

## Manchester City Council Report for Information

**Report to:** Executive – 28 June 2023

**Subject:** Large Scale Renewable Energy Generation – Power Purchase Agreement (Part A)

**Report of:** The Deputy Chief Executive and City Treasurer

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### Summary

This report provides an update on the progress of the City Council's proposal to purchase renewable energy supplies via a Power Purchase Agreement (PPA) to ensure the Council has a long term, cost effective supply of renewable energy to meet its energy needs and achieve its Zero Carbon objectives to reduce the Council's CO<sub>2</sub> emissions.

### Recommendations

To note and comment on the contents of the report. Further details and recommendations are set out in Part B to this report

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### Wards Affected - All

**Environmental Impact Assessment** - the impact of the decisions proposed in this report on achieving the zero-carbon target for the city

Action 1.3 of the Council's Climate Change Action Plan 2020-25 targets 7,000 tonnes of annual CO<sub>2</sub> savings. The Plan sets out the actions that will be delivered to ensure that the Council plays its full part in delivering the city's Climate Change Framework 2020-25 which aims to halve the city's CO<sub>2</sub> emissions over the next 5 years.

| <b>Our Manchester Strategy outcomes</b>   | <b>Contribution to the strategy</b>  |
|---|--|
| A thriving and sustainable city: supporting a diverse and distinctive economy that creates jobs and opportunities | The transition to a zero-carbon city will help the city's economy become more sustainable and will generate jobs within the low carbon energy and goods sector. This will support the implementation of the Our Manchester Industrial Strategy and Manchester Economic Recovery and Investment Plan. |

|  |  |
|--|--|
| A highly skilled city: world class and home-grown talent sustaining the city's economic success                | Manchester is one of a small number of UK cities that have agreed a science-based target and is leading the way in transitioning to a zero-carbon city. It is envisaged that this may give the city opportunities in the green technology and services sector. |
| A progressive and equitable city: making a positive contribution by unlocking the potential of our communities | Transitioning to a zero-carbon city can help to tackle fuel poverty by reducing energy bills. Health outcomes will also be improved through the promotion of more sustainable modes of transport and improved air quality.                                     |
| A liveable and low carbon city: a destination of choice to live, visit, work                                   | Becoming a zero-carbon city can help to make the city a more attractive place for people to live, work, visit and study.   |
| A connected city: world class infrastructure and connectivity to drive growth                                  | A zero-carbon transport system would create a world class business environment to drive sustainable economic growth.   |

**Full details are in the body of the report, along with any implications for**

- Equal Opportunities Policy
- Risk Management
- Legal Considerations

### **Financial Consequences – Revenue**

The requirement for ongoing external technical support means that costs are being incurred through the early stages of agreeing the PPA contract, and these costs are funded from existing budgets. Once entered into, the PPA costs will form part of future years' energy revenue budgets. Details of the accounting treatment of the proposed PPA can be found in Part B.

### **Financial Consequences – Capital**

None

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**Background documents (available for public inspection):**

The following documents disclose important facts on which the report is based and have been relied upon in preparing the report. Copies of the background documents are available up to 4 years after the date of the meeting. If you would like a copy, please contact one of the contact officers above.

Manchester City Council Climate Change Action Plan 2020-25:  
[2020-25 MCC Climate Change Action Plan \(Refresh 2022\)](#)

Executive Report, January 2023: Large Scale Renewable Energy Generation Solar Farm Purchase:  
[Large Scale Renewable Energy Generation Solar Farm Purchase Part A.pdf \(manchester.gov.uk\)](#)

## **1.0 Introduction**

- 1.1 The Council's Climate Change Action Plan (CCAP) has a science-based target calculated by the Tyndall Centre for Climate Research to reduce the Council's direct emissions of CO<sub>2</sub> by 41% over the five-year period of 2020-25. In addition, the Council has committed to be zero carbon by 2038 at the latest, also based on the science-based targets developed by the Tyndall Centre.
- 1.2 The Council's CCAP includes a commitment to research and identify options for large scale renewable energy generation to deliver either a solar asset and / or suitable Power Purchase Agreements (PPAs) to achieve a traceable, renewable energy source to deliver CO<sub>2</sub> savings and maximise long-term benefits for the Council.
- 1.3 A Power Purchase Agreement (PPA) is the direct purchase of renewable energy. Investment in a PPA enables additional renewable power generation to be created and added to the national grid. The investment in a PPA is traceable directly to specific renewable energy projects such as wind and solar farms across the UK and guarantees supply of renewable energy over a long-term supply agreement, typically between 5 and 15 years.
- 1.4 This report sets out: the background to the work undertaken to date including an assessment of the City Council's energy demand; and relevant details of the potential purchase of a PPA.

## **2.0 Background**

- 2.1 In January 2022, the Executive granted delegation for the Deputy Chief Executive and City Treasurer, in consultation with the Leader, Executive Member for Finance and the Executive Member for Environment to negotiate for the purchase of a solar asset / PPA and any associated corporate documentation to establish a Special Purpose Vehicle if required.
- 2.2 The volatility in the energy markets linked to the war in Ukraine, combined with uncertain government energy policy over the summer and autumn of 2022 including a likely Government ban on new solar farm developments (since abandoned), plus the financial volatility arising from the UK Government's short-lived financial policies of September 2022 have all contributed to a volatile market over the past 18 months.
- 2.3 In common with many other local authorities, the Council has felt exposure to the volatile energy markets over the past 18 months and is keen to obtain a more secure energy pricing framework. For example, the Council's electricity contract cost has risen by approximately 70% in the 2022-23 contract period (October to September); resulting in a projected contract uplift of over £15m. Manchester City Council's operational estate accounts for approximately half of this. Despite prices having dropped significantly in the recent period, this

project to secure a long-term renewable energy supply gives greater energy security and a degree of long-term protection on future energy prices.

- 2.4 In November 2022, officers identified a potentially suitable large scale solar PV facility available for purchase and submitted an initial non-binding offer to the developer. A report on the potential purchase was made to Executive in January 2023. However, during the Council's detailed assessment of the proposition, the Council took the decision to withdraw from this potential purchase as the site did not pass our due diligence thresholds for viability and therefore did not offer a sound investment opportunity for the Council.
- 2.5 Since the last report to Executive in January 2023, Council officers have continued to explore suitable renewable energy supply options considering the available options for an asset purchase, such as a solar farm, or purchase of renewable energy via a Power Purchase Agreement (PPA) taking advice from external advisors including the Tyndall Centre for Climate Research. Advice from Tyndall is that:
- MCC will likely **remain within its science-based carbon budget by 2025** through its existing programme of actions to reduce CO<sub>2</sub> emissions across our estate, street-lighting, fleet and staff business travel
  - **Planning and action is needed now** to ensure that the 2025-30 carbon budget is not exceeded
  - Using a solar PV farm or **a PPA is recommended to meet carbon targets** where additional renewable electricity generation is created by MCC and applied to reduce electricity related emissions
- 2.6 In purchasing a PPA of this kind, the City Council's commitment to purchase power, gives the power provider certainty of a guaranteed off taker which helps them to fund the construction of an additional renewable energy supply to the grid, thereby reducing the Council's CO<sub>2</sub> emissions for the production of the energy that the Council uses to supply its buildings and to charge its electric vehicles etc. The Council have confirmed with its advisors, including the Tyndall Centre for Climate Research, that the purchase of a PPA is a valid, and indeed essential, contribution towards the Council meeting its Zero Carbon 2038 objectives between 2025/26 and 2038.
- 2.7 To ensure that the Council has appropriate expertise in relation to the securing of a suitable renewable energy supply, MCC has sought commercial advice from EY (Ernst & Young) on the options and viability of purchasing a fixed asset such as a solar farm or purchasing renewable energy through a PPA. Considering the availability of suitable sites, risks and benefits, and the availability of sites and PPAs on the market, the City Council's preferred option is to purchase a PPA.

### **3.0 City Council Energy Demand Assessment and Energy Purchasing Policy**

- 3.1 Throughout April and May 2023, Council officers reviewed and updated the Council's energy demand assessment, which will inform the amount of

renewable offtake needed from the PPA. Additional major energy conservation works by the Council have been fully incorporated into the projection. Technical consultants EY have reviewed and supported the methodology used to amend the energy demand assessment figures. The full energy demand assessment is included in Part B of this report.

- 3.2 Currently, the Council's Energy Management Unit and Procurement colleagues are finalising procurement documents required to establish a new retail electricity supply framework, projected to be in place by September 2023 to replace the now expired previous framework. It is expected that, unlike the framework this replaces, the new framework will accommodate a single supplier across all lots, so that energy taken from a renewable project can be more easily integrated (or "sleeved") into the contracts which make up the demand under consideration for this PPA.
- 3.4 The Council intends to seek additional support and advice from EY and our legal advisors DLA Piper for consideration in establishing this framework agreement.

#### **4.0 Recommendations**

- 4.1 Recommendations are set to at the beginning of this report.

#### **5.0 Contributing to a Zero-Carbon City**

Action 1.3 of the CCAP targets 7,000 tonnes of annual CO<sub>2</sub> savings and is a key action to ensure that the Council plays its full part in delivering the city's Climate Change Framework 2020-25 which aims to halve the city's CO<sub>2</sub> emissions over the next 5 years.

#### **6.0 Contributing to the Our Manchester Strategy**

##### **(a) A thriving and sustainable city**

The transition to a zero-carbon city will help the city's economy become more sustainable and will generate jobs within the low carbon energy and goods sector. This will support the implementation of the Our Manchester Industrial Strategy and Manchester Economic Recovery and Investment Plan.

##### **(b) A highly skilled city**

Manchester is one of a small number of UK cities that have agreed a science-based target and is leading the way in transitioning to a zero-carbon city. It is envisaged that this may give the city opportunities in the green technology and services sector.

**(c) A progressive and equitable city**

Transitioning to a zero-carbon city can help to tackle fuel poverty by reducing energy bills. Health outcomes will also be improved through the promotion of more sustainable modes of transport and improved air quality.

**(d) A liveable and low carbon city**

Becoming a zero-carbon city can help to make the city a more attractive place for people to live, work, visit and study.

**(e) A connected city**

A zero-carbon transport system would create a world class business environment to drive sustainable economic growth.

**7.0 Key Policies and Considerations**

**(a) Equal Opportunities**

There are no equal opportunity issues to note that should arise from the content of this report.

**(b) Risk Management**

The key risk is to successful delivery of the Council's Zero Carbon 2038 objectives and remaining within the science-based carbon budgets set by the Tyndall Centre.

**(c) Legal Considerations**

The legal issues are as set out in part B of this report.

Legal Services will provide support and advice in regard to this project, seeking such appropriate expert technical and professional support and advice as shall be appropriate.