Item 4

11th of April 2023

Glasgow City Council

Net Zero and Climate Progress Monitoring City Policy Committee

Report by George Gillespie, Executive Director of Neighbourhoods, Regeneration & Sustainability

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DEVELOPING A COMMUNITY ENERGY FRAMEWORK

Purpose of Report:

The purpose of this report is to provide an update on the development of a Community Energy Framework.

Recommendations:

The Committee is asked to:
1) Note the contents of this report.
2) Continue to support the work of Neighbourhoods, Regeneration & Sustainability (NRS) in the development of a Community Energy Framework.
3) Note that further updates will be provided on an annual basis.

Ward No(s):	Citywide: ✓
Local member(s) advised: Yes ☐ No ☐	consulted: Yes ☐ No ☐

1 Introduction

1.1 As part of Glasgow City Council's work to meet its Net Zero Carbon target by 2030 and contribute towards the Scottish Government target of Net Zero by 2045, GCC is undertaking a range of actions to support the decarbonisation of energy in the city. This report provides an update on our plans to support local renewable energy generation as part of this work.

1.2 The Climate Plan (Action 46) establishes the need to establish a framework to support local energy co-operatives to help deliver our Net Zero target.

1.3 This is an opportunity to pro-actively support projects that will lead to the development of community renewable energy projects of scale in the city and ensure local benefit.

2. Community Benefit

2.1 The Scottish Energy Strategy sets out the Scottish Governments expectation that energy developers should offer meaningful community benefits in line with its Good Practice Principles. The average financial value to communities in Scotland from projects in 2022 is estimated by Local Energy Scotland to be £4,500 per MW per year.(Source: LES).

2.2 The additional benefits to the community from generating its own energy are:

(i) the potential to generate revenue that could be invested directly back into the community,
(ii) reducing communities dependence on fossil fuels and actively contributing to Glasgow's 2030 ambitions,
(iii) building resilience to future potential climate shocks and/or pandemics, and
(iv) building capacity within Glasgow communities to become part of a bigger network of community energy developments, supporting the energy transition in Glasgow.

3. The Framework

3.1 The proposed Community Renewable Energy Framework (CREF) will aim to support the increased generation of energy from renewable sources by identifying a portfolio of sites which are suitable for community led renewable energy development and outlining the process by which communities can work with GCC.

3.2 The Framework will support a wide range of energy projects. These may include electricity generation, which is more mainstream and relatively easier to derive

a benefit from, as well as heat projects, which are currently less mainstream and include more challenges to delivery.

4 Site Identification

4.1 A key element in supporting Glasgow Communities to realise this ambition, is to identify suitable locations within the City. The Council is supporting this through the identification of suitable site selection criteria; identifying Vacant and Derelict Land (VDL) sites capable of generating between 0.5MW and 1MW of power and consideration of other suitable Glasgow City Council buildings. This will provide clarity on which sites are viable and able to be marketed for projects.

4.2 Undertaking this site identification process will allow the council to enter discussion with communities or organisations representing communities, with regards to securing the site for renewable energy development.

4.3 The objective of providing this portfolio of investable sites, is to enable the Council to present opportunities to any and all community energy organisations in a fair and transparent way and enabling project development to ensure direct local benefit. This is a proactive approach to enabling community energy development.

5 Process update

5.1 In 2015 an opportunity map was developed by GCC, in partnership with the University of Strathclyde, as part of the Future City: Glasgow programme to support informed decision making around the location of ground-mounted solar photovoltaic arrays on the city's Vacant and Derelict Land. This mapping tool has since been upgraded and can now be used to support decisions on the suitability of areas for community scale renewable energy systems.

5.2 To evaluate whether a site is suitable for renewable energy development, three sets of potential constraints need to be considered.

- Technical constraints that would limit viability of infrastructure deployment
- Planning constraints, which will affect the likelihood of receiving planning permission for a technically feasible scheme
- and environmental designations that may prohibit use of land to ensure protection of environmental conditions

A location may be affected by several individual technical, planning, and policy factors, so a combined view of the constraints requires weighting and combining factors to give an overall technical and policy score.

5.3 The technical factors include grid connection distance, grid congestion, overshadowing, and terrain. The policy factors include environmental policy, development policy, visual intrusion (100m from motorway and exclusion zone

for glare risk to aircraft), biodiversity and visual impact. The opportunity map was created through combining and using a weighted factor to determine the suitable locations across the city.

5.4 Once the study parameters have been reviewed it is recognised that some of the policy and technical factors data may need to be further updated, however, the existing map provides a good baseline to consider site viability. This is now being used to create the list of suitable sites and to take the next steps to develop the approvals process.

6 Resources and Funding

6.1 The CREF will direct community groups to a suite of complementary resources and tools to develop their own renewable energy projects. This will include the Local Energy Scotland's (LES) Resource Hub, Projects & Case Studies, LES Toolkits, and potential funding routes.

6.2 The Economic Development team in the Council are exploring different financing approaches through a partnership between Mannheim Foundation, the Scottish Community Finance, and the council. The aim is to be able to give some direct financial support to renewable energy projects of this kind.

7 Existing projects and Case Studies

7.1 A number of projects are currently underway to test out aspects of the above process.

7.2 NRS have been awarded £75k from the Scottish Government Vacant and Derelict Land (VDL) Fund (2022/23) to test the viability of a large-scale PV on VDL The concept is that the PV installation will also encourage wildlife and biodiversity; with the creation of species-rich wildflower meadows around the panels to meet the ambitions and aspirations outlined in our Climate Plan. The feasibility, design and implementation of the pilot will inform future role out of community energy projects.

7.3 NRS worked with the Glasgow Community Energy Partnership, a community-owned renewable energy co-operative, to pilot a community share scheme for local residents. The aim was to install photovoltaic panels to:

- supply renewable energy to two Glasgow schools, and
- generate a revenue for use in supporting the local community.

The CREF supports a fair and transparent approach to working with community groups. GCC will continue to be open to discussion with all community groups around suitable project locations.

7.4 The Council's own plans for installing solar PV on its estate have limited the opportunity for further community owned installations on GCC estate, hence

the frameworks focus on developing ground-mounted assets on VDL. However, an evaluation of any potential suitable GCC buildings will also be undertaken as part of this process.

7.5 We can also have confidence in this approach based on other examples from across the UK, two examples of different scales are outlined below.

7.6 Southill Solar is a 4.5MW solar farm operated by Southill Community Energy (SCE) for Charlbury and the surrounding villages. SCE is a community benefit society that pays its 400 members interest of 5% a year from its surpluses, as well as disbursing grants to the community for projects such as improving the energy and carbon performance of community buildings. It was funded by a mix of community and private investment and forecasts show that there will be on average, £30,000 a year to invest locally.

7.7 Macrihanish Airbase Community Company's (MACC) vision is to build a prosperous and sustainable future for the local community. In 2018 MACC installed a 250kW ground-mounted solar PV array. The project feasibility was funded through support from the Scottish Government's Community and Renewable Energy Scheme (CARES) and was delivered significantly under the original budget after a competitive tender process and is generating a good return on investment.

8 Next steps

8.1 The next steps to be taken to finalise the CREF are:

- Define a list of GCC Owned Vacant & Derelict Land Sites (<2.5ha) suitable for renewable potential aligned with the opportunity map factors.
- Further engage with Central Procurement and Legal Services to test and agree route to market.
- Further investigate the current funding mechanisms and technologies available, together with the barriers and constraints to community energy projects.
- Scope the process expected of communities to engage with this work and outline the ways in which the council can provide support, such as helping to map the potential customers for heat and or energy and therefore increase project viability.
- Scope what will be required of any community energy group to evidence community benefits.
- Once the Framework and list of sites have been through the evaluation process and secured for long-term use for renewable energy development (25 years), they will be taken through the Climate and Sustainability governance before coming to this Committee and then on to City Administration Committee for final approval.
- Publish the CREF by end of 2023.

9 Policy and Resource Implications

Resource Implications:

Financial:	There are no direct financial implications arising from the report.
Legal:	The report raises no legal issues.
Personnel:	The development of the Community Energy Framework is managed within existing resource in the Sustainability team.
Procurement:	The report raises no procurement issues.

Council Strategic Plan:	Grand Challenge(s) this report aligns with: Reduce poverty and inequality in our communities; Fight the climate emergency in a just transition to a net zero Glasgow; Enable staff to deliver essential services in a sustainable, innovative, and efficient way for our communities.

Equality and Socio-Economic Impacts:

Does the proposal support the Council's Equality Outcomes 2021-25? Please specify.	Not applicable to this report.
What are the potential equality impacts as a result of this report?	No significant impact.
Please highlight if the policy/proposal will help address socio-economic disadvantage.	Not applicable to this report.

Climate Impacts:

Does the proposal support any Climate Plan actions? Please specify:	The Community Energy Framework supports Climate Plan Recommendation 59: The Council's business support and planning services are made available to support community investment in renewable energy,

	including the Glasgow Community Energy Co-operative. And Action 46: To establish a framework for engagement with local energy cooperatives.
What are the potential climate impacts as a result of this proposal?	Decarbonisation of power and testing pathways to our 2030 Net Zero Target.
Will the proposal contribute to Glasgow's net zero carbon target?	Yes, this proposal will positively contribute to Glasgow's net zero carbon target.
Privacy and Data Protection Impacts:	None

10 Recommendations

10.1 The Committee is asked to:

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3) Note that further updates will be provided on an annual basis.