacturing;
2. Develop a stable supply of green energy to the Net Zero Park and surrounding lands to support the industrial cluster by developing affordable sustainable energy supply, by creating a testbed for multiple green fuels, and by establishing a local hydrogen plant;
3. Accelerate the transition to low carbon manufacturing by supporting industries to measure and manage their carbon footprints, by using smart design and digital twin assets to accelerate innovation, test new business models and enhance supply chain resilience;
4. Support Green Multi-Modal Mobility by creating a living lab across Harbour estate to test new low carbon transport solutions, by supporting low carbon innovation in advanced air, maritime & road transport, and by establishing partnerships with maritime districts
5. Expand an existing cluster of net zero technology companies to create a burgeoning GreenTech sector in NI and help realise the objectives of the Green Growth Strategy.

- 3.5 Climate and environmental considerations are also embedded throughout the other themes. For example, under housing led regeneration and the future city centre priorities. There is also a separate priority (under the Place theme) covering active and sustainable travel.

3.6 Next Steps

The planned next steps to finalising the draft strategy document and action plans are as follows:

Early August 2023	Refreshed Belfast Agenda strategy document and Action Plans launched for consultation. EQIA and RNA consultation also commence
July – October 2023	Review of Belfast Agenda Governance arrangements, performance framework and co-design framework undertaken.
10 October 2023	Refreshed Belfast Agenda strategy document and action plan consultation ends
w/c 6 November 2023	Refreshed Belfast Agenda formally launched (date to be confirmed)

4.0 Financial and Resource Implications

4.1 There are no financial implications.

5.0 Equality or Good Relations Implications/ Rural Needs Implications

5.1 An EQIA and RNA have been undertaken and will be consulted on for a period of 12 weeks.”

A Member highlighted the success in regard to the retrofit of Housing Executive properties in parts of the city. He enquired if funding could be sought from additional external sources, and raised concerns about the lack of a formal Housing Executive policy in regard to the installation of EV charging points attached to those residential properties. The Member referred to the ‘Access to the Hills’ and ‘Living With Water’ initiatives as positive developments in securing an improved green infrastructure for the city.

In response, the Climate Commissioner reported that the Council was researching all potential funding streams, including development proposals to reduce flooding. She stated that the issue would be raised in regard to EV charging points with the Housing Executive. The Climate Commissioner reported that some work had been undertaken with the Department for Social Development, on a joint transition bond, which would allow the Housing Executive to borrow money on capital markets, subject to Ministerial approval. She agreed to raise that issue with the Housing Executive and report back to the Committee.

In response to a question from a Member in regard to the timeframe when individuals would be mandated to switch to electric vehicles, the Climate Commissioner reported that the sale of new combustible vehicles would not be permitted after 2030. The Member raised concerns in regard to the lack of drainage infrastructure to mitigate against flooding and how the community might have access to affordable green energy in development proposals for the Harbour Estate and other initiatives.

The Climate Commissioner confirmed that the Council had an EV strategy with targets specified with that strategy. In terms of flooding, she stated that Belfast had a preponderance of non-absorbent surfaces which required to be addressed by introducing more green spaces and tree planting throughout the city. In terms of the question in regard to the Harbour Estate's green development proposals, the Climate Commissioner confirmed that, on the proviso that the Council was successful in securing phase 2 funding, social inclusion was a key part of the transition to a green infrastructure. She confirmed that Queen's University Belfast, the Belfast Metropolitan College and Artemis were engaged in developing apprenticeships and community development plans as part of its green ambitions for the Harbour Estate.

Members raised the issue of rewilding wards, within Belfast, as a potential positive development initiative and stressed the importance of securing community engagement for all green energy development proposals. The Climate Commissioner confirmed that the Council was at an early stage in its green energy development proposals, for the Harbour Estate, and reported that a community engagement plan was being developed currently.

Noted.

**Application for phase 2 funding from Innovate UK
for the Pathfinders: Net Zero Living competition**

The Climate Commissioner provided the Committee with an update on the Council's application proposal for stage 2 funding in regard to the Pathfinders (Net Zero Living Competition). She provided the Members with proposals attached to that funding application and detailed how, if successful, the funding would assist the city in the development of its net zero options.

The Committee noted the information provided and wished the officers success in pursuance of their phase 2 funding application.

Update on Notice of Motion on C40 Membership

The Climate Commissioner submitted the undernoted report in regard to its intention to apply for membership of the C40 group.

“1.0 Purpose of Report or Summary of Main Issues

1.1 This report will update Members on a Notice of Motion raised in Standards and Business Committee on the 25th October 2022 suggesting membership of the C40 network.

2.0 Recommendations

2.1 The Committee is asked to:

- I. Note the content of the Notice of Motion raised at the Standards and Business Committee on the 25th October 2022.**
- II. Note that having enquired about Belfast joining C40 the Climate Unit was informed that membership is at full capacity. Belfast City Council Climate Unit has registered our interest should membership reopen.**
- III. Note that in relation to climate and resilience networks, Belfast is currently a member of the Global Resilient Cities Network, Core Cities Network, Eurocities Network and ICLEI Network, in addition to the PCAN Network mentioned in the Notice of Motion.**

3.0 Main report

Background

3.1 At the Standards and Business Committee on the 25th October 2022 Councillor Matt Collins proposed the following notice of motion, which was seconded by Councillor Ferguson and agreed by the Committee:

3.2 ‘Belfast City Council notes that the C40 World Mayors Summit occurred between 19 – 21 October 2022 in Buenos Aires. The Council notes that the C40 World Mayors Summit brings together the mayors of global and regional cities, alongside business leaders, philanthropists, campaigners, youth leaders, scientists and residents, to share bold ideas, showcase innovative solutions and stand together to create a sustainable, prosperous and equitable future. This Council notes that it already supports the work of the Belfast Climate Commission and is part of the Place-based Climate Action Network (‘PCAN’). The Council also notes that the C40 Leadership Standards are as follows:

- 3.3 **Plan:** City has adopted a resilient and inclusive climate action plan aligned with the 1.5°C ambition of the Paris Agreement, and updates it regularly;
- 3.4 **Deliver:** In 2024, city remains on track to deliver its climate action plan, contributing to increased resilience, equitable outcomes and halving C40's overall emissions by 2030;
- 3.5 **Mainstream:** City uses the necessary financial, regulatory and other tools at their disposal to address the climate crisis and mainstreams their equitable climate targets into the most impactful city decision-making processes;
- 3.6 **Innovate:** City innovates and starts taking inclusive and resilient action to address emissions beyond the direct control of the city government, such as associated with goods and services consumed in their city;
- 3.7 **Lead:** Mayor and the city demonstrate global climate leadership and inspire others to act in support of the Paris Agreement.
- 3.8 These Leadership Standards will guide C40's collective action until at least 2024. The Council considers that this PCAN work would be enhanced by Belfast City Council applying to join C40 as an 'Innovator'. An 'Innovator' city is one that shows exceptional climate leadership at the global level, but do not meet the population/size criteria of a 'Megacity.'
- 3.9 Accordingly, the Council resolves to recommend to the Lord Mayor of Belfast that she apply on behalf of Belfast City Council and her office to join the C40 network and, in any event, adhering to the C40's leadership standards.'
- 3.10 Having liaised with contacts in C40 the Climate Unit has been informed that currently (as of April 2023) their membership is at full capacity. C40 are primarily mega cities who will have a population of 3million or more by 2030 and in addition include some innovator cities who are seen as leaders on climate action. However, C40 are not accepting new applications under either category at present. The Climate Unit has registered our interest should this open up again, and C40 have asked to be kept informed of any outstanding climate action similar to the CDP A achieved by Belfast in 2022. Should the situation change, membership will be applied for, and Committee updated accordingly.
- 3.11 The Belfast Climate Unit Climate Unit will seek to adhere to the C40 leadership standards as set out in the body of this report.

3.12 Members may be aware that that in relation to climate and resilience networks, Belfast is currently a member of the Global Resilient Cities Network, Core Cities Network, Eurocities Network and ICLEI Network, in addition to the PCAN (Place Based Climate Action) Network mentioned in the Notice of Motion.

4.0 **Financial and Resource Implications**

4.1 There are no financial or resource implications at present.

5.1 **Equality or Good Relations Implications/
Rural Needs Implications**

5.1 There are no direct equality and good relations implications.”

The Committee noted the information which had been provided by the Climate Commissioner in the aforementioned report.

Issues raised in advance by Members

Proposed agenda items for future meetings

Councillor Brooks requested that the following areas be considered by the Committee on dates, and in a sequence, deemed appropriate by officers and the Chairperson.

1. Cycle Lanes - Councillor Brooks requested the DfI be invited to a future meeting of the Committee, in addition to Sustrans, to provide an update on the Belfast Cycling Delivery Network and how the cycling infrastructure might be improved.
2. Passive House Design - Councillor Brooks requested that the Southwest College, based in Enniskillen, which had undertaken a passive house development, be invited to a future meeting of the Committee to outline their experience of that development project in terms of its cost and pay-back period.
3. Embodied Carbon - Councillor Brooks requested that Dr. Siobhan Cox, from Queen’s University Belfast, be invited, to a future meeting of the Committee, to ascertain the calculation methodology and measures which might be put in place to reduce the amount of embodied carbon generated, as part of the Council’s future operational and capital projects.
4. EV Charging Points – Councillor Brooks requested that an update be provided, to a future meeting of the Committee, on the development proposals in regard to both the infrastructure and funding of EV charging points, throughout the city.

In response, the Climate Commissioner reported that the issues raised relevant to active travel was the responsibility of the People and Communities Committee and

that any presentation to the Climate and Resilience Committee, on those issues, would be for notation only.

In regard to the additional issue raised by Councillor Brooks on the Council's vehicle fleet, the Climate Commissioner stated that she would be happy to arrange for the Director (Operational) City and Neighbourhood Services to be invited to provide an update on progress, in regard to the electrification of the Council fleet and for DfI to be invited to provide an update on the expansion of cycle lanes and the development of future cycling infrastructure. She reported, also that she would be content to invite Sony to provide information on the capacity of the network to meet the future demand from electric vehicle charging points.

She agreed to the Member's request to invite Southwest College (Enniskillen) to provide the Committee with an update on their experience with passive house design and that an invitation be extended to Ms. Wendy Langham (Belfast Stories) to provide an update on their ambition to attain 'Passive House Plus' standard for future house construction. The Climate Commissioner confirmed also that Dr. Siobhan Cox, Queen's University Belfast, would be invited to provide the Members with an update on embodied carbon emissions.

The Committee agreed to the presentations requested by Councillor Brooks, on the proviso that the presentations were time limited to allow for adequate debate of the remaining agenda items under discussion.

Date of Next Meeting

The Committee agreed that its next meeting be held on Thursday, 14th September at 5.15 p.m.

Chairperson