



Executive

Date: Wednesday, 19 January 2022

Time: 2.00 pm

Venue: Council Chamber, Level 2, Town Hall Extension

Everyone is welcome to attend this Executive meeting.

Access to the Public Gallery

Access to the Public Gallery is on Level 3 of the Town Hall Extension, using the lift or stairs in the lobby of the Mount Street entrance to the Extension. **There is no public access from any other entrance.**

Filming and broadcast of the meeting

Meetings of the Executive are 'webcast'. These meetings are filmed and broadcast live on the Internet. If you attend this meeting you should be aware that you might be filmed and included in that transmission.

Membership of the Executive

Councillors

Craig (Chair), Akbar, Bridges, Midgley, Rahman, Rawlins and White

Membership of the Consultative Panel

Councillors

Butt, Karney, M Sharif Mahamed, Ilyas and Taylor

The Consultative Panel has a standing invitation to attend meetings of the Executive. The Members of the Panel may speak at these meetings but cannot vote on the decisions taken at the meetings.

Agenda

- 1. Appeals**
To consider any appeals from the public against refusal to allow inspection of background documents and/or the inclusion of items in the confidential part of the agenda.
- 2. Interests**
To allow Members an opportunity to [a] declare any personal, prejudicial or disclosable pecuniary interests they might have in any items which appear on this agenda; and [b] record any items from which they are precluded from voting as a result of Council Tax/Council rent arrears; [c] the existence and nature of party whipping arrangements in respect of any item to be considered at this meeting. Members with a personal interest should declare that at the start of the item under consideration. If Members also have a prejudicial or disclosable pecuniary interest they must withdraw from the meeting during the consideration of the item.
- 3. Minutes**
To approve as a correct record the minutes of the meeting held on 15 December 2021. 5 - 8
- 4. COVID19 updates - Population Health and Economic Recovery**
Report to follow
- 5. Our Manchester progress update report**
Report to follow
- 6. Finance Settlement and Budget Position** **All Wards**
Report of the Deputy Chief Executive and City Treasurer attached 9 - 26
- 7. Capital Programme Update Report** **All Wards**
Report of the Deputy Chief Executive and City Treasurer attached
- 8. School Budgets report** **All Wards**
Report of the Strategic Director of Children and Education Services attached 27 - 36
- 9. Administration of the Covid 19 Additional Relief Fund (CARF)**
Report to follow
- 10. Grants to businesses in response to the Omicron variant**
Report to follow
- 11. Culture in the City Levelling Up Fund Project** **All Wards**
Report of the Director of City Centre Growth and Infrastructure attached 37 - 48

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|---|---|
| 12. Public Realm Strategy for the back of Ancoats
Report of the Strategic Director (Growth and Development)
attached | Ancoats and
Beswick
49 - 78 |
| 13. Large Scale Renewable Energy Generation
Report of the Deputy Chief Executive and City Treasurer attached | All Wards
79 - 184 |

Information about the Executive

The Executive is made up of 8 Councillors: the Leader and two Deputy Leaders of the Council and 4 Executive Members with responsibility for: Children's Services; Environment; Housing and Employment; and Neighbourhoods. The Leader of the Council chairs the meetings of the Executive

The Executive has full authority for implementing the Council's Budgetary and Policy Framework, and this means that most of its decisions do not need approval by Council, although they may still be subject to detailed review through the Council's overview and scrutiny procedures.

It is the Council's policy to consult people as fully as possible before making decisions that affect them. Members of the public do not have a right to speak at meetings but may do so if invited by the Chair.

The Council is concerned to ensure that its meetings are as open as possible and confidential business is kept to a strict minimum. When confidential items are involved these are considered at the end of the meeting at which point members of the public and the press are asked to leave.

Joanne Roney OBE
Chief Executive
Level 3, Town Hall Extension,
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Further Information

For help, advice and information about this meeting please contact the Committee Officer:

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This agenda was issued on **Tuesday, 11 January 2022** by the Governance and Scrutiny Support Unit, Manchester City Council, Level 3, Town Hall Extension (Lloyd Street Elevation), Manchester M60 2LA

Executive

Minutes of the meeting held on Wednesday, 15 December 2021

Present: Councillor Craig (Chair)

Councillors: Midgley, Rawlins, White

Also present as Members of the Standing Consultative Panel:

Councillors: Karney, M Sharif Mahamed, Ilyas and Taylor

Apologies: Councillor Bridges, Rahman and Butt

Exe/21/121 Minutes

Decision

The Executive approved as a correct record the minutes of the meeting on 17 November 2021.

Exe/21/122 Appointment of Executive Members and their Portfolios

The Executive Leader advised that in accordance with Articles of the Constitution 7.4(c) and 7.5(a), she had given notice to the Monitoring Officer and Members in question of her appointment of Deputy Leader and Executive Members (and associated portfolios).

Decision

The Executive note the appointments of Deputy Leader and Executive Members.

Exe/21/123 Allocation of responsibilities for the discharge of executive functions

The Executive Leader advised that in accordance with Article 7.10(c) of the Council's Constitution, she had undertaken a review of the allocation of responsibilities for the discharge of executive functions recorded in Part 3 of the Council's Constitution and had reaffirmed the existing allocation of such responsibilities, which included:-

- delegation of the discharge of all of the Council's executive functions to the Executive, as per paragraph (A) of Part 3, Section B of the Council's Constitution;
- delegation to officers of the discharge of the Council's executive functions recorded at Part 3, Sections A and F of the Council's Constitution, including both those functions that are designated as "Executive Functions" and, insofar as they are executive functions, those that are designated as "General Functions"; and
- any other arrangements for the discharge of executive functions that were in place at the time of her predecessor's resignation as Leader.

Decision

The Executive note the decision of the Executive Leader to reaffirm the existing allocation for the discharge of executive functions.

Exe/21/124 COVID19 updates - Population Health and Economic Recovery

The Executive considered a report of the Director of Public Health and the Director of City Centre Growth and Infrastructure, which provided an update on the COVID-19 situation within the city and the progress that was being made with the city's economic recovery.

The Director of Public Health advised that infection rates within the city were now 428.6 per 100,000 of the population and Manchester was currently 6th amongst Greater Manchester's Local Authorities in terms of infection rates, with rates significantly increasing due to the recent outbreak of the omicron variant, which now accounted for 55% of all cases and was the dominant strain in Greater Manchester. The infection rate amongst the over 60's was 1608 per 100,000 which at present was remaining steady and put Manchester 5th across Greater Manchester.

He added that the success of the booster programme was vital to keeping rates low and the NHS was likely to be under significant pressure over the forthcoming weeks. A number of Test and Trace teams were dealing with outbreaks in schools and colleges. He reported that in light of the national difficulties faced in ordering LFT home testing kits, a new collection hub had been set up to help residents access these.

It was reported that all over 18's could now book an appointment for their booster vaccination through a number of channels and an updated list of clinics would be put on the Council's website. It was also reported that military support had been brought in to help administer vaccinations.

The Deputy Leader (Health and Care) echoed the seriousness of the situation Manchester and the country faced with the Omicron variant and reported that there had been a strong response from residents to the booster programme, noting that every person that had a booster was helping to protect the NHS front line services.

The Executive collectively placed on record its thanks and appreciation to all Doctors, Nurses, Pharmacists and volunteers helping deliver the vaccination programme to Manchester residents.

In relation to the city's economic recovery, the Director of City Centre Growth and Infrastructure reported that there was concern with the rise of inflation and the impact this would have on economic growth, which would likely be felt in early 2022. In terms of use of public transport and footfall, there had been no significant drop since the new variant was announced and there had been a modest drop in the number of Manchester residents on furlough as well as slight reduction in 16-17 years olds classed as NEET.

Councillor Karney advised that the Council would be monitoring the hospitality situation following the recent announcement of the Prime Minister and stated that the number one priority was the health and employment of people within this sector and representations would be made to Government for financial aid for the sector.

Decision

The Executive note the report.

Exe/21/125 Our Manchester progress update report

The Executive considered a report of the Chief Executive which provided an update on key areas of progress against the Our Manchester Strategy – Forward to 2025 which reset Manchester’s priorities for the next five years to ensure the Council could still achieve the city’s ambition set out in the Our Manchester Strategy 2016 – 2025.

The Leader reported on the launch of the 2022 “Our year” campaign, which aimed to create an array of activities, opportunities and experiences for the city’s children and young people and create a legacy which would make Manchester one of the best places for young people to grow up in.

The Executive Member for Environment reported on a number of areas that contributed to the Council’s ambition of becoming a cleaner and greener city. This included recent consultation on plans to pedestrianise Stevenson Square in the Northern Quarter, with the intention of making it one of the most attractive destinations in the city, the launch of a strategy to revitalise Manchester’s river valleys and put them at the heart of the city’s regenerations, West Gorton Community Park winning a prestigious environmental design award from the Landscape Institute and the commencement of the second year of a two-year project to plant at least 2,000 trees across Manchester, which would contribute to the national Queen’s Green Canopy campaign, for which Greater Manchester is a champion city region.

The Executive Member for Housing and Employment reported on progress that had been made with the large scale redevelopment of Victoria North, with a planning application submitted last month to begin the process of making the Red Bank neighbourhood in north Manchester ready for development, bringing a large swathe of brownfield land back into productive use and also included a commitment to increase biodiversity by at least 10% as a result of the overall development.

Decision

The Executive note the report

Exe/21/126 This City: Manchester's Housing Delivery Vehicle Business Case (Part A)

The Executive considered a report of the Deputy Chief Executive and City Treasurer, which outlined a business case for This City (Manchester’s Housing Delivery Vehicle), detailing the rationale and considerations that had been taken into account

when developing the proposal for the establishment of the Council's wholly owned housing delivery vehicle.

The Executive Member for Housing and Employment reported that the business case outlined the finer detail of the proposed approach, building on the reports presented to the Executive in March and June 2020 and more recently, September 2021. It set out the context of the project, the Council's vision and the proposed governance arrangements and demonstrated the legal frameworks that the Company would operate within and that the proposals met with legal and financial requirements.

If approved, the business case would be used as the guiding document to initiate the operation of the company and delivery of the first two phases of development. The business case would be reported back through to the already established governance structure for This City and would be developed into a business plan for the company. In addition, performance of This City would be reported back through to the Council's Shareholder Panel, to ensure that the company was performing against Key Performance Indicators and financial projections.

Decision

The Executive note the report.

Exe/21/127 Exclusion of the Public

Decision

The Executive agrees to exclude the public during consideration of the following item which involved consideration of exempt information relating to the financial or business affairs of particular persons and public interest in maintaining the exemption outweighs the public interest in disclosing the information

Exe/21/128 This City: Manchester's Housing Delivery Vehicle Business Case (Part B)

The Executive considered a report of the Deputy Chief Executive and City Treasurer, which outlined a business case for This City (Manchester's Housing Delivery Vehicle), detailing the rationale and considerations that had been taken into account when developing the proposal for the establishment of the Council's wholly owned housing delivery vehicle.

Decision

The Executive endorse the attached business case which is to be used as the basis to develop a business plan for This City MCR Limited prior to the company becoming operational.

**Manchester City Council
Report for Information**

Report to: Resources and Governance Scrutiny Committee – 11 January 2022
Executive – 17 January 2022

Subject: Provisional local government finance settlement 2022/23 and budget assumptions

Report of: Deputy City Treasurer

Summary

This report updates on the main announcements from the provisional local government finance settlement 2022/23 announced 16 December 2021, with a focus on the impact on Manchester City Council and its budget for 2022/23. It also outlines the main budget assumptions behind the Medium-Term budget position 2022/23 to 2024/25.

Recommendations

The Resources and Governance Scrutiny Committee is recommended to note the report

The Executive is recommended to note the report.

Wards Affected: None directly

Environmental Impact Assessment - the impact of the issues addressed in this report on achieving the zero-carbon target for the city

The budget reflects the fact that the Council has declared a climate emergency by making carbon reduction a key consideration in the Council's planning and budget proposals.

Manchester Strategy outcomes	Summary of the contribution to the strategy
A thriving and sustainable city: supporting a diverse and distinctive economy that creates jobs and opportunities	The effective use of resources underpins the Council's activities in support of its strategic priorities as set out in the Corporate Plan which is underpinned by the Our Manchester Strategy.
A highly skilled city: world class and home grown talent sustaining the city's economic success	

A progressive and equitable city: making a positive contribution by unlocking the potential of our communities	
A liveable and low carbon city: a destination of choice to live, visit, work	
A connected city: world class infrastructure and connectivity to drive 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 report sets out the announcements in the provisional local government finance settlement 2022/23 and the impact on Manchester City Council.

Financial Consequences – Capital

None directly arising from this report.

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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.

Executive – 17 February 2021 Subject: Revenue Budget 2021/22

Resources and Governance Scrutiny Committee – 9 November 2021 Subject:
Spending Review and budget update

Provisional local government finance settlement: England, 2022 to 2023

1. Introduction

- 1.1. The finance settlement is the annual determination of funding for local government from central government. The provisional 2022/23 settlement was announced 16 December, following the three-year Spending Review announced in October 2021. The settlement has been front loaded and includes a number of one-off distributions of funding. It is also a one-year settlement. Therefore, considerable uncertainty remains in relation to the position after 2022/23.
- 1.2. The Local government funding reform work will be restarted in the Spring. This means that the Fair Funding Review and baseline reset are both going to be under consideration again, for possible implementation in 2023-24. This will potentially impact on how funding between different local authorities is distributed.
- 1.3. A prudent estimate was made of the funding available following the Spending Review and reported to Scrutiny Committees and Executive in November 2021. Whilst a balanced budget was proposed for 2022/23 the Council was facing a budget gap of £63m in 2023/24 rising to nearly £80m in 2024/25. The strategy was to use any additional funding from the Finance Settlement to help close the budget gap in future years and reduce the need for very significant cuts in 2023/24 and beyond.
- 1.4. This report sets out the key elements of the Provisional Finance Settlement and confirms that the c£7.7m savings and mitigations, as reported to Resources and Governance committee on 9 November, are sufficient to deliver a balanced budget next year.
- 1.5. The final budget position for 2022/23 and beyond will be confirmed at February Executive. This will be after the key decisions confirming the Collection Fund position and Council Tax and Business Rates base have been made and the Final Finance Settlement is received. It is unlikely that there will be any significant changes to the Provisional Settlement.
- 1.6. This report is in two parts. The first focuses on the forecast financial impact of the provisional finance settlement on the Council's budget. The second outlines the impact on the Council's budget and the next steps.

Part One: Provisional Finance Settlement Announcements

2. Summary of key announcements

- 2.1. The key points are as follows:
 - It is a one year settlement with a more fundamental review of local government funding starting in 2022.
 - The headline announcement was an additional £3.5bn of funding would be “made available” to councils, a 4% real terms increase. Of this £1.4bn

relates to Council Tax and assumes that every local authority will raise their council tax by the maximum permitted.

- The council tax referendum thresholds are largely as expected: 1.99% maximum “core” increase, 1% adult social care precept, £5 maximum for district councils and £10 maximum for Police and Crime Commissioners. There is a new £5 maximum precept increase for the lowest-funded fire authorities.
- The £3.5bn also includes £1.6 billion of the additional grant funding announced at the Spending Review. Of this £70m will be used to apply inflation to Settlement Funding Assessment (SFA), £636m for additional social care grants, and £822m for a new one-off “Services” Grant.
- The distribution of the Adult Social Care grant takes into account the ability of the local authority to raise council tax via the precept.
- The “Services” Grant has been created to fund general responsibilities including the national insurance increase. This is likely to be redistributed from 2023-24 in line with the planned “fair funding review”. The remaining £100m is for cyber resilience and supporting families with the details yet to be announced.
- The 2022-23 settlement rolls forward many aspects of the current year’s settlement and all existing social care grants have been baselined.
- There is a further New Homes Bonus payment (Year 12, £333m), on top of the final “legacy” payment of £221m. This is now the final year.
- Compensation for under-indexing the business rates multiplier of £375m.
- The 100% Business Rates growth retention pilot will continue for a further year.
- The first £162m of the National Insurance / levy funded support from Department of Health to support Market Sustainability and Fair Cost of Care has been announced. This is distributed using the existing Adult formula and is for the Fair Pricing reforms with some conditions attached on its use.
- The Better Care Fund has been uplifted for inflation.
- Whilst it is anticipated the Public Health Grant will receive a real-term uplift; this is yet to be confirmed.

2.2. This report goes onto outline the impact of the funding announcements on:

- the aligned budget with the Manchester Local Care Organisation (MLCO).
- Ongoing funding that can be built into the budget model
- The proposed use of one-off resources, including that to help close the budget gap in future years.
- The updated position regarding budget savings options and the funding of budget pressures

2.3. The second part of the report details:

- The overall Medium-Term budget position and main assumptions
- The strategy to close the remaining budget gap
- Budget Process for Health and Social Care
- The next steps

3. Implications for the MLCO Budget

- 3.1. It is proposed that the additional funding via the 'social care levy' or Market Sustainability and Fair Cost of Care Fund and the uplifting of the Better Care Fund for inflation are passed directly to the aligned budget for the MLCO. These are **£1.8m** and **£0.9m** respectively, totalling £2.7m.
- 3.2. The 2022/23 Market Sustainability and Fair Cost of Care Fund is designed to ensure local authorities can prepare their care market for reform and move towards paying providers a fair cost of care, as appropriate to local circumstances. The Government expects local authorities will carry out activities including:
- conduct a cost of care exercise to determine the sustainable rates and identify how close they are to it;
 - engage with local providers to improve data on operational costs and number of self-funders to better understand the impact of reform on the local market;
 - strengthen capacity to plan for, and execute, greater market oversight and improved market management to ensure markets are well positioned to deliver on our reform ambitions; and
 - use this additional funding to genuinely increase fee rates, as appropriate to local circumstances.
- 3.3. A further £600m is available for distribution in 2023/24 and another £600m in 2024/25. This is conditional upon the conclusion of the cost of care exercise, a publication of a provisional 3-year market sustainability plan on how councils intend to move to a sustainable rate fee and a grant spending report.
- 3.4. The Market Sustainability and Fair Cost of Care funding is only a small proportion of that which will be raised via the £5.4bn 'social care levy'. The table below shows the latest information available on how this will be utilised including the which £3.6bn will be directed through Local Government and the £1.7bn for wider reform.

Table One: Adult Social Care Reform Funding

Adult Social Care Reform Funding											
£5.4bn over 3 years on adult social care reform											
£3.6bn over 3 years directly to local government for the cap, means test, and fair cost of care			£1.7bn over 3 years to improve wider social care system								
£2.2bn over 3 years for the cap and means test		£1.4bn over 3 years for fair cost of care:		Funding commitments made in the <i>People at the Heart of Care</i> adult social care reform white paper:*							
22/23: £0m	23/24: £800m	22/23: £162m	23/24: £600m	24/25: £600m	At least £300m to integrate housing	At least £150m for technology and digitisation	At least £500m for workforce training and qualifications	Up to £25m to support unpaid carers	£30m for innovation of support and care	At least £5m to help people understand care and support available	More than £70m to improve the delivery of care and support services
24/25: £1.4bn											

4. Implications for the Council's Budget

Additional Ongoing Funding

- 4.1. Following the Provisional Finance Settlement an additional £18.5m per annum is available on an ongoing basis to that assumed (rising slightly each year). This has been built into the budget position, along with a risk allowance of £3m for the impact of the likely funding reforms. This includes:

Share of additional £1.6bn announced in the Spending Review

- 4.2. An additional £1.6bn a year was announced in the Spending Review, starting in 2022/23, although only £1.5bn has been distributed as part of the Settlement. As the method of allocation was unknown, a prudent assumption of an extra £16m for MCC had been assumed, based on the Adult Social Care Formula. The settlement has the Council is receiving £22.2m, an improvement of **£6.2m**.
- 4.3. The £22.2m is allocated over three grants as follows:
- A new one off 2022/23 Services Grant - £12.3m
 - Additional Social Care Funding - £8m
 - Inflation to Settlement Funding Assessment - £1.9m
- 4.4. The one-off Services Grant of £12.3m is allocated based on the Settlement Funding Assessment and is unringfenced, including funding for the increase in

employer National Insurance Contributions. The funding will remain in the national funding total for local government in 2023/24 and 2024/25, but the allocation methodology is likely to change. Given the risks associated with the Fairer Funding reforms a reduced amount of £8.3m has been built into the budget on an ongoing basis.

- 4.5. The distribution of the £8m social care grant is allocated using the adult social care relative needs formula, with 12.6% used to adjust for the funding that could potentially be raised through the adult social care precept in 2022/23. This will help fund the additional funding of £13.4m for demography, increases to the National Minimum Wage, inflation, pay award and the National Insurance increase, that has already been added to the adult social care budget.
- 4.6. The final £1.9m for inflation to Settlement Funding Assessment (SFA) will be added to the Revenue Support Grant (RSG) and can be used for any purpose.

Continuation of the 2021/22 Adult Social Care Grant

- 4.7. In addition, all the existing Social Care funding received up to 2021/22 has been baselined. This includes the **£6.3m** Adult Social Care grant the Council received in 2021/22 which can now be built into the budget on a permanent basis.

Section 31 Business Rates Grants

- 4.8. The government has announced the freezing of the business rates multiplier in 2022/23. Local authorities will therefore be compensated via a section 31 grant. This and associated changes to other Section 31 grants total **£6m**, rising to £6.7m in 2023/24. There are emerging signs of potential pressure on business rates collection with the latest Omicron wave, and the likely need to pay a 2021/22 share of business rates to fund Greater Manchester wide initiatives funded from business rates as part of the 100% Business Rates Growth Retention Pilot. It is therefore recommended the 2022/23 allocation is used to offset these future risks and held in the business rates reserve. Future years funding has been built into the budget position.

One off funding (£8.1m)

- 4.9. There are two sources of funding which will end after 2022/23. These are:
- The New Homes Bonus grant 2022/23 of £333m of which Manchester's receipt is **£6.8m**. This was due to be reformed, however a further one-year payment is being made based on the October council tax return for new housing and houses being brought back into use, with the threshold over which the bonus is paid remaining at 0.4% growth in the Council Tax base. The Government has not yet responded to its consultation on new homes bonus reform.
 - The **£1.3m** Lower Tiers services grant is set to continue for one more year.

- 4.10. As these are one-off there is a need to avoid creating additional pressures for 2023/24 when they drop out of the funding base. In line with the strategy outlined in the November budget report, it proposed to add the £8.1m to the budget smoothing reserve to be applied equally to help close the budget gap in 2024/25 and 2025/26.

Summary position

- 4.11. The tables below show the impact of the provisional settlement and proposed use of additional funds, as set out in the preceding paragraphs.

Table Two: Summary of additional funding

	National Total	Forecast Additional Income		
	2022/23	2022/23	2023/24	2024/25
	£,000	£,000	£,000	£,000
Share of £1.5bn announced in the Spending Review:				
2022/23 Services Grant	822,000	12,324	12,324	12,324
Additional Social Care Funding	636,400	8,047	8,047	8,047
Settlement Funding Assessment Increase	72,500	1,795	1,795	1,795
Less increased resources already assumed following Spending Review £1.5bn announcement		(16,000)	(16,000)	(16,000)
Settlement risk adjustment			(3,000)	(3,000)
Sub total	1,530,900	6,166	3,166	3,166
Other Ongoing Funding:				
Continuation of £300m 21/22 social care grant	300,000	6,313	6,313	6,313
Compensation for under-indexing the business rates multiplier	375,100	6,022	6,730	7,128
Sub total	675,100	12,335	13,043	13,441
One Off Funding:				
New Homes Bonus Scheme	333,000	6,774	0	0
Lower Tier Services Grant	111,000	1,302	0	0
Sub total One	444,000	8,076	0	0
Total additional income	2,650,000	26,577	16,209	16,607

- 4.12. The Provisional Finance Settlement and the proposals set out above, if approved, will reduce the 2023/24 budget gap from £57m to £38m and 2024/25 from £78m to £59m.

Table Three: Impact of settlement on budget gap

	Forecast Impact on budget position		
	2022/23	2023/24	2024/25
	£,000	£,000	£,000
Forecast Shortfall / (surplus) reported to Resources and governance 9 November	(60)	57,139	78,204
Additional resources following settlement	(26,577)	(16,209)	(16,607)
Transfer to Business Rates reserve (Collection fund risk)	6,022	0	0
Transfer one off funds to smoothing reserve to support future years budget	8,076	(4,076)	(4,000)
Spreading of additional funding to support pressures over three years	8,000	(4,000)	(4,000)
Budget to support known budget pressures	4,000	4,000	4,000
Revised forecast Shortfall / (surplus)	(539)	36,854	57,597

Investment proposals – additional pressures and priorities

- 4.13. The figures in this note are provisional and may change as further work is completed. The position will need to be updated again in January. This will include for the most up to date position for business rates and council tax collection and the key decisions made on the collection fund position and the council tax and business rates base for 2022/23. In addition, the final Finance Settlement, once received in February may change slightly.
- 4.14. Further considerable uncertainty remains around the position after the next financial year as consultation on the long-planned reforms to Local Government Funding will resume in Spring 2022. Expected changes include:
- Implementation of the ‘fair funding’ review of local authority financing. This will update the assessment of need and change the distribution of funding across Local Authorities. With the total funding envelop for Local Government remaining at 2022/23 levels, despite proposals for a transition to any new formula there will inevitably be gainers and losers from the changes.
 - The Business Rates Reset will revise baselines for Business Rates income. This means all growth from 2013/14 will be removed from individual Local Authorities and redistributed on a basis yet to be determined.
 - Review of New Homes Bonus – the scheme could be revised or ended completely with funds added back to Settlement Funding Assessment.

- Social Care Reform and the adequacy of the £3.6bn of funding to be made available across three years for implementation.
- 4.15. The funding announced for 2022/23 makes available £12m to fund additional pressures and emerging risks. Given the scale of the remaining budget gap for 2023/24 and 2024/25 and the risks set out above it is recommended that this is not all committed in 2022/23. Creating recurrent spending commitments for 2023/24 would increase the ongoing gap that would have to be closed by further saving. It is therefore recommended that this is used across a three-year period, for example at £4m a year.
- 4.16. Full detail of suggested priorities for funding will be presented to the Executive in February 2022. This could include priorities such as anti-poverty measures, waste and street cleaning. The suggested approach to funding over three years initially would give sufficient time to consider how any ongoing commitments could be mainstreamed into the base funding position.

Part Two: Impact on the Council's Budget

5. Summary position

- 5.1. The table below summarises the Medium-Term budget position after the impact of the settlement announcements and a full review of all the resources available and expenditure commitments.

Table Four: Summary budget position

	Revised 2021 / 22 £'000	2022 / 23 £'000	2023 / 24 £'000	2024 / 25 £'000
Resources Available				
Business Rates Related Funding	156,416	337,398	324,082	342,441
Council Tax	176,857	205,528	204,116	214,567
Grants and other External Funding	120,243	104,533	87,374	85,374
Use of Reserves	184,667	41,783	26,811	11,573
Total Resources Available	638,183	689,242	642,383	653,955
Resources Required				
<i>Corporate Costs</i>	123,097	140,794	113,378	118,016
<i>Directorate Costs</i>	515,086	547,909	565,859	593,536
Total Resources Required	638,183	688,703	679,237	711,552
Shortfall / (surplus)	0	(539)	36,854	57,597

6. Underpinning Financial Assumptions

6.1. This section of the report sets out the main assumptions which underpin the forecast medium term budget.

Local Resources

6.2. Local resources include Council Tax, Business Rates and commercial income, the main assumptions are as follows:

- Significant commercial income does not resume until after 2024/25 at the earliest.
- After the 2021/22 budget was set the estimated business rates appeal requirement was reduced due to the change in policy not to allow appeals related to the impact of COVID-19 (material change in circumstances) and fully refunded retail reliefs were extended. This has led to a one-off (2022/23) business rates surplus, estimated at £10.2m.
- Council Tax has been assumed to increase in line with the Provisional Finance Settlement referenda limits of 1.99% for core council tax and 1% for the Adult Social Care precept in each of the next three years.
- An estimated Council Tax surplus of £6.9m (one off 2022/23) due to growth in the tax base with the delivery of new homes in Manchester, a lower number of student exemptions and fewer Council Tax Support claimants than originally estimated. The ongoing impact of the growth in the council tax base is forecast at c£4.2m a year.

2021/22 Estimated Impact of COVID 19 on Service Delivery

6.3. As part of the 2021/22 budget setting process £24m additional ongoing funding was included in the budget for the ongoing impact of COVID-19. The budget monitoring process has identified that the following amounts were not required due to either an overestimation of the impact of alternative funding being available. These have now been removed from the budget on a permanent basis:

- Adults Personal protective equipment (PPE) (£2.5m) as it has been agreed the anticipated costs are being covered by the Clinical Commissioning Group.
- Children's Services (£1.2m) recurrently due to a positive reduction in demand. This is linked to the preventative actions and investments targeted on the front door, edge of care and approach to permanency.

Inflation and Oncosts

6.4. Inflation is continuing to rise and the following provisions have been made within the draft Revenue Budget:

- The ongoing impact of the potential 2021/22 pay award (£0.8m) and assumed 3% increase per year (£7.5m a year).

- An uplift to National Living Wage of 6.6% to £9.50 per hour was announced as part of the Spending Review. An additional £2.5m in 2022/23 has been allowed for over the £3.1m already included in the 2022/23 budget.
- National Insurance increase of 1.25% (£1.5m).
- The full year effect of electricity price increases forecast at £7.2m next year reducing to £5.5m thereafter.
- Increased allowance to cover general contract inflation and gas of £4m (above existing £4m per year). This is net of additional income which could be achieved through a review of Sales, Fees and Charges. A 2.5% increase would raise around £2m and reflect the increases in costs of providing the services charged for.

Proposed measures to deliver a balanced budget

- 6.5. As set out in the reports to Scrutiny Committees in November 2021 a range of measures were identified to ensure a balanced budget for 2022/23 and to put the Council on as firm a footing as possible for 2023/24 and beyond. The reports set out emerging pressures of £3.2m and proposed mitigating measures of £7.7m. These are subject to formal approval as part of the 2022/23 budget setting process and are set out below.

Budget Pressures

- 6.6. The pressures of £3.2m are summarised in table five and detailed in the paragraphs which follow:

Table Five: Budget Pressures

	2022 / 23	2023 / 24	2024 / 25
	£'000	£'000	£'000
Core Pressures Identified	2,319	2,352	4,134
Neighborhoods Pressures Identified	464	464	464
Children's Centre's Maintenance	400	400	400
Total pressures	3,183	3,216	4,998

- 6.7. Corporate Core £1.264m net pressure (Gross pressure of £2.319m less savings £1.055m). As part of the work to review the budget the directorate has identified budget pressures, some offsetting savings measures and the need to reallocate some resources to reflect the changing priorities in the Directorate. There is a net budget increase of £1.264m which largely reflects two areas of cost which cannot be absorbed from within Corporate Services namely the reduction in court summons fees of £0.5m due to the reduction in summons due to the reduction in levels of Council Tax support residents had to pay in 2021/22 and changes to debt collection, and the additional costs associated with Gorton Hub. Full details are available in the budget report to Resources and Governance committee 9 November 2021.

- 6.8. Neighbourhood Services £464k pressures relating to CCTV (£264k) to cover increased contract costs for monitoring arrangements and Winter Services (£200k) for increased costs of service provision.
- 6.9. Childrens centres maintenance of £400k - In 2012, the Council took the decision to withdraw from the direct provision of day-care services to move to a new model, with the Council acting as commissioner of day-care services. As the estate is not in good condition maintenance costs are higher than day care providers anticipated and can afford. A review of the current arrangements with tendered day-care has been concluded and Executive have agreed a capital investment of £3m to improve the condition of these buildings. However, this is a 3-year programme and current projections indicate an ongoing budget shortfall. It is proposed that this pressure is funded going forward.

Budget Mitigations

- 6.10. The mitigations of £7.8m are summarised in table six and detailed in the paragraphs which follow:

Table Six: Budget Mitigations

	2022 / 23	2023 / 24	2024 / 25
	£'000	£'000	£'000
Proposed savings and mitigations:			
Core Savings	1,055	1,055	1,055
Adults	2,000	2,000	2,000
Homelessness demand management	1,716	3,765	6,237
Staffing budgets	2,000	2,000	2,000
Corporate Budgets	1,000	1,000	1,000
Total proposed mitigations	7,771	9,820	12,292

- 6.11. The mitigations of £7.8m are as follows:

- **£2m** from Adult Social Care that has not been needed is released on a permanent basis. This still leaves an additional £9m in the budget to deal with ongoing demand from COVID-19 which is deemed to be sufficient to meet the ongoing impact and demographic changes.
- £7m was added to the Homelessness budget in 2020/21. In addition, a £1.5m contingency remains and further funding has been announced as part of the Spending Review. It is unlikely that the further planned **£1.7m** per annum increase that was originally budgeted for 2022/23 will be required and this has now been removed from the budget assumptions, although the position will be kept under review.
- Core savings to mitigate pressures **£1.055m** as follows:

- 1% increase in vacancy factor across Corporate Services to reflect actual levels of staff turnover £463k.
- Capital Programmes - increased fee income and increased efficiencies from shared management arrangements with Northwards £230k
- A reduction in supplies and services, printing, and mobile telephony costs £230k
- Legal services increased fee income for works undertaken £82k
- Registrars and Coroners - increased income from increased ceremonies £50k
- Review staff budgeting and vacancy factors. A 1% increase to the vacancy factor would more accurately reflect the fact that many employees are not at the top of the grade and the current levels of turnover and would generate budget savings of c.£2m
- Historic pension costs are continuing to reduce. In addition, there are some legacy financing charges which are no longer required. The relevant corporate budgets can be reduced by £1m.

6.12. A full breakdown of how the above will be allocated will be included in the February Scrutiny and Executive budget reports.

Further Budget Pressures

6.13. The £3.2m budget pressures identified did not include provision for any of the other known pressures and commitments facing the Council. The Provisional Finance Settlement does give some limited capacity to consider the priorities of improving the cleanliness of neighbourhoods, support to the anti-poverty agenda and tackling climate change. Further work is being carried out in advance of the February budget committee cycle on the expenditure required in these areas.

7. Strategy to close the remaining budget gap

7.1. As outlined above a significant budget gap of £36.9m remains in 2023/24, rising to £57.6m in 2024/25 and considerable uncertainty on funding after 2022/23. The potential delay in the return of significant commercial income until after 2024/25 also leaves the City Council in a weaker financial position unless proactive action is taken.

7.2. The above factors, along with the large number of risks facing local government as a whole, mean early work on the 2023/24 budget is required and has been planned. This will include:

- As part of the Future shape change programme work has started on defining the financial and operational benefits that each workstream will deliver. This work will inform a programme of savings to be developed. The move to a 'digital first' approach within the Council will be one of the areas where further savings will be identified.
- The continued work on Public Service Reform and management of demand / prevention will be important, particularly in limiting future demand growth.

- Work to identify invest to save approaches and budget efficiencies.

7.3. A programme of work will be developed around the above to enable the presentation of a balanced set of options early in the next municipal year. The work will target budget cuts and savings of c£40m per annum for 2023/24 and 2024/25.

8. Budget Smoothing Reserve

8.1. As part of the 2021/22 budget setting process £50m of reserves were ring-fenced to support the medium-term budget, although as this would have reduced the amount of unringfenced reserves to £98m, they would need to be replenished in future years. The £50m was to smooth the impact of funding reductions and loss of commercial income and had not been specifically applied to the revenue budget. It included the use of all the service transformation reserve and most of the capital fund.

8.2. The improved settlement position means consideration should be given to reducing the amount held to support the revenue budget to £30m and putting the reserves into a more sustainable position. It is recommended that £30m is still held given the scale of the remaining budget gap from 2023/24 and the uncertainty that remains around commercial income and dividends.

9. Budget Process for Health and Social Care

9.1. The section 75 agreement between MCC and Manchester Foundation Trust (MFT) includes a Financial Framework which sets out the approach to the management of an 'aligned' budget across MCC and MFT for the services in scope of the Manchester Local Care organisation (MLCO). The MLCO is hosted by MFT. The Adult Social Care (ASC) budget constitutes the Council's contribution to the aligned budget.

9.2. In April 2022 Manchester Health and Care Commissioning (MHCC) – the CCG in Manchester, will cease to exist with responsibility for health commissioning moving to the newly formed Greater Manchester Integrated Care System (ICS). ASC within the MLCO will be working with colleagues to ensure that this change is beneficial for Manchester residents and that we are continuing to strengthen the MLCO and maximise opportunities for integration including in our collective commissioning of the external market. The NHS funding regime is also going to look substantially different with a move away from the old payments by results system.

9.3. Ideally there would be a fully integrated budget process to support the MLCO position. Due to the uncertainty around the NHS reforms, the move to the Integrated Care System, what this means for existing CCG funding and responsibilities, alongside the fundamental changes to the NHS planning round, this is not going to be possible for 2022/23. The intention is to move to a fully integrated budget process for 2023/24 when funding streams should be clearer.

9.4. For 2022/23 a workshop will be held in January to review the following areas of work:

- Community Health - Confirm options for 2021/22 Waste Reduction Programme (WRP) and look at the impact of measures on urgent care, primary care, long term conditions and population health. Start discussion on the 2022/23 WRP target.
- Adult Social Care – To carry out a detailed review of how pressures can be met, the position on Better Outcomes Better Lives (BOBL) and the fair price for care work.
- Cross cutting – to consider options for corporate costs and the evaluation of care models

10. Next Steps

Budget Consultation

10.1. It is not anticipated that formal consultation on specific proposals will be required for 2022/23. There is a statutory requirement to consult with business rates payers. In addition, a public consultation on the proposed council tax increases will open 11 January and close on 8 February. The responses will be reported to Executive alongside the budget papers on 16 February.

Formal budget approval

10.2. 2022/23 budget will be subject to further scrutiny and formal approval as follows:

- 8-10 February 2022 - February Scrutiny Committees (see below)
- 16 February 2022 - Executive Proposed budget
- 28 February 2022 - Resources and Governance Budget Scrutiny
- 4 March 2022 - March Council 2022/23 Budget approval
- New Municipal Year – early options around 2023/24 and 2024/25 discussed with Executive members

10.3. At the February meetings all scrutiny committees will receive a short update on the Council's budget and a high-level update on the three-year position. The reports will be tailored to the remit of each scrutiny as shown in the table below.

Date	Meeting	Services Included
8 February 2022	Resources and Governance Scrutiny Committee	Chief Executives Corporate Services Revenue and Benefits / Customer and Welfare Support Business Units

8 February 2022	Communities and Equalities Scrutiny Committee	Sport, Leisure, Events Libraries Galleries and Culture Compliance and Community Safety Housing Operations including Homelessness Neighbourhood teams
9 February 2022	Health Scrutiny Committee	Adult Social Care and Population Health
9 February 2022	Children and Young People Scrutiny Committee	Children and Education Services
10 February 2022	Environment and Climate Change Scrutiny Committee	Waste and Recycling Parks Grounds maintenance
10 February 2022	Economy Scrutiny Committee	City Centre Regeneration Strategic Development Housing and residential growth Planning, Building Control, and licensing Investment Estate Work and skills Highways

11. Conclusion

- 11.1. Overall the settlement announcements were towards the positive end of expectations, although the collection fund position is still to be finalised. It is expected that mitigations in the region of £7.7m, as previously identified, will be sufficient to balance the 2022/23 budget.
- 11.2. The funding outlined in this provisional settlement confirms that the 2022/23 budget can be balanced without additional savings in addition to those already approved. It also brings some one-off capacity for the funding of emerging pressures and some smoothing of future years.
- 11.3. The pandemic and planned funding reforms make it difficult for government to set out a multi-year settlement, however this is the fourth one-year settlement in a row for councils which continues to hamper longer term financial planning. The one-off nature of the £12.3m services grant and the future of New Homes Bonus increase the uncertainty.
- 11.4. Officers have estimated the future resources available based on the information available. This results in forecast gap of £37m in 2023/24 increasing to £58m in 2024/25.
- 11.5. The focus will now be on identifying savings and mitigations to keep the council on a sustainable financial footing. It is proposed that budget cuts and savings of £40m per annum for 2023/24, 2024/25 and 2025/26 are developed for member consideration. £40m equates to just under 8% of 2022/23 directorate budgets. In addition, £30m of risk-based reserves have been identified as available to manage risk and timing differences.

Manchester City Council Report for Resolution

Report to: Executive – 19 January 2022

Subject: School Budgets

Report of: Strategic Director for Children’s and Education Services

Summary

The Dedicated School Grant (DSG) is a ring-fenced grant to support the education of children across the city. It is divided into 4 blocks, the largest of which is the Schools’ Block element, used to fund individual school budgets in maintained schools and academies.

DSG arrangements for 2022/23 remain unchanged with the grant continuing to be allocated to local authorities in four blocks based on a national formula, but Local Authorities can continue to fund schools on the local formula. Manchester’s Schools Forum had previously opted to maintain the local funding formula. In the summer the Government re-confirmed the intention to implement a National Funding Formula which means that primary and secondary school funding longer term is likely to be determined by the Department of Education (DfE).

The school budget report normally forms part of suite of budget papers that are submitted to the Executive in February for approval prior to the financial year they relate to. In previous years, in consultation with Schools Forum and schools, the Local Authority made the decision not to change the formula and to maintain the existing Local Funding Formula (LFF).

This report recommends changing the basis for the funding allocation across individual primary and secondary school budgets from 2022/23, in order to allow schools a longer adjustment period before introduction of the direct national funding formula. The Local Authority has to submit school budgets to Department for Education by January 2022, giving this requirement the recommendations in the paper need to be considered by the Executive in advance of the February meeting.

Recommendations

The Local Authority has undertaken a modelling exercise in order to better understand the potential financial implications of a move to the NFF and in consultation with all schools and through Schools Forum meetings in September and November 2021 it is recommended a **10% transition to NFF values in 2022/23. In addition to the NFF factor for Free School Meal (FSM) at the NFF rate**, with larger capping to ensure affordability.

The Executive is invited to review, comment and approve starting a transition to the National Funding Formula (NFF) in advance of submission of primary and secondary budget to the Department for Education in January 2022.

Wards Affected -

Environmental Impact Assessment - the impact of the issues addressed in this report on achieving the zero-carbon target for the city

The report reflects the fact that the Council has declared a climate emergency by making carbon reduction a key consideration in the Council's planning and budget proposals.

Manchester Strategy outcomes	Summary of how this report aligns to the OMS
A thriving and sustainable city: supporting a diverse and distinctive economy that creates jobs and opportunities	Effective Children and Education Services are critical to ensuring our children are afforded opportunities and supported to connect and contribute to the city's sustainability and growth.
A highly skilled city: world class and home grown talent sustaining the city's economic success	Ensuring children and young people are supported and afforded the opportunity to access and achieve in the City; empowered and supported by the delivery of a strong and cohesive system that works for all children.
A progressive and equitable city: making a positive contribution by unlocking the potential of our communities	Improving education and social care services that are connected to the wider partnership build the resilience of children and families needed to achieve their potential and be integrated into their communities
A liveable and low carbon city: a destination of choice to live, visit, work	Improving outcomes for the children and families across the City, helps build and develop whole communities and increases the liability of the City
A connected city: world class infrastructure and connectivity to drive growth	Successful services support successful families who are able to deliver continuing growth in the City

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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.

1. Introduction

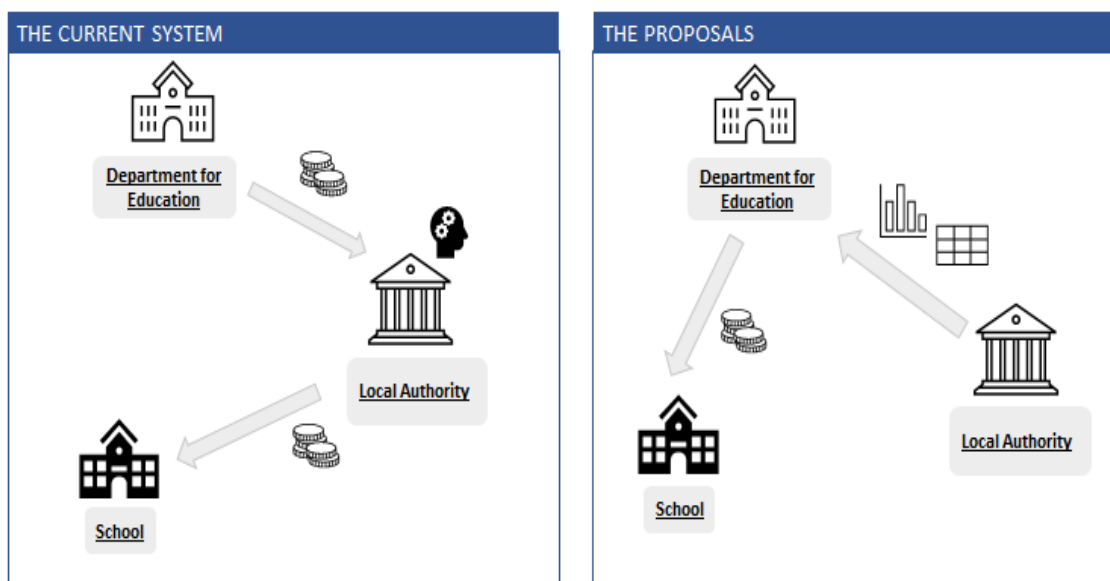
- 1.1 Dedicated School Grant (DSG) is a ring-fenced grant of which the majority is used to fund individual schools budgets in maintained schools and academies in the city, early years nursery entitlement and provision for pupils with high needs including those with Education Health & Care Plans (EHCPs) in special schools, special provision and mainstream schools in Manchester and out of city.
- 1.2 Local authorities receive and manage the DSG within four blocks: schools, central school services, high needs and early years. A large proportion of it is delegated directly to schools and other settings to provide the majority of education services. A small proportion of the DSG is provided for local authorities to deliver support to schools and education system.
- 1.3 Currently Dedicated School Grant (DSG) is allocated to Local Authorities on a national formula basis. Once the grant is received, local authorities calculate funding for individual schools based on different factors in their local formulae to reflect additional needs in schools' allocations.
- 1.4 In July 2021, the Department for Education (DfE) launched a national consultation which seeks to develop a funding system whereby DfE directly funds schools. The DfE plans to move local formulae "progressively closer" to a National Funding Formula (NFF) direct to primary and secondary schools starting in 2023/24.
- 1.5 This report considers the implications of moving Manchester's local funding formula for primary and secondary schools closer to the national funding formula.

2. Background

- 2.1 In Autumn 2017 the DfE announced national changes to the school funding formula which will eventually see all mainstream school budgets set using a national funding formula. To date, a 'soft' approach has been undertaken where the funding which local authorities receive is based on the new formula but there continues to be a degree of local discretion in terms of determining the funding formula values and factors used within each local authority area, please see illustration one below.

Illustration one: Current Funding Allocation process and proposed Direct Funding Allocation process

Proposals:



- 2.2 In the past few years, in consultation with Schools Forum and schools, the Local Authority made the decision to maintain the existing Local Funding Formula (LFF). This afforded schools financial stability whilst preparing for the eventual move towards the direct National Funding Formula (NFF).
- 2.3 In July 2021, the DfE launched a consultation which seeks to develop a funding system whereby the DfE directly funds schools. Plans to move local formulae "progressively closer" to a NFF direct to schools starting 2023/24. The DfE has confirmed that it does not plan to set a "fixed target date by which the direct NFF will be fully in place".
- 2.4 The consultation outlined a plan that would involve requiring Local Authority to bring each of its local formula factors "at least 10% closer to the NFF factor value", compared with 2022/23. After an initial 10% movement closer to the NFF in 2023/24, and subject to the impact of this movement, the aim is to move at least 15% to the NFF in 2024/25 and at least 20% in 2025/26. Schools will continue to be protected from cash-term losses in their per-pupil funding by the Minimum Funding Guarantees (MFGs), this ensures that schools receive at least what they did previously on a per pupil basis.
- 2.5 The Local Authority has undertaken a modelling exercise in order to better understand the potential financial implications of a move to the NFF, whether it be gradual or immediate. This modelling found that individual schools' budgets under each model would be protected at nearly the same levels via operation of the MFG during the transition. Funding under LFF and NFF models would be similar in the short-term.

- 2.6 The modelling was provided to Schools Forum in September 2021, and is replicated in Appendix One. Following the meeting in September 2021, a consultation was launched with Manchester schools, concluding on the 5th November 2021.
- 2.7 Consultation results – 44 schools responded to the consultation, which comprised of two questions in principle: (i) do schools support the LA’s transition towards the NFF in 2022/23 and (ii) do schools support addition of the Free School Meals (FSM) factor to the local formula.
- i. Responses to the first question were overall positive, with 37 schools voting in favor of the proposed transition, stating it would be prudent to begin a gradual transition, allowing schools a longer adjustment period and more time to monitor real-term impacts and undertake multi-year strategic planning. Reduced reliance on the Minimum Funding Guarantee (MFG) and increased stability for schools were also cited as reasons for support. 1 school opposed the proposal, raising concerns that Manchester’s currently generous local formula may be adversely impacted by the transition. 6 schools voted as “not sure”, primarily based on not having enough understanding of the budgetary impacts, with several schools requesting data on their individual budget shares under the various models.
 - ii. Responses to the second question were again positive, with 37 schools voting in favor of the proposal, with the view that the additional FSM funding would acknowledge the high proportions of FSM children in Manchester schools and would help support levels of deprivation in the city. 7 schools were “not sure”, as they felt they did not have enough information to submit a response, or due to confusion about whether this FSM funding would be additional to the current FSM ever 6 funding or would replace it. The LA clarified it to be the former.
- 2.8 To allow schools a longer adjustment period before the introduction of the direct NFF and based on the data currently available, it is recommended that the **adoption of a 10% transition to NFF values in 2022/23**, as well as the **addition of the NFF factor for Free School Meal (FSM) at the NFF rate**, with larger capping to ensure affordability. Under this model, there is marginally more funding locked into protected budgets; meaning that school budgets would be protected from big swings year-on-year, and reduces the risk of reliance on MFG, model 2A in Appendix one. This is in line with consultation responses from Schools Forum and schools.

Schools Block Funding Settlement 2022/23

- 2.9 In mid-July 2021 the DfE announced the provisional School Funding Settlement 2022/23. The allocations are notional. Increasing by 3.2% overall, and by 2.8% per pupil, compared with 2021/22, with the funding floor allocating at least 2% more in pupil-led funding per pupil.

2.10 The settlement was announced on the 16th December 2022. Manchester will receive the minimum, a 2% increase, which equates to £10m for primary and secondary schools in the City, and £8.6m in recognition of additional pupils the City. The Local Authority held Central Services schools block has reduced mainly due to a decrease in the amount grant allocated per pupil. The high needs block has increased by £9.4m, mainly due to recognition of additional pressures in this part of the grant. The early years block has reduced £3.1m following a reduction in early years children taking up offers, please table one below:

2.10 **Table one: Dedicated Schools Grant Settlement 2022/23**

	2022 to 2023 DSG allocations, before recoupment and deductions for national non-domestic rates, and for direct funding of high needs places by Education and Skills Funding Agency (ESFA)				
	Schools block (£s)	Central school services block (£s)	High needs block (£s)	Early years block (£s)	Total DSG allocation (£s)
2022/23	475,053,544	3,796,486	110,024,402	38,807,749	627,682,181
2021/22	456,200,384	3,901,830	100,583,526	41,941,475	602,627,215
Change	18,853,160	- 105,344	9,440,876	- 3,133,726	25,054,966
Pupil Number change	8,616,670	55,232	695,000	- 4,502,000	4,864,902
Growth Fund	246,091				246,091
Formula Change	9,990,399	- 160,576	8,745,876	1,368,274	19,943,973

2.11 After the provisional settlement the October spending review announcements indicated at a national level a core school budget increase of £4.7bn by 2024/25, compared to original 2022/23 plans, this includes £1.6bn in supplementary funding for 2022/23 budgets, on top of DSG.

Supplementary funding 2022 to 2023

2.12 Manchester's allocation is £18m. Of which £14m is for primary and secondary provision this, the grant is being provided in respect of both the Health and Social Care Levy and other cost pressures. The DfE will publish school-level allocations of the Schools Supplementary Grant in spring 2022. £4m - Special schools and other high needs providers is an increase of 4% to the high needs allocations announced in July 2021.

Pupil premium for 2022 to 2023

2.12 DfE have also confirmed funding rates for the pupil premium in the financial year 2022 to 2023 – increasing by 2.7%, in line with the inflation forecasts. Rates for 2022 to 2023 will be:

- Primary FSM6 pupils: £1,385
- Secondary FSM6 pupils: £985
- Looked-after children: £2,410
- Children who have ceased to be looked-after: £2,410

- Service children: £320

3 Recommendations

- 3.1 The Executive is invited to review and comment on the 2022/23 individual school budgets primary and secondary recommendation of starting a transition to the NFF. More specifically it is recommended that a **10% transition to NFF values in 2022/23**, as well as the **addition of the NFF factor for Free School Meal (FSM) at the NFF rate**, with larger capping to ensure affordability.

4. Contributing to a Zero-Carbon City

- 4.1 Explain how this helps to make climate breakdown and the environment an integral part of activity throughout the Council, including all decision making?

5. Contributing to the Our Manchester Strategy

(a) A thriving and sustainable city

- 5.1 Effective Children and Education Services are critical to ensuring our children are afforded opportunities and supported to connect and contribute to the city's sustainability and growth.

(b) A highly skilled city

- 5.2 Ensuring children and young people are supported and afforded the opportunity to access and achieve in the City; empowered and supported by the delivery of a strong and cohesive system that works for all children.

(c) A progressive and equitable city

- 5.3 Improving education and social care services that are connected to the wider partnership build the resilience of children and families needed to achieve their potential and be integrated into their communities.

(d) A liveable and low carbon city

- 5.4 Improving outcomes for the children and families across the City, helps build and develop whole communities and increases the liability of the City.

(e) A connected city

- 5.5 Successful services support successful families who are able to deliver continuing growth in the City.

6. Key Policies and Considerations

(a) Equal Opportunities

- 6.2 Education services provide support and challenge to schools to address gaps in attainment and disproportionality in attendance and exclusion between black, Asian and other ethnic minority groups in the city. They are encouraging all schools to sign up to the Diverse Curriculum Charter developed by Afsal Khan and developing a plan in collaboration with Teaching School hub and school leaders to ensure the school workforce and school leadership better reflects the diversity in the city.

(b) Risk Management

- 6.2 There are no risk management issues arising from this report.

(c) Legal Considerations

- 6.3 There are no risk management issues arising from this report.

**Appendix 1 – Children and Young People’s Scrutiny Committee minute extract
– 8 December 2021****CYP/21/60 School Budgets 2022/23**

The Committee received a report of the Strategic Director of Children and Education Services which recommended changing the basis for the funding allocation across individual primary and secondary school budgets from 2022/23, in order to allow schools a longer adjustment period before introduction of the direct national funding formula.

The main points and themes within the report included:

- Background information, including national changes to school funding; and
- Proposals to start a transition to the National Funding Formula.

In response to a question from the Chair about whether there were any negative responses from schools to the consultation, the Head of Finance advised that schools wanted clear figures on what the impact would be but that that this level of detail was not yet available, although they had been provided with the information in appendix 1 of the report.

Decision

To note the report.

**Manchester City Council
Report for Resolution**

Report to: Executive – 19 January 2022

Subject: Culture in the City Levelling Up Fund Project

Report of: Director of City Centre Growth & Infrastructure

Summary

This report informs the Executive of the details of the Culture in the City Levelling Up Fund project and the Council's successful bid to the Department for Levelling Up, Housing & Communities (DLUHC) for £19.8 million of grant funding. It also seeks approval to enter into an agreement with DLUHC for the grant, and an accompanying onward funding agreement for up to £17.5m with Allied London, in order to facilitate the delivery of the Campfield element of the project, and an increase in the capital budget to reflect the receipt of the external grant funding.

Recommendations

The Executive is recommended:

- (i) To approve the Council accepting a £19.82 million Levelling up Fund grant from the Department for Levelling Up, Housing & Communities (DLUHC) and entering into all necessary agreements in order to receive the funding;
- (ii) To delegate authority to the Strategic Director – Growth & Development, the Deputy Chief Executive & City Treasurer and the City Solicitor to negotiate and agree the detailed terms of a Memorandum of Understanding (MOU) and any other agreement necessary with DLUHC to secure this funding;
- (iii) To approve the Council entering into an onward funding agreement for a maximum sum of £17.52m with Allied London, in order to facilitate the delivery of the Campfield element of the project;
- (iv) To delegate authority to the Strategic Director – Growth & Development, the Deputy Chief Executive & City Treasurer and the City Solicitor to negotiate and finalise the detailed terms of the onward funding agreement and any other necessary agreements with Allied London in respect of the Campfield element of the project;
- (v) Approve a capital budget increase of £19.82m (£17.52m for Campfield and £2.3m for the Arches), funded from the external grant funding, for the activities included within the Culture in the City application, noting that spend will not be incurred until the completion of the necessary agreements; and
- (vi) To authorise the City Solicitor or the Deputy Chief Executive and City Treasurer, as applicable, to complete and enter into all necessary agreements

or documents to give effect to the above recommendations.

Wards Affected – Deansgate

Environmental Impact Assessment - the impact of the decisions proposed in this report on achieving the zero-carbon target for the city
<p>Through the repurposing of existing, heritage buildings, the project reduces the environmental impact of creating new provision. Carbon reduction considerations will be made at the design and construction stages. The buildings are located close to Deansgate and Oxford Road railway stations, a Metrolink stop, bus routes and secure cycle parking, making them accessible to workers and visitors from across the conurbation through public transport and active travel.</p> <p>Greater Manchester Arts Centre, who will operate the Arches element of the project, is a founding member of the Manchester Arts Sustainability Team (MAST) initiative – a national and international exemplar of collective carbon reduction targets and engaging audiences and customers. HOME is the first arts and cultural venue in the world to have 100% of staff trained in Carbon Literacy (certified by the Carbon Literacy Project) and is one of the first organisations worldwide to be recognised with Platinum Carbon Literate Organisation status. This leading practice will be implemented in the development and management of the Arches.</p>

Our Manchester Strategy outcomes	Contribution to the strategy
<p>A thriving and sustainable city: supporting a diverse and distinctive economy that creates jobs and opportunities</p>	<p>The Culture in the City project will support the growth of the tech and creative sectors in the city, which have a key role in supporting economic recovery and ongoing growth in the Manchester economy. The tech and creative sectors provide an important source of new employment for Manchester’s young people, in particular, with the sectors’ employment profile dominated by younger workers.</p> <p>The project will directly support up to 4,000 jobs over the 15 years of the grant funding (both in existing and new businesses), providing job opportunities for local people. The skills and talent development opportunities provided by the project will also support local residents to access jobs in this important sector.</p>

<p>A highly skilled city: world class and home grown talent sustaining the city's economic success</p>	<p>The project will play a significant role in developing local talent in the tech and cultural industries.</p> <p>The project will create an additional 5,000 hours of free rehearsal space in the city; and build the creative skills of Manchester's young people to prepare them for careers in the creative industries.</p> <p>It will also provide space and business support to assist local start up businesses in the tech and creative sectors.</p>
<p>A progressive and equitable city: making a positive contribution by unlocking the potential of our communities</p>	<p>We expect that the project will provide significant opportunities for people with protected characteristics and from other target groups (e.g. young people) through the provision of affordable space and job and training opportunities accessible to local residents from across our communities. The creative and cultural sectors are attractive to people from a range of backgrounds.</p> <p>HOME is a creative hub for the region, where local and world-class talent of all backgrounds and disciplines are discovered, nurtured and showcased. The company has a commitment to champion anti-racism, equality and diversity through the way it works and informed by discussions with HOME staff through an Equality and Diversity Staff Working Group.</p>
<p>A liveable and low carbon city: a destination of choice to live, visit, work</p>	<p>The project will bring back into use three under-utilised listed buildings, greatly improving their appearance, and avoiding the need for new build accommodation. These buildings can become assets for their local neighbourhoods and allow them to be used again by local people and to the benefit of the city.</p>

<p>A connected city: world class infrastructure and connectivity to drive growth</p>	<p>The Campfield buildings and the Arches are located close to Deansgate and Oxford Road railway stations respectively, as well as the Deansgate Castlefield and St Peter's Square Metrolink stops, key bus routes and secure cycle parking, making them highly accessible by public transport and active travel.</p> <p>The project will also provide new job and training opportunities for people living in surrounding communities, accessible using local transport links.</p>
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Full details are in the body of the report, along with any implications for

- Equal Opportunities Policy
- Risk Management
- Legal Considerations

Financial Consequences – Revenue

None as a consequence of this report. We are exploring with DLUHC opportunities for using any future under-spends on the project to pay for project evaluation.

Financial Consequences – Capital

The MOU with DLUHC will provide £19.82m of additional capital grant over the next 3 years, broken down as follows:

- 2021/22 – Campfield £694k, Arches £391k, total £1.08m
- 2022/23 – Campfield £9.93m, Arches £1.92m, total £11.85m
- 2023/24- Campfield £6.89m, total £6.89m

The Council will receive grant monies on a 6 monthly basis, with 3 months paid in arrears and 3 months in advance. The deadline for spend under the project is March 2025.

Match funding of £215k from the City Council towards the Home Arches element of the project is already included within the Capital Programme for 2021/22.

A further £3,724,500 was approved at the February 2020 Strategic Capital Board meeting and is included in the approved Capital Programme for the acquisition of Castlefield House, as part of the Campfield element of the project. The funding covered the £3,500,000 acquisition cost of the building from Allied London, plus Stamp Duty Land Tax and Legal and Agent fees.

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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.

Culture in the City Levelling Up Fund application form.

Notice of Key Decision – 19 April 2021 - To give Capital Expenditure approval to the Redevelopment of Campfield Market Halls (including acquisition of Castlefield House) £3,735,000.

1.0 Background

- 1.1 The Levelling Up fund was confirmed at the 2021 Budget, and provided £4bn from the DLUHC for “levelling up” schemes in England during the course of this parliament. Local Authorities are eligible to apply for bids of up to £20m for each of the constituencies within its boundary. The first round of the Fund focused on three themes - town centre and high street regeneration; cultural investments and transport investments. Applications for round 1 of the scheme were invited by DLUHC by 18 June 2021, with projects required to start within financial year 2021-2.
- 1.2 Two projects were selected as meeting the criteria for round 1 of the Levelling Up Fund and were submitted in line with the deadline. The two projects are the Culture in the City Project (Central Constituency, £19.8m grant) and Withington Village (Withington Constituency, £13.5m).
- 1.3 Following an appraisal process by DLUHC, the City Council was informed in October 2021 that the Culture in the City project had been successful in its application, for the full amount of £19.82m. Unfortunately, the Withington Village project was unsuccessful, and a meeting is taking place in January with Government officials who will be providing feedback on the reasons for this.

2.0 The Culture in the City Project

- 2.1 The Culture in the City project will deliver high quality, affordable tech and creative work and production space in under-developed parts of the city centre that are recognised regeneration priority areas, supporting levelling up, economic recovery and sector growth.
- 2.2 The project aims to broaden the creative and cultural infrastructure, which will support both the re-purposing and recovery of the city centre, and business start-up and skills development opportunities for local people within the creative sector. It is based around 2 elements, set out below.
- 2.3 **Campfield** is the creation of a new media and tech industries cluster in the St John’s Strategic Regeneration Framework (SRF) area, based on two over-riding criteria of sustainability and affordability. It will deliver inspiring workspaces and studio spaces, to attract and support start-up, recovery, and scale-up businesses around tech, innovation and media through the re-adaptation of three buildings, including two heritage buildings, which have reached the end of their economic life. The grant is to cover the conversion of the two heritage Campfield Market buildings, with the third, Castlefield House, to be delivered by Allied London using their own investment. The Council has capital programme approval to acquire Castlefield House, which is being significantly redeveloped and extended as grow on space for new media and tech businesses. The building will be acquired on completion of the building works. All three properties will then be leased back to Allied London, on completion of the refurbishment works.

2.4 The Campfield Market buildings element will provide around 8k sqm of modern workspace. The offer will include resident and flexible access desks, meeting rooms, studios and event space, accessible under a membership model that is responsive to the sector's needs. Following the Exchange model – the Department for Culture, Media & Sport funded tech incubator, managed by All Work and Social (an Allied London managed workspace company) - being successfully applied at the Bonded Warehouse, the facility will:

- Engage ambitious early stage tech companies on a 6 to 12-month scheme.
- Offer accommodation at subsidised rates, including free space.
- Facilitate networking and collaborative working between members.
- Provide access to tailored events, including themed workshops, upskilling sessions and speaker events.
- Provide the support needed by new and growing businesses to succeed.
- Support approximately 4,000 jobs over the 15-year grant period.

2.5 The **Arches Project** will transform three heritage railway arches, situated between HOME's building and Whitworth Street West, into a talent development centre for artists of all ages, disciplines and stages of their careers. The Arches Project will nurture, attract and retain creative talent in Manchester by providing free, high-quality space to artists in the city centre, as well as supporting place-making and cementing First Street as a major visitor destination.

2.6 The arches will offer:

- Flexible workshop space for work with young people.
- Affordable co-working space for artists.
- A double-height making and sharing space for artists.

2.7 Adjacent to, and operated by, HOME, the facility will target artists from all backgrounds, and give them a greater sense of ownership of cultural facilities in the city, empowering them to develop new work and successful careers.

2.8 The facility will offer 5,000 hours of free rehearsal space and allow up to 3,500 young people and an additional 50 schools to benefit from HOME's training offer per annum, bringing significant economic and social benefits.

3.0 **Levelling Up Fund Grant**

3.1 It is understood that the £19.8million Levelling Up Fund grant from DLUHC will be governed by a Memorandum of Understanding (MOU). The Council has been provided with a template MOU from DLUHC which is intended to form the basis of all Levelling Up grants across the country. Council officers are currently liaising with DLUHC in relation to the project specific elements of the MOU with the intention that this would be agreed between the Council and DLUHC early in 2022.

- 3.2 The MOU covers the funding commitments from DLUHC, and the delivery, financial, expenditure, agreed milestones, reporting and evaluation, communication and branding expectations between DLUHC and the Council.
- 3.3 The funding is provided to form part of the necessary capital investment required for delivery of the Council's Culture in the City project. DLUHC expects the Council to use the funding provided for the purposes outlined in the approved application.
- 3.4 Grant funding will be paid in six monthly tranches, and on the basis of agreed delivery targets having been met. It is anticipated that the first grant payment to the Council will be made in February 2022. The Council must spend all grant funding by 31st March 2025.
- 3.5 The MOU is initially intended to cover financial years 2021/2022 and 2022/2023, with the intention for its operation to be reviewed and amended to cover future years no later than February 2023.
- 3.6 The Council will provide regular project, financial, and risk reporting to DLUHC, demonstrating expenditure of the previous funding and that outputs and outcomes are being met.
- 3.7 The Council is required to accept responsibility for meeting any costs to the project over and above DLUHC's contribution. In respect of the Campfield's element the Council intends to flow down such risks to Allied London in the onward grant agreement.
- 3.8 The outputs which are expected to be delivered by the project are:
- 4,000 jobs (2,600 safeguarded, 1,400 new)
 - 3 buildings improved
 - 8,440 sqm of workspace (across both Campfield and the Arches)
 - 5 commercial units with broadband access of at least 1Gbps

In addition, the number of cultural events, level of business investment, and use of workspaces will be monitored.

4.0 Project Delivery

- 4.1 **Campfield:** As set out in the successful application to DLUHC, the Council will pass down the grant funding to Allied London, in order to facilitate the delivery of the Campfield element of the project. This will support and align with the overall delivery arrangements for the St John's regeneration scheme. Allied London will take on responsibility for the appointment of a design and construction team to undertake the works required. Following completion of the works the buildings will form an extension to the existing Exchange tech incubator (described in paragraph 2.4).
- 4.2 This arrangement recognises Allied London's ownership of Castlefield House, located between the two Campfield Market Buildings, their operation of the

successful Exchange tech incubator, and their wider role in the management and delivery of Enterprise City, part of the St John's SRF area, and will allow a comprehensive eco-system of provision to flourish and be enhanced.

4.3 The rationale for this proposed approach includes the following:

- Work undertaken to date will enable further plans to be developed quickly with governance arrangements in place.
- A prompt start to delivery can be secured.
- It provides the ability to draw on the experience and track record of the developer and their facility operating arm, ensuring tech sector specific expertise is available to inform the design.
- A comprehensive eco-system solution for tech and creative businesses across the wider St John's SRF area.
- Scope for efficiencies to be secured through the operation of Campfield as an extension to the adjacent Tech Hub facility at the Bonded Warehouse.

4.4 The Council will enter into an onward grant funding agreement with Allied London to pass down the DLUHC funding and associated obligations together with any additional Council specific requirements. Under the onward grant agreement, Allied will be required to commit to delivery of the outputs for the Campfield element of the project, including 4,000 jobs, 8k sqm of floorspace, provision of digitally connected workspace units, and the level of business investment and use of workspaces by businesses, with progress to be measured against these metrics.

4.5 **The Arches:** Robertson Construction has been directly appointed by the Council as the design and build contractor for the Arches, following the funding of the initial feasibility and design works through the Capital Programme. The grant funding will, therefore, be directly controlled and expended by the Council.

4.6 The facility will be operated by HOME, through the existing Service Level Agreement between Manchester City Council, which owns HOME, and its operators - Greater Manchester Arts Centre Ltd (trading as HOME). A series of Key Performance Indicators are attached to the existing Service Level Agreement, which will be revised to reflect the additional activities facilitated by the development of HOME Arches – i.e. training hours provided, additional cultural events held and use of the space by local young people and artists.

5.0 Conclusion

5.1 The Culture in the City project will make a key contribution to the growth of the tech and creative sectors in the city, and provide new opportunities for local residents, supporting levelling up and economic recovery, and contributing to local regeneration. The award of £19.8m for the project from the Department of Levelling Up, Housing and Communities is greatly welcomed. The Council is working with existing partners, with a strong track record in delivery in these areas, in order to deliver the activities and outcomes of the project.

- 5.2 The Executive are requested to approve the arrangements for the acceptance and delivery of the £19.82m Levelling Up Fund grant for the project, as set out in the recommendations at the start of the report.

6.0 Contributing to a Zero-Carbon City

- 6.1 Through the repurposing of existing, heritage buildings, the project reduces the environmental impact of creating new provision with carbon reduction considerations at the design and construction stages. The buildings are located close to Deansgate and Oxford Road railway stations, a Metrolink stop, bus routes and secure cycle parking, making them accessible to workers and visitors from across the conurbation through public transport and active travel.
- 6.2 Greater Manchester Arts Centre, who will operate the Arches element of the project, is a founding member of the Manchester Arts Sustainability Team (MAST) initiative – a national and international exemplar of collective carbon reduction targets and engaging audiences and customers. HOME is the first arts and cultural venue in the world to have 100% of staff trained in Carbon Literacy (certified by the Carbon Literacy Project) and is one of the first organisations worldwide to be recognised with Platinum Carbon Literate Organisation status. This leading practice will be implemented in the development and management of the Arches.

7.0 Contributing to the Our Manchester Strategy

(a) A thriving and sustainable city

- 7.1 The Culture in the City project will support the growth of the tech and creative sectors in the city, which have a key role in supporting economic recovery and ongoing growth in the Manchester economy. The tech and creative sectors provide an important source of new employment for Manchester's young people, in particular, with the sectors' employment profile dominated by younger workers. The project will directly support up to 4,000 jobs over 15 years (both in existing and new businesses), providing job opportunities for local people. The skills and talent development opportunities provided by the project will also support local residents to access jobs in this sector.

(b) A highly skilled city

- 7.2 The project will play a significant role in developing local talent in the tech and cultural industries. The project will create an additional 5,000 hours of free rehearsal space in the city; and build the creative skills of Manchester's young people to prepare them for careers in the creative industries. It will also provide space and business support to assist local start up businesses in the tech, digital and creative sectors.

(c) A progressive and equitable city

- 7.3 We expect that the project will provide significant opportunities for people with

protected characteristics and from other target groups (e.g. young people) through the provision of affordable space and job and training opportunities accessible to local residents from across our communities. The creative and cultural sectors are attractive to people from a range of backgrounds. This will be further assessed within the Equality Impact Assessment.

- 7.4 HOME is a creative hub for the region, where local and world-class talent of all backgrounds and disciplines are discovered, nurtured and showcased. The company has a commitment to champion anti-racism, equality and diversity through the way it works and informed by discussions with HOME staff through an Equality and Diversity Staff Working Group.

(d) A liveable and low carbon city

- 7.5 The project will bring back into use three under-utilised listed buildings, greatly improving their appearance, and avoiding the need for new build accommodation. These buildings can become assets for their local neighbourhoods and allow them to be used again by local people and to the benefit of the city.

(e) A connected city

- 7.6 The Campfield buildings and the Arches are located close to Deansgate and Oxford Road railway stations respectively, as well as the Deansgate Castlefield and St Peter's Square Metrolink stops, key bus routes and secure cycle parking, making them highly accessible by public transport and active travel. The project will also provide new job and training opportunities for people living in surrounding communities, who can access them using local transport links.

8.0 Key Policies and Considerations

(a) Equal Opportunities

- 8.1 We expect that the project will provide opportunities for people with protected characteristics and from other target groups (e.g. young people) through the provision of affordable space and job and training opportunities accessible to local residents from across our communities.

(b) Risk Management

- 8.2 A risk register has been established for the project. This will be monitored throughout the course of the project as part of the internal and Government monitoring and report arrangements.

(c) Legal Considerations

- 8.3 The Council will be receiving the DLUHC under Section 50 of the United Kingdom Internal Markets Act 2020 (Power to Provide Financial Assistance for Economic Development etc).

- 8.4 The Council will be entering into the onward funding grant agreement with Allied pursuant to its powers under Section 1 of the Localism Act 2011.
- 8.5 Legal Services will continue to work closely with the project team in order to finalise the detailed terms of the MOU with DLUHC and the onward grant agreement with Allied London. Legal Services will continue to support and advise the team on all aspects of this project to facilitate delivery, mitigate risks where possible and ensure compliance with all relevant law (including Subsidy Control and Public Procurement requirements) and contractual terms.

**Manchester City Council
Report for Resolution**

Report to: Executive – 19 January 2022

Subject: Development and public realm strategy for the Back of Ancoats

Report of: Strategic Director for Growth & Development

Summary

This report follows on from the report to the Executive in September 2021. That report, updated Members on activity that had been taking place to support the delivery of the Ancoats and New Islington Neighbourhood Development Framework (NDF), by bringing forward investment and development to deliver up to 1500 new residential units and the Ancoats Mobility Hub that will contribute to the sustainability of the neighbourhood and promote a modal shift towards cycling and walking. It was acknowledged that a complementary public realm strategy with the Ancoats Mobility Hub at its heart would be critical to underpin development activity and ensure a fully integrated approach to placemaking. The September report recommended bringing further details back prior to undertaking stakeholder consultation.

Recommendations

The Executive is recommended to:

1. Endorse the draft public realm strategy as a basis for a consultation exercise with landowners, developers and local stakeholders, which will be undertaken in February 2022.
2. Note that the outcomes of the consultation and a final version of the Back of Ancoats public realm strategy will be reported to a future meeting of the Executive. It is proposed that, once adopted, the public realm strategy will be used as a material consideration for the City Council when considering all future planning applications relevant to the Back of Ancoats.
3. Note progress on the preparation of a full business case to Homes England for essential enabling infrastructure including the Ancoats Mobility Hub.
4. Delegate authority to the Strategic Director for Growth and Development and the Deputy Chief Executive to finalise the business case for the Ancoats Mobility Hub.
5. Delegate authority to the Strategic Director for Growth and Development and Deputy Chief Executive to negotiate contractual terms for the delivery and operation of the Ancoats Mobility Hub.
6. Delegate authority to the Strategic Director for Growth and Development and Deputy Chief Executive to agree the detailed grant funding terms and conditions relating to the Homes England grant funding bid.
7. Delegate authority to the City Solicitor to finalise the terms and conditions of all

contractual documentation to give effect to the above recommendations.

8. Note that, whilst the City Council will seek to acquire the necessary land and property interests to deliver the Ancoats Mobility Hub and public realm strategy by agreement, this may not be possible and a future report may need to be brought back to the Executive in the future to seek authority to promote a Compulsory Purchase Order.

Wards Affected – Ancoats and Beswick

Environmental Impact Assessment - the impact of the decisions proposed in this report on achieving the zero-carbon target for the city
<p>The Ancoats and New Islington Neighbourhood Development Framework and the draft Poland Street Zone public realm strategy recognise that future development within the area will be required to contribute to the City Council’s objective of achieving a zero carbon target by 2038 through the active utilisation and deployment of leading building technologies.</p> <p>The Ancoats Mobility Hub is a key component in delivering a highly sustainable neighbourhood. It will directly reduce car trips and on street parking in this area, promoting a modal shift to cycling, walking and the use of public transport networks. The logistics hub within the building will provide a central location for parcel deliveries with ‘final mile’ delivery via a fleet of electric vehicles.</p> <p>The City Council is and will continue to use its land interests in the area to deliver this outcome and this will be integrated into all aspects of the public realm delivery strategy.</p>

Our Manchester Strategy outcomes	Contribution to the strategy
A thriving and sustainable city: supporting a diverse and distinctive economy that creates jobs and opportunities	The proposals outlined in the Poland Street Zone draft public realm strategy supported the opportunity to create a new mixed-use neighbourhood including new jobs and employment opportunities and easy access to the regional centre economy for residents.
A highly skilled city: world class and home-grown talent sustaining the city’s economic success	The Poland Street Zone will continue to provide direct employment opportunities and also meet the demand for housing from residents who wish to live close to the Regional Centre.
A progressive and equitable city: making a positive contribution by unlocking the potential of our communities	The draft Poland Street Zone public realm strategy and the approved Ancoats and New Islington Neighbourhood Development Framework offers the potential to drive forward the Manchester Residential Growth Prospectus and meeting the growing demand for new homes in the city, through the provision of high-quality neighbourhood infrastructure to serve the local community.

A liveable and low carbon city: a destination of choice to live, visit, work	The vision for the Poland Street Zone is to create a high-quality sustainable neighbourhood within the extended city centre. The draft public realm strategy will support the creation of a new neighbourhood in a sustainable location, adjacent to the city centre and the range of jobs, culture and leisure opportunities contained therein.
A connected city: world class infrastructure and connectivity to drive growth	The draft public realm strategy will underpin the delivery of the Ancoats Mobility Hub and promote connectivity with core public transport infrastructure across the city and the wider GM conurbation.

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

- Equal Opportunities Policy
- Risk Management
- Legal Considerations

Financial Consequences – Revenue

Financial Consequences – Capital

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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.

- Ancoats and New Islington Neighbourhood Development Framework July 2014
- Ancoats and New Islington Neighbourhood Development Framework, report to the Executive October 2014
- Refresh of the Ancoats and New Islington Neighbourhood Development Framework, report to the Executive December 2016;
- Refresh of the Ancoats and New Islington Neighbourhood Development Framework Poland Street Zone, report to the Executive February 2020
- Refresh of the Ancoats and New Islington Neighbourhood Development Framework Poland Street Zone, report to the Executive July 2020
- Mobility Hub proposal for the Back of Ancoats, report to the Executive November 2020;
- Development Strategy for the Back of Ancoats, Progress report to the Executive September 2021;
- Manchester Zero Carbon 2018 – Manchester City Council’s Commitment, report to the Executive March 2019;
- Council Resolution on declaring a Climate Emergency, report to the Executive July 2019;
- Eastland Regeneration Framework, report to the Executive July 2019;
- Revised City Centre Transport Strategy, report to the Executive October 2019 and City Centre Engagement Outcomes, report to the Executive February 2020;
- Draft City Centre Transport Strategy, Report to the Executive September 2020.
- Draft Executive Summary – Back of Ancoats Public Realm Strategy December 2021

1.0 Introduction

- 1.1 The Ancoats neighbourhood is located on the eastern edge of the city centre and is part of the Eastlands Regeneration Framework area, a refresh of which was taken to the Executive in 2018.
- 1.2 Ancoats is an important part of the growing city centre. It is a key component of the Eastlands Regeneration Framework, and its importance is further enhanced by the opportunity to complete investment in the area, within a sustainable public realm strategy.
- 1.3 The Ancoats and New Islington Neighbourhood Development Framework (NDF) was approved by the Executive in 2014, in order to enable the City Council to provide development principles in line with adopted planning policy in this key location on the north-eastern edge of the city centre.
- 1.4 One of the zones within the approved Neighbourhood Development Framework was identified as character area 3, Back of Ancoats, referred to as the Poland Street Zone which spans the area between Oldham Road, Bengal Street, the Rochdale Canal and Butler Street. This area has become the focus for developer interest in the area and as a consequence of this an illustrative masterplan for the area was commissioned and paid for by four major landowners in the area (Manchester City Council, Manchester Life Development Company, Urban Splash and Northern Group). This document provided an aspirational guide to the further development of the area based on the principles of the 2016 NDF.
- 1.5 In order to ensure that the NDF reflected these aspirations, a further review and update of the NDF Poland Street Zone was undertaken in 2020. This review and update took account of updated City Council strategies and adopted planning policy, and provides a framework to ensure that compatible residential and commercial development opportunities are realised, and that connectivity and access to quality public amenity space area is maximised. This document proposes 1500 new residential units can be delivered in the area.
- 1.6 The NDF identified a number of key strategic drivers that are required to facilitate the delivery of the framework objectives and address a number of constraints to delivery – including the inferior quality of the public realm, lack of clear connectivity through the area, and a perceived absence of co-ordinated place making infrastructure necessary to support the delivery of a medium density residential and mixed-use neighbourhood. Fly parking and rat running through the area currently causes problems for neighbouring, residential communities. As new development comes forward a co-ordinated approach to parking requirements and street design will help create a liveable, high quality neighbourhood.
- 1.7 A new public realm strategy has been prepared by consultants with Manchester City Council officers working across all key departments.

2.0 Background

- 2.1 The area referred to as the Back of Ancoats is located within the north-eastern fringe of the city centre, and forms part of the wider Ancoats neighbourhood. The area between Great Ancoats Street and Butler Street is a conservation area and is home to a number of listed and architecturally important buildings. The area is

surrounded by the neighbourhoods of Miles Platting in the East, New Cross to the West, the core of Ancoats and the city centre to the south and New Islington.

- 2.2 Within Ancoats, development over the last 20 years has focussed on the core of the conservation area, between Great Ancoats Street and Bengal Street and in the area surrounding New Islington Marina. The Poland Street Zone as referred to in the NDF, also known as the Back of Ancoats, is now the subject of developer interest and represents the final elements of the regeneration of Ancoats.
- 2.3 The area is currently characterised by low value, low density light industrial units, surrounding an area of green space that has been the focus of anti-social behaviour and does not reflect the quality of open space elsewhere in the City. The breakdown of the grid street pattern in this area has resulted in there being no clear street hierarchy and consequently it is difficult for pedestrians to navigate. This is further manifested in the fact that the area suffers from being used as a “rat run” for vehicles seeking to avoid Oldham Road and Great Ancoats Street. The poor physical quality of the area is also compounded by commuter and fly parking during the day adding to traffic movements.
- 2.4 These barriers to development have resulted in limited development activity in the area, with developers concentrating investment to date into the Great Ancoats Street – Bengal Street section of Ancoats and New Islington where public sector place-making intervention created the environment to support viable development. There has been very limited new build development activity in the area as sites are unviable and unlocking their redevelopment requires a high level of public and private sector co-ordination.
- 2.5 As the development opportunities in Ancoats and New Islington become increasingly scarce, developer interest has started to focus on the Poland Street Zone. This interest manifested itself in the delivery of the jointly funded masterplan and subsequent refresh of the NDF in 2020. The NDF established detailed development and design principles for the Poland Street Zone in relation to the form and nature of development and permeability and connectivity through the area and following the adoption of the NDF, Manchester Life have secured planning permission for the Eliza Yard Residential scheme that will deliver 118 units, and it is the intention to submit another application for a site on Jersey Street. Planning permission has also been granted for the Ancoats Mobility Hub that will meet the parking and logistics requirements of 1,500 new homes in the Back of Ancoats.
- 2.6 Complementary to the vision for the public realm is an emerging development proposal for the site bounded by Rodney Street/Jersey Street/Wadeford Close. The site is intended to be brought forward for housing. The emerging public realm proposals create a clear synergy and transition from the site to Ancoats Green, ensuring high quality place making in line with the principles outlined in the illustrative NDF for the area.
- 2.7 A number of other sites in the neighbourhood are owned by developers, and there have been recent transactions to demonstrate further the developer interest in the locality. As such, it is now essential that the City Council moves to establish a formal public realm strategy to ensure that all future development can be delivered alongside investment in place-making to support the creation of a neighbourhood of choice with up to 1500 new residential units within the area.

3.0 Draft public realm strategy

- 3.1 A consultancy team have worked closely with Council colleagues from Highways, Planning and Neighbourhoods to prepare a draft strategy for consideration. This draft will be subject to a public consultation with key stakeholders, including landowners, developer partners and local residents and community interest groups prior to its formalisation and adoption.
- 3.2 The purpose of the strategy is to provide a robust and practical analysis of the current public realm provision in the area, taking into account the vision that was articulated in the NDF and masterplan refresh of 2020, and the key principles contained therein. The document will provide a delivery strategy for future intervention and investment, that can be used by the City Council and the Local Planning Authority to co-ordinate public realm investment and provision on an incremental basis.
- 3.3 A draft executive summary of the public realm strategy is attached as an appendix to this report. The key principles of the strategy are set out below

Analysis

- A site analysis of the Poland Street Zone highlights the general poor quality of the public realm and the lack of co-ordinated interventions to manage both pedestrian and vehicular movements. There is no clear street hierarchy in the area, and it is used by vehicular traffic as a “rat run” to avoid using the Inner Relief Route, and as a consequence of this pedestrians and cyclists can find it difficult to navigate through the neighbourhood.
- The edges and the interfaces of the Poland Street Zone are poor and the relationship to key infrastructure such as the Rochdale Canal, Butler Street and adjoining residential neighbourhoods is severed. The definition of the frontages along Oldham Road and the Canal are poor and do not represent a quality arrival point for the area.
- The Poland Street Zone falls within the Ancoats Conservation Area but does not contain any listed buildings within it. The grid street pattern which is a key feature of the core of the Ancoats Conservation area breaks down in the Poland Street Zone, with only two streets passing from Bengal Street to the eastern edge of the area. This has led to a built form that restricts the connectivity internally and to the surrounding areas.
- The quality of the green and blue infrastructure in the area is poor. Ancoats Green suffers from a poor relationship with existing buildings and is not overlooked. Consequently, it has been the target of anti-social behaviour, and this is further exacerbated by the limited access to the space and its disconnect with its immediate surroundings. Equally, access to the Rochdale Canal in the Poland Street Zone is limited to the eastern edges of the area.
- The site analysis for the Poland Street Zone, has identified a need for a coherent approach to traffic management that will support the delivery of the Ancoats Mobility Hub, address the issue of commuter parking in the area and create an environment that prioritises pedestrians and cyclists above vehicular traffic in a

new residential neighbourhood of up to 1500 homes.

Place-making

- The area presents a unique opportunity to create a new neighbourhood of up to 1500 residential units supported by a range of facilities that create a pleasant and liveable environment with access to green and blue infrastructure. The investment in the core of Ancoats and the neighbourhoods surrounding it, has delivered successful and sustainable communities. This has created the impetus to bring forward a comprehensive public realm strategy that contains a number of key projects with the Ancoats Mobility Hub as a catalyst for the creation of a sustainable neighbourhood that meets the needs of a growing population.
- The draft public realm strategy has further developed the concepts that were outlined in the NDF in 2020, and identified a number of key drivers that integrates best practice in design and delivery to contribute to the creation of a high-quality sustainable neighbourhood.
- The Ancoats Mobility Hub will provide parking for several residential developments within the area alongside a central delivery facility with a last mile delivery service. This will negate the need for parking provision within individual developments and creates an opportunity to review the traffic flow through the area allowing for a modal shift away from vehicular movements and promoting pedestrian and cyclist priority. The establishment of a hierarchy of streets and lanes will create clear and legible routes through the area, and a number of nature-based interventions will act as vehicular traffic management devices while adding value to the street setting.
- Good quality amenity space that is easily accessible is key in creating a rebalanced neighbourhood. The strategy proposes enhancing and improving Ancoats Green to create a tranquil green space with appropriate facilities for residents and visitors and enhances the setting of the developments surrounding the green. Furthermore, the creation of a new linear green route from Portugal Street to the Rochdale Canal via Jersey Street will connect the green and blue infrastructure in the area and provide permeability that currently does not exist.
- Given the restrictions of the existing street layout and the potential for a medium density neighbourhood to be created in the area, the strategy proposes a co-ordinated approach to street parking that maximises the use of the Ancoats Mobility Hub and moves away from on street parking, thus contributing to the creation of a calmer and more pedestrian friendly neighbourhood.

Public realm strategy

The public realm strategy is key to delivering a sustainable, attractive neighbourhood that celebrates the uniqueness of the area and creates integration between the surrounding neighbourhoods and the city centre. There are a number of key strands within this approach that together will create a coherent identity for the area. The proposals are aligned with emerging development proposals within the area.

Ancoats Green: provides an opportunity to become the green heart of the neighbourhood. Investment in the Green and the delivery of play and recreational facilities will add value to the space. There is an opportunity to extend the influence of Ancoats Green into the wider area creating a green neighbourhood that provides a softer environment to the dense “hard” street scene in the core of the Ancoats area.

The creation of a linear green link from Portugal Street through the green to the Rochdale Canal will enhance the space making it more accessible and creating natural surveillance in an open that is currently not overlooked and consequently suffers from anti-social behaviour

Ancoats Mobility Hub – sits at the interface with Ancoats Green and creates the conditions to reduce traffic movements through the area with developments not requiring in curtilage parking. The plaza space surrounding the building celebrates the landmark status of the building and provides the linkage between Ancoats Green and the creation of new green street connections

Green Streets – the reduced vehicle movements created by the use of the Mobility Hub and a TRO strategy that reduces rat running and on street parking will rebalance the streets in favour of pedestrians and cyclists and allow for the creation of a connected network of streets and spaces that extend the green character of the area. The introduction of green infrastructure and the creation of residential streets that provide amenity and interaction will reflect the influence of Ancoats Green on the wider area.

Projects and Interventions

Key projects within the framework include:

- Enhancement of Ancoats Green
- Creation of a greenway connecting Portugal Street with Jersey Street and the Rochdale Canal
- Delivery of the Ancoats Mobility Hub Plaza
- Establishment of a hierarchy of streets
- Range of physical interventions to reduce traffic flow in the area
- The delivery of site-wide Traffic Regulations Orders (TROs) to address traffic management and on street parking, to contribute to the promotion of a pedestrian friendly residential environment
- The resurfacing of carriageways and pedestrian footpaths to an agreed specification that reflects the new street hierarchy

4.0 Evolving spatial strategy

- 4.1 The public realm strategy responds to the evolving development context that is coming forward in the Back of Ancoats, and therefore the strategy is a progression from the illustrative masterplan that was included in the NDF refresh in 2020.
- 4.2 Since approval of the NDF in July 2020, planning permissions have been granted for the Ancoats Mobility Hub and for the Eliza Yard development. The AMH will provide parking for a number of developments within the Back of Ancoats and therefore negate the need for in curtilage parking in development blocks, hence

reducing car movements around the area. This presents a unique opportunity to develop a traffic management strategy for the area that rebalances the street hierarchy in favour of pedestrians and cyclists and facilitates the development of “green streets” that expand the influence of Ancoats Green into the area and counterbalances the “hard” environment of the core of Ancoats.

- 4.3 The NDF of 2020 proposed a re-orientation of Ancoats Green along an east- west alignment, with a new building proposed within the Ancoats Green footprint. However, the public realm strategy moves away from this and the historic alignment of the park is retained and expanded, with a green link through proposed development at Rodney Street linking the area to Butler Street and the Miles Platting neighbourhood. The strategy promotes the Green as the heart of the area, with children’s play facilities, open space and dog exercise areas at the back of the Mobility hub, creating a “square” that will link the development plots surrounding it with the wider Ancoats Green. This east west reorientation is further enhanced by the series of green streets that are proposed, emphasising the influence of Ancoats green into the wider area and creating further opportunities for planting of trees and enhancing the climate resilience of the scheme.
- 4.4 The NDF promoted a green link from Ancoats Green to the Rochdale Canal, the public realm strategy has further refined this to build on and celebrate the historic Prussia Street canal arm that was in this location, and also to provide a pedestrian link between Jersey Street and the Green.
- 4.5 Furthermore work has commenced on the design of a scheme between Jersey Street and the Rochdale Canal – working closely with Manchester Life who are the site owners, it has been agreed that their development will be designed to enable a green link from Jersey Street behind their building along the Rochdale Canal to the bridge at Stephen Hunt Street. This will be open to the public.
- 4.6 The pallet of materials proposed will help tie the area back into the front of Ancoats, with key streets using a pallet that reflects the public realm in the core of Ancoats, thus ensuring that the character of the area is not lost and that the grid pattern that is recognisable as we move through the area. The strategy represents a further evolution of this area that was the worlds first industrial neighbourhood. However, its decline and reinvention as a residential area with up to 1500 homes is reflected in the proposals for the public realm strategy that celebrates its industrial heritage in a form that creates a welcoming and living environment.

5.0 Delivery Strategy

- 5.1 Within the area a range of development proposals, including the AMH, Eliza Yard consented schemes together with Manchester Life’s and Jersey Street residential scheme and the This City housing proposal are all being progressed. Other sites that are in private sector ownerships are also being prepared for future development, but it is anticipated that further land assembly will be required to realise the proposals contained with the public realm strategy.
- 5.2 Collaboration between key landowners and stakeholders will be essential to ensure that the principles of the public realm strategy are delivered. To this end, the City Council is working closely with key private sector partners to ensure that development proposals respond to the aspirations of the public realm strategy and where necessary collaboration in relation to future maintenance and

management obligations are agreed.

5.3 A number of delivery mechanisms have been considered as part of the Public Realm Strategy to:

- Provide a framework within which public realm improvements can be programmed and prioritised to keep pace with development activity.
- Ensure that contributions from developers can be fully maximised within the confines of local and national policy; and
- Respond to the constraints and practicalities of delivery e.g., to ensure that economies of scale are realised and that standards of construction are maintained.

5.4 The Delivery Strategy provides a series of costed projects and to form the basis of consultation with landowners, developers and key stakeholders that will be delivered via a series of mechanisms that include:

- Public realm works delivered via Brownfield Land Fund (BLF) Grant; these projects will be completed prior to March 2024:
- Predevelopment activity – the strategy proposes interventions that are required to take place as a pre- development activity to facilitate improvements across the area.
- Public realm works secured via planning conditions – where a development proposal necessitates improvements to the public realm, the Council will seek to secure required upgrades by way of planning conditions as part of the planning process.
- Study area wide projects - the strategy proposes a number of study area wide improvements, that will require a level of central co-ordination and commissioning.

5.5 The aim of the public realm strategy and supporting delivery strategy will be to provide officers with a practical toolkit to assist the successful delivery of public realm and to form the basis of ongoing consultations with landowners and developers as part of the planning process – to ensure that the necessary improvements to the public realm are delivered in a coordinated and collaborative way to support the creation of a successful neighbourhood.

5.6 The Council will also seek to leverage participation in the delivery of the public realm interventions through it's land interest where relevant and appropriate.

6.0 Approach to funding

6.1 There is a significant requirement for placemaking to support housing growth in the Back of Ancoats. Funding will address the legacy of its industrial past, minimal investment in the public realm and the nature of current land ownerships and meanwhile uses.

6.2 Officers from the City Council have considered a range of funding streams that can be utilised to contribute to the delivery of the placemaking aspirations for the area. In particular, discussions with Homes England are advancing in order to facilitate the delivery of some 1,500 homes. Funding could potentially be used to deliver the innovative mobility hub, new public realm and land remediation. Through this

approach, the existing infrastructure and funding challenges in the Back of Ancoats will be overcome at pace. If approved, a funding agreement will be established between Manchester City Council and DLUHC with the appropriate governance structures and accountability to shape the strategic direction of the Back of Ancoats and the wider Eastern Gateway mission.

- 6.3 The proposed projects within the public realm strategy have been reviewed and costed by external consultants to provide a better understanding of the total delivery costs and the preferred programming of works in order to align with construction programmes for individual developments and to ensure that works are co-ordinated in terms of delivery and funding. The total costs of all works to facilitate the public realm strategy are circa £15m. It is anticipated that delivery of the full complement of public realm interventions will take up to 10 years to align with private sector partners timescales for bringing forward development on sites within private ownership.
- 6.4 Brownfield Land Funding of £4.7m has been secured via GMCA. This funding is directly linked to the delivery of up to 275 residential units as a first phase and will be used to deliver the first enabling phases of a programme of public realm interventions that will support the delivery of the Ancoats Mobility Hub, enhance and improve Ancoats Green and create the first elements of linear greenway pedestrian route that will link Portugal Street with the Rochdale Canal. A condition of the Brownfield Land Fund is that it must be spent by March 2024, and current programme planning has indicated that this can be achieved.
- 6.5 It remains key that appropriate contributions and investment can be sourced from third party developers and harnessed to support the creation of place as part of an integrated vision and approach to delivery. The use of s106 contributions in this area will be applied alongside existing City Council priorities for funding. In addition to this work is progressing on a collaboration agreement between key landowners and stakeholders to secure appropriate contributions that will ensure the provision of high quality, appropriately maintained public realm.
- 6.6 Given the scale of potential investment required to support the public realm delivery and requirements for forward funding, it is proposed that a more detailed review of costings and funding requirements will be submitted for consideration, alongside the final draft public realm strategy, to a future meeting of the Executive.

7.0 Legal Considerations

- 7.1 It is proposed that, once adopted, the public realm strategy will be used as a material consideration for the City Council when considering all future planning applications relevant to the Back of Ancoats.
- 7.2 Notwithstanding the provisions of the strategy, if the City Council grants a planning permission subject to the planning conditions, the conditions will be lawful only if they are necessary, relevant to planning, relevant to the development to be permitted enforceable, precise and reasonable in all other aspects (Section 70(2) TCPA 1990 and para. 206 of NPPF).
- 7.3 Furthermore, the use of Section 106 planning obligations is only permitted when such obligations are a) necessary to make the development acceptable in planning terms, b) directly related to the development and c) fairly and reasonably related to

the development in scale and kind (Section 106 TCPA 1990, regs 122 of the Community Infrastructure Levy Regulations 2010). Finally, regulation 123 of the CIL Regulations prevents a Local Planning Authority from pooling five or more contributions entered into on or after 6 April 2010 to fund or provide a type of infrastructure.

- 7.4 Whilst a more detailed review of costings and funding requirements will be submitted to a future meeting of the Executive. It should be noted that the City Council's approach to funding and delivery, and consideration given to imposing planning conditions and/or the use of planning obligations and/or the use of planning obligations, must be in accordance with the legislative framework.

8.0 Contributing to a Zero-Carbon City

- 8.1 Explain how this helps to make climate breakdown and the environment an integral part of activity throughout the Council, including all decision making?

9.0 Contributing to the Our Manchester Strategy

(a) A thriving and sustainable city

- 9.1 The proposals outlined in the Poland Street Zone draft public realm strategy offer the opportunity to create a new mixed-use neighbourhood including new jobs and employment opportunities and easy access to the regional centre economy for residents.

(b) A highly skilled city

- 9.2 The Poland Street Zone will continue to provide direct employment opportunities and also meet the demand for housing from residents who wish to live close to the Regional Centre.

(c) A progressive and equitable city

- 9.3 The draft Poland Street Zone public realm strategy and the approved Ancoats and New Islington Neighbourhood Development Framework offers the potential to drive forward the Manchester Residential Growth Prospectus and meeting the growing demand for new homes in the city, through the provision of high-quality neighbourhood infrastructure to serve the local community.

(d) A liveable and low carbon city

- 9.4 The vision for the Poland Street Zone is to create a high-quality sustainable neighbourhood within the extended city centre. The draft public realm strategy will support the creation of a new neighbourhood in a sustainable location, adjacent to the city centre and the range of jobs, culture and leisure opportunities contained therein.

(e) A connected city

- 9.5 The draft public realm strategy will underpin the delivery of the Ancoats Mobility Hub and promote connectivity with core public transport infrastructure across the city and the wider GM conurbation.

10.0 Key Policies and Considerations

(a) Equal Opportunities

10.1 The preparation and subsequent consultation will enable a range of stakeholders and interest groups to engage in the process to finalise the public realm strategy.

(b) Risk Management

10.2 Not applicable at this stage.

(c) Legal Considerations

10.3 Any particular legal issues arise from the decisions in the report?



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REFERENCE
2895

PROJECT

BACK OF ANCOATS NEIGHBOURHOOD

DOCUMENT

PUBLIC REALM STRATEGY - EXECUTIVE SUMMARY

CLIENT

MANCHESTER CITY COUNCIL

STATUS

DRAFT FOR
CONSULTATION

DATE

07/01/22

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1.1 Introduction

This Public Realm Strategy builds on the ambitious placemaking vision outlined for the neighbourhood in the Poland Street Zone Neighbourhood Development Framework (NDF) (2020), providing a narrative on how the design principles set out in the NDF can be realised through the detailed design of streets and spaces.

This opportunity is to effectively complete Ancoats as a sustainable urban neighbourhood. It is a significant plan to continue driving Manchester forward as a city over the coming decade.

Investment has delivered award-winning public realm and buildings¹, revitalising Ancoats and New Islington. With further committed investment within the neighbourhood it is necessary to ensure that the public realm is grounded in a strong, flexible, place-specific strategy that looks to the past as well as the future, and at the detail as well as the masterplan. These qualities are why Ancoats works so well as a neighbourhood. The evolving approach to development requires a reciprocal approach to detailed thinking about the public realm and infrastructure within which around 1500 new homes will be sensitively integrated. The Ancoats Mobility Hub is the catalyst for these innovative, practical and deliverable proposals.



FIGURE 1 - NEIGHBOURHOOD BOUNDARY

1 Ancoats Green

A substantial historic green space located to the north east of the neighbourhood.

2 Rochdale Canal

A popular blue link running along the southwestern boundary of the neighbourhood

3 Warehaus

Mid-rise residential buildings fronting George Leigh Street.

4 Flint Glass Wharf

Significant canalside residential development, with offices and studio spaces activating Jersey Street.

5 Beehive Mill

Grade II* listed Cotton Mill on the corner of Jersey Street and Radium St.

¹ - 2020 PROPERTY AWARDS "PLACEMAKING AWARD"

- RIBA NORTHWEST SUSTAINABILITY AWARD - WINNER 2021 - THE OGLESBY CENTRE AT HALLE ST PETERS BY STEPHENSON, HAMILTON RISLEY STUDIO

- RIBA NORTH WEST AWARD WINNER - 2021 MURRAYS MILLS - FIELDEN CLEGG BRADLEY STUDIOS.

1.2 Public Realm Vision and Objectives

To support the creation of a sustainable urban neighbourhood of 1,500 homes through the delivery of a public realm which supports life and celebrates place.

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This will be achieved by rebalancing movement to promote active travel; and through the delivery of an enhanced green heart at Ancoats Green.

The green character will extend into the adjacent streets and spaces to create a liveable healthy environment, which is climate resilient and supports the moves towards a zero carbon future.

The public realm will be locally distinctive; utilising the existing industrial heritage of Ancoats to create a unique sense of place, enhancing the character of the Ancoats Conservation Area and facilitating the creation of a canal edge walk.

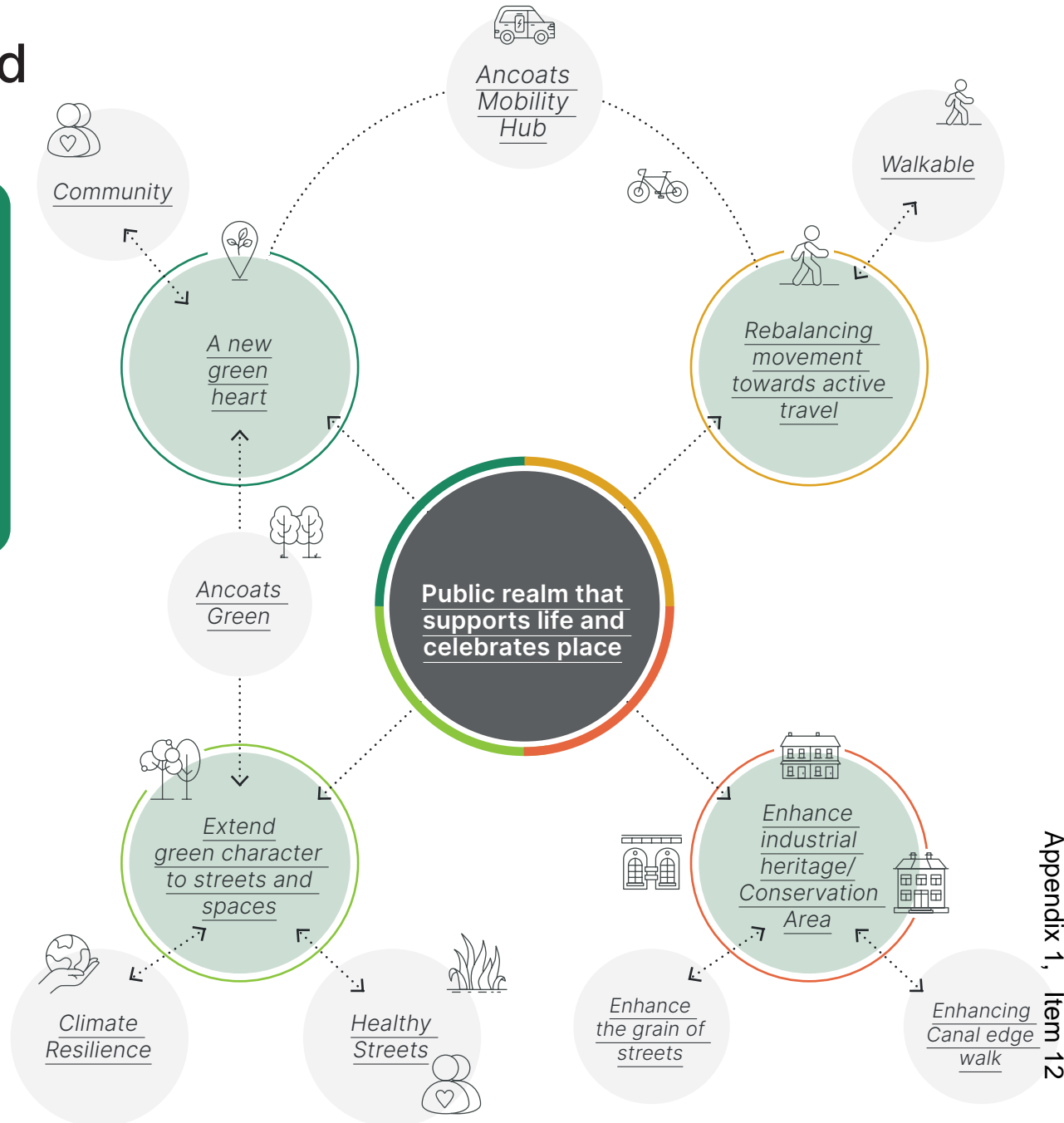


FIGURE 2 - VISION AND OBJECTIVES DIAGRAM

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1.3 Building on the Neighbourhood Development Framework

"The vision for the Poland Street Zone is to *bring forward an authentic evolution of Ancoats; a form of urban development and mix of uses, rooted in the area's past but driven by a sense of the future.*"

Poland Street Zone NDF, 2020

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Evolution

The Public Realm Strategy evolves some of the detail set out in the 2020 NDF in six key areas:

1. Refine the **street hierarchy** - many of the streets proposed in the NDF shared similar characteristics. The strategy refines this to three street types, based on a common design language and philosophy.
2. Create a **movement strategy** which rebalances the streets, favouring active travel for pedestrians and cyclists, exploiting the sustainable movement opportunities generated by the Mobility Hub.
3. Place a **higher degree of emphasis on Naval Street** as the direct pedestrian route linking Ancoats Green and Cutting Room Square.
4. Refine the **design of the Prussia Street green link**, creating a wider range of uses and heritage references. The removal of the remnants of Jersey St Bridge is considered key in creating a level, pleasant and safe connection to the Rochdale Canal.
5. Add **design detail showing how the influence of Ancoats Green can be extended through the neighbourhood**, along streets and beyond its current boundaries.
6. Explore **how the benefits of extending Ancoats Green can be maximised**, placing a strong emphasis on walking, cycling and healthy lifestyles.

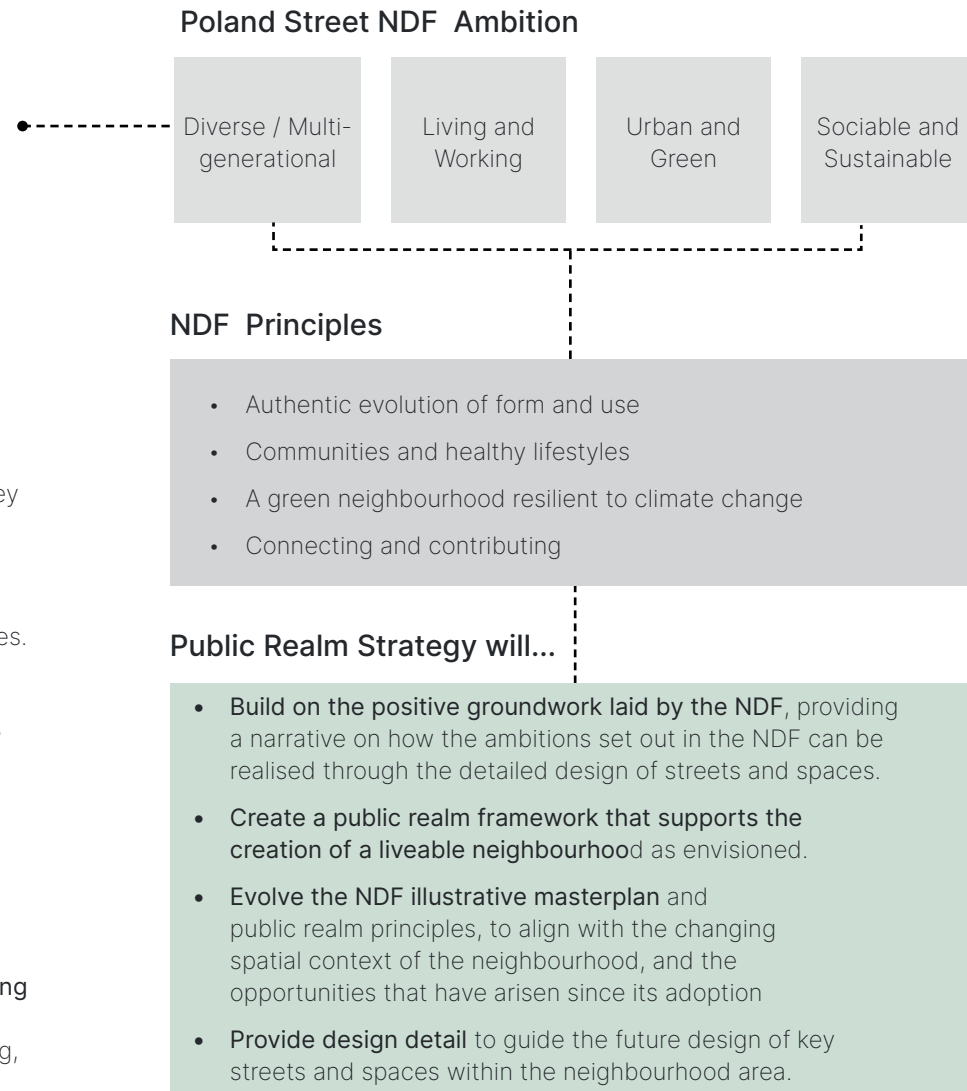


FIGURE 3 - NDF REVIEW DIAGRAM

1.4 An Evolving Spatial Context

Poland Street Zone NDF (2020) Illustrative Masterplan



FIGURE 4 - NDF ILLUSTRATIVE MASTERPLAN

The NDF illustrative masterplan indicated potential for:

- A re-orientation of Ancoats Green along east-west alignment. New buildings proposed within previous Ancoats Green footprint.
- A significant linear green space along former Prussia St canal arm
- A large green space along Rochdale Canal at southernmost tip of the Prussia Street green link.
- Assumptions on what can be delivered within future development parcels - including new connections, open spaces and buildings.

Evolving Development Context



FIGURE 5 - NDF EVOLUTION PLAN

Strategy evolution:

- Historic area of Ancoats Green utilised to create a new green heart.
- The consented Mobility Hub sits at the interface of the park, providing opportunity to create new, safe, green street connections. Streets rebalanced for active travel and a reduction in vehicular traffic.
- The removal of Jersey St Bridge remnants will deliver safe, level and pleasant access to the Rochdale Canal along a new greenway.
- Revitalised Ancoats Green informs evolution of the greenway concept.
- The materials palette will be influenced by the industrial aesthetic of the Front of Ancoats.
- A green character could extend along three key east-west streets.
- The strategy will inform the design of future development parcels.

1.5 Opportunities

A series of key opportunities can be drawn from the analysis, helping to ensure the emerging strategy captures the unique elements of the neighbourhood.

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The analysis shows...

- A key strategic location within the wider regeneration context.
- Located at interface of various existing communities.
- Several city linkages feed into the neighbourhood (with scope to extend).
- Front of Ancoats to the west presents a hard, urban streetscene.
- Ancoats Green along the western edge provides a substantial green space.
- The range of functions provided in local green spaces is limited.
- The area is used as a transient neighbourhood by cars, with vehicles rat-running between Oldham Road and Great Ancoats Street.

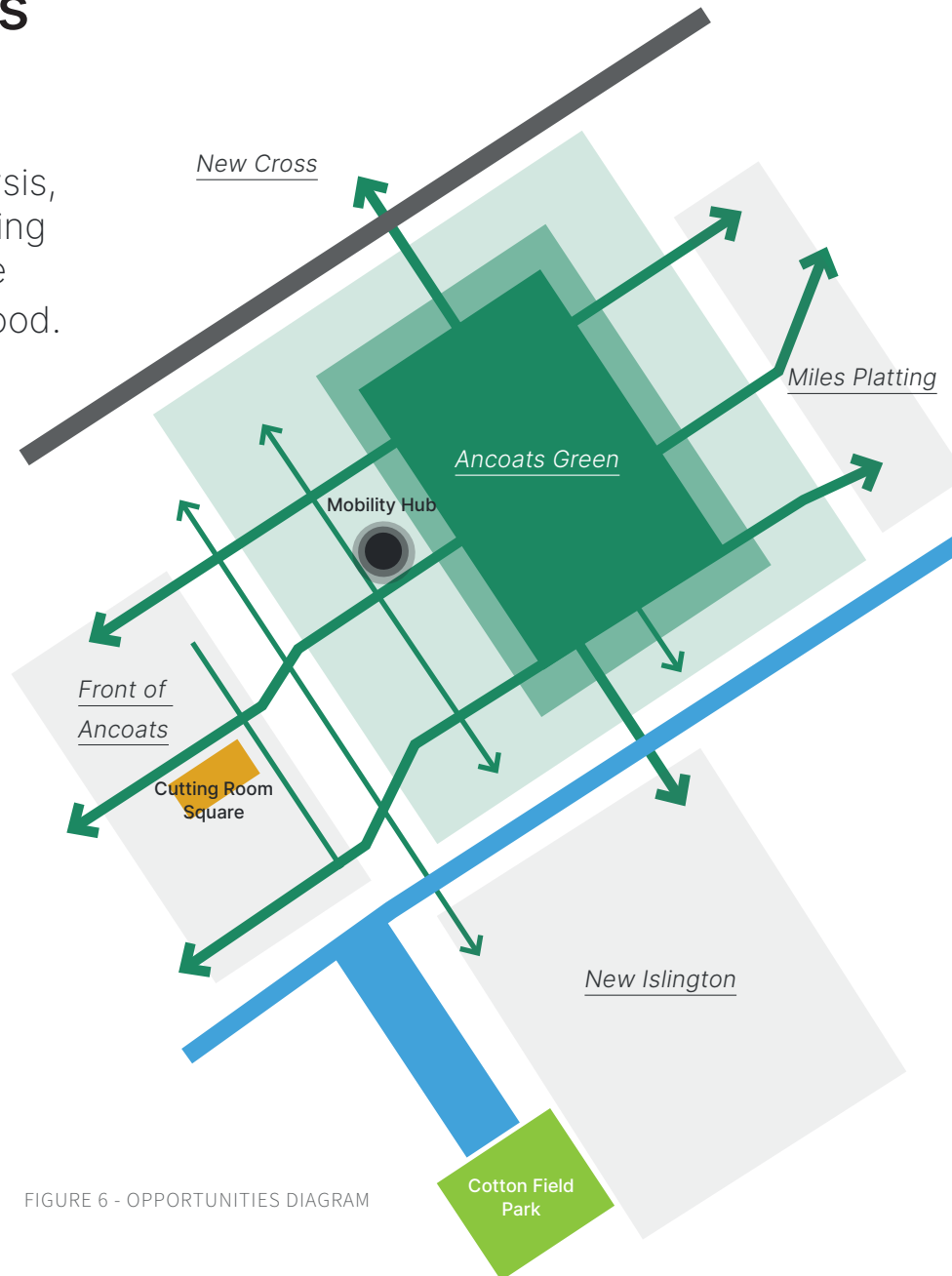


FIGURE 6 - OPPORTUNITIES DIAGRAM

Opportunities

There is a **real opportunity to extend the influence of Ancoats Green through the neighbourhood**, enhancing its functions and providing future residents opportunities for play and amenity.

The area sits at the interface of several existing and future communities, and as such **creates a space where communities come together - encouraging integration, interaction and conviviality.**

To improve the range of functions and activities available in the public realm, including space for active play, biodiversity, local events and outdoor sport.

The Mobility Hub provides the opportunity to rebalance the streets in the area in favour of active travel, reducing car dominance and prioritising the health and wellbeing of people. It also allows for the relocation of highway over to green space, planting and tree, in the form of Green Streets, which will in turn emphasise the grain of the streets.

Create strong pedestrian and cycle connections through the neighbourhood, connecting the neighbourhood with its neighbours and key city spaces and the strategic cycle network.

Appendix 1, Item 12

1.6 Public Realm Strategy and Concept

Figure 7 illustrates the application of the Public Realm Strategy objectives spatially, capturing the following design features.

The importance of Ancoats Green as a focus/conduit for key routes between communities and destination points within the City.

Strengthening desire lines as they permeate Ancoats Green, integrating them with the overall design and function of the space.

A new plaza and playground around the Mobility Hub provides a focal point of activity, enhancing the active setting of this key building. The space connects the Mobility Hub and future developments to the park and becomes the centre of a new Greenway, along the alignment of the old Prussia Street Canal Arm, which informs the character of this space.

The diagram also indicates a potential green connection along the Bengal Street Canal Arm, along with other potential green corridors whilst through private development plots, which would help to develop a more permeable neighbourhood; however, these form guidance principles only.

The strategy seeks to create a connected network of streets and new spaces, enhancing and celebrating the areas natural and built assets and extending a green character through the neighbourhood.

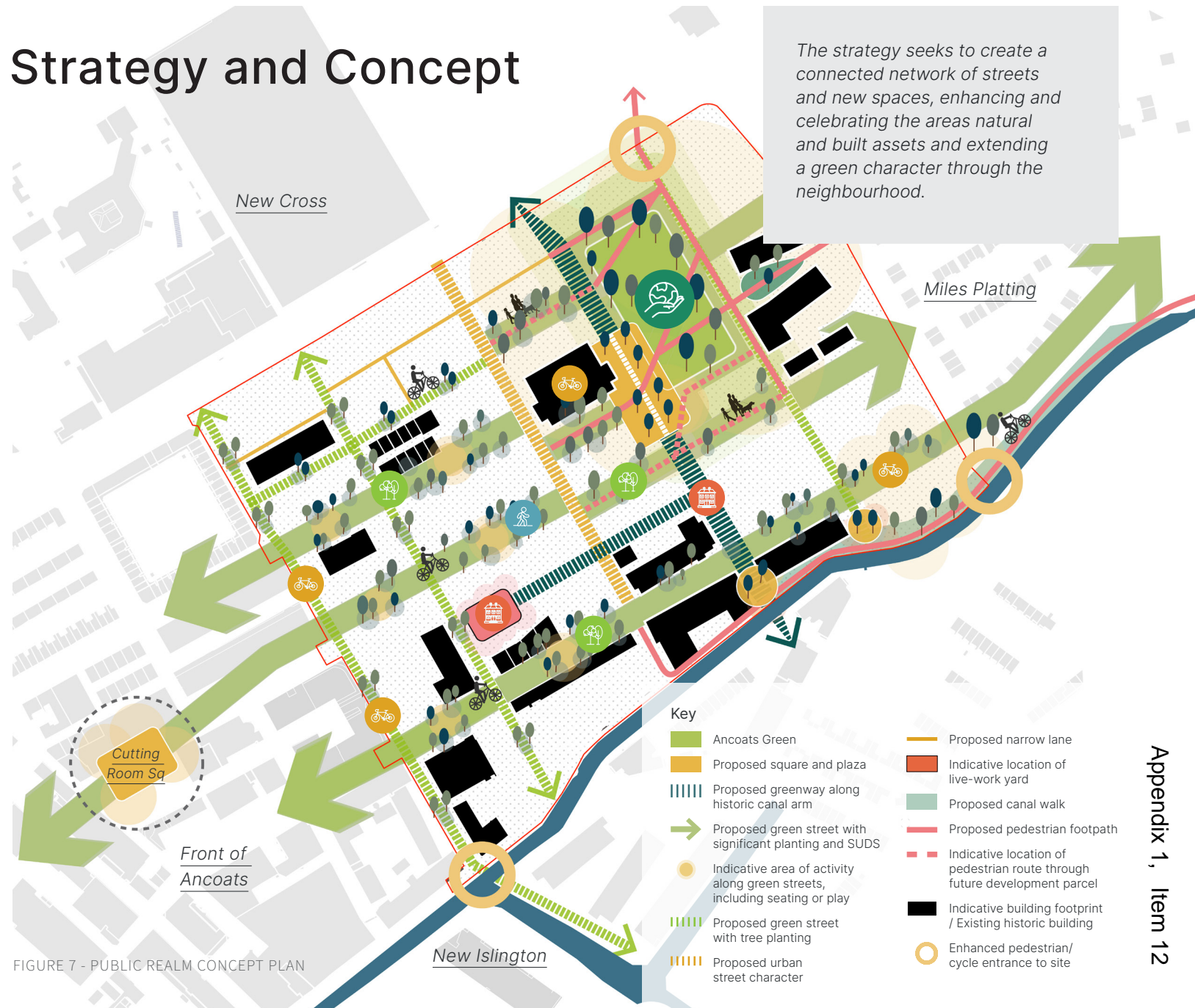


FIGURE 7 - PUBLIC REALM CONCEPT PLAN

1.7 Illustrative Public Realm Masterplan

Figure 8 provides further detail on the design of streets and spaces, illustrating how the public realm strategy objectives can be achieved through detailed design.

The masterplan has evolved to:

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- Incorporate the historic orientation of Ancoats Green;
- Integrate the Mobility Hub around an active space, which also links to the future development plot to the south. It also looks to integrate with the landscape proposals and desire lines created at Rodney Street; and
- Evolve the design of the linear park, responding to Ancoats Green to create a character space - 'Prussia Street Greenway'. The removal of the remnants of Jersey Street Bridge would extend the greenway through to the canal, creating a safe, level and pleasant pedestrian and cycle connection.

Finally, the masterplan indicates a detailed but flexible approach to delivering Green Streets across the neighbourhood.

The implementation of the illustrative masterplan will provide opportunities for future development to contribute to a sustainable urban neighbourhood. Interventions will not only create a green, safe and active setting for new homes, but would provide wider social, health and economic benefits for existing communities.

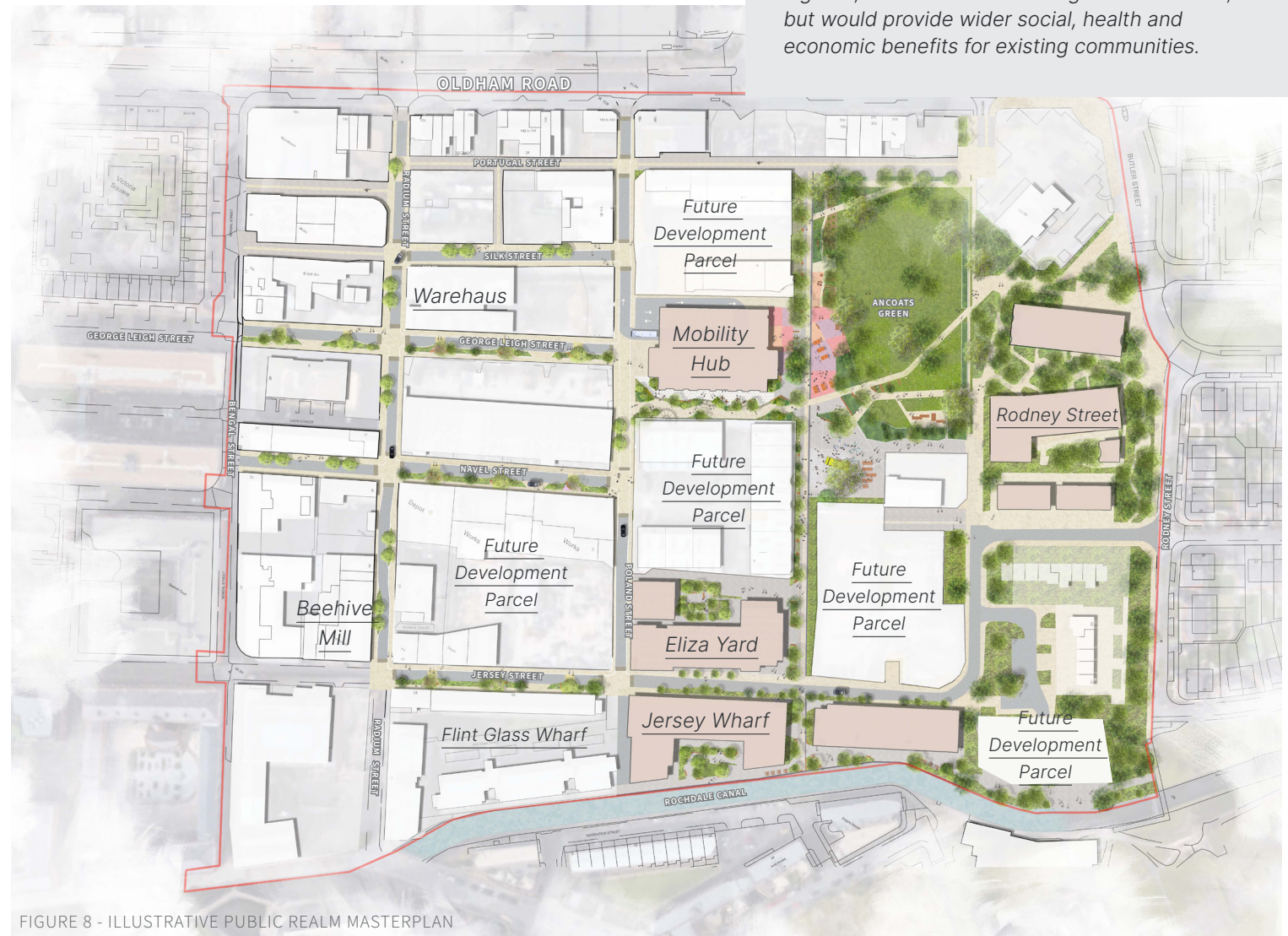


FIGURE 8 - ILLUSTRATIVE PUBLIC REALM MASTERPLAN

1.8 Ancoats Green



FIGURE 9 - ANCOATS GREEN LOCATION PLAN

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What are we trying to achieve?

An activated Ancoats Green, creating a multi-functional, green heart to the neighbourhood that fosters a sense of community.

Key requirements include:

- A refinement of the NDF masterplan, reflecting emerging plot designs and land ownerships and reinstating the historic alignment of the green.
- Provide a direct connection and setting for the new Mobility Hub.
- Create new pedestrian/ cycle connections along key desire lines through the park.
- Provide a range of park spaces from public squares and gardens through to open grass lawn and fenced dog run areas.



FIGURE 10 - PROPOSED ANCOATS GREEN ILLUSTRATIVE VIEW

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1.9 Prussia Street Arm Greenway

Rebalance streets

The greenway promotes cycle and pedestrian movement, terminating at an enhanced crossing point at Jersey Street.

Enhance industrial character

A green channel and a range of industrial materials celebrate the old canal arm.

A green heart

The greenway creates a verdant amenity space and green setting for future homes.

Extend green character

Pockets of wildflower and grasses, linear tree planting and an interpretive SuDS feature establish a new green axis.

Active, healthy, walkable

A significant new footpath/ cycleway connects with the existing network, encouraging active travel.



FIGURE 11 - PRUSSIA ST GREENWAY LOCATION PLAN

FIGURE 12 - PROPOSED GREENWAY ILLUSTRATIVE VIEW

Community

A key public amenity space is delivered, encouraging interaction within the public realm.

Removing the former Jersey St. Bridge

A heritage report has been produced, concluding the benefits of removing the remnants of Jersey St Bridge outweigh the heritage impact. The following benefits underpin the proposed removal:

- Legibility and permeability - enable views and physical connections
- More successful re-interpretation of the heritage of the area
- Landscape connectivity / ecology
- Accessibility to the water
- Deliver a range of functions

1.10 Green Streets

Rebalance streets

The movement framework enhances the historic grid, creating permeability and encouraging two-way cycle movement.

Lane width encourages two-way cycle movement to all streets, ensuring streets creating pedestrian and cycle priority.

Enhance industrial character

Street furniture could reference the uses of historic buildings on adjacent plots, creating and enriching Ancoats' industrial narrative.

Extend green character

Significant green verges are proposed along streets, creating opportunities for a range of planting, SuDS features and street trees.

Active, healthy, walkable

Seating and informal play features are proposed within the green channel, encouraging interaction with nature. Streets prioritise pedestrian movement.

Community

Flexible street furniture proposed in green verge creates opportunities for dwell, interaction and play.

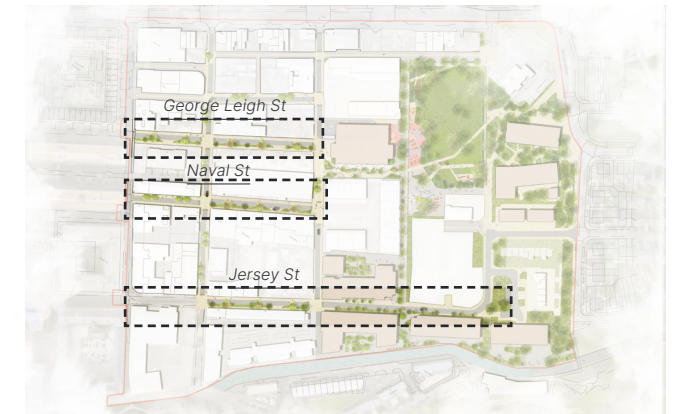


FIGURE 13 - GREEN STREETS LOCATION PLAN



A range of native and ornamental tree and shrub planting along the length of a meandering green channel.

Multifunctional street furniture fixes creates pockets of spaces at crossing points, referencing building heritage.

FIGURE 14 - PROPOSED GREEN STREET SECTION



Civic Engineers

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**Manchester City Council
Report for Resolution**

Report to: Environment & Climate Change Scrutiny Committee –13 January 2022
Executive – 19 January 2022
Council – 2 February 2022

Subject: Large Scale Renewable Energy Generation Outline Business Case

Report of: The Deputy Chief Executive and City Treasurer

Summary

The purpose of this report is to seek a decision to support the proposal to secure delegation from Executive for the Council to enter commercial negotiations to progress the purchase of a suitable solution with options being a solar asset and / or a Power Purchase Agreement (PPA).

The Council's Climate Change Action Plan (CCAP) has a target to reduce direct emissions of CO₂ by 50% over the five-year period of 2020-25. In addition, the Council has committed to be zero carbon by 2038.

Action 1.4 of the CCAP targets 7,000 tonnes of annual CO₂ reductions by 2025 with savings to be delivered by a, "feasibility and business case for a large-scale energy generation scheme from large scale Solar PV or Onshore or Offshore Wind on Council land and buildings, or sites in third party ownership".

Local Partnerships (LP) were appointed in November 2020 to deliver the feasibility study. The, "Feasibility Study and Options Appraisal for Large Scale Energy Generation for Manchester City Council" was completed in April 2021. It concluded that the Council has two options: purchase a solar PV facility or negotiate a power purchase agreement (PPA). Both options were assessed to be better than the "do nothing" option.

In October 2021, Executive approved a recommendation for the Deputy Chief Executive and City Treasurer to establish a delivery team to develop the options, with a view to returning to the Executive with a proposal to progress the work. This proposal and associated recommendations are contained in this report.

Recommendations

The Environment and Climate Change Scrutiny Committee is:

1. Invited to comment on the report and note the options in Section 4 available to the Council.
2. Endorse the recommendations made to Executive to grant delegation for the Deputy Chief Executive and City Treasurer to enter into negotiations for the purchase of a solar asset / PPA to meet the Council's 2020-25 CO₂ emissions reduction target and contribute positively to our longer term zero carbon 2038 target through:
 - development / purchase of a suitable large-scale solar PV facility
 - a suitable direct PPA of renewable energy

The Executive is asked to:

1. Note the options in Section 4 available to the Council.
2. Note that should the direct purchase of a solar asset be pursued this will be funded via borrowing and require Council approval.
3. Agree to grant 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, to meet the Council's 2020-25 CO₂ emissions reduction target and contribute positively to our longer term zero carbon 2038 target through:
 - development / purchase of a suitable large-scale solar PV facility
 - a suitable direct PPA of renewable energy

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 1.4 of the Council's Climate Change Action Plan 2020-25 targets 7,000 tonnes of annual CO₂ savings by 2025. 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 half the city's CO₂ emissions over the next 5 years.

Our Manchester Strategy outcomes	Contribution to the strategy
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

It is expected that the revenue requirements needed to take this forward will be met from existing directorate budgets; if this is not possible, the financial consequences will be that an additional funding requirement is needed to establish a delivery team, including the cost of engaging the necessary external technical support.

Financial Consequences – Capital

It is not expected that there will be any immediate financial consequences to the capital budget from the content of this report. However, it should be recognised that the outcome of the report options will have capital cost implications.

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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.

Feasibility Study and Options Appraisal for Large Scale Energy Generation for Manchester City Council – Local Partnerships (April 2021)

Large Scale Renewable Energy Generation Feasibility Summary Study - Report to Environment and Climate Change Scrutiny Committee, 14 October 2021 and Executive, 20 October 2021

1.0 Introduction

- 1.1 The purpose of this report is to seek a decision to support the proposal to secure delegation from Executive for the Council to enter commercial negotiations to progress the purchase of a suitable solution with options being a solar asset and / or a Power Purchase Agreement (PPA).
- 1.2 The Council's Climate Change Action Plan (CCAP) has a target to reduce direct emissions of CO₂ by 50% over the five-year period of 2020-25. In addition, the Council has committed to be carbon zero by 2038.
- 1.3 Action 1.4 of the CCAP targets 7,000 tonnes of annual CO₂ by 2025 savings to be delivered by a "feasibility and business case for a large-scale energy generation scheme from large scale Solar PV or Onshore or Offshore Wind on Council land and buildings, or sites in third party ownership".
- 1.4 Local Partnerships (LP) were appointed in November 2020 to deliver the feasibility study. The study, "Feasibility Study and Options Appraisal for Large Scale Energy Generation for Manchester City Council" was completed in April 2021. It concluded that the Council has two options: purchase a solar PV facility or negotiate a power purchase agreement (PPA). Both options were assessed to be better than the "do nothing" option.
- 1.5 In October 2021, Executive approved a recommendation for Deputy Chief Executive and City Treasurer to establish a delivery team to develop the options, with a view to returning to the Executive with a proposal to progress the work.

2.0 Key findings of the Feasibility Study

- 2.1 Solar PV is recommended as the most appropriate renewable technology. Onshore wind developments are very limited in availability and are often subject to planning challenges. Offshore wind is generally too large a scale and requiring much longer lead in times to be suitable for our needs.
- 2.2 The size of requirement needed to deliver 7,000 tonnes CO₂ annual savings is equivalent to ~33MW of solar PV. To deliver benefits beyond this point and to contribute more significantly to the Council meeting its target to be zero carbon by 2038, then ~45-50MW of solar PV would be required. The Council should consider adopting this size of requirement to future-proof residual emissions through to 2038, facilitating an earlier reduction of a greater proportion of the Council's (Scope 2) electricity emissions and maximising the potential for carbon reduction through renewable energy.
- 2.3 An area of ~100 Ha of land is required to deliver the 7,000 tonnes CO₂ requirement. The Council has already deployed significant renewable energy generation capacity on its own buildings and is developing proposals to maximise this as part of the ongoing carbon reduction programme. There is no suitable land in Council ownership to deploy 45-50MW of solar capacity. No opportunities were identified within Manchester for a partnership project but we will continue to work with GMCA to identify local opportunities if possible.

- 2.4 The GMCA Go Neutral project has assessed opportunities for small-scale renewable energy assets across the city-region. Based on initial findings it is estimated that ~7-14MW of additional capacity could be available on Council-owned buildings and small parcels of land in Manchester. This is insufficient to meet our requirements.
- 2.5 The feasibility study concluded that the Council needs to look out of area to deliver the required size of generation, given there are no local opportunities for solar PV at the required scale. Additionally, the study noted that where levels of irradiance are higher, solar PV schemes deliver a better return on investment (ROI). Irradiance levels are potentially 13% higher in the south of the UK compared to Manchester and hence generate a higher return on investment or ROI.
- 2.6 To provide the Council with a deeper understanding of the available options, LP used data from Aurora Energy Research (provider of commercial modelling and forecasting data for renewable technologies). The data was used to generate an options appraisal based on current and forecasted pricing. Net Present Value (NPV) calculations were appraised over an 8 year and a 25-year period and were compared to a 'do nothing' scenario, i.e., the Council's current green electricity tariff.
- 2.7 This calculation showed that all options have positive NPV outcomes compared with 'do nothing'. There is a solid value for money basis to either enter a suitable PPA or asset purchase agreement and the Council should therefore seek to change its current supply arrangements.
- 2.8 The report concluded that a budget of £27m–£30m was the estimated cost for an asset purchase. A solar asset is anticipated to have a life of 35-40 years. Should this option be selected, and a suitable facility identified, the Council would need to be able to move at speed since projects of this nature coming to market are relatively few and are likely to be in high demand.

3.0 Establishing a Working Group

- 3.1 In October 2021, the Deputy Chief Executive established a working group and project team. The project team appointed LP to support further project development. This includes updating the findings of the feasibility study to reflect current prices and market availability, to carry out future energy demand analysis and to further explore financing options.
- 3.2 The team have been progressing the two agreed options to purchase a solar facility twin-tracked with a PPA. This approach allows us to progress the two recommended options in line with the findings of the feasibility study and is necessary to allow us to make the correct purchase decision to meet the CO₂ targets, and timescales as set in the Council's CCAP.

4.0 Updated Market Availability Assessment & Pricing

4.1 There are several potential sites currently available to purchase. At this stage there is sufficient information to model two different scenarios, with more to follow. The Council is in the process of entering into Non-Disclosure Agreements (NDAs) with the developers for two sites in order to progress discussions:

- **Option 1** – 45.3 MW scheme (south of England). This is the same scheme that the Council reviewed in the feasibility report. Some of the numbers have changed slightly. Irradiance is 1077 kwh/kwp and the scheme is due to connect in June 2023.
- **Option 2** – Two schemes (58 MW total) comprising of 21 MW with an irradiance of 1091kwh/kwp and 37 MW (Southern England). Irradiance of 1019kwh/kwp. The 21 MW scheme connects in March 2022 and the 37MW scheme connects in June 2022.

4.2 There are still no potential schemes identified within the Council boundary or local surrounding areas. Officers have been in contact with the GMCA Environment Team, and they have advised that the launch of their Go Neutral procurement framework is scheduled for early 2022. This will provide us with an additional route to make our needs known to potential suppliers.

4.3 The market has changed significantly since the initial feasibility report was produced (April 2021). Assets have continued to be brought forward and investor confidence in merchant assets i.e., those not supported by subsidy such as Feed in Tariff (FiT) or Renewables Obligation Certificate (ROC) have increased. There has also been an announcement of further funding rounds for Contract for Difference, although it is likely that most of this will support offshore wind and Scottish wind projects.

4.4 Changes in global supply chains and energy markets have impacted on the economics of solar and there is an increase in capital build costs and in the PPA prices achieved at market. In common with many other local authorities, the Council has felt their exposure to the volatile energy markets in recent months and is keen to obtain a more secure energy pricing framework.

4.5 Council officers have met with GMCA colleagues and shared our latest position. The GMCA are launching their Go Neutral energy procurement framework early in 2022 and this will be considered as an additional potential route to market.

5.0 Updated Energy Demand Assessment

5.1 The Council's Energy Management Team, with input from the project team, has assessed the Council's future energy needs considering a range of factors affecting future energy demand and the Council's CO₂ reduction needs.

- 5.2 Based on the Council's projected future energy demand, LP's assessment of the Council's needs is a solar generation asset of between 45MW and 60MW at current market rates costs of c. £30m – to £39m. This would be sufficient to meet our current target to reduce emissions by 7,000 tonnes CO₂ by 2025 and to contribute to our overall target to be Zero Carbon by 2038.
- 5.3 The exact size of the requirement is a function of both the electrical demand of the Council over time and the location of generation. Irradiance levels mean that if a scheme is bought in the south, it could be smaller than a scheme in the north. As there are only a limited number of viable options available on the market, there will be a need to review schemes in a range of 45 MW and 60 MW, depending on location. Schemes with higher irradiance attract a higher value. It is possible that to achieve the required levels of CO₂ savings, a scheme may need to be oversized, with any surplus power generated being sold.
- 5.4 With reference to the two options detailed in Section 4, an assessment has been carried out to consider the alignment between the production from the asset and consumption by MCC. The advantage of these options is they are scheduled to be available by the June 2022 target. The decarbonisation assessment for each option looks at the available carbon savings from a base year of 2025 until the decarbonisation date of 2038.
- **Option 1** – 45.3 MW (southern England) would provide sufficient CO₂e savings above the Council's demand in the early years and will meet the 2025 target. However, from 2035 onwards, the Council's forecast Scope 2 emissions exceed the available CO₂e savings from the asset. It would offer 95% of the 2038 target.
 - **Option 2** – 58MW across two sites (southern England) offers additional capacity for CO₂e savings above the Council's demand in the early years. The 2038 target is met in full. Whilst production means the supply and demand become closer in the later years, the assets always produce more electricity than the forecast demand and surplus could be supplied to third parties locally (e.g., schools) or traded directly.

Other options will be considered as discussions move forward with developers.

6.0 Financing

- 6.1 The implications for both revenue and capital budgets would be as follows:
- revenue for the specialist advice needed in 2022/23 (within existing budgets)
 - capital for the purchase itself in 2022/23 or 2023/24 if the direct purchase of an asset is approved. This would be funded from borrowing and require Council approval.
 - revenue in the long term for the electricity consumption costs of a solar asset / PPA versus the current tariffs and budget.

The quantum of these implications will be determined during the next stage of the process i.e., when NDAs are in place and allow for detailed negotiations and analysis of the business models for individual schemes.

- 6.2 Purchasing a scheme has the potential to offer value for money by reducing the net cost of each unit of electricity used by the Council as well as providing protection from market price volatility.
- 6.3 A direct purchase has a longer-term benefit, and the 25 year period is aimed at capturing the different values over time. The final overall life of an acquired project is likely to be in the range of 25-35 years.
- 6.4 Our feasibility study and business case development work to date demonstrates that the direct purchase of the solar generation asset delivers a stronger Net Present Value (NPV) than a PPA, although all options demonstrate a positive return versus do nothing. Both an asset purchase and a PPA should also deliver revenue savings. As negotiations move forward and actual costs become known, a full financial model will be constructed and the NPV calculations updated accordingly.
- 6.5 Should the direct purchase of a solar asset be pursued this will be funded via borrowing and require Council approval in due course.

7.0 Current Energy Purchasing Policy

- 7.1 The Council currently purchases electricity via a green energy tariff. The supplier promises to match all or some of the electricity used with renewable energy, which feeds back into the National Grid. A green energy tariff means the electricity still comes from the grid. As only a proportion of grid electricity comes from renewable green sources, the energy currently purchased by the Council cannot be reported as a reduction in carbon emissions. Our current contracts are as follows:
- Gas – Current contract ends 31st March 2022. The new gas procurement framework commences January 2022 (1 year agreement with 3 year option to extend).
 - Electric – Current contract and framework expires September 2022.

The contract periods have been adjusted to secure competitive prices and consider longer term energy generation and PPA options.

- 7.2 Most schools and academies in Manchester currently source their electricity via the Council's supply arrangements. For the baseline year 2019/20, this amounted to approximately 28GWh of additional load. If and when heat decarbonisation is delivered to the school estates, demand will increase significantly. Schools and academies gas usage is currently ~ 54GWh annually.

- 7.3 The Council's Energy Management Unit also purchases energy for Bolton Council. The current electricity demand for their operational estate is 22GWh with an additional 13GWh for schools and academies in that area.
- 7.4 Moving to direct energy generation through an owned asset or PPA(s) of renewable energy impacts on the existing energy purchasing approach. Whilst the joint purchasing of energy achieves better pricing for all parties, there is currently no contractual agreement or long-term commitment with the above parties to tie them into the Council's procurement arrangements. It is unviable within the timescales to include within either the sizing of this asset or an associated PPA.

8.0 Accounting for Emissions

- 8.1 The objective of the project is to generate / purchase electricity from a direct renewable energy source to deliver a direct reduction in the Council's CO₂ emissions. To achieve the reduction, the energy must be from a source which is traceable, permanent, and net additional renewable energy. We believe that the purchase of a solar asset / PPA of the kind proposed meets these requirements.
- 8.2 There are some complexities around the reporting of emissions and emissions reductions when scaled up to sub-regional and national level and we need to be mindful of these.
- 8.3 In accounting for their own emissions, organisations such as the Council should draw a boundary around their emissions which represents either their area of operational control or their area of financial control. In this case, a solar asset or other generation assets linked to supply for a PPA would be deemed to be within our boundary of control.

9.0 Recommendations

- 9.1 The recommendations are detailed on the cover page of this report.

10.0 Contributing to a Zero-Carbon City

- 10.1 Action 1.4 of the CCAP targets 7,000 tonnes of annual CO₂ savings by 2025 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 CO₂ emissions over the next 5 years.

11.0 Contributing to the Our Manchester Strategy

(a) A thriving and sustainable city

- 11.1 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

- 11.2 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

- 11.3 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

- 11.4 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

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

12.0 Key Policies and Considerations

(a) Equal Opportunities

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

(b) Risk Management

- 12.2 The key risk is to successful delivery of the Council's Climate Change Action Plan as action 1.4 is targeted to generate 7,000 tonnes of annual CO₂ savings by 2025 and the earlier this is delivered, the greater the contribution to staying within the carbon budget for the five year period.

(c) Legal Considerations

- 12.3 The legal issues to note from the content of this report are that in regard to an asset purchase, PPA or a hybrid it will be necessary to consider the relevant public contracts regulations and the Council's own Contractual Standing Orders in regard to procurement and the processes associated with procurement and associated decision making along with relevant decision making processes for the acquisition of an asset and any agreements entered into in association with any proposal. In this regard appropriate delegated decision making powers and approvals will also need to be considered.

- 12.4 Legal Services will provide support and advice in regard to such matters and also in regard to the recommendations in this report seeking such appropriate expert technical and professional support and advice as shall be appropriate.

12.0 Appendices

Appendix 1 - Feasibility Study and Options Appraisal for Large Scale Energy Generation for Manchester City Council – Local Partnerships (April 2021)

Appendix 2 - Large Scale Renewable Energy Generation Feasibility Summary Study - Report to Environment and Climate Change Scrutiny Committee, 14 October 2021 and Executive, 20 October 2021

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Feasibility Study and Options Appraisal for Large Scale Energy Generation for Manchester City Council

Version No: FINAL

Issue Date: 12 April 2021



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1 Executive Summary

1.1 Background and Purpose

Manchester City Council (“the Council”) has declared a climate emergency and set a science-based target to be zero carbon by 2038. It has already reduced its direct emissions by 48% from a 2009/10 baseline¹. Ongoing work to reduce emissions further is set out within the Council’s Climate Change Action Plan (CCAP) for 2020-25. The CCAP includes a target to halve emissions again within this 5-year period and sets a carbon budget for the period too.

Work is underway across several different strands to meet these emission reduction targets – from improving the energy efficiency of street lighting to decarbonising heat within the estate and investing in large scale renewable energy generation capacity. In October this year, Local Partnerships was appointed to carry out a feasibility study to investigate options for large-scale renewable energy generation - in line with Action 1.4 of the CCAP which sets a target to reduce CO₂ emissions by 7,000 t pa.

1.2 Methodology

This report is based on a desk-based review of opportunities on land assets owned by the Council, a review of potential market opportunities to acquire assets from third parties and a review of potential power purchase agreement (PPA) options. For the reasons set out in section 3.1 of this report the analysis of self-development and asset purchase concentrates on solar PV generation. PPA options consider all alternatives.

1.3 Size of the requirement

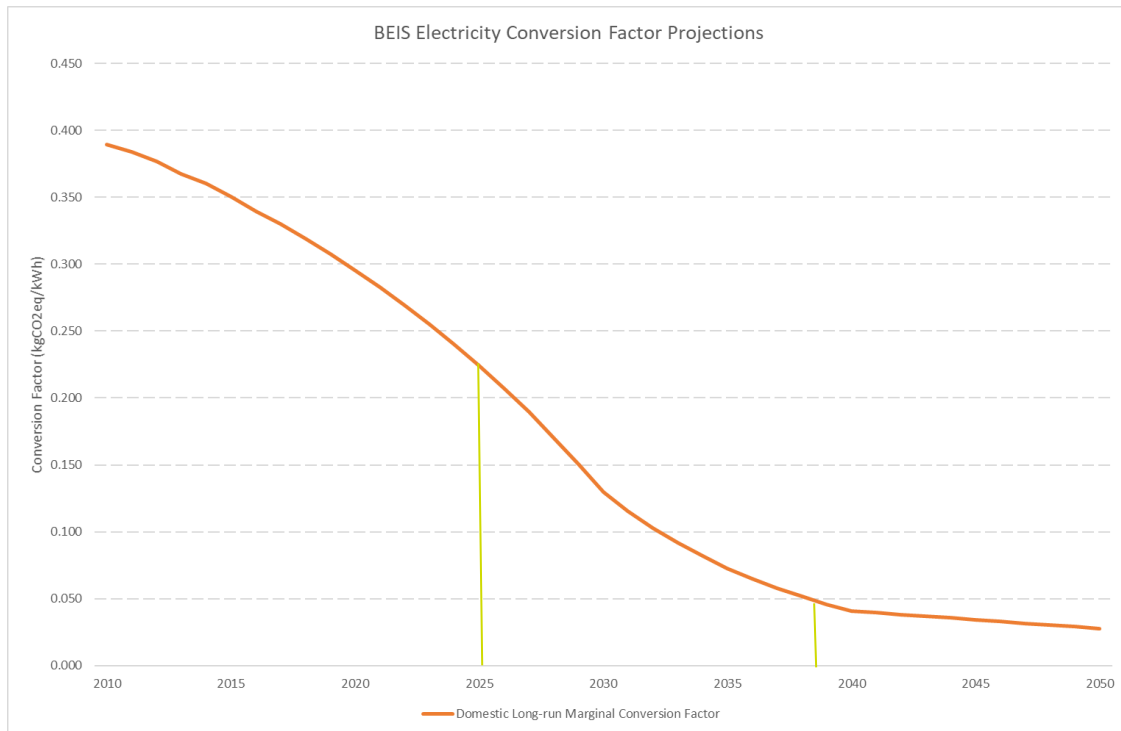
Carbon displaced through renewable energy generation can be described as the avoidance of carbon emissions through grid supplied electricity. The UK has seen significant reductions in the carbon intensity of grid supplied electricity over the last ten years resulting from the retirement of most of the UK coal fired power stations and the introduction of gas fired power stations and renewable energy.

For the UK to achieve net carbon zero emissions by 2050 the complete decarbonisation of the electricity supply will be needed. This will require several measures including a fourfold increase in renewable energy generation. As this happens the carbon intensity of grid supplied electricity falls (see Figure 1)

1

<https://democracy.manchester.gov.uk/documents/s16275/Final%20MCC%20Climate%20Change%20Action%20Plan%202020-25.pdf>

Figure 1: Forecast for electricity grid decarbonisation 2010-2050



Based on the requirement to avoid 7,000 tonnes of tCO₂e by 2025, the Council would require a solar PV portfolio of 33 MW in addition to that already identified in its carbon savings programme. By the Council's net zero emissions date of 2038 the carbon intensity of grid supplied electricity has fallen significantly. In 2038 it is anticipated that the Council will have residual emissions of around 2,913 tonnes of tCO₂e which would require a solar PV portfolio of around 60 MW to offset. The methodology for calculating the 2025 and 2038 requirements is set out in section 3.2.1 and 3.2.2.

The Council will only be able to offset emissions from electricity generation against its electricity consumption (i.e. scope 2 emissions). In setting a target requirement consideration also needs to be given to the future consumption of electricity by the Council. 2018/19 electricity consumption was around 49GWh (excluding schools). A further 4GWh/pa reduction is forecast from the street lighting programme, leaving a residual requirement of around 45 GWh/pa. No further assumptions have been made on volumes due to uncertainties, with volumes set to decrease as a consequence of energy efficiency and rationalisation of property, but also set to increase through the electrification of heat and transport.

At an irradiance level of 945 kwh/kwp (see section 3.2 for further details) the annual consumption would equate to around 47.6 MW.

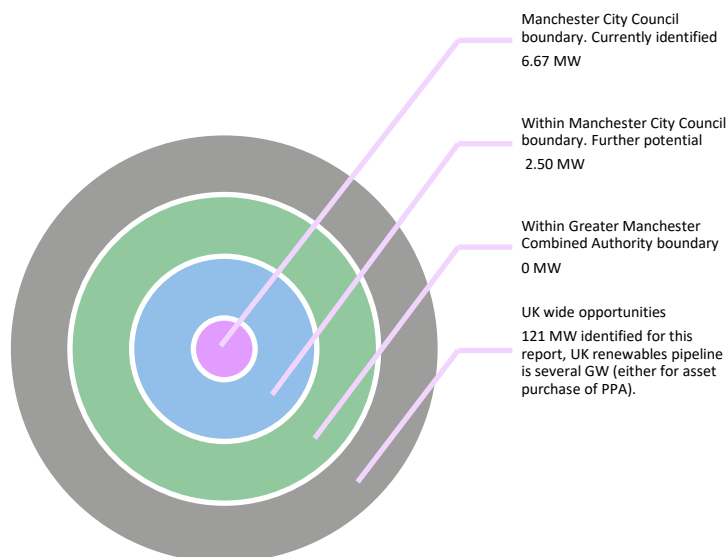
Bringing together these assumptions the Council should consider adopting a target of around 45-50 MW of generation (solar PV or equivalent wind) in order to meet its ongoing requirement.

Recommendation 1: The Council should consider adopting a target of 45-50 MW of solar PV generation (or equivalent wind) now as this will:

- a) Provide a future proof solution which will also deal with residual emissions in 2038.
- b) Allow a larger proportion of the Council's scope 2 electricity emissions to be reduced from an earlier point in time. This will help the Council in achieving its carbon budget target.
- c) Maximise the potential of carbon reduction through generation or power purchase.

Figure 2 below sets out how this requirement is likely to be met.

Figure 2: Opportunities for renewable energy generation



1.4 Council owned sites

The Council has already identified around 6.67 MW of rooftop and carport solar PV (see Table 1) that could realistically be delivered on its own assets.

Table 1: Manchester City Council – Estate wide opportunities for renewable generation

Opportunity	Sites	Solar capacity (MW)
Potential roof mounted solar schemes (Phase 1 Buildings Carbon Reduction)	a) Wythenshawe Forum	0.165
	b) The Sharp Project	0.790
	c) Space Project	0.494
	d) Hough End Leisure Centre	0.188
	e) East Manchester Leisure Centre	0.179
	f) Arcadia Sports Centre	0.166
	g) Moss Side Leisure Centre	0.101
	h) Belle Vue Sports Centre	0.375
	i) Manchester Tennis and Football Centre	

		0.103
Potential roof mounted solar schemes (Public Sector Decarbonisation Fund)	j) Arcadia Library & Leisure Centre k) Manchester Aquatics Centre l) Manchester Tennis and Football Centre m) North City Family & Fitness Centre n) Sharp Project Media Centre o) Wythenshawe Forum p) Zion Arts Centre q) Space Studios	0.082 0.367 0.165 0.146 0.273 0.142 0.102 1.20
Potential roof mounted and carport schemes (ERDF Unlocking Clean Energy)	r) Hammerstone Road – roof mounted s) Manchester Velodrome - carport	0.717 0.915
Total Solar PV		6.67

These schemes are already accounted for in relation to carbon accounting and therefore do not contribute towards the 7,000 tCO₂e target.

1.5 Further potential sites

The Council has limited land available to support large-scale solar PV generation. The requirement identified in section 1.3 will require around 100 Ha of land to achieve, which would be hard to find in a densely built-up area.

Table 2 sets out the criteria that have been considered in assessing sites for potential suitability:

Table 2 – screening tests for potential projects – Solar PV

Risk Category	Action and Information Sources
Viability	<p>Size and orientation. For a scheme to offer sufficient financial return on investment to pay for a grid connection it is likely to need to be > 1MW. A site of this size would require 5 acres of land.</p> <p>Shading from trees or adjacent buildings which would prevent the solar panels from working effectively.</p>
Planning	<p>Planning designations (greenbelt, Area of Outstanding Natural Beauty (AONB) etc).</p> <p>Sites allocated for housing – local plan Proximity to housing – we would recommend at least 300m. Potential loss of amenity either through loss of established public use of a site.</p> <p>Transport and access constraints.</p> <p>Other development issues such as flooding, proximity to historic buildings, complex ecology etc.</p>

Risk Category	Action and Information Sources
Land	<p>Agricultural land grade 3b or below. Indicative land grade is provided by Natural England . http://publications.naturalengland.org.uk/category/5954148537204736).</p> <p>Land ownership including underlying interests and covenants, tenancies etc – Land Registry and deed packets Does the land have direct access to the public highway?</p> <p>Suitability of ground conditions and ground contamination/ stability.</p>
Grid	<p>Available and affordable grid connection capacity for the export of power generated</p>

We have examined a range of land holdings including 35 historic landfill sites across the city. Many of these closed landfill sites have been reclaimed as open space (for example, Clayton Vale and Tweedle Common) or are not suitable for development as a result of location issues where adjacent land uses effectively rule out development (also see Appendix 4). For example, Shack Liffe Green is nestled between the houses of Horncastle Road and Boggart Hole Clough Park. The site has received minimal intervention and as a result now has a very diverse habitat with ecological value.

We also identified potential opportunities for solar PV at Heaton Park and on Council owned land south of Wythenshawe Hospital. Further investigation of these sites suggests that there are issues which would prevent them providing solar PV capacity as follows:

- Heaton Park is a large, historic, Grade II listed municipal park and reservoir, containing a number of historic structures dating from its original use as a country estate. It is used for a mix of formal and informal recreational opportunities in a primarily informal landscape. Heaton Park is a site of heritage value and as such a heritage impact assessment will be required to determine any potential harm or opportunities on the listed buildings within the setting. Heaton Park is also designated as a green belt area. At the time of writing, grid capacity of around 8 MW was the available in the vicinity of the site.

Discussions with the Council's planning department has precluded a development of this scale due to the impact on heritage assets. As an alternative a significantly smaller solar carport project was considered, but again this is likely to be unsuitable in planning terms.

- The land south of Wythenshawe Hospital under is included within Allocations 11 and 46 for employment within the Greater Manchester Spatial Framework Publication Plan 2020. These allocations and supporting planning documents have been through extensive consultation and as such it would be very difficult to make representation to amend the allocations for a ground mounted solar scheme to be brought forward on the site. The plan is currently going through all ten Greater Manchester Combined Authority councils for approval. The consultation on the final plan is scheduled from 1 December 2020 to 26 January 2021.



There remains potential for up to 2 MW of solar PV on both the car park and roof areas at the site, however it is likely that this will be required by the eventual occupiers of the site.

Further investigation of the planning constraints associated with these assets suggest that **none of this will contribute** to the overall requirement as the sites are unsuitable in planning terms.

A review of planning applications within the Council's area over the last two years has not provided any potential third-party schemes within the Council's boundary.

1.6 Greater Manchester Combined Authority Sites

Other councils within the Greater Manchester Combined Authority area are also exploring potential opportunities for solar farm sites. The ground mounted projects planned include solar farms at Chamber House farm in Rochdale (5 MW) and Kenyon Way in Salford (1.7 MW). The size of these schemes are not large enough to necessitate a collaboration with the Council and we have not been able to identify any third party developments which could be acquired.

1.7 Market Schemes – UK wide opportunities

We have identified no additional potential for schemes within the Greater Manchester area.

As the Council's requirement cannot be met from within its own asset base it is likely to need to acquire assets from the open market or enter into a suitable PPA. Section 8 of this report sets out how the Council can position itself to be able to respond to market opportunities as they arise. It is most likely that schemes available to purchase will be onshore solar PV for the reasons set out in section 3.1.

There is a substantial pipeline of new solar PV projects in the UK, but many of these projects are either already owned by, or committed to, existing investors. There are two types of developers of solar PV assets in the UK, those who are part of or commercially attached to the major funds (e.g. Greencoat, BlackRock and Octopus Renewables), and those who fund their own developments and sell projects. This report has been produced following dialogue with developers who sell projects.

There are examples of local authorities successfully purchasing Low and Zero Carbon (LZC) most notably Warrington Borough Council who have acquired around 100 MW of solar PV and storage assets from Gridserve.

The solar development market has focused in recent years on the development of larger schemes, typically larger than 30 MW capacity and mostly concentrated just under 50 MW in size. These schemes are a good fit with the Council's overall requirement.

During the course of this process, Local Partnerships has identified three potentially suitable projects for the Council to review. Other schemes may become available over time and these schemes may no longer be available when the Council is in a position to act, so implementation of an asset purchase scenario is likely to require new market

[Feasibility Study and Options Appraisal for Large Scale Energy Generation for Manchester City Council](#)



intelligence. We are not able to disclose commercially sensitive information in relation to projects identified, so these have been anonymised for the purpose of this report.

1.7.1 Project A – North West – 30 MW

Project is in development. Grid and land rights appear to have been secured by the developer. Planning is yet to be submitted. Earliest energisation date Q4 2023. Community development company.

1.7.2 Project B – The Midlands – 45 MW

Project has grid and land rights secured. Planning consent has been granted for the scheme. This scheme has a grid connection at 132kV which will add some complexity. Opportunity to purchase post construction. Earliest energisation date Q1 2022. Commercial developer.

1.7.3 Project C – Southern England – 46 MW

Project has grid and land rights secured. Planning consent has been granted for the scheme. Earliest energisation date Q3 2021. Commercial developer.

There will be competition for the acquisition of these projects, and the Council cannot therefore be certain at this stage of securing a particular project. The purpose of this report is not to identify and secure a project, it is to develop the Council's understanding of what is required to meet its objectives and the extent to which that is possible. This will enable the Council to take the necessary decisions to put in place measures which would allow it to engage with projects and move at the speed that is likely to be necessary to secure project rights. This report therefore does not contain a specific recommendation to pursue any particular option.

1.8 PPA options

Renewable energy PPA's are available either through major electricity suppliers or direct with generating stations. These are generally on terms ranging from 8-15 years. Renewable energy PPAs have some risks in carbon accounting terms in relation to permanence as the arrangement can be easily reversed at the end of the contract period.

1.8.1 Electricity supplier green PPAs

For this report we have reviewed options available from npower (the Council's current electricity supplier). Under these arrangements the Council are able to source their power directly from an identified renewable energy generating station, with pricing tied to the particular technology.

Various pricing options are available ranging from a fixed price option to options indexed at either CPI or RPI.

In addition to the carbon accounting risk in relation to permanence PPAs with major suppliers are harder to justify in terms of additionality as most of the schemes listed would have entered into a PPA with a large electricity supplier regardless of the specific demand from one customer. There is also the possibility of being accused of 'green washing' as by allocating particular renewable energy generation to a specific customer

the supplier is potentially increasing the carbon intensity factor for electricity supplied to its other customer who are not on a specifically 100% renewable energy tariff.

1.8.2 Direct PPAs with generating stations

It is possible to procure electricity directly from a generating station, through either a sleeved or a synthetic PPA. Either of these arrangements is compliant in terms of carbon accounting.

Whilst the permanence argument remains in relation to carbon accounting the additionality argument is much stronger when taking this alternative.

1.9 Value for Money

A financial appraisal of each of the options was undertaken and compared to the current state (do nothing scenario) using a net present value (npv) calculation. This modelling was undertaken by Local Partnerships on behalf of the council and utilises third party data from Aurora Energy Research (Aurora). The outputs of this modelling are shown in Table 3.

Local Partnerships are subscribers to Aurora, who are a market leading provider of energy price forecast information. Using high quality forecast information for forward energy prices provides the council with the highest likelihood of a robust npv calculation. Aurora's information is the basis of their business and clients are tied with strict contractual terms that prevent the release of forecasts to non-subscribers. Local Partnership's agreement with Aurora allows them to use the information in financial modelling and to release the outputs of that modelling in a form where the original data cannot be reverse engineered, but not to release the financial models as these contain the embedded data sets. We have therefore included the assumptions for the financial modelling and the outputs of the npv calculations in this report.

Local Partnerships and Aurora have undertaken a workshop with council officers to ensure that the council understands the basis of the data and the financial models that produce the npv information used in this report.”

Table 3: Outputs from NPV modelling

Manchester City Council Scenario Comparisons (February 2021)

		Total Cost (25 yrs)	Cost after 8 years	25 year npv	8 year npv
With sleeved PPAs					
1.	Do Nothing (assumes Aurora wholesale plus inflation)	-£85,558,054	-£21,965,089	-£43,366,132	-£17,091,133
2.	Fair Value Solar PPA Option	£15,808,392	£2,593,361	£7,235,495	£1,966,242
3.	Fair Value Wind PPA Option	£22,385,253	£5,528,952	£11,169,161	£4,258,268
4.	Solar Own/Operate Option Site 1 (southern England)				
4. a)	Solar own and operate with 25 year finance (southern England)	£22,017,266	£3,055,525	£9,977,925	£2,207,730
4. b)	Solar own and operate with 35 year finance (southern England)	£30,147,626	£5,765,645	£14,403,842	£4,347,664
5.	Solar Own/Operate Option Site 2 (the Midlands)				
5. a)	Solar own and operate with 25 year finance (the Midlands)	£20,225,002	£1,081,277	£8,263,154	£629,010
5. b)	Solar own and operate with 35 year finance (the Midlands)	£28,230,442	£3,749,757	£12,621,068	£2,736,065
6.	npower wind PPA (£48.50) indexation 2.0%	£20,089,059	£3,232,759	£9,293,783	£2,382,890
7.	npower solar PPA (£47.10) indexation 2.0%	£16,988,517	£3,773,486	£8,076,710	£2,807,458

From the table it is clear that all options represent value for money in relation to 'do nothing' and there is therefore a compelling reason to act.

Over a 25 year operation period both the asset acquisition options offer good value for money. If a shorter 8 year time horizon is considered then the a fair value (direct) PPA

with a third party or an asset acquisition of a site in southern England represent best value.

Recommendation 2: All options have positive NPV outcomes when compared with 'do nothing'. There is therefore a solid value for money basis to either enter into a suitable PPA or asset purchase agreement.

1.10 Options Appraisal

Four scenarios were taken forward into the options appraisal. These represented the best value alternatives from the NPV comparison exercise and include:

1. nPower wind PPA
2. Fair price wind PPA (direct with a generator)
3. An asset purchase of the site in southern England
4. An asset purchase of the site in the Midlands.

A total of seventeen criteria based around desirability, feasibility and viability were agreed with the Council and each option was scored against the criteria. Detail of this process can be found in section 10 and Appendix 5.

The output scoring from the options appraisal is set out in table 4.

Table 4: Options appraisal scoring

Option	Description	Score	Rank
1.	nPower wind PPA. A wind based PPA with nPower (current electricity supplier) linked to specific projects. This is for an 8 year duration and pricing has been obtained from nPower.	61%	4
2.	Fair Price Wind. A wind based PPA direct with a turbine operator. This assumes an 8 year duration with pricing based around the Aurora Energy Research fair pricing model.	72%	2=
3.	Asset Purchase (Southern England). An asset purchase of a 49 MW solar farm post construction. The farm is based in southern England and terms have been discussed directly with the owners. Financing is through a 35 year PWLB loan at 1.46%.	80%	1
4.	Asset Purchase (The Midlands). An asset purchase of a 46 MW solar farm pre-construction. The farm is based in the Midlands and terms have been discussed directly with the owners. Financing is through a 35 year PWLB loan at 1.46%.	73%	2=

From the options appraisal it can be seen that the purchase of a site in southern England represents both the best value for money and the best fit with the Council's objectives. There is little to choose between an asset purchase in central England and direct wind PPA.



1.11 Preferred option and PWLB risk

In November 2020 the Government published its response to a consultation on Public Works Loan Board (PWLB) lending terms. The consultation was aimed directly at preventing local authorities borrowing for projects which were purely or largely for yield and contained a specific note around investments being in the local economic area.

The asset purchase options are not in the Council's local economic area and it is highly unlikely that a suitable asset will ever become available in the Council's economic area. Furthermore, if investment in renewable energy generation is allowable (and within the local area it appears to be), then local authorities in the north of England are at a disadvantage to those in the south as irradiance levels (and therefore carbon saved and cost savings per £ spent) are less.

Before the Council can decide whether or not an asset purchase is its preferred option it needs to establish with HM Treasury whether or not it is permitted to make this investment under the new PWLB lending criteria.

Recommendation 3: Having undertaken a thorough options appraisal exercise the Council is now able to articulate that asset purchase is a value for money option to achieve their carbon targets and should now explore with HM Treasury whether or not an asset purchase would be compliant with PWLB lending terms.

1.12 No regrets actions and next steps

In order to deliver the strategy of reducing emissions by 7,000 tCO₂e by 2025, the Council will need to determine its preferred way forward. In order to do that the following are recommended:

1. Develop an understanding of the likely future requirements for electricity over the next decade. This should provide a view as to the likely overall requirements and the degree of certainty which could be attached to this forecast. In all scenarios there is a benefit in having reliable information on which to base assumptions.
2. Follow up established conversations in relation to the use of PWLB to ascertain whether an out of area asset purchase would be allowable under the new prudential regime.

If the Council determines that it wants to pursue an asset purchase strategy, then it will need to put in place measures to allow it to implement that strategy including:

3. Establishing sufficient delegated decision-making powers to allow the Council to enter into an exclusivity agreement with a developer and invest in the necessary due diligence work to determine whether a project is a viable prospect.
4. Establish a supplier base to facilitate the due diligence work including technical specialists and lawyers.
5. Develop its financial and carbon modelling to ensure that all costs and benefits for a particular project are understood.



6. Determine whether or not to proceed further with due diligence in relation to any of the large-scale projects identified.

If the Council determines that it wants to pursue a PPA strategy, then it will need to put in place the following:

7. A clear policy in relation to carbon accounting, tested with the Council's advisors in this area, setting out how additionality, permanence and traceability will need to be demonstrated by any procurement.
8. A suitable procurement for a direct 'fair value' PPA agreement.



2 Methodology

2.1 Site Generation Hierarchy

This report has been developed with reference to the methodology set out below.

1. Express the carbon reduction target in terms of renewable energy generation capacity. Review overall Council electricity consumption and combine the two to provide an overall renewable energy target that achieves a 7,000t CO₂e reduction in 2025.
2. Review Council owned assets to ascertain how much renewable energy generation could be accommodated on Council owned assets, in addition to that already identified. This took the form of a desk-based review of suitability from an asset list supplied by the Council and references land, planning and grid connection constraints.
3. Once the Council's own estate has been exhausted, look for other opportunities in the Greater Manchester Combined Authority area with other public sector bodies. These opportunities were highlighted by the Council and reviewed on a similar basis to the asset review.
4. Third party schemes in the Council area were searched for through the planning registers, although no suitable schemes were identified as having been submitted for planning within the last two years.
5. Look for surplus generation capacity in the open market to fulfil any shortfall in relation to capacity. This was done by direct approaches to renewable energy developers known to sell projects and project rights on the open market. Local Partnerships has Non-Disclosure Agreements (NDAs) with these developers which allows us to provide anonymised data to the Council (who do not currently have an NDA). Three projects were identified through this process (see section 8.10). These sites have not been subject to due diligence and the information provided in the term sheets has been used to generate the information for the report.
6. Review available PPA alternatives. This took the form of dialogue with Aurora Energy Research to gain market insights and intelligence and a meeting with the Council's current energy supplier nPower to discuss alternatives they could offer.

The schemes in section 8.10 have also been subject to outline financial appraisal to ensure the Council has a broad understanding of scheme economics.

2.2 Key Considerations

The options are quite different in their approach, in order to analyse them further the following considered:

1. Is the size of the scheme a match with the Council's requirements
2. Work required by the Council to deliver the scheme



3. Timing – likely date of first generation
4. Irradiation
5. Potential for community involvement
6. Risks
7. Carbon benefits (a function of size, irradiation and timing)
8. Investment criteria (a function of size, irradiation, capital cost and Power Purchase Agreement (PPA) assumptions).

To assist the Council in understanding the different characteristics, we have run workshops with key personnel to cover each of the topics in detail and to provide the opportunity for assumptions to be explored and risks to be analysed. Further information in relation to PPAs, subsidy and price support mechanisms are found in Appendix 1.

The approach taken to the acquisition or development of schemes will also have risk and procurement implications. To assist in the understanding of this further information is provided in Appendix 2 in relation to procurement.

3 Sizing the Council's renewable energy generation requirement

3.1 Background

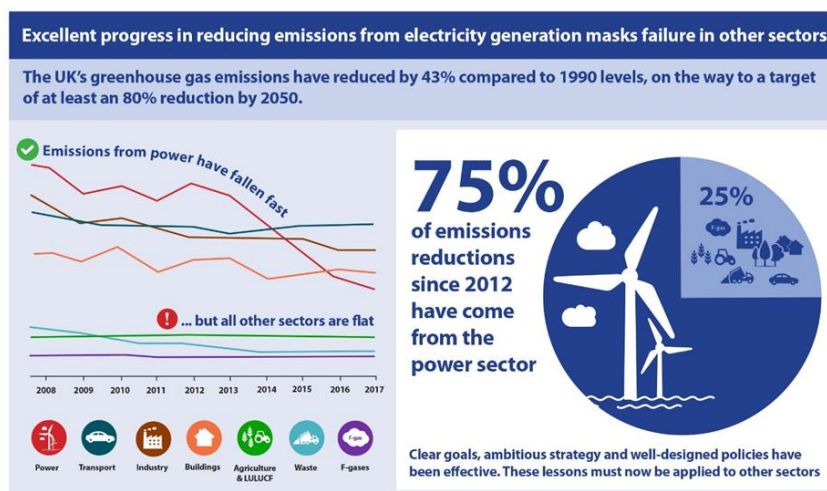
The Council has declared a climate emergency and set a science-based target to be zero carbon by 2038. It has already reduced its direct emissions by 48% from a 2009/10 baseline. Ongoing work to reduce emissions further is set out within the Council's Climate Change Action Plan (CCAP) for 2020-25. The CCAP includes a target to halve emissions again within this 5-year period and sets a carbon budget for the period too.

Work is underway across several different strands to meet these emission reduction targets – from improving the energy efficiency of street lighting to decarbonizing heat within the estate and investing in large scale renewable energy generation capacity. In October this year, Local Partnerships was appointed to carry out a feasibility study to investigate options for large-scale renewable energy generation - in line with Action 1.4 of the CCAP which sets a target to reduce CO₂ emissions by 7,000 t pa.

3.2 Grid decarbonisation

The UK has seen rapid decarbonisation of its electricity supply over the last eight years. Figure 3, produced by the Committee on Climate Change, sets out the progress towards decarbonisation made by the main sectors of the economy since 2012.

Figure 3: UK progress towards decarbonisation²



The UK Government has committed the UK to be a net zero emitter of greenhouse gases (GHG) by 2050. In order to achieve this commitment, decarbonisation of electricity generation will be a pre-requisite. The UK has continued to make progress with deployment of renewable energy and there are a number of measures in place (or in the

² Source: Committee on Climate Change 2018 progress report to Parliament – June 2018

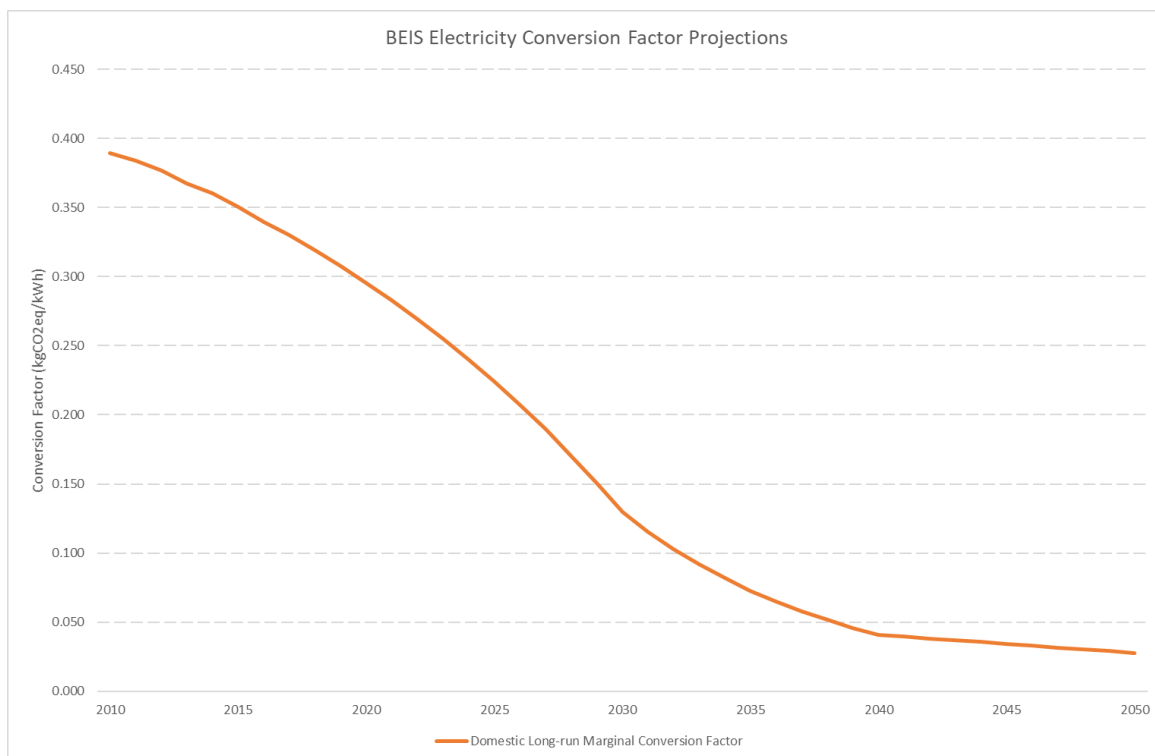


pipeline) that should provide confidence that grid decarbonisation is likely to continue for the foreseeable future. These measures include:

1. Offshore wind sector deal – aiming to triple current capacity to 30 GW by 2030. A further commitment to increase this to 40 GW by 2030 was included in the ten-point plan for a 'Green Industrial Revolution' made in November 2020³.
2. Introduction of the Smart Export Guarantee Scheme – guaranteeing both an export market and a positive tariff at all times for small generators under 5MW.
3. Announcement that there will be a 12 GW allocation for mature technologies in the next round of Contract for Difference Auctions in late 2021. This in effect provides a mechanism for price guarantees for both onshore wind and solar PV schemes that are successful in the auction.

UK Government forecasts for the carbon intensity of the electricity supply were last produced by the Department of Energy and Climate Change in 2010. Decarbonisation has been happening at a rate slightly quicker than the forecast figures. The future forecasts are shown at Figure 4.

Figure 4: Forecast for electricity grid decarbonisation 2010-2050



Grid decarbonisation looks set to continue, but the rates of decarbonisation are likely to be less pronounced as almost all coal fired power stations have already been removed from the generation mix. In order to achieve net zero by 2050 the UK will have to increase its supply of renewable energy to around four times current levels. This is to allow for the removal of the gas fired power stations from the generation mix. These

³ The ten point plan for a green industrial revolution - GOV.UK



forecasts are now ten years old and current rates of grid decarbonisation are running approximately 13.5% ahead of the forecast figures.

3.1 Renewable energy technology selection

Solar PV and wind turbines represent the best value for money in UK renewable energy technology installations. There may be some small opportunities to generate power from other technologies, however the returns on investment are generally lower. We have not been made aware of any specific opportunities the Council has in relation to other technologies.

Development of new onshore wind turbines in England and Wales has been problematic since the introduction of new planning criteria in 2016 (see section 6.1), with the result that almost no new onshore wind capacity has been delivered in England or Wales in the last five years. Most new onshore turbines are in Scotland. Schemes in Scotland run the risk in the event of devolution that the Council has an investment outside of the country in which it is located. These schemes are also normally developed directly for investors and rarely come to the market. For these reasons it is considered unlikely that an onshore wind scheme would meet the Councils' requirements.

The Crown Estate is currently in the process of running its fourth leasing round, creating the opportunity for at least 7 GW of new offshore wind projects (see section 7.1). The Round 4 leasing process consists of five stages, the pre-qualification stage of which has already been completed. It is currently anticipated that Round 4 projects will become operational towards 2030. The size and delivery timing for offshore wind assets makes them unlikely to be a good fit with the Council's requirement.

These constraints, coupled with the largely urban nature of the Council's area, mean that our analysis for development or acquisition projects has focused on solar PV which represents the most realistic and affordable opportunities to meet the requirement. However, where a scheme may be improved by the incorporation of on-site storage then commentary on this has been provided.

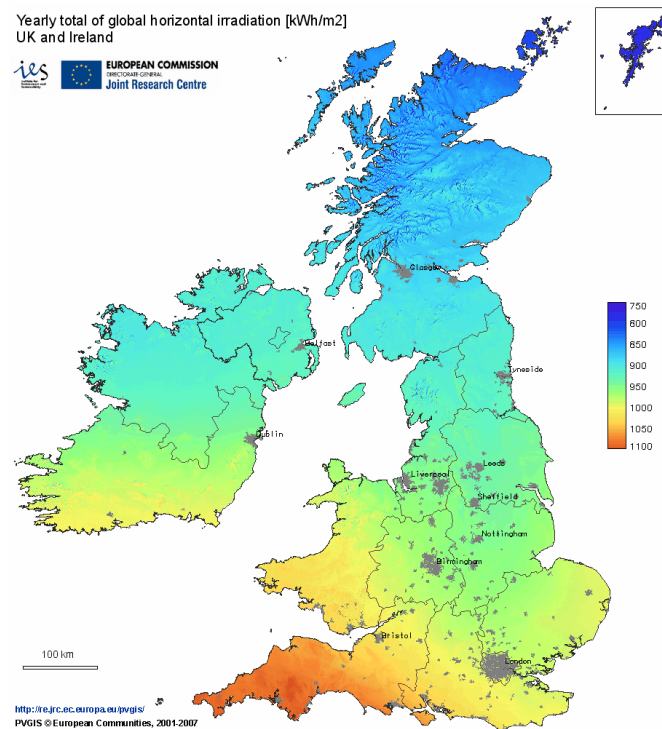
PPA options have also considered wind projects, although these are likely to be located in Scotland or offshore.

3.2 Calculating the appropriate size of a solar PV scheme to meet existing targets

The original brief was to offset 7,000 tCO₂e in 2025. Figure 3 shows that the carbon intensity of grid supplied electricity falls from 0.224 Kg CO₂e/kWh in 2025 to 0.052 Kg CO₂e/kWh in 2038. The Council's offsetting requirement also falls during the period 2025 – 2038, with a residual requirement in 2038 of 2,913 tCO₂e. We have therefore calculated the equivalent solar PV requirement for both 2025 and 2038.

The other significant variable in calculating the size of the requirement is solar irradiance. Irradiance varies across the UK and significantly affects project economics, as higher irradiance is in effect free fuel. Figure 5 on page 16 shows irradiance levels across the UK. As it is not yet known where any potential scheme might be located we have assumed a generic figure of 945 kWh/kWp of installed solar PV in our calculations, which is similar to the figure in Manchester. Schemes in southern England may have significantly higher levels of irradiation.

Figure 5 – UK solar irradiance levels (Source PVGIS)



3.2.1 Solar equivalent sizing - 2025

By 2025 grid supplied electricity is forecast by BEIS to have a carbon intensity factor of 0.224 Kg/ kWh.

Converting the **7,000-tonne requirement** into the equivalent grid supplied electricity can be done as follows:

1 Kg/kWh = 1 tonne/ MWh therefore:

$7,000 \text{ tonnes} / 0.224 = 31,250 \text{ MWh}$ of grid supplied electricity equivalent

The projected irradiance for Manchester is in the region of 945 kwh/kwp⁴. For the requirement to be met by locally produced solar PV in 2025 the Council would therefore need:

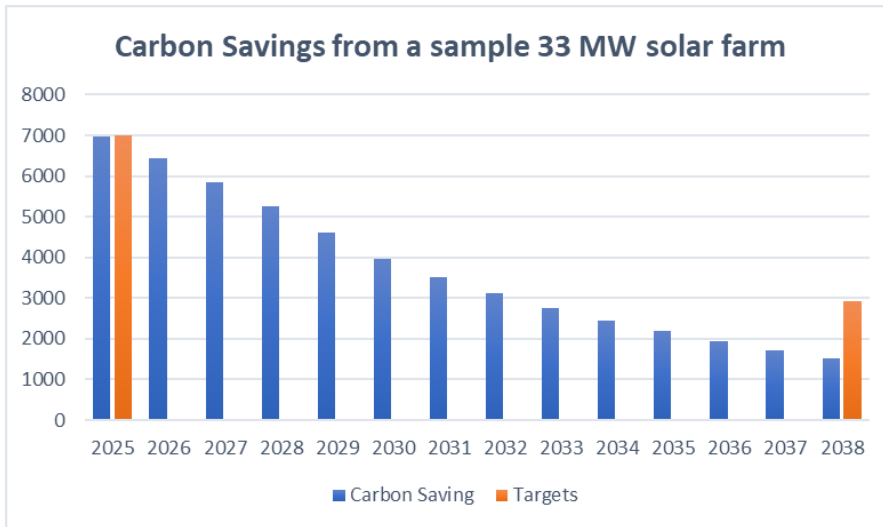
$31,250 \times 1,000 \text{ (conversion MWh to kWh)} / 945 = 33,069 \text{ kWp}$ or the equivalent of around **33 MW solar**.

Figure 6 sets out how a 33 MW solar farm, sized to meet the 2025 target would fall short of the 2038 target.

⁴ PVGIS Version 5 - CMSAF



Figure 6: Carbon savings from a 33 MW solar farm against targets



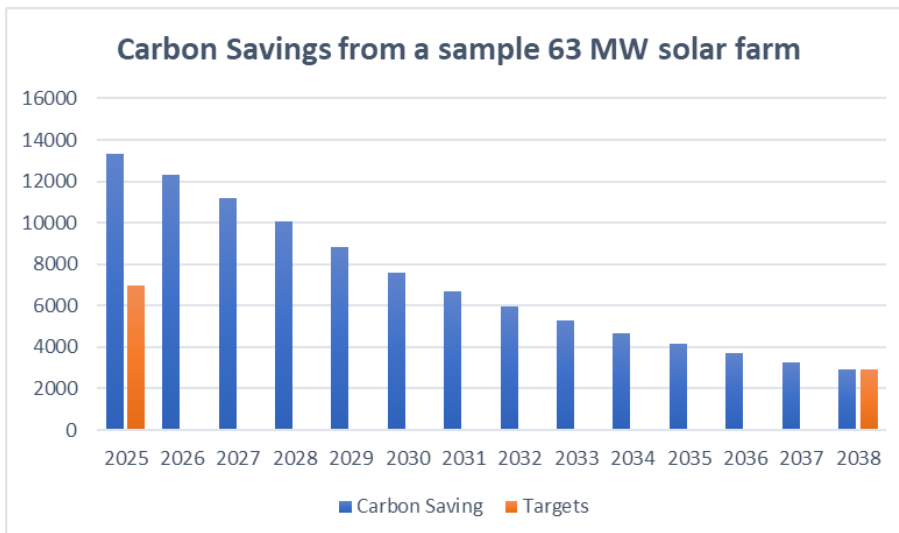
3.2.2 Solar equivalent sizing – 2038

By 2028 grid supplied electricity is forecast by BEIS to have a carbon intensity factor of 0.052 Kg/ kWh.

Following the same methodology set out above, but also allowing for the 0.4% annual degradation the 2038 **2,913-tonne requirement** is equivalent to a 63 MW solar requirement in the Manchester area.

Figure 7 sets out the carbon savings from 63 MW of solar against the targets in 2025 and 2038.

Figure 7: Carbon savings from a 63 MW solar farm against targets





3.2.3 Sizing by electrical consumption

The Council will only be able to offset emissions from electricity generation against its electricity consumption (i.e. scope 2 emissions). In setting a target requirement we therefore also need to consider the future consumption of electricity by the Council. 2018/19 electricity consumption was around 49GWh (excluding schools). A further 4GWh/pa reductions are forecast from the street lighting programme, leaving a residual requirement of around 45 GWh/pa.

There is considerable uncertainty around future levels of consumption. The Council have ongoing energy efficiency programmes and will potentially also review their estates requirement following a year of homeworking through the Covid-19 lockdowns. These measures may see a significant decrease in electricity consumption, although analysis of previous years trends suggests that aside from the street lighting programme the Council has achieved year on year energy efficiency savings of around 2%.

Set against this the Council will need to use electricity for more things in the future if it is going to remove its scope 1 emissions (i.e. petrol, diesel and gas). It is likely that much of the fleet will need to be electrified and heating systems will require more electricity in the future.

45 GWh in 2038 would represent around 2,088 tCO₂e in 2038. This is less than the 2,913 tCO₂e identified in earlier work, and therefore assumes that the Council will achieve greater energy efficiency savings than previously identified.

Bearing in mind the uncertainty over electricity consumption we have used the 45 GWh/pa in the remainder of this report and focused on flexibility in our assessment of different alternatives.

At an irradiance level of 945 kwh/kwp (see section 3.2.1 for further details on methodology) the annual consumption would equate to around 47.6 MW of solar PV.

3.3 Carbon Accounting Practice

The Council will be able to account for the electricity produced from the renewable energy generators against its scope 2 emissions. These are the emissions produced by the consumption of grid supplied electricity. It is not possible to use renewable energy generation to offset against scope 1 emissions in the UK.

Recommended practice in the UK is for organisations to undertake dual accounting for the use or generation of renewable energy. Under this methodology the initial assessment is undertaken using grid supplied electricity and then an adjustment is shown 'below the line' for the renewable energy. In this way it is possible to retain visibility over both total consumption of electricity (and the success or otherwise of energy efficiency measures) and the use of carbon.

In order for renewable energy to be reliably used in carbon accounting it is necessary to consider three things:

1. Whether or not the use of renewable energy directly contributes to additional renewable energy resource in the UK. Any scheme which would have gone ahead regardless of the arrangement should not be included in carbon

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accounting measures. In particular the Council should be wary of supplies which are part of much wider arrangements where the allocation of a project to a particular customer would lead to the general supply for customers not on a 'green' tariff having a higher carbon intensity.

2. Permanence of the arrangement. Any initiative which can easily be reversed eg if budget cuts are required should not be included in carbon accounting measures.
3. Traceability. This means the extent to which it is possible to be certain that the electricity purchased has been generated at the point specified. This is governed in the UK by the Renewable Energy Generation of Origin (REGO) certificates, a scheme which is administered by Ofgem. For the purposes of the remainder of this report it is assumed that all schemes will be able to provide suitable REGO certificates.

3.4 Size range and target size

The 2025 target requires a solar farm of around 33 MW, whereas to meet the 2038 target a much larger 63 MW solar farm would be required. These are both assuming an irradiance of 945 kWh/ kWp (Manchester area). If a suitable project could be found in an area with 10% higher irradiance, then the requirement would fall by the same amount.

If a larger project was selected, then it would meet the 2025 requirement and potentially the 2038 residual emissions target. A larger scheme would also have the benefit of contributing more to the earlier carbon budgets.

In order to contribute to CO₂e reductions a scheme will have to be no larger than the Council's equivalent scope 2 emissions. We would therefore recommend that the correct size for the requirement is in the order of 45 MW – 50 MW of solar PV.

Recommendation 1: The Council should consider adopting a target of 45-50 MW of solar PV generation (or equivalent wind) now as this will:

- a) **Provide a future proof solution which will also deal with residual emissions in 2038.**
- b) **Allow a larger proportion of the Council's scope 2 electricity emissions to be reduced from an earlier point in time. This will help the Council in achieving its carbon budget target.**
- c) **Maximise the potential of offsetting through generation or power purchase.**

Background – Key Points

The report sets out a requirement for the equivalent of 45-50 MW of solar PV.

Solar PV projects are more realistic than wind turbines due to planning restrictions.



4 Review of ground mounted solar PV opportunities on land assets owned by the Council

4.1 Overview

The use of large-scale ground mounted solar has been popular in the UK and represents around two thirds of the UK's overall installed solar capacity. Ground mounted solar PV schemes need scale to be cost effective as investment yields are typically relatively low (<6%).

Land recovered from former landfill activities can be used for ground mounted PV systems, but this increases the costs as mounting structures need to be surface mounted (as opposed to piled into the ground). It is also possible to install floating solar arrays on reservoirs, although these schemes are more expensive.

The requirement identified in section 3.4 will require in excess of 100 Ha of land to achieve. Our analysis (see Appendix 4) concludes that the Council has limited scope for ground-mounted solar that merit further investigation. The Council currently holds land interests at 35 historic landfill sites across the City. Many of these closed landfill sites have been reclaimed as open space (for example, Clayton Vale and Tweedle Common) or are not suitable for development as a result of location issues where adjacent land uses effectively rule out development. For example, Shack Liffe Green is nestled between the houses of Horncastle Road and Boggart Hole Clough Park. The site has received minimal intervention and as a result now has a very diverse habitat with ecological value.

Potential opportunities for solar PV exist at Heaton Park and on Council owned land south of Wythenshawe Hospital (see sections 4.4 and 4.5), however planning and other designations mean that these sites cannot realistically be brought forward for solar PV.

4.2 Development of ground-mounted solar PV schemes

In progressing ground mounted solar schemes on its own sites, the Council will need to consider the best approach to take to managing the development process. Detailed guidance on this can be found at [Renewable Energy Good Practice guidance for the LGA](#).

Working with a third party brings skills and potential development finance but will require the benefits to be shared and a procurement will be necessary.

In this analysis we have not contemplated the Council developing sites on third party land as this would require the identification of suitable sites before any appraisal could take place. If the concept of ownership of large-scale ground mounted solar PV projects is agreeable this alternative could be considered as a potential delivery route, although it is resource intensive and carries significant development risk. Under the Prudential Code, local authorities cannot borrow from the PWLB or any other lender for speculative purposes.



The options for development of schemes on Council owned land are:

1. The Council acts as developer by directly managing the grid connection application and the submission of the planning application – this approach will maximise the financial benefits but carries the greatest risk in terms of development finance and failure to develop. The approach will require staff capacity and capability to manage the process.
2. Partnering with a solar developer who would take on some of the project risk. Given the relatively small size of the pipeline and the complexity of the procurement exercise that would be required, this route would be unlikely to provide best value.
3. Energy performance contracting – this approach uses a framework to appoint a suitable contractor who will then work up the scheme and manage the development process. Costs are incurred by the Councils for the development work, but financial returns are guaranteed.

4.3 Elements of development

Table 5 below sets out the initial screening tests that have been applied to Council owned sites in assessing their suitability to host solar PV projects.

Table 5 – screening tests for potential projects – Solar PV

Risk Category	Action and Information Sources
Viability	<p>Size and orientation. For a scheme to offer sufficient financial return on investment to pay for a grid connection it is likely to need to be > 1MW. A site of this size would require 5 acres of land.</p> <p>Shading from trees or adjacent buildings which would prevent the solar panels from working effectively.</p>
Planning	<p>Planning designations (greenbelt, Area of Outstanding Natural Beauty (AONB) etc).</p> <p>Sites allocated for housing – local plan Proximity to housing – we would recommend at least 300m.</p> <p>Potential loss of amenity either through loss of established public use of a site.</p> <p>Transport and access constraints.</p> <p>Other development issues such as flooding, proximity to historic buildings, complex ecology etc.</p>

Risk Category	Action and Information Sources
Land	<p>Agricultural land grade 3b or below. Indicative land grade is provided by Natural England . http://publications.naturalengland.org.uk/category/5954148537204736).</p> <p>Land ownership including underlying interests and covenants, tenancies etc – Land Registry and deed packets Does the land have direct access to the public highway?</p> <p>Suitability of ground conditions and ground contamination/ stability.</p>
Grid	<p>Available and affordable grid connection capacity for the export of power generated</p>

There are three basic elements for developing a solar farm; land rights, grid connection and planning.

4.3.1 Land rights

The schemes we have reviewed are on land owned by the Council. There are, however, other land considerations which any scheme would need to we have reviewed are on land owned by the Council. consider. These are as follows:

1. Any leases, licences, covenants or other rights over the land.
2. Any third-party land rights which will be needed to lay a cable between the site and the point of connection identified by the electricity grid network operator Electricity North West (ENW).
3. Any alternative uses for the land which the Council may have and whether a solar farm represents the optimum use of scarce resources.

4.3.2 Grid connection

In order for any scheme to work it needs access to a grid connection. This needs to be at a suitable scale and affordable cost. Grid access is provided by the local network operator via a formal process of a grid application. Prior to the grid application, informal advice can be sought either via surgeries or via a 'budget estimate' process. These informal processes are helpful, but do not provide certainty either in terms of price or guarantee that a connection will be available when required. The grid offer process takes around 65 working days and involves an up-front cost (of the order of £2,000 per site).

Types of grid connection offer

ENW grid connection offers provide two alternative prices; one is for ENW to undertake all connection works i.e. from the project site on to their network (usually known as 'all works' offer). The second offer is for ENW to undertake only those works on the network which others are not allowed to undertake (for example upgrading their transformers to facilitate the connection).



This second type of offer is known as a Competition in Connections (CIC) offer. This form of offer is likely to be cheaper but will require the procurement of an Independent Connection Provider (ICP) to undertake the remainder of the works. Developers typically pursue the use of an ICP for the following reasons:

- Greater choice
- Greater flexibility
- Faster delivery
- It can be more cost effective
- They are more likely to use language you understand and have knowledge from other projects, especially where dialogue with ENW is required to optimise the connection.

Greater efficiencies and economies of scale (cable and staffing costs) are more prevalent on longer connections. From our experience, ENW are very conservative on programme timescales resulting in higher contractor's costs (for weekly site establishment and management) in comparison to ICPs who typically drive the shortest and most efficient programme of works.

If the Council decided to accept a CIC offer, then it would require either the procurement of an ICP or for the ICP works to be procured as part of the solar farm construction contract. This may add to the complexity of procurement activities. Further complexities arise through the need for the cable route to be included in the planning submission (ENW has permitted development rights which do not extend to the CIC contractors) and the management of road opening licences (which will normally be managed by the ICP).

4.3.3 Planning

Information to submit a planning application for large scale solar PV usually takes around six months to collate and three months to determine.

Key planning considerations generally include:

- Landscape and visual impact/amenity impact
- Ecology
- Transport, construction and noise
- Glint and glare
- Rights of way
- Flood risk
- Specific local policy designations and constraints

Planning for renewable energy schemes does carry an inherent level of risk.

Biodiversity net gain (BNG) is an increasingly prevalent requirement in planning decisions. This will become mandatory under the forthcoming Environment Bill. Any planning submission is likely to be required to demonstrate a 10% gain under the legislation, using the recently issued metric from the Department for Environment, Food and Rural Affairs (DEFRA).

Local buy-in to any scheme will be important in the urban area. There are instances where buy-in has been enhanced by working with community development groups or offering Community Municipal Investments (CMI). The Council could consider using a

CMI as an alternative to, or alongside the Public Works Loan Board (PWLB) to fund the schemes.

For example, West Berkshire Council has looked to tackle its climate emergency by investing in its first CMIs. The Council offered residents and community groups an opportunity to invest directly with them to help build a greener future for the district. The council was seeking to raise £1 million to fund new rooftop solar power on council-owned buildings around West Berkshire. The CMI successfully closed reaching its £1m target five days ahead of the proposed deadline, attracting 640 investors who each invested an average of around £1,500. Similarly, Warrington Borough Council launched a CMI bond to raise £1m to help finance the construction of a solar farm near Cirencester and its co-located battery storage facility (a 24 MW hybrid project).

4.4 Heaton Park

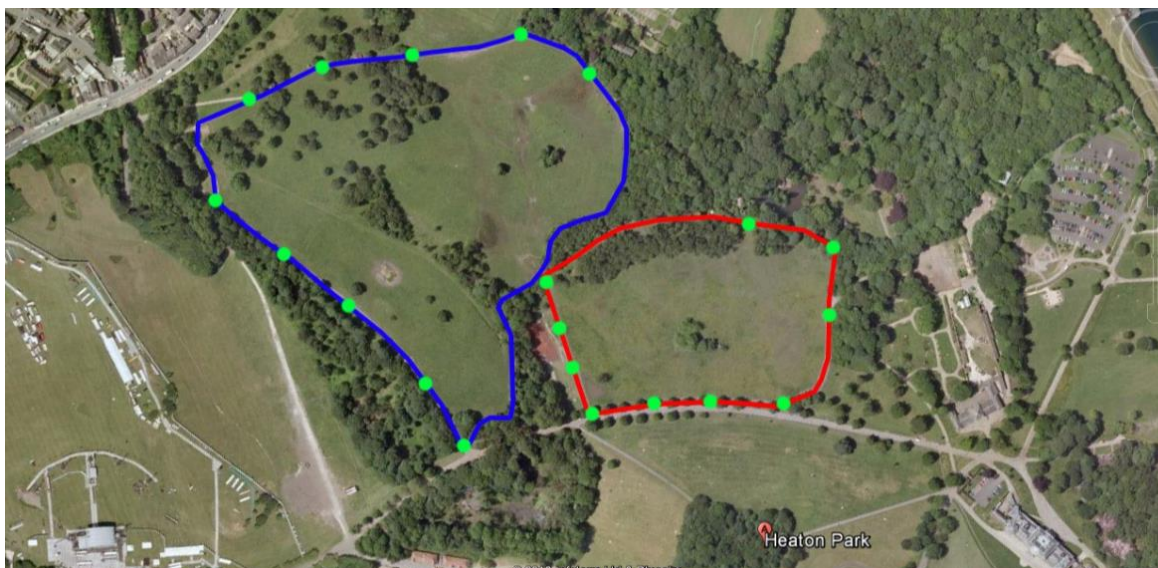
This is a desk-based analysis based on information that can be gained from websites, Google Earth and other electronic media. A site visit has not been undertaken by Local Partnerships as part of this assessment.

4.4.1 Site description

Heaton Park is a large, historic, Grade II listed municipal park, containing a number of historic structures dating from its original use as a country estate. It is used for a mix of formal and informal recreational opportunities in a primarily informal landscape.

The Council's Re:fit Service Provider, Ameresco, has identified two land parcels within Heaton Park as having potential for solar PV (see Figure 8). The area shown in red is approximately 4 Ha in size and at its closest point is 230m from Heaton Hall and orangery. There is a cluster of trees in the centre of the land parcel. The land is bounded by a tree lined perimeter path which forms part of a wider path network. Ameresco has indicated that the land parcel could support a 3.9 MWp solar PV scheme.

Figure 8: Potential land parcels for PV development at Heaton Park



The area shown in blue is a larger land parcel (circa 10.5 Ha) which is undulating with a gradual slope to a peak of mature trees. The land parcel is bounded by a tree lined



perimeter path which provides screening from Heaton Hall. There are three football pitches adjacent to the site. At its closest point the land is 510m from Heaton Hall.

Installation of a solar farm on the site would require considerable removal of trees. Consideration will also need be given to the existing site contours as it is likely that some levelling works would be required to facilitate the development of a solar panel array. Ameresco has indicated that the land parcel could support a 6.5 MWp solar PV scheme.

4.4.2 Planning

Key planning and design constraints for the site include:

1. Cultural Heritage and listing
2. Tree belts
3. Greenbelt
4. Nature and biodiversity considerations
5. Leisure and open space policies

The significance of Heaton Park, both as a heritage asset and a recreational resource mean that it is unlikely that any significant scheme could be brought forward at the site without significant harm.

Installing solar carports is becoming increasingly popular for local authorities looking to generate renewable energy, and whilst it remains an expensive method of solar PV construction, a solar carport project at Heaton Park could provide the Council with the opportunity to generate renewable energy on the site whilst protecting the setting of the park. Ameresco has outlined a potential 500 kW scheme for one of the main car parks at Heaton Park. The Council recently obtained planning permission for a 915 kWp Solar carport at the National Cycling Centre, so is familiar with the technology. Discussion with the Council's planning department suggest that even a scheme of this size would not be suitable in planning terms.

United Utilities own the reservoir, meaning even if a floating solar scheme were possible in planning terms it would not be available to the Council.

4.4.3 Grid

A connections surgery call took place with ENW on 11 November 2020 to understand connections and capacity available in the vicinity of the site. An 11kV firm connection to support up to 8 MW of export was available circa 3.5km from the site. A budget connection cost was also provided by ENW, although firm costs will not be available until a formal offer is applied for and analysis of the connection route is completed.

4.4.4 Heaton Park Potential

The feedback from the Council's planning department means it is unlikely that any scheme could be brought forward at Heaton Park.



4.5 Land south of Wythenshawe Hospital

4.5.1 Site description

The land area under consideration (13.8 Ha) for a solar farm is located in the far south of Manchester, a short distance to the south of Wythenshawe Hospital. The area is bordered by Fairywell Brook to the southwest, which also forms the border with Trafford; by Dobbinetts Lane to the northwest; by a surface car park to the north; and, by Floats Road / Barnacre Avenue / Newall Road / Whitecarr Lane to the east and southeast.

4.5.2 Planning

The land under consideration is included within Allocations 11 and 46 within the Greater Manchester Spatial Framework Publication Plan 2020. The site has been allocated to provide around 2,400 high quality homes along with 60,000 square metres of employment land to provide high quality office space. These allocations and supporting planning documents have been through extensive consultation and as such it would be difficult to make representation to amend the allocations and therefore for a ground mounted solar scheme to be brought forward on the site. There is however the potential to target up to 2MW of solar car ports and rooftop solar as the site is developed.

4.5.3 Grid

A connections surgery call took place with ENW on 4 November 2020 to understand connections and capacity available in the vicinity of the site. ENW outlined that a firm connection to support up to 10 MWA of export was available circa 1.9km from the site (Green Lane (Altrincham) (33 kV / 11 kV)). The Council could also consider a private wire connection to provide a renewable energy supply to Wythenshawe Hospital.

4.5.4 Private Wire Connections

The term 'private wire' is used to describe a connection made directly to a customer's premises. Private wires can significantly enhance investment yields as the customer avoids paying the network distribution charges for grid supplied electricity, which typically constitute around two thirds of their bill. This leaves scope for a higher price (relative to the wholesale price alternative) to be charged to the customer for the power supplied, whilst still representing a significant cost saving to the customer.

Further advice would need to be sought on the impact of any private wire connections in relation to carbon accounting practice and whether there would be any allowable reductions under this type of arrangement if the Council is not the customer.

4.5.5 Land to the south of Wythenshawe Hospital potential

As the land has been allocated for employment use it is very unlikely that it would come forward as a solar farm. There is however scope for up to 2 MW of solar (a combination of rooftop and carports). There is no certainty that the Council would act as developer and landlord at the site, so it may lose control of any solar potential through the development process. The economics of any scheme located on the site would be much improved by a 'private wire' direct to the occupiers. We therefore consider it unlikely that

any generation at this location would be utilised towards the Council's target and have discounted it from further analysis.

Ground Mounted Solar PV – Key Points

Our analysis has failed to find any significant sites with renewable energy generation potential which are under the Council's control and not already identified as part of the Council's existing programme for solar PV.

5 Battery Storage

5.1 Overview

Many councils have a diverse property portfolio which offers the opportunity to benefit from the growing demand for energy storage infrastructure. With recent advances in technology, falling costs and better regulation, local authority investment in this type of technology is becoming increasingly popular as a means of optimising existing assets and utilising renewable energy.

Battery storage systems do not provide direct carbon benefits, although they are required for the smooth operation of the electricity grid with the increasing prevalence of renewables. Standalone battery storage projects, unless the power is used by the Council, may be harder to justify as suitable for Public Works Loan Board (PWLB) funding.

Battery storage systems are becoming a popular addition to new and existing solar PV systems in a bid to increase the amount of self-consumption, mitigate against price cannibalisation risks and to reduce energy costs. For example, Exeter City Council is currently constructing a 1.2 MW ground mounted solar array co-located with energy storage technology, with a separate connection (private wire) to provide a renewable energy supply to its nearby operations depot.

Charging during daylight hours uses 'free' solar electricity and, if this energy is then discharged when electricity supply costs are higher this has the potential to offset the cost of grid supplied electricity.

5.2 Potential for battery storage across the Council estate

In March 2019, the new Greater Manchester 5-year Environment Plan was launched, setting a new target for the city region of carbon neutrality by 2038. The plan included a range of commitments for local authorities, including a target to develop 45 MW of energy storage over the next 5 years. Opportunities exist for large scale energy storage with the Council boundary which again requires further consideration of the land use at the sites identified. Table 6 sets out the opportunities which exist for large scale energy storage across the Council estate, which requires further consideration of the land use at the sites identified.

Table 6: Large scale energy storage opportunities

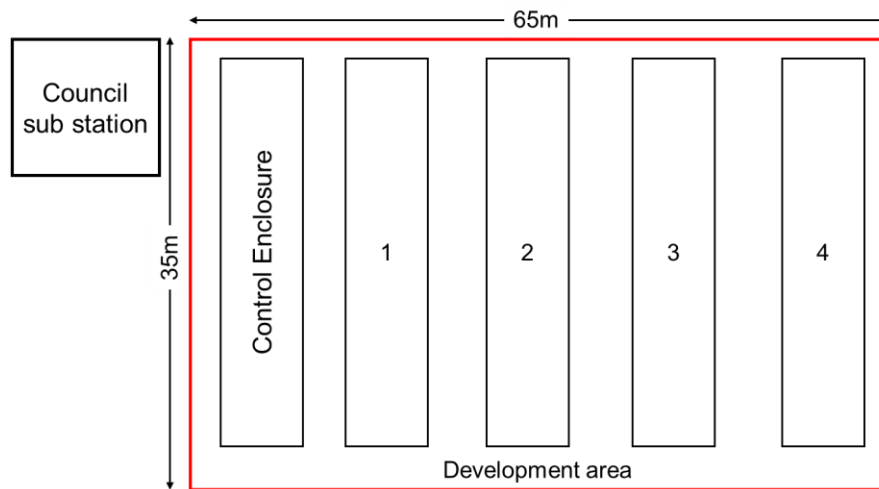
Site	Substation Name	Distance from substation	Battery energy storage headroom
Bradford Gas Works	Bradford (33 kV / 6.6 kV)	2.2km	7.8 MW
Airport Woodhouse Park	Moss Nook Primary (33 kV / 11 kV)	1.3km	11.2MW
Land south of Wythenshawe Hospital	Green Lane (Altrincham) (33 kV / 11 kV)	1.9km	10.0 MW

5.2.1 Land utilisation

A grid scale battery system consists of a group of containerised battery cells (usually Lithium Ion) that are connected to a major substation via a high voltage cable.

Figure 9, below, is a simplified and conservative system layout sketch for a 5 MW battery storage facility (including 4 x 1.26 MWh capacity enclosures and their associated transformers). This layout would occupy less than 0.25 Ha. A 2 MWh capacity battery storage system would typically be housed in 12.5m long containers which would reduce the development footprint further.

Figure 9: Simplified and conservative system layout sketch for a 5MW battery storage facility



Given the limited land requirement and access to a close grid connection point a battery storage facility could be included within the Council's overall employment use ambition for the land south of Wythenshawe Hospital.

As set out in section 4.5.3, the Council could consider a private wire connection to provide energy storage to Wythenshawe Hospital. A battery storage system would allow the hospital to control the timing and amount of electricity it purchases, sells or stores. This capability would enable the hospital to take advantage of a variety of opportunities to reduce electricity costs and generate revenues. Wythenshawe Hospital benefits from a recently installed Combined Heat and Power (CHP) unit which delivers almost all the power needed to run the hospital, as well as four new high-efficiency boilers. Supplementing the CHP with battery storage would give the hospital more flexibility over how to manage their energy.

A hospital's highest electricity usage typically occurs between 8 AM and 8 PM when demand for electricity and peak charges are high. Large-scale battery storage can help a hospital reduce peak costs by "shifting" all or part of its load to off-peak hours. By recharging a large-scale battery system during off-peak hours, the hospital pays the lowest rates for electricity. It can then use the stored electricity during the day to minimize the hospital's electricity purchases when charge rates are highest.

Both the Council and the hospital should seek specialist procurement advice in relation to any potential project.

5.2.2 Economics

We have estimated a cost of £2,535,000 for the installation of a 5 MW battery storage facility (including cell, balance of system and grid connection). Allowance would also need to be made for development costs e.g. planning application, surveys etc.

Revenue streams from storage projects are complicated and it is highly likely that the Council will need to work with an aggregator to ensure that they access the best sources of revenue at any given time.

Early battery storage projects were characterised by a revenue stack of 24/7 frequency response plus capacity market operated in a standalone fashion. Whilst this model was far from simple there are now several sources of revenue available, with the most lucrative options changing between capacity, ancillary services, trading and the Balancing Mechanism (BM).

Currently no one revenue stream holds the answer to a battery storage business case, revenue agility is required. An asset needs access to ancillary services, Distribution System Operator (DSO) services, reliable triad management, energy markets, BM, and any other services that emerge, to be truly optimised. Aggregators are currently indicating to potential clients annual revenues of £50,000 - £60,000 per MW for a 1-hour battery and £70,000 - £80,000 for a 2-hour battery. For a new build battery delivered from the early to mid-2020's we would expect an IRR between 9-10% to be achieved.

5.3 Next steps

- The Council needs to consider whether stand-alone battery storage would meet the new criteria for PWLB lending.
- The Council should consider the use of land for the three battery storage opportunities identified. Undertake engagement with stakeholders to achieve broad support and buy-in if a battery storage facility is considered a good use of the land available.
- The Council will need to submit a formal distribution grid connection application to secure grid capacity and engage with aggregators and technology suppliers to firm up costs and revenues.
- The Council should consider the addition of battery storage to any large-scale solar installation in order to hedge against price cannibalisation and improve viability.

Battery Storage – Key Points

Battery Storage projects will not directly contribute to the Council's carbon offsetting aims but are an essential part of the grid infrastructure required to deliver a decarbonised electricity system.

There is potential to investigate battery storage projects at the three sites identified. Battery storage should be considered on any large-scale solar projects to improve viability and hedge against price cannibalisation.



6 Onshore Wind

6.1 Background

Onshore wind turbines are also potential projects in which a local authority could invest. In wind energy projects, to produce renewable electricity and thereby reduce their scope 2 carbon emissions. For example, Bristol City Council became the first local authority in England to develop and own wind turbines. The two-turbine project was installed at the former Shell Tank site at Avonmouth and was commissioned in December 2013.

The most recent example is Cornwall Council's commercial investment into a single turbine (2.3 MW) project which became operational in September 2020. The turbine is sited on Cornwall Council land at Ventonteaue, near Carland Cross, on the A30. The rationale for the turbine is to help Cornwall better manage its energy supply and power the equivalent of around 1,180 Cornish homes, representing a significant contribution towards the Council's climate emergency agenda. Cornwall Council own and operate the wind turbine. Earlier this year Orkney Islands Council submitted a planning application for a six-turbine wind farm which is in the process of being determined by Scottish Government. There are also micro wind turbine installation examples.

In comparison to solar PV, there are very few examples of local authority commercial scale development of onshore wind projects, with deployment being at the single or two turbine level and benefitting from niche land assets (such as Bristol City Council's project at Avonmouth). This is largely due to planning permission being one of the biggest barriers to project development for larger wind turbines and commercial wind farms. Project development is generally riskier than solar PV and can take up to several years to deliver.

Onshore wind is an established technology and offers one of the least-cost options for renewable energy supply; delivering electricity cheaper than conventional fossil-fuel technologies. Despite the strengths of onshore wind energy, widescale deployment of the technology in England and Wales has been largely restricted since 2015 due to the local and national planning requirements. Proposals often face local opposition, with visual impact, noise, site access and ecological impacts cited as reasons for objection. In the UK, 55% of historic onshore wind projects (between 1993 to 2019) were refused permission or abandoned (planning application withdrawn) by the developer.

Furthermore, legislation introduced under the Energy Act 2016 provided local authorities with the final say for all onshore wind energy projects and only allows wind turbines to be proposed for sites which have been identified within local or neighbourhood development plans. These changes effectively provided local communities with a veto to block the development of wind turbines.

In 2014 (the year before the planning changes were implemented) there were 156 onshore wind planning applications (51 in England). In contrast, only one application was submitted into the English planning system in 2020, with a capacity of 4.2 MW. This highlights the extent to which the local veto has all but stopped this form of development in England.

Historic planning consents in England have been at a total height of 125m. In recent years tip heights for schemes have generally increased to around 200m and the manufacturers are understandably concentrating on this larger market. In effect any [Feasibility Study and Options Appraisal for Large Scale Energy Generation for Manchester City Council](#)

smaller schemes in England would therefore be unlikely to access the latest, most cost-effective turbines unless there is a softening of the planning consenting regime in England. Most commercial turbine manufactures (such as Enercon, GE, Nordex, Siemens Gamesa and Vestas) have phased out production of turbines below 150m to focus on the next generation of turbines at 180m tip heights and above. 180m tip height turbines have already been consented in Scotland, with projects at 200m+ also in the planning system.

Onshore wind turbines are typically located in areas with adequate wind speeds and in exposed locations free from obstacles like trees or buildings that can interfere with turbine performance. Table 7 outlines some of the key considerations for onshore wind site identification.

Table 7: Screening criteria for wind development

Key consideration	Comment
Wind resource/ viability	A minimum average windspeed of 6m/s+ will be required to obtain a reasonable return.
Monitoring wind speed	Wind speed monitoring is advisable prior to developing a wind energy project, to obtain more accurate data on wind speeds at the height of the proposed turbine. Wind monitoring also allows energy output for the project to be estimated. For commercial developers seeking project finance, this monitoring will be undertaken for a full year. Planning permission is also likely to be required for the wind monitoring mast.
Spacing	If more than one turbine is being installed, a space of at least five times the diameter of the rotor should be allowed between turbines to optimise power output by reducing wind shadowing and or turbulence.
Access	Access for the installation also needs to be taken into account. More remote locations will typically have a better wind resource, however access for vehicles to construct the turbine foundations and transport the turbine blades and other components to the project site may be constrained.
Grid connection	One of the main challenges wind development faces generally is the cost of procuring access to local grid infrastructure. Underground or overhead power lines can be very expensive, so the closer the site is to a suitable connection point the better.

Like for solar, sites identified for planned wind farms are subject to a formal application assessment. The National Planning Policy Framework aims to protect Areas of Outstanding Natural Beauty, Sites of Special Scientific Interest and areas of high national heritage value from negative impacts of wind farm development. In addition to this, most commercial scale onshore wind turbine applications will require an Environmental Impact



Assessment (EIA), which assesses the potential visual impacts and changes to landscape and biodiversity that could result. Other areas the EIA covers includes:

- archaeology, hydrology and geology
- aviation and radar
- noise and shadow flicker impacts
- ecological impact

New onshore wind projects cannot receive planning permission unless an area is identified as suitable for wind energy in a local or neighbourhood plan. Table 8 sets out other key designated areas which need to be avoided along with some typical set back distances for onshore wind projects.

Table 8: Key designated areas and set back distances for onshore wind development

Key consideration	Comment
Designated nature conservation areas	Designated nature conservation areas should be avoided. Where sites are used by birds, ecologists may recommend set back distances from the boundary of designated areas.
Designated landscape	Designated landscapes may or may not be suitable for wind turbines, depending on the reason for their designation and the impact that wind turbines may have on this. Views from designated landscapes to wind turbine sites will also need to be considered.
Bats	Hedgerows and woodland areas need to be avoided to reduce the potential impact on bats. Ecologists will recommend separation distances.
Residential properties	A setback distance of at least 600 - 800 metres from residential properties for large wind turbines is recommended. However, as local communities have a veto to block the development of wind turbines, engagement with the local community should be sought on setback distances.
Infrastructure	Minimum distances from roads, power lines, gas pipelines and other infrastructure, which are required by the Highways Agency and other infrastructure operators including National Grid.
Exclusion areas	Exclusion areas around airports, airfields and MOD land exists. Depending on the nature of the project, this should be determined in advance in consultation with the relevant body.
Communication equipment (telecoms)	Communications equipment need to be taken into account in consultation with the relevant telecoms operators such as Openreach.



6.2 Potential for onshore wind across the Council estate

We have reviewed the Council's land assets and were not able to identify any suitable areas that could potentially support one/two commercial size turbines, or the deployment of micro turbines.

6.3 Onshore wind market review

An analysis of the BEIS Renewable Energy Planning Database quarterly extract for September 2020 indicates that there are 84 onshore projects greater than 5MW that have been consented between 2016 and 2020 that are still awaiting construction. This pipeline totalling 3.6 GW is comprised of 65 projects only one of which is in England. The remainder are in Scotland (65), Northern Ireland (13) and Wales (5). In terms of the MCC requirement (range 20MW to 60MW) there are 45 projects all of which are outside England. This would mean that the Council would need to be open and able to invest outside England. Developers of these projects have not historically sold assets or are already committed to existing investors.

The announcement that there will be a Contract for Difference (CfD) pot 1 allocation in 2021 (see Appendix 1) will also provide further certainty in this market and drive competition. Large projects or portfolios of projects in high wind speed areas in Scotland and Wales are likely to be the main beneficiaries in the fourth allocation round.

6.4 Next steps

- The Council needs to determine whether it can invest outside England.
- Approaches could be made to wind turbine developers who have assets which have not been constructed, but as these are generally tied in to a particular investor it is unlikely that would be available for purchase.

Onshore Wind – Key Points

Onshore wind is one of the most established technologies and offers one of the least-cost options for renewable energy supply and delivers electricity cheaper than conventional fossil-fuel technologies.

We have reviewed the Council's land assets and were not able to identify any suitable areas that could potentially support one/two commercial size turbines, or the deployment of micro turbines.

Only one onshore wind application was submitted into the English planning system in 2020, with a capacity of 4.2 MW.

There is potential for the Council to investigate the acquisition of consented projects which are still to be constructed, however any acquisition would be outside England and it is not likely there would be a significant number (if any) assets available for a transaction of this nature.



7 Offshore Wind

7.1 Background

The Crown Estate manages the seabed around England, Wales, and Northern Ireland. The Energy Act 2004 vests rights to The Crown Estate to license the generation of renewable energy on the continental shelf within the Renewable Energy Zone out to 200 nautical miles.

In 2001, The Crown Estate announced the first UK offshore wind leasing round and since has run two further leasing rounds in 2003 and 2008. Thirty-nine offshore wind farms have been built by the sector, comprised of 2,292 turbines with an operating capacity of 10.4 GW. In September 2020, the Crown Estate awarded lease agreements to six proposed offshore wind project extensions in the waters around England and Wales (totalling 2.8 GW).

The Crown Estate is currently in the process of running its fourth leasing round, creating the opportunity for at least 7 GW of new projects. Prospective developers have been given the opportunity to identify and propose project sites within four broad seabed Bidding Areas. The Round 4 leasing process consists of five stages, the pre-qualification stage of which has already been completed. Invitation to Tender Stage 2 and bidding cycles are expected to take place in early 2021.

The Crown Estate is expecting to enter into a wind farm agreement lease with successful bidders in Spring 2022. Once seabed rights have been awarded, project developers will apply for the required statutory development consents. This is required as each project will be at least 400 MW. Developers will also require consent for the construction of the wind farm's offshore cable connection to the onshore grid and associated onshore permissions.

The development and consenting stage of the process is managed by the wind farm developer. The main offshore UK developers are: EDF Renewables, EDP Renewables, E.ON, Equinor, Innogy, Ørsted, Red Rock Power, ScottishPower Renewables, SSE and Vattenfall. A guide to an offshore wind farm was published on behalf of The Crown Estate and the Offshore Renewable Energy Catapult⁵ in 2019. This guide sets out the costs associated with the development, construction and operation of an offshore wind farm. Development costs alone (development and project management) for a 1 GW installation are estimated at £120m. There are no speculative developers in this market and most projects are developed and owned by these companies

Once consents are granted, developers will then need to take part in CfD auctions to bid for support to build and run the wind farm. It is currently anticipated that Round 4 projects will become operational towards 2030.

There is no real market to purchase offshore wind turbines other than to participate in the auction for leasehold rights and then go on to develop assets.

⁵ <https://ore.catapult.org.uk/wp-content/uploads/2019/04/BVGA-5238-Guide-r2.pdf>



7.2 Offshore wind – suitability

Offshore wind is not considered to be a suitable investment to meet the Council's requirements due to the scale of investment, the capacity required to acquire and develop assets and the extended timescale for assets coming on stream. The extended timescale would mean that an acquisition of this nature would not deliver the Council's carbon budget requirements.

Offshore Wind – Key Points

The MCC requirement would represent less than 1% of the current Round 4 opportunity.

The pre-qualification stage for Round 4 has already been completed.

Development costs associated with offshore wind are significant and any partnering/acquisition opportunity (given the MCC requirement) is likely to be extremely limited.

Round 4 projects are not forecast to become operational until the end of the decade and this would not meet the Council's carbon budget requirements.



8 Solar PV Market Review

8.1 Background

In order to meet its targets to offset 7,000 tonnes of CO₂e by 2025 the Council will need around 45-50 MW of solar PV generation (depending on location).

8.2 Opportunities within the Council's boundary

A review of Council owned sites and planning applications within the Council's area over the last two years has not provided any potential schemes within the Council's boundary.

8.3 Opportunities within the Greater Manchester Combined Authority boundary

Other councils in the Greater Manchester Combined Authority area are also exploring potential opportunities for solar farm sites. The ground mounted projects planned include solar farms at Chamber House farm in Rochdale (5 MW) and Kenyon Way in Salford (1.7 MW). Initial indications are that the size of the schemes are not large enough to benefit from a collaboration with the Council.

8.4 Out of area opportunities

We understand from discussions that the Council is open to financing an out-of-area investment if that is the best alternative and it is able to do so within the new PWLB lending criteria. Engagement with active solar PV has identified three potential projects that are in development and are available to purchase. The purpose of this section is to set out those opportunities and how the Council can position itself to be able to respond, either to these opportunities or to further market opportunities as they arise.

8.5 Solar PV market investments

The market for well developed, de-risked and subsidy backed solar PV projects remains high. This drives high prices and relatively low yields due to the secure nature of the income streams.

Local Partnerships has been tracking the pricing of operational disposals and have seen an upward value trend for operational (subsidy backed) solar PV transactions with prices of circa £1m per MW representing a current market benchmark. The majority of investors in the subsidised market are looking to move into the unsubsidised market. Those with large subsidised portfolios have substantial experience of managing merchant risk within these portfolios as a proportion of their income will be from trading wholesale power within their existing generation fleets.

We expect, and have already seen, that investors who need to continue to deploy capital into renewable generation and have experience in solar PV will invest in unsubsidised projects. The announcement that there will be a Contract for Difference (CfD) pot 1 allocation in 2021 (see Appendix 1) will also provide further certainty in this market and [Feasibility Study and Options Appraisal for Large Scale Energy Generation for Manchester City Council](#)



drive competition. Without CfD, projects require a relatively long-term Power Purchase Agreement (PPA) to cover eight to ten years of operation at the start of the project in order to create financial certainty in the early years. Renewed interest from the funds has resulted in project developers returning to the market. There has been a significant shift towards larger projects with the smallest new projects typically exceeding 25 MW.

To date there have been relatively few transactions of operational subsidy-free solar projects. Gridserve purchased the first subsidy-free solar farm from developer Anesco as recently as August 2020 (for an undisclosed sum). From discussions with active solar PV developers we understand developers are targeting pricing in the range of £550,000 to £650,000 per MW for constructed and connected assets. This reflects the greater risk of variable income associated with subsidy free development in comparison to £1m per MW for subsidy backed operational projects. It is likely that any solar projects which secure CfD will be more valuable than those trading on a merchant basis. One of the main challenges renewable energy development faces is the cost of procuring access to local grid infrastructure. Grid connection cost is therefore a key driver of project viability generally and price expectation within the range where viability is established.

Private sector developers are able to access significantly lower construction pricing than has been seen to date in the public sector. Public sector construction pricing is similar to the costs quoted for completed projects, so serious consideration should be given to projects which can be bought as they become operational. These projects represent a cost-effective solution for the public sector with significantly better risk profiles than schemes in development or at shovel ready.

8.6 Useful life

In the pre-construction solar PV market we are seeing increased focus on the useful operating life of projects, with developers seeking to obtain planning consent for 40 years and including provisions to extend land leases to match. This has led to an increased understanding of the potential value and technical requirements of investors to apply this extended life. This will result in more aggressive assumptions being made by funds on the potential project duration when assessing the viability of projects.

8.7 Technological improvements

Panel manufactures have continued to increase the efficiency of their technology. The emerging technology within the industry (bifacial modules and single-axis solar trackers) provide greater land-use options and offer a higher yield. Bifacial solar panels generate power by exposing both sides of the cells to sunlight, increasing total energy generation. The technology is relatively new and reported outputs are higher but sufficient data is not yet available to allow reliable modelling to take place in the UK. This coupled with reducing panel costs and the significantly larger size of new developments is having a positive impact on the economics of subsidy free solar PV. We expect investors bidding into market opportunities to factor in these improvements.

Single access tracker systems are common in the United States but have not featured to any significant extent in the UK so far. Build and maintenance costs are higher, but so are yields. The Warrington BC/Gridserve sites are the first deployment of large-scale single access trackers in the UK (examples of technology are shown in Figure 10 and Figure 11 for information).



Figure 10: Traditional fixed mounting structure solar farm with standard solar panels⁶



Figure 11: Single access tracking solar farm with bi-facial panels⁷



⁶ Image bsg-ecology.com

⁷ First4solar.co.uk



8.8 Structuring

The buyer pool for large projects are all astute financial institutions who will employ different but effective structuring to ensure that their investors' tax exposure is limited. As such, assumptions on structuring are variable and can also impact value.

From discussions with active solar PV developers who sell assets there is recognition of the advantages that local authorities would bring to transactions (e.g. motivations for investment, low cost of borrowing, their own power purchase requirements, return expectations and the ability to look at longer term project time horizons). It is likely that local authorities would be competitive in bidding processes. Subject to acceptable valuation, there is also willingness to align transaction timelines with council approval processes.

8.9 Positioning the Councils to respond to market opportunities

The pipeline of UK solar farms (as at September 2020) was 10.6 GW across 442 sites. 24.8% of the entire ground-mount pipeline capacity in the UK is coming from sites planned to operate at between 40 and exactly 49.9 MW. 29.6% of projects fall into the 250 kW to 5 MW band. These smaller sites are often local-council, public sector or landowner-based projects. The key message for the Council is that developers don't have the capacity to build every consented project, but the Council will need to be flexible both on location and size of project.

From our engagement with active solar PV developers who sell assets, it is clear that smaller size projects are available (5-10 MW) however the viability of projects that we have appraised has been difficult to establish. We therefore recommend that the Council should shape its approval processes and governance around a single 40 – 50 MW stand-alone project (on a subsidy free basis), with the flexibility to invest in two smaller size projects should they be financially viable and the projects become available.

Appendix 3 sets out more detail about the nature of activities required in the purchase of a large solar farm. Transactions of this nature are relatively competitive and there is a need to be able to take decisions relatively rapidly. The Council should consider what preliminary and delegated authorities are required to allow it to properly analyse and progress a transaction of this nature.

8.10 Active Projects

We have identified three currently available PV projects across the UK.

Project A – North West – 30 MW

Project is in development. Grid and land rights appear to have been secured by the developer. Planning is yet to be submitted. Earliest energisation date Q4 2023. Community development company.

Project B – The Midlands – 45 MW

Project has grid and land rights secured. Planning consent has been granted for the scheme. This scheme has a grid connection at 132kV which will add some

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complexity. Opportunity to purchase post construction. Earliest energisation date Q1 2022. Commercial developer.

Project C – Southern England – 46 MW

Project has grid and land rights secured. Planning consent has been granted for the scheme. Earliest energisation date Q3 2021. Commercial developer.

Table 9 sets out the different solar irradiance at these locations and compares them to the irradiance in central Manchester, together with the tCO₂e each scheme would offer between 2025 and 2038.

Table 9: Schemes irradiance and potential carbon savings (2025-2038)

Location	Forecast Irradiance (kWh/kWp)	Delta to Manchester	tCO ₂ e
Manchester	945	n/a	n/a
North West	958	+1%	48,238
The Midlands	989	+5%	74,699
Southern England	1065	+13%	82,227

8.11 Public Works Loan Board Consultation

On 26th November 2020 the UK Government published its response to the consultation on future lending terms for PWLB⁸. The aim of the consultation was to “..develop a proportionate and equitable way to prevent local authorities from using PWLB loans to buy commercial assets primarily for yield, without impeding their ability to pursue service delivery, housing, and regeneration under the prudential regime as they do now.”

The Government has now introduced new terms to apply to all loans arranged after 26 November 2020. Under these terms the s151 Officer will need to confirm that there is not an intention to buy investment assets primarily for yield, based on their professional interpretation of the guidance.

In relation to specific concerns raised by some respondents (item 3.99 of the response to the consultation) that they carry out some capital spending on green or renewable energy developments which support the local authority’s policy objectives to achieve carbon neutrality but were not necessarily located within the authority’s wider economic area, the Government response was: “The government will not restrict local authorities’ ability to carry out capital projects in neighbouring districts or the authority’s wider economic area

⁸https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/938043/Response_to_consultation_Public_Works_Loan_Board_future_lending_terms_1.pdf
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where these projects are for service delivery, housing, preventative action, or regeneration”

8.12 Next steps

- Develop sufficient outline business case authority to set up a decision making framework which allows the Council to act with sufficient speed to maintain market interest in a transaction whilst remaining within the decision making framework of the Council.
- Obtain in-principle support to enter into an exclusivity period/undertake project due diligence as opportunities arise.
- Review the project specific information in relation to the three currently identified projects and determine whether to pursue an exclusivity agreement in relation to any of these opportunities.

Market Opportunities – Key Points

There are opportunities to purchase solar PV schemes directly from developers, but these are unlikely to be within the Council boundary area.

50 MW schemes are available in the current market although the Council may need to show flexibility around actual sizing. The numbers of projects coming to the market are relatively small and the Council needs to be prepared to move at speed and be flexible in how they meet their requirement.

A budget of £ 27 - 30m would allow the Council to purchase sufficient assets to meet the requirements set out in this report.

The Council's s151 officer will need to be satisfied that an investment of this nature meets the new PWLB lending criteria.



9 The PPA alternative

A number of local authorities are exploring the route of purchasing 'green' electricity in order to meet their current carbon budgets.

Section 3.3 sets out the basis for carbon accounting for scope 2 emissions (grid supplied electricity). If dual accounting is to be used then good practice suggests there needs to be a very clear rationale for the inclusion of other electricity sources and in particular; additionality (i.e. demonstrating you triggered new capacity), traceability (i.e. how you can demonstrate where the power is generated) and permanence (i.e. long term arrangements that cannot easily be reversed) will be required to justify inclusion.

The duration of a PPA is an important factor in whether it would be legitimate to account for the carbon savings, with longer term agreements being beneficial. Longer term agreements however come at the risk of mismatch between the Council's requirements and the supply levels in the agreement. Longer term PPAs are likely to have a minimum supply requirement, below which the offtaker (i.e. the Council) will pay for power generated whether or not they are able to consume it.

If the Council were to pursue a green PPA there are two main scenarios i.e:

- a) Purchase a 'green tariff' from a supplier
- b) Direct purchase of electricity from a renewable energy generating station

9.1 Green Tariffs

A green tariff means that some or all of the electricity you buy is 'matched' by purchases of renewable energy that your energy supplier makes on your behalf. These could come from a variety of renewable energy sources such as wind farms and hydroelectric power stations. Renewable energy generation is demonstrated by the Renewable Energy Guarantees of Origin (REGO) certificates.

The Council's current supplier, nPower, offer tariffs for 10-15 years linked back to specific, identifiable generating stations.

9.1.1 Applying the tests of additionality, traceability and permanence

Before a green tariff is included in an organisation's carbon accounting it should meet the requirements of additionality, transparency and permanence.

I Additionality – green tariffs

Green tariffs rarely meet the additionality criteria as they may be part of an existing portfolio of assets. Furthermore, new green tariff customers will increase demand for green electricity which will be taken from the general portfolio of the provider, potentially making the general electricity supply from the provider to customers not on a green tariff more carbon intensive.

A green tariff is therefore unlikely to meet a specific additionality test even where it is from a clearly defined source. There is also nothing in the nPower agreement which

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would preclude the supplier from applying for a CfD for the scheme. Where as scheme has CfD certainty it is very unlikely that the supply contract with the provider would be sufficient to meet the requirements of additionality.

II Traceability – green tariffs

Green tariffs should be able to provide REGO certificates for every unit of power consumed. Provided they are able to do this then potentially they do pass the transparency test, although it is preferable if the certificates are traceable to a single nominated source. REGO certificates can be traded independently of the source from which they originate which reduces their value in the eyes of some observers.

III Permanence – green tariffs

Permanence is the most difficult test for any form of PPA as they are often short term contracts, after which time there is no obligation on the accounting organisation to continue the arrangement. Whilst flexibility is often valued in PPAs it is to the detriment of accounting for the carbon saved.

There are no hard and fast rules for the length required of a PPA before it is considered to have a degree of permanence. Forecasts for decarbonisation of UK electricity range from 2030-2050 and arguably any green tariff would need to be for a period until grid decarbonisation has occurred i.e. 10-30 years. Most green tariffs are of a significantly shorter period than this.

9.2 Direct PPAs with a generator

It is possible to purchase electricity directly from renewable energy generators through a direct PPA agreement. This can either be synthetic or sleeved (see Appendix 1 for a description of the differences). A direct PPA with a specific asset that is not part of a larger pool of assets supplying a range of customers has a potentially stronger weighting in carbon accounting terms than a green tariff.

A PPA of this nature would require a procurement exercise to put it in place and could be on the basis of either a sleeved or synthetic PPA.

9.2.1 Applying the tests of additionality, transparency and permanence to a PPA directly with a generator

I Additionality

Any tender exercise could state that the generation capacity was not subject to any forms of subsidy and was new build generation. This would potentially meet the criteria of additionality.

II Transparency

In addition to the REGOs the Council would benefit from a direct relationship with the energy generator to demonstrate the source of the electricity consumed.



III Permanence

This will depend on the length of the PPA agreement. Current market PPAs are largely of the 5-8 year duration. Beyond this longer term arrangements are available but come at a premium of around 10%.

It may be possible to make a case for permanence in that the new generating asset would have been created because of the initial PPA, however it does not provide permanence to the decarbonisation of the Council's electricity supply.



10 Options Appraisal

This options appraisal has been based around the Treasury Green Book recommendations.

10.1 Options for Appraisal

The following options have been considered in this options appraisal:

1. Do nothing
2. Fair value solar PPA – direct with a solar farm operator
3. Fair value wind PPA – direct with a wind turbine operator
4. a) Asset purchase of 49 MW site in southern England with PWLB lending over 25 years
b) Asset purchase of 49 MW site in southern England with PWLB lending over 35 years
5. a) Asset purchase of 46 MW site in the Midlands with PWLB lending over 25 years
b) Asset purchase of 46 MW site in the Midlands with PWLB lending over 35 years
6. nPower wind PPA
7. nPower solar PPA

10.2 Preliminary appraisal – affordability

Before proceeding further with the options appraisal net present value (NPV) calculations were produced for all of the alternatives and compared to option 1 – ‘do nothing’.

This modelling was undertaken by Local Partnerships on behalf of the council and utilises third party data from Aurora Energy Research (Aurora). Local Partnerships are subscribers to Aurora, who are a market leading provider of energy price forecast information. Using high quality forecast information for forward energy prices provides the council with the highest likelihood of a robust npv calculation. Aurora’s information is the basis of their business and clients are tied with strict contractual terms that prevent the release of forecasts to non-subscribers. Local Partnership’s agreement with Aurora allows them to use the information in financial modelling and to release the outputs of that modelling in a form where the original data cannot be reverse engineered, but not to release the financial models as these contain the embedded data sets. We have therefore included the assumptions for the financial modelling and the outputs of the npv calculations in this report.

Local Partnerships and Aurora have undertaken a workshop with council officers to ensure that the council understands the basis of the data and the financial models that produce the npv information used in this report.”

10.2.1 NPV assumptions

All NPV calculations have been appraised over an 8 year and a 25 year period and compared to a ‘do nothing’ scenario based around ongoing purchase of wholesale

electricity. The 'do nothing' scenario relies on the Aurora Energy Research central power price curve for wholesale power. Table 10 shows the assumptions embedded in the NPV model.

Table 10 – NPV assumption fields in the model

	Input Data	
MCC total requirement (excluding schools)	45,000	MWh
Site 1 (southern England) Installation Size	46,092	kW
Site 1 P50 Generation Specific annual yield	1,065	kWh/kWp
Site 2 (the Midlands) Installation Size	45,000	kW
Site 2 P50 Generation Specific annual yield	989	kWh/kWp
Deterioration	0.40%	Module degradation
Inflation	2.0%	
Inflation base year	2019	
npv discount rate	5.6%	
Differential between central and fair value	2.0%	
Solar sleeving costs (£ 6/MWh)	£0	per MWh
Wind sleeving costs (£ 7/MWh)	£0	per MWh

10.2.2 PPA Duration

An 8 year duration has been taken for the PPA agreements following a discussion with Aurora Energy Research, with the view being that prices for longer term PPAs would be higher than the values modelled. For the fair value PPAs it does not make a significant difference to the scenarios if the duration is longer as the prices revert to the Aurora solar central case less 2% adjustment for fair value. A more significant impact is seen in relation to the nPower PPAs, although the wind PPA offers considerably lower value in the short term where prices would be higher than modelled for the first four years.

The asset purchase models are unaffected as they are based on costs incurred rather than price paid. The gap between costs incurred and price paid increases over time so in all scenarios the asset purchase models look better over a longer duration.

10.2.3 Deterioration

The speed at which solar panel efficiency decreases over time. The assumed rate at 0.4% is within the industry standard rate, but less than the likely module guarantee rate of around 0.5% pa.

10.2.4 Inflation

2% CPI has been used throughout as this is the Government target figure. Base year relates to the base year for Aurora price information.

10.2.5 NPV discount rate

This is the Treasury Green Book rate adjusted for schemes which include inflation.

10.2.6 Differential between central and fair value

Adjustment applied to Aurora central solar price forecast curve to achieve the Aurora fair price. This price represents the price most likely to be paid by an offtaker when all factors are taken into account (such as transaction costs etc).



10.2.7 Sleeving Costs

Differential rates for wind and solar have been discussed with Aurora. We have not applied sleeving costs in the final models as they can be avoided by the use of a synthetic PPA agreement and destroy considerable value in all schemes (except the nPower options). Synthetic PPAs are compliant for greenhouse gas accounting (as confirmed with Anthesis).

10.2.8 Asset purchase schemes – traded balances.

As these schemes are not exactly sized to the Council's requirement there are differences between the energy produced and the energy consumed. With a synthetic PPA the Council will have PPAs in place with energy suppliers as well and these additional volumes can be included in these contracts. The models have therefore included for a revenue where there is over generation and for purchased electricity where there is under generation.

10.2.9 Operating and maintenance costs for asset purchase schemes.

The model allows for the following: £ 10,500 O&M contract including cyclical replacements, £ 1250 insurance, £ 2,800 rent, £ 2,000 rates, £ 2,500 asset management, £ 5,000 contingency and the Council's internal costs. All costs are per MW installed per year. The asset management service will in effect run the farm for you and manage the contractors, billing etc. The contingency amounts to around £ 230,000 pa and will allow the Council to have a member of staff who can deal with this and as well as providing general contingency to the investment. The costs allowed are all reasonably generous.

10.2.10 Finance period

The asset purchase scenarios have reviewed both a 25 year financing period and a 35 year financing period. A solar asset is anticipated to have a life of 35-40 years.

The 35 year asset financing scenarios have a residual balance on both schemes of around £ 11m at the end of year 25.

10.2.11 Post PPA assumptions for the 8 year PPA scenarios

For all of these scenarios (both nPower and the fair value agreement directly with an asset operator) the schemes revert to the fair value solar price curve for the respective technology after the end of the 8 year PPA period.

10.3 NPV outputs

Table 11 below sets out the outputs from the NPV exercise undertaken by Local Partnerships and utilising the confidential Aurora data.

Table 11: outputs from NPV comparison exercise

Manchester City Council Scenario Comparisons (February 2021)

		Total Cost (25 yrs)	Cost after 8 years	25 year npv	8 year npv
With sleeved PPAs					
1.	Do Nothing (assumes Aurora wholesale plus inflation)	-£85,558,054	-£21,965,089	-£43,366,132	-£17,091,133
2.	Fair Value Solar PPA Option	£15,808,392	£2,593,361	£7,235,495	£1,966,242
3.	Fair Value Wind PPA Option	£22,385,253	£5,528,952	£11,169,161	£4,258,268
4.	Solar Own/Operate Option Site 1 (southern England)				
4. a)	Solar own and operate with 25 year finance (southern England)	£22,017,266	£3,055,525	£9,977,925	£2,207,730
4. b)	Solar own and operate with 35 year finance (southern England)	£30,147,626	£5,765,645	£14,403,842	£4,347,664
5.	Solar Own/Operate Option Site 2 (the Midlands)				
5. a)	Solar own and operate with 25 year finance (the Midlands)	£20,225,002	£1,081,277	£8,263,154	£629,010
5. b)	Solar own and operate with 35 year finance (the Midlands)	£28,230,442	£3,749,757	£12,621,068	£2,736,065
6.	npower wind PPA (£48.50) indexation 2.0%	£20,089,059	£3,232,759	£9,293,783	£2,382,890
7.	npower solar PPA (£47.10) indexation 2.0%	£16,988,517	£3,773,486	£8,076,710	£2,807,458

Several of the scenarios are effectively derivatives of the same option i.e. the fair value PPAs and the nPower PPAs together with the different finance options for the asset purchase options. The asset purchase options are not directly derivatives of each other as aside from variations in size and output the Midlands opportunity represents what might normally be available in the market where the southern England scheme is a particularly good one and may not be representative of what is available when the Council have decided on their preferred approach.

Recommendation 2: All options have positive NPV outcomes when compared with ‘do nothing’. There is therefore a solid value for money basis to either enter into a suitable PPA or asset purchase agreement.

10.3.1 Options for Further appraisal

In order to keep the options appraisal to a manageable exercise, the best value alternatives of each of the derivatives have been taken forward into the next stage as follows:

1. A wind based PPA with nPower (current electricity supplier) linked to specific projects. This is for an 8 year duration and pricing has been obtained from nPower.
2. A wind based PPA direct with a turbine operator. This assumes an 8 year duration with pricing based around the Aurora Energy Research fair pricing model.
3. An asset purchase of a 49 MW solar farm post construction. The farm is based in southern England and terms have been discussed directly with the owners. Financing is through a 35 year PWLB loan at 1.46%.
4. An asset purchase of a 46 MW solar farm pre-construction. The farm is based in the Midlands and terms have been discussed directly with the owners. Financing is through a 35 year PWLB loan at 1.46%.

10.4 Criteria and weighting for options appraisal

The following criteria have been developed for the options appraisal based around the Green Book criteria of desirability, feasibility and viability.

The weighting figures are out of a maximum of 10 for each criteria (and balance to 100 overall and are shown in table 12). These represent the relative importance of different measures in reaching a decision and have been developed from the workshops run with the Council to develop their understanding of options and associated risks.

Table 12 – Weighting and criteria for options appraisal

Criteria	Weighting
Desirability	
Reduction of CO2e emissions by 7,000 tCO2e by 2025	10
Are CO2e savings lasting upto and beyond 2038 (this criteria is included as a measure of the permanence provided by the option)?	7
Is the option available to current MCC partners?	2
Feasibility	
What is the earliest implementation date?	7
How well does the option fit with the likely scope 2 emissions for MCC?	6
Does the option have reputational risks?	7
Does the option expose MCC to a risk of challenge through procurement?	7
Does the option expose MCC to a risk of challenge to its carbon accounting practice?	8

Criteria	Weighting
Viability	
What savings can be realised by the option during a typical 8 year PPA time horizon (NPV v do nothing)?	8
What savings can be realised by the option during a typical 25 year financing period for an asset purchase?	8
Are there savings available beyond 25 years? This measure is included to show whether an option provides cashable savings beyond year 25.	4
Are there viable mechanisms for adjusting supply volumes over time?	8
Does the option provide protection against energy price increases (short and long term)?	3
Are MCC able to resource the option with suitable capacity and capability?	5
What capital is required by MCC to implement the option?	5
What resources are required by MCC to manage the option on an ongoing basis?	3
Will the option positively impact the market?	2

10.4.1 Scoring methodology

Each of the criteria has a documented methodology by which each option is scored, these are set out in table 13 below.

Table 13 – Basis of scoring for each criteria

Criteria	Points allocation basis
Reduction of CO ₂ e emissions by 7,000 tCO ₂ e by 2025	10 points if 7,000 tCO ₂ e reduction by 2025. Less one point for each -5% reduction by 2025. Less one point for each -5%
Are CO ₂ e savings lasting up to and beyond 2038 (this criterion is included as a measure of the permanence provided by the option)	0.5 points for each year of certainty offered for each year from year 5 onwards (all schemes provide certainty for at least 5 years)
Is the option available to current MCC partners?	1 point for up to 20% of partners supply that could be offered and 1 point for each additional 20%. To reflect flexibility remaining 5 points are as follows 5 points for agreement of 2 years or less, 4 points for 2-3 years, 3 points for 3-4 years, 2 points for 4-5 years, 1 point for 5-8 years
What is the earliest implementation date?	H2 2021 = 10 points, H1 2022 = 8 points, H2 2022 = 6 points, H1 2023 = 4 points, H2 2023 = 3 points, H1 2024 = 2 points, H2 2024 = 1 point
How well does the option fit with the likely scope 2 emissions for MCC?	First 8 years - within 10% = 6 points, within 25% = 4 points, less than 75% = 0 points. PLUS long term after year 8 - very flexible = 4 points, flexibility can be achieved (e.g. through sale or purchase outside the contract) = 2 points, none = 0 points
Does the option have reputational risks?	Likely to occur and attract ongoing publicity as issue cannot easily be resolved = 0 points, could occur on a one off basis, but can be mitigated = 5 points, unlikely to occur = 10 points
Does the option expose MCC to a risk of challenge through procurement?	Existing framework can be used = 10 points, one off new procurement = 8 points, specialist advice to structure agreement = 6 points



Criteria	Points allocation basis
Does the option expose MCC to a risk of challenge to its carbon accounting practice?	Assumes all options can demonstrate that the energy is renewably produced via the issue of REGO certificates. Ability to demonstrate additionality = 5 points, PLUS ability to demonstrate permanence = 5 points
What savings can be realised by the option during a typical 8 year PPA time horizon (NPV v do nothing)?	(option value/value of best option)*10
What savings can be realised by the option during a typical 25 year financing period for an asset purchase?	(option value/value of best option)*10
Are there savings available beyond 25 years? This measure is included to show whether an option provides cashable savings beyond year 25.	Yes =10, No = 0
Are there viable mechanisms for adjusting supply volumes over time?	Assessed in two parts. Part 1 - flexibility in years 0-8. +/- up to 10 % = 2 points, +/- 25% = 5 points. Part 2 - rebalancing. Ability to rebalance supply volume at year 8 = 5 points, no = 0 points
Does the option provide protection against energy price increases (short and long term)?	Yes =10, Yes, but only for first 8 years = 4, No = 0
Are MCC able to resource the option with suitable capacity and capability?	Within existing capacity and skills = 10, will require some bought in capacity (up to £ 50k expenditure) = 6 points, will require significant additional support = 3 points
What capital is required by MCC to implement the option?	Capital requirement 10 points for nil capital investment. Less 1 point for each £ 5m capital investment required
What resources are required by MCC to manage the option on an ongoing basis?	Costs fully included or within existing resources = 10 points, - 3 points for each uncosted FTE required for support
Will the option positively impact the market?	Impact on the UK energy mix - up to 3 points. Sector leadership up to 7 points

10.5 Options Appraisal Outputs

Utilising the weighting and criteria set out in section 10.4 each of the four options has been appraised. The weighting scheme provides a score as a % with higher scores being a closer fit with criteria than lower scores.

A full copy of the options appraisal matrix is in appendix 5 to this report (Excel Workbook).

The outputs from the scoring exercise are as follows (table 14):

Table 14 – outputs of options appraisal scoring exercise

Option	Description	Score	Rank
1.	nPower wind PPA. A wind based PPA with nPower (current electricity supplier) linked to specific projects. This is for an 8 year duration and pricing has been obtained from nPower.	61%	4
2.	Fair Price Wind. A wind based PPA direct with a turbine operator. This assumes an 8 year duration with pricing based around the Aurora Energy Research fair pricing model.	72%	2=
3.	Asset Purchase (Southern England). An asset purchase of a 49 MW solar farm post construction. The farm is based in southern England and terms have been discussed directly with the owners. Financing is through a 35 year PWLB loan at 1.46%.	80%	1
4.	Asset Purchase (The Midlands). An asset purchase of a 46 MW solar farm pre-construction. The farm is based in the Midlands and terms have been discussed directly with the owners. Financing is through a 35 year PWLB loan at 1.46%.	73%	2=

10.6 Options Appraisal Summary

As all options represent better value for money than do nothing there is a clear case for developing and implementing a new regime in relation to the Council's electricity procurement.

The scoring exercise for the options appraisal has a clear front runner in the site in southern England, however this site represents a particularly good option and may not always be replicable in the market place if the Council are not able to act quickly enough to secure this option.

There is little to choose between a wind based fair value PPA and a more usual asset purchase alternative, although the financial modelling assumptions for the asset acquisition are more conservative.

The pursuit of a PPA agreement with a major electricity supplier is unlikely to represent the best alternative due to both value for money and carbon accounting compliance.



11 Risks and other considerations in decision making

11.1 PWLB risk factor

The options appraisal has not taken account of the potential PWLB lending risk in relation to an out of area asset purchase. This has been taken out to allow the Council to understand the best option in terms of delivery of its objectives.

The PWLB risk remains and before the Council could pursue an asset purchase strategy it would need to seek assurances from HM Treasury that borrowing for this purpose would not breach the PWLB lending terms. In relation to investment for yield there is a clear case that an asset purchase would represent delivery of the Council's decarbonisation targets and would represent value for money compared to existing arrangements to procure electricity. The more significant risk lies with the criteria to invest in the 'economic area' and this would need to be explored further.

Recommendation 3: Having undertaken a thorough options appraisal exercise the Council is now in a position to explore with HM Treasury whether or not an asset purchase would be compliant with PWLB lending terms.

11.2 Asset acquisitions

Market engagement has identified three potentially suitable schemes which are currently available and could meet some or all of the Council's requirements. In order to progress opportunities, the Council will need to take sufficient early decisions to enable it to enter into an exclusivity agreement and undertake due diligence. Speed of decision making is key to success in acquiring projects in a competitive market.

A number of local authorities have successfully invested in renewable energy generating assets and there are likely to be opportunities for other local authorities to follow suit. Whether it is better to seek to develop an asset, or buy one from a commercial developer, will depend on the opportunities available and how each local authority responds to individual challenges.

Local authorities should not assume that it will be more cost effective to develop their own schemes. Solar PV and wind developers have worked hard to drive down costs in recent years and bring considerable leverage and expertise to the market. Some of these schemes are likely to offer better value for money, and at less effort, than development of schemes from scratch.

An asset purchase would tie the Council's electricity costs to the cost of operating the asset and servicing debt raised; representing a saving of around 10-15% of current electricity costs. Predicting the costs of financing and operation is relatively straightforward and an asset purchase would therefore provide a degree of cost certainty to the Council's energy planning as well as potential cost savings.

If the Council's electricity demand diminishes over time, there would be the ability to sell any surplus generation to a third party.

Schemes which combine solar PV with battery storage will generally provide a better match against the Council's electricity usage profile and improved savings as fixed cost infrastructure can be shared across the two technologies.

11.3 PPA opportunities

In considering a PPA option the Council will need to balance its desire for flexibility with the need to demonstrate permanence in order to meaningfully account for the carbon saved. An agreement directly with a generating station is preferable to a green tariff from a larger energy supplier.

11.4 Preferred Option

Whilst the southern England site appears to be the preferred option the question of PWLB risk remains unresolved. There is a strong possibility that by the time this issue is resolved the southern England site will no longer be available.

Without the southern England site there is little to choose between a directly procured fair value PPA and an asset purchase in terms of the options appraisal exercise.

11.5 Risk Management

The Council's attitude towards risk and reward is likely to be the determining factor in making a decision between the options of a fair value PPA and an asset purchase. Table 15 sets out the key risks and the solutions they apply to.

Table 15: Summary of key risks

Risk Description	Asset Purchase	Fair Value PPA
Achieving the carbon benefits - production (i.e. the risk that specified volumes will not be available)	Low	Low
Flexibility risk – supply arrangement that no longer matches the Council's needs	Low/Medium	Medium/High
Wholesale electricity price inflation risk leading to higher than forecast electricity costs	Low	Medium – after end of PPA
Carbon accounting – additionality	Low	Low
Carbon accounting – permanence	Low	Medium/High
PWLB lending criteria	Possible	Low

11.5.1 Risk consequences and mitigation

This section sets out the impact of risks, the extent to which they are capable of being mitigated and the measures likely to be necessary.



11.5.2 Production Risks

These risks are associated with the ownership of an asset and whether it produces the electricity that was originally expected. The main causes of this risk are set out below together with methods of mitigation.

- a. Failure to operate effectively or consistently. Mitigation is via a suitable operation and maintenance contract with an experienced contractor. The contract should include clear specifications of work and availability guarantees. Failure to produce the guaranteed levels of power should be covered in a two-year testing period at the end of the construction contract. Further mitigation can be afforded by the engagement of an asset manager.
- b. Irradiance. Overall, there is no significant risk with irradiance as the data available has been collected over many years and is robust. There is however variance year on year in the levels of irradiance. Returns should match those in the original modelling in an average year – but some years will be better than others. Variance is likely to be less than 5% of gross yield.
- c. Component failure. The construction contract should provide product warranties for all key components in the early years of the project and this should be managed as part of the operation and maintenance services contract. Ensuring the construction contract has suitable warranties is a key part of the technical evaluation of a project in due diligence.

11.5.3 Flexibility and permanence risks

Flexibility and permanence risks are closely related. The higher the degree of flexibility the lower the level of permanence. Permanence is dependent on how difficult it would be for the Council to reverse its decision and revert to standard grid supplied electricity. It is likely that the green tariff would not be able to demonstrate sufficient permanence to meet the criteria for carbon accounting, unless the contract is for an extended period.

The Council has a commitment to become a carbon neutral organisation by 2038, some 17 years into the future. The Council, in common with most local authorities, currently procures electricity over a much shorter timeframe.

The current short-term nature of electricity procurement does not require the Council to be able to accurately forecast its needs into the future. With estate rationalisation, building energy efficiency measures, electrification of heat and transport all due to take place in the coming years accurate forecasting is likely to be difficult.

All of the options are likely to require the Council to form a reasonable view on likely power requirements in 2038. The consequences under different arrangements are potentially different and are likely to be most manageable under the green tariff scenario. Under a direct PPA agreement it is likely there will be a 'take or pay' clause in the contract, committing the Council to a particular volume of supply for the period of the contract. There may be provisions for the council to sell surplus power to a third party if they do not require the power for their own consumption, but this arrangement could be complicated.

Under the asset purchase scenario there would be a need to have a PPA in place to sell power generated where this is in excess of Council requirements. This volume could

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potentially be flexible. This leaves an element of price risk and a risk that the asset is significantly larger than the Council's actual requirement. In this circumstance there would be market opportunities to sell the asset either with or without the benefit of a PPA for the Council's ongoing electricity requirement.

11.5.4 Wholesale electricity price risk

Shorter term and more flexible arrangements carry the risk of prices rising faster than forecast and the Council incurring a higher level of spend as a consequence. Price forecast information shared with the Council suggests a real terms price increase in wholesale electricity prices in addition to inflationary increases until around 2035, thereafter there may be real terms reductions in electricity prices.

An asset purchase would tie the Council's electricity costs to a combination of the costs of operation and maintenance, debt and finance repayments and sleeving and balancing costs. This is potentially more predictable and less volatile than energy prices and may provide a higher degree of certainty at lower cost than the other alternatives.

The shorter the term any PPA or green tariff arrangement is, the greater the wholesale price risk. Agreements for 8-10 years may provide a significant variance to market when they end.

11.5.5 Additionality

Both the direct PPA and asset purchase options provide a strong argument for additionality and are therefore robust in carbon accounting terms.

11.5.6 Transparency and traceability

Directly linking supply to a single generating station provides the clearest link in carbon accounting terms and is met by both the direct PPA and the asset purchase options.

Green tariffs are more likely to rely on REGO certificates. Whilst a REGO certificate demonstrates that the supplier has purchased green energy to back this demand it does not provide any degree of assurance where that supply has actually come from (as certificates can be sold independently of supply). The separation of certificates and supplies also allows larger suppliers to direct more green power to direct green tariffs, whilst their standard supply mix becomes increasingly 'brown' as a direct consequence.

11.5.7 PWLB risk

There is no PWLB risk with the PPA options.

There is potential PWLB risk with the asset purchase option. The potential risk lies more around the location of the generating station than the nature of the activity. The ownership of renewable energy generation assets to cover the Council's own use is likely to meet the 'service delivery' criteria in the guidance. The more difficult issue relates to whether any asset would be deemed to be in the Council's Economic Area (and whether these criteria should be strictly applied as in doing so northern authorities would potentially be disadvantaged compared to those with higher levels of irradiance in the south).



11.6 Value for Money

Entering into a PPA or agreement asset purchase is likely to result in a cost reduction when compared to the Council's existing electricity supply arrangements.

Sleeving contracts offer significantly reduced value for money when compared with synthetic PPA agreements and unless there are compelling commercial reasons to use a sleeving contract a synthetic PPA would offer a preferred option.

Asset ownership reduces the price of electricity to the Council by eliminating the margin that would normally go to the owner of the generation asset. This would represent a saving of around 10% on the price currently paid for electricity.

If asset ownership is pursued then schemes in the south of England offer better value for money as the irradiance is higher (see section 3.2) and the £/tCO₂e factor is therefore better.



12 Conclusions and Recommendations

12.1 Preferred option

This report sets out a total requirement of around 45 MW of solar PV or an equivalent PPA to enable the Council to meet its 2025 and 2038 targets.

The Council has two potentially attractive options available to it in order to meet the requirement; either the procurement of a suitable asset from a third party, or procurement of a PPA direct with a generating station suitable to meet carbon accounting requirements. There are no realistic options for the Council to meet the full requirement without pursuing one of these strategies. Both of these options represent value for money in relation to a 'do nothing' scenario.

Before a final decision can be made the Council need to understand the magnitude of the PWLB risk. If this risk is significant then the preferred option is clearly a direct PPA with a generating.

If PWLB does not represent a significant risk the Council needs to decide on its appetite for the long-term ownership of a generation asset. This option is likely to represent the best value for money but will require more resource to implement and maintain as well as introducing a new range of (manageable) risks.

12.2 Recommendation

Through this report we have made the following recommendations:

Recommendation 1: The Council should consider adopting a target of 45-50 MW of solar PV generation or equivalent direct PPA with a generating station (wind or solar).

Recommendation 2: All options have positive NPV outcomes when compared with 'do nothing'. There is therefore a solid value for money basis to either enter into a suitable PPA or asset purchase agreement and the Council should therefore change its current supply arrangements.

Recommendation 3: Having undertaken a thorough options appraisal exercise the Council is now able to articulate that asset purchase is a value for money option to achieve its carbon targets and should now explore with HM Treasury whether or not an asset purchase would be compliant with PWLB lending terms.

12.3 Next steps and no regrets actions

In order to deliver the strategy of reducing emissions by 7,000 tCO₂e by 2025, the Council will need to determine its preferred way forward. In order to do that the following are recommended:

1. Develop an understanding of the likely future requirements for electricity over the next decade. This should provide a view as to the likely overall requirements and the degree of certainty which could be attached to this forecast. In all scenarios there is a benefit in having reliable information on which to base assumptions.



2. Follow up established conversations in relation to the use of PWLB to ascertain whether an out of area asset purchase would be allowable under the new prudential regime.

If the Council determines that it wants to pursue an asset purchase strategy, then it will need to put in place measures to allow it to implement that strategy including:

3. Establishing sufficient delegated decision making powers to allow the Council to enter into an exclusivity agreement with a developer and invest in the necessary due diligence work to determine whether a project is a viable prospect.
4. Establish a supplier base to facilitate the due diligence work including technical specialists and lawyers.
5. Develop its financial and carbon modelling to ensure that all costs and benefits for a particular project are understood.
6. Determine whether or not to proceed further with due diligence in relation to any of the large-scale projects identified.

If the Council determines that it wants to pursue a PPA strategy, then it will need to put in place the following:

7. A clear policy in relation to carbon accounting, tested with the Council's advisors in this area, setting out how additionality, permanence and traceability will need to be demonstrated by any procurement.
8. A suitable procurement for a direct 'fair value' PPA agreement.



APPENDIX 1 Income from Electricity Generation - Subsidies and Power Purchase Agreements

Generation subsidies

Subsidy schemes for the generation of renewable electricity have all recently closed. There are however two potential support mechanisms which may be of benefit to the Council if electricity generated is exported. These are Contracts for Difference (CfD) and the Smart Export Guarantee (SEG).

Contracts for Difference

The Government has announced that there will be a 'pot 1' allocation of up to 12 GW in the CfD auction due to take place in late 2021. Pot 1 covers mature technology and includes solar PV and onshore wind. Wind projects generally have better economics than solar PV (especially wind projects in Scotland) and it is therefore unclear at this stage whether any solar PV projects will qualify for the price certainty that CfD brings. Arguably a CfD could also prejudice whether or not any scheme would be an allowable reduction in carbon accounting terms as it would be more problematic to sustain the proposition that the Councils' investment has led to the construction of new capacity.

Smart Export Guarantee Scheme

On 1 January 2020, the Government introduced the Smart Export Guarantee (SEG) scheme, which will enable anaerobic digestion, hydro, micro-combined heat and power (micro-CHP, with an electrical capacity of 50 kW or less), onshore wind and solar PV exporters with up to 5 MW capacity to receive payment for exported electricity. The SEG scheme replaces the feed in tariff (FiT) scheme that closed in Q1 2019. The purpose of the scheme is to guarantee a market for small scale renewable energy generation projects which export power directly to the grid.

Under the SEG scheme all licenced energy suppliers with 150,000 or more customers must provide at least one SEG tariff. The Government has set out that, in order to provide space for the small-scale export market to develop, there will not be any specified minimum tariff rate other than that a supplier must provide payment greater than zero at all times of export. The SEG licensees therefore decide how they want their SEG export tariff to work in terms of its rate, type and length. Storage is also eligible to receive export payments, although suppliers will be able to exclude 'brown' electricity from those payments and require the generator to put metering in place that isolates 'green' exports.

Under the scheme exported power must be metered with a meter capable of reporting exports on a half-hourly basis and meters must also be registered for settlement – though the SEG design is flexible and does not necessarily require half-hourly readings.

Power Purchase Agreements

All schemes will require some form of Power Purchase Agreement (PPA) to sell the electricity produced. It is unlikely that any scheme will secure a PPA at the outset for the life of the project, other than for self consumption by the Council. Different arrangements may apply during the lifespan of the project. This is particularly true under a private wire

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arrangement when you need to consider when designing the infrastructure how you will export power to the grid if the arrangement subsequently changes.

Grid export PPAs come in two main forms, either relatively short-term arrangements generally with the major energy suppliers, or longer-term arrangements with a single (or small group) customer. Shorter term arrangements often offer a better spot price than the longer-term ones – but there is more exposure to general price volatility.

Longer term PPA agreements are generally with commercial third parties and seek to fix prices over a set period which helps protect those entering into the PPA (both buyer and seller) from market volatility. Large corporates, such as Google and Amazon have used corporate PPAs for their energy needs. There are currently 260 RE100 companies which have made a commitment to go 100% renewable and are taking actions such as entering into corporate PPA's to deliver on their RE100 and wider sustainability commitments.

Where power is sold as renewable energy the Renewable Energy Guarantees of Origin certificates (REGOs) will be sold with the electricity and therefore any greenhouse gas emissions savings will normally benefit the purchaser of the power rather than the owner of the renewable energy generator.

It is likely that the Council will be the PPA offtaker for an amount of supply equivalent to its electricity consumption. Any surplus power will need to be sold via a PPA agreement.. Key benefits gained from public bodies entering into a PPA with a third-party generator (or their own arm- length generator) are as follows:

Secure energy price - as part of any prudent risk management approach, entering into PPAs provides some insulation against volatile wholesale power markets;

Long term hedge – utilising a PPA gives access to longer date prices;

Additionality/provenance – purchasing directly from a new incremental green generator demonstrates commitment to reducing demand on carbon emitting fuel and provides clear linkage to supply for carbon accounting purposes;

Support UK climate change policy – the UK has made a legal commitment to net zero emissions by 2050. Many local councils have declared climate emergencies and have set targets to achieve carbon neutrality as early as 2030.

PPA structures

Whilst PPA structures continue to evolve there are typically three contract structures:

- Physical (also referred to as a 'sleeving' arrangement)
- Synthetic (or virtual)
- Private Wire

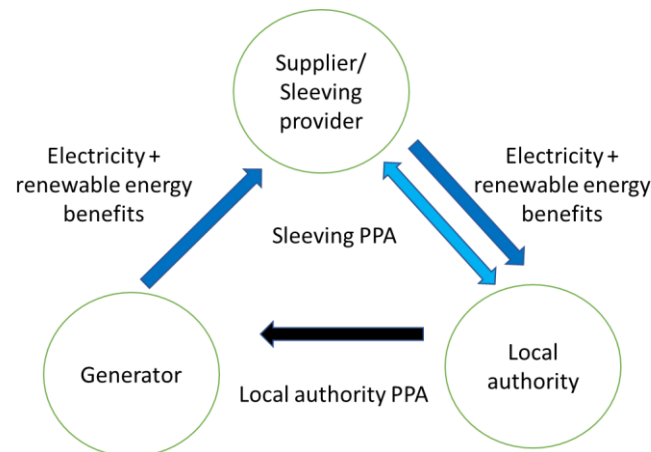
Physical PPA

A Physical PPA is between a customer and a generator who are remote from one another. The public electricity network provides the connection and network charges apply. This form of contract provides a direct and verifiable connection between the electricity produced and the electricity consumed.

An overview of the contractual arrangement is shown in Figure 11 below:

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Figure 11: Contractual arrangements for a physical PPA with local authority as the off-taker



- Under this structure the off-taker enters into a long term PPA with a renewable energy generator to take some or all of the energy generated by its plant (or portfolio of plants) with a defined amount of power sold at a fixed price per MWh. Typically, the PPA will contain provisions for the sale and purchase of electricity and the allocation of any applicable renewable energy benefits, and the provisions governing that sale and purchase.
- The PPA will also include obligations to provide or procure certain metering and regulatory activities that can only be undertaken by licensed electricity suppliers (such as npower, Centrica etc). As such, the off-taker will need to enter into a back-to-back agreement with its licensed supplier under which the licensed supplier commits to undertake these obligations.
- In parallel to this arrangement the off-taker will have an electricity supply agreement with its licensed supplier under which electricity may be supplied to meet the off-taker's energy demands from time to time. The terms of supply under this supply agreement will take into account the electricity purchased under the PPA and passed through to the licensed supplier under the licensed supplier agreement. This ensures that the off-taker has the benefit of the fixed pricing for renewable energy under the PPA but the reliability of a supply agreement with a licensed electricity supplier to meet its day-to-day energy demands.
- There is generally a charge for the sleeving PPA with the sleeving provider which amounts to around 5% of the value of the wholesale electricity traded.

Both wind and solar developers have built up extensive pipelines of renewable energy projects which can give off-takers flexibility around choosing a PPA start date and the ability to dovetail into their long-term energy buying/risk management strategies. Options also exist for individual public bodies to aggregate smaller volumes to benefit from pricing.

Synthetic PPA

In a synthetic PPA structure no power is physically traded. Instead it is a purely financial structure where the off-taker and generator agree a defined 'strike price' to fix the cost of power between themselves for the power generated by a renewable energy facility. Each



party will then enter into separate agreements with their electricity/licenced supplier to sell/acquire electricity at the spot price.

A synthetic PPA works as a financial hedge in that if the spot price in a settlement period exceeds the PPA defined strike price, the generator pays the excess amount to the off-taker for power generated in that period. Where the market price for power is less than the strike price in a settlement period, then the off-taker pays the shortfall amount to the generator for power generated in that period.

A synthetic PPA is relatively simple to enact and provides price certainty to both parties. It can be harder to demonstrate a direct connection, but this should still constitute a valid carbon reduction for an authority participating as an off-taker, provided the contracts also secure the associated renewable energy accreditations.

Private Wire PPA

Private wire PPAs are concerned with the sale of electricity from a generator to an off-taker. Under this PPA agreement, power will normally be sold directly from the generator's facility to the off-taker, rather than being notionally passed through a national power grid. Typically, the generating facility only supplies power to the off-taker and will be located at, or close to the off-takers assets. Private wire PPAs are often utilised in conditions where the off-taker wishes to secure its own source of power. In the case of a local authority for example, an energy intensive depot or industrial estate owned by the local authority.



APPENDIX 2 – Procurement and risk management

For local authorities looking to own a renewable energy asset there are four basic options:

- Develop a project on owned land
- Develop a project on third party land
- Acquire project rights (land agreements, planning consent and grid connection offer) from a commercial developer prior to construction
- Acquire a fully built and commissioned project

Table 8 below sets out the pros and cons of different the different approaches.

Table 8 – Options for Project Acquisition and Development

Option	Potential Advantages	Things to consider
Self-develop on your own land	<ul style="list-style-type: none"> • No rental payments • No need to acquire land rights and establish clean title • No onerous restrictions or lease end date • Likely to be within the geographical boundary of the authority 	<ul style="list-style-type: none"> • Is suitable land available • Will you be forgoing an existing income stream? • Do you have another use for the site? • Reputational issues if the site is in proximity to housing or has been promised for another use • Do you have the skills and capacity for the development? • Are you prepared to risk the development costs? • Design, procurement and construction risks to be managed
Develop a site on third party land	<ul style="list-style-type: none"> • Identify site for its suitability (both size and location) rather than its ownership • Wider search area and therefore more chance of finding a viable grid connection or private wire 	<ul style="list-style-type: none"> • Viability model will need to account for landowner rent • Capacity to acquire the site • Time constraints introduced through the land acquisition period (for example option periods) • Asset lifespan limited by lease arrangements • Do you have the skills and capacity for the development? • Are you prepared to risk the development costs? • Design, procurement and construction risks to be managed • Whether the development is speculative and therefore not able to meet PWLB criteria



<p>Acquire project rights from a third party</p>	<ul style="list-style-type: none"> Removes development risk, avoiding potentially abortive costs and providing certainty <p>Land rights, accepted grid offer, and planning consent will be in place significantly reducing capacity required in the authority to deliver the project</p>	<ul style="list-style-type: none"> Viability model will need to account for the landowner rent and for costs of acquiring the project rights Asset lifespan limited by lease arrangements Design, procurement and construction risks still to be managed Project rights are well sought after in a competitive market. A local authority can potentially lack credibility as a purchaser compared to a financial institution who has undertaken several similar transactions Rights are unlikely to be available at a scale or location which is preferable to the authority (bear in mind for example managing construction of a project several hundred miles away) and flexibility may be required
<p>Acquire a completed project from a third party</p>	<ul style="list-style-type: none"> Removes development and construction risks, avoiding potentially abortive costs and providing certainty Land rights, accepted grid offer, planning consent and functioning asset will be in place significantly reducing capacity required in the authority to deliver the project Private sector developers often prefer to sell post construction and commissioning <p>Private sector contractors can procure more freely and consequently often build at a price significantly lower than the public sector. Quality may also be higher due to ongoing relationships with construction companies</p>	<ul style="list-style-type: none"> Viability model will need to account for the landowner rent and for costs of acquiring the project – although this may be less than the combined cost of acquiring project rights and constructing the asset through public procurement Asset lifespan limited by lease arrangements Projects are well sought after in a competitive market. A local authority can potentially lack credibility as a purchaser compared to a financial institution who has undertaken several similar transactions Authorities will only have the ability to bid on existing projects and cannot therefore drive scale or location

Risk Management

Development of renewable energy projects carries a number of risks which need to be managed and mitigated. Key areas of risk are:

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1. Development risks – particularly in relation to land rights, availability of grid connection, planning risks and viability. Whilst local authorities possess many of the necessary skills in relation to land rights and planning, they are likely to require specialist support in obtaining and managing grid connection offers and in assessing project viability.
2. Construction and procurement risks – these relate to ensuring that the asset delivers the levels of electrical production anticipated by the business case. Much of this risk can be mitigated by selection of an appropriate form of contract with suitable production guarantees, accompanied by the appointment of a competent technical advisor.
3. Operational risks – these largely relate to ensuring that revenues are as anticipated in the business case. Many of these risks can be mitigated against by appropriate forms of contract, strong technical support, contractual guarantees on availability and appointment of an asset manager.
4. Income risks - These are a combination of production and price. Production risks can be mitigated against by strong build and maintain contracts transferring as much production risk as possible to the contractor.

Price risk is key in assessing viability. BEIS (Department for Business, Energy and Industrial Strategy) produce forecasts for wholesale electricity prices, but these are not technology specific. It is likely as renewable energy generation becomes more prevalent that differential pricing will prevail, with lower price being offered when there is over production. Local Partnerships use Aurora Energy Research (Aurora) forecast data in the production of financial information and we would recommend that the Council purchases appropriate data from Aurora if they want to proceed with either development or acquisition of a scheme.



APPENDIX 3 – Solar Farm Acquisition Briefing Note

Purpose

This briefing note is to provide the Council with background information about the processes and resource requirements associated with the acquisition, ownership and operation of a solar farm. It is not a definitive guide and has been provided to build general awareness and to aid understanding.

Acquisition Process

At this stage we are concentrating on acquiring a site which will be purchased as it becomes operational, the process may vary (with additional steps) if a shovel ready scheme was being contemplated.

Figure 12 on page 44 sets out the most common route for a transaction of this nature to take, together with tasks to be undertaken during each stage of the process. In general, Stage 1 (initial appraisal) takes 4-8 weeks depending on the urgency of the vendor and speed at which the purchaser is willing to respond.

Stage 2 (due diligence) typically takes around 6-12 weeks to complete depending on how well kept the vendor's records are and how hard the purchaser pushes their contractors.

Stage 3 (completion and commissioning) of the process takes a further two years and ensures that the solar farm produces the electricity guaranteed under the terms of the design and construction contract.

Figure 12: Acquisition process





Council Resources required

This section sets out the key tasks and likely time involvement required at the various stages of acquisition and during the operational phase of the project.

I Acquisition Stage 1: Initial Appraisal

The purpose of this stage is to determine whether you want to make an indicative offer. Resources to support that include the ability to model the potential financial position and the ability to make the decision to make an offer.

The offer is only indicative and can be withdrawn by the purchaser at any time, right through until the point of completion. Equally the vendor can withdraw the site from the transaction, but the exclusivity agreement would prevent them from commencing discussions with any third parties during the exclusivity period. These agreements are generally well honoured within the renewables industry.

Council officers are currently determining the resources required to put the Council in a position to make an indicative offer and ensuring that necessary briefings and decisions are being properly taken.

II Acquisition Stage 2: Due diligence

During this stage the Council will need resources to procure or appoint the following workstreams and to manage input:

1. Land legal advisors to review all land rights associated with the development. This will generally include full legal searches, review of lease and option documentation and the review of all other land rights required to ensure the scheme can be accessed and connected to the grid. Agreements with the network operator will also need to be reviewed to ensure they have been properly entered into. Some vendors (although not all) will provide a certificate of title which simplifies this process to an extent.

If acquisition is via an assignment of project rights (as opposed to purchase of the SPV) then the land agreements will require assignment to a new target entity.

2. Planning consultants – to review the planning consent and any associated conditions and advise as to whether they have been fully complied with. Advice should be sought as to the extent of any gaps in the compliance and any ongoing requirements the operator of the site will need to comply with.
3. Technical Assessment. Ideally a technical advisor (TA) will be engaged as soon as possible to review the design and forecast output. The TA should provide a full design review and energy yield assessment. In addition, it would be advisable for the TA to monitor construction quality and oversee the testing and handover

procedure under the EPC contract.

4. Grid offer. The grid offer and acceptance should be checked by commercial lawyers to ensure that they have been validly accepted. The grid offer must be novated to the SPV. If acquisition is via an assignment of project rights (as opposed to purchase of the SPV) then a novation agreement will be required from the network operator.
5. Commercial legal and tax advice. This relates to the overall structure of the deal and preparation or review of the transaction documents. There is likely to be a significant commercial input to this dialogue, bringing together any due diligence concerns into conditions precedent being specified in the contracts.

Whilst the technical input can be procured, the Council will need the resource capacity to procure and instruct specialists, project manage the process, negotiate with the developer and write a business case prior to completion of any transaction. It is typical for transactions of this nature to require some negotiation and hands on resolution of issues during the transfer process. Understanding the risks and potential routes to resolution is key to ensuring the transaction either progresses to completion or is terminated at an appropriate stage.

The Council will also need to consider any potential milestone payments and determine whether it has the necessary skills and expertise to certify such payments. These can be supported by the TA if their role is sufficiently scoped.

Alongside the negotiation with the developer, the Council would also need to prepare for owning an operational solar farm – key activities would include:

1. Appointment of an energy supplier and offtaker for the site. Even if you are planning on acquiring the power you will need some form of offtake or sleeving contract. Meters at the site cannot be installed without a supplier appointed (so this may initially be put in place by the vendor – but you will need clear input to the process).
2. Review how and when you can start to purchase the power and put the necessary agreements in place. Put arrangement in place to sell any surplus power.
3. Write the business case and obtain the approvals for the transaction.

Bearing in mind the timescales (i.e. up to 12 weeks), it is a relatively intense process and will require a full-time dedicated officer, with further specialist internal and external support also being required.

III Acquisition Stage 3: Completion and Commissioning

Once the full business case is approved and the contracts exchanged the solar farm will be operational.

The first two years of operation are critical as it is during this time that you can properly assess whether the solar farm is producing the energy guaranteed by the EPC contractor. The Council will need technical support during this period to assess the ongoing testing and to ensure that calculations are properly carried out. This could be



achieved either by extending the services provided by the TA to cover this period or by the appointment of an asset manager.

Asset managers work on behalf of the client and perform an 'intelligent client' function. A typical asset manager scope of services includes ongoing optimisation/ analysis, management of the O&M contractor, review of real time monitoring information and accounting, bookkeeping/ filing accounts etc. Generally, this costs around £2,000 - £3,000 per MW pa plus VAT. Whilst an asset management service is not cheap, the costs are often offset by improved performance and income.

The Council will need to determine whether they need and can afford an asset manager and procure a suitable one if required. An asset manager can also be used to help the Council scope an ongoing O&M contract and provide support during the procurement process if required.

Time commitments required will eventually reduce and this is typically achieved by procuring the right support to the project, although these contracts will still require management and periodic re-procurement.

Without an asset manager the solar farm will require around 1 day per week of staff time to monitor outputs, manage bills, etc. With an asset manager the requirement will be less, but there will still be an ongoing requirement of 1 day per month. In addition to this further resource will be required when any agreements need re-procurement, health and safety incidents occur, insurance incidents occur or if there is any other material change in circumstances.

APPENDIX 4 – Review of ground mounted solar PV opportunities on land assets owned by the Council

Site	Commentary regarding suitability for solar PV development
Clayton Vale	Clayton Vale is an area of green space in Clayton, Manchester, through which the River Medlock flows. Former landfill site which was redeveloped in 1986. The area is now a natural habitat for wildlife and it has been designated a Local Nature Reserve
Tweedle Hill/Plant Hill	Tweedle Common is a former landfill site that has been reclaimed as open space. It sits north of Plant Hill Road adjacent to Plant Hill School. It is characterised by relatively flat grass land and some tree planting. Westwards from Plant Hill Park is an expanse of three natural open spaces split by French Barn Lane and Chapel Lane. The site is enclosed on all sides by urban development.
Shack Liffe Green	A former landfill site which was reclaimed in the late 1970's. The site is nestled between the houses of Horncastle Road and Boggart Hole Clough Park. The site has received minimal intervention and as a result now has a very diverse habitat with ecological value.
Queens Road Tip	Ongoing urban development at the site. Forms part of Manchester Fort 2020 Vision and Development Framework. Consideration for battery storage.
Church Lane Church Lane North	Both sites reclaimed as open space containing informal footpaths. Currently used for recreational usage and enclosed on all sites by residential properties.
Matthews Lane	Site forms part of Nutsford Vale which is a park and community wildlife space. The site is located between Matthews Lane and Longsight Road, behind the Gorton Mount and Grange Schools. Former landfill site which has been turned into an area of recreation and wildlife preservation which is managed by The Friends of Nutsford Vale.

Cringle Road	Site is allocated as an Environmental Improvement Area. Enclosed by residential properties and Highfield Country Park.
Ivy Green Road	Restored former landfill site turned into green woodland space. Site joins onto other woods and meadows extending alongside the River Mersey. The site forms part of Chorlton Ees and Ivy Green Nature Reserve.
Parrs Wood Road	Site forms part of the nature reserve of Stenner Woods, Millgate Fields and the River Mersey. Millgate Fields are adjacent to Environment Agency Flood Zones 2 and 3.
Crescent Road	The area is predominantly residential in character. The land area forms part of the Abraham Moss College estate. No firm demand headroom at closest grid connection point (Cheetham Hill (33 kV / 6.6 kV)).
South of Blackley New Road	Former landfill site which was reclaimed and landscaped in the early 1980s. Site forms part of the wider Blackley Vale. Significant levelling works would be required to facilitate the any development. Large pond adjacent to the site.
Russett Road/Factory Lane	Parcel of land contains substantial tree coverage. Forms a tree corridor between residential properties.
Rear of Fairway	Land predominantly consists of substantial tree coverage offset from residential properties. Land contains a network of footpaths. Forms part of Moston Fairway nature reserve which is maintained by the Wildlife Trust.
Graver Lane	Parcel of land contains substantial tree coverage. Forms a tree corridor between residential properties.
Scotland Hall Road	Small land parcel adjacent to four high rise flats. Site area also contains a recreational ground. Enclosed by residential properties and railway line and neighbouring Clayton Vale.
Annie Leigh Playing Fields, Mount Road	Site forms part of Gorton recreational ground, consisting of a children's play area, multi-use games area and football pitches.
Barlow Hall Farm	Site contains substantial tree coverage and is adjacent to Chorlton Water Park, which is a local nature reserve. Installation of a solar farm on the site would require removal of significant areas of

	scrub vegetation. Grid connection would require crossing the River Mersey. Closest grid connection point is South Manchester 132 kV GSP. Connecting a small solar PV scheme at this voltage is unlikely to be viable.
Sand Street, Collyhurst	Small embanked land parcel adjacent high-rise flats. Site enclosed by residential properties.
Rear of Romer Avenue	Parcel of land contains substantial tree coverage. Forms a tree corridor between residential properties.
Fitzgeorge Street	Small land parcel near high rise flats. Enclosed by residential properties, a railway line and urban development.
Riverdale Road, Blackley	Parcel of land contains substantial tree coverage. Forms a tree corridor between residential properties.
Bluestone Road	Small land parcel which lies between a cemetery and allotments.
Joyce Street	Small land parcel. Enclosed by residential properties and a railway line.
High Bank	Small land parcel enclosed by residential properties. Land parcel contains recreational use sports pitches.
Abbey Hey Tip	Small land parcel which forms a corridor between surrounding residential properties.
Harpurhey Road	Small embanked land parcel. Adjacent to weir and reservoir.
Pike Fold Lane	Site contains substantial tree coverage with a network of paths.
Bradford Road, New Viaduct Street, Cambrian Street	Very small land parcel of scrub vegetation enclosed by gas works and railway line. No firm demand headroom at closest grid connection point (Eastlands (33 kV / 6.6 kV)).
Great Ancoats Street	Small land parcel containing significant tree coverage, enclosed by residential properties.
Crabtree Lane, Rear of Eva Bros	Very small land parcel enclosed by urban development and allotments. The site is fairly isolated, however there is no firm demand headroom at the closest grid connection point (Bradford (33 kV / 6.6 kV)).

Princess Road / Kenworthy Farm	Land parcel enclosed by substantial tree coverage forming part of Kenworthy Wood. The site contains a network of walking paths and cycle tracks. Closest grid connection is South Manchester 132 kV GSP. Connecting a small solar PV scheme at this voltage is unlikely to be viable.
Princess Parkway	Site currently forms part of Northenden golf club.
Airport Woodhouse Park	Very small isolated land parcel. Consideration for battery storage.
Former Stockport Branch Canal Footpath	Canal footpath
Bradford Gas Works	Existing car park area adjacent to the Etihad Stadium. No firm demand headroom at closest grid connection point (Eastlands (33 kV / 6.6 kV)) to support solar PV. Consideration for battery storage connecting into the Bradford (33 kV / 6.6 kV) substation.

Site	Ground Mounted Solar PV				Grid Management Services
	Land Size, location and access	Planning	Technical	Grid Firm demand availability for solar PV, connection length, connection voltage	Potential for Grid Management Services
Clayton Vale					
Tweedle Hill/Plant Hill					
Shack Liffe Green					
Queens Road Tip					
Church Lane					
Church Lane North					
Matthews Lane					
Cringle Road					
Ivy Green Road					
Parrs Wood Road					
Crescent Road					
South of Blackley New Road					
Russett Road/Factory Lane					
Rear of Fairway					
Graver Lane					
Scotland Hall Road					
Annie Leigh Playing Fields, Mount Road					
Barlow Hall Farm					
Sand Street, Collyhurst					
Rear of Romer Avenue					
Fitzgeorge Street					
Riverdale Road, Blackley					
Bluestone Road					
Joyce Street					
High Bank					
Abbey Hey Tip					
Harpurhey Road					
Pike Fold Lane					
Bradford Road, New Viaduct Street,Cambrian Street					
Great Ancoats Street					
Crabtree Lane, Rear of Eva Bros					
Princess Road / Kenworthy Farm					
Princess Parkway					
Airport Woodhouse Park					
Heaton Park					
Former Stockport Branch Canal Footpath					
Bradford Gas Works - solar carport					
Land south of Wythenshawe Hospital					

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**Manchester City Council
Report for Resolution**

Report to: Environment and Climate Change Scrutiny Committee – 14
October 2021
Executive – 20 October 2021

Subject: Large Scale Renewable Energy Generation Feasibility Summary
Study

Report of: The Deputy Chief Executive and City Treasurer

Summary

The Council's Climate Change Action Plan (CCAP) has a target to reduce direct emissions of CO₂ by 50% over the five-year period of 2020-25. In addition, the Council has a target to be zero carbon by 2038.

Action 1.4 of the CCAP targets 7,000 tonnes of annual CO₂ by 2025 savings to be delivered via a “feasibility and business case for a large-scale energy generation scheme from large scale Solar PV or Onshore or Offshore Wind on Council land and buildings, or sites in third party ownership”.

Local Partnerships were appointed in November 2020 to deliver the feasibility study and their study, “**Feasibility Study and Options Appraisal for Large Scale Energy Generation for Manchester City Council**”, was completed in April 2021 and is attached as Appendix 1 to this paper.

The Feasibility Study concluded that the Council has two options: either purchase a solar PV facility or negotiate a suitable power purchase agreement (PPA). Both options were assessed to be better than the “do nothing” option.

Recommendations

The Environment and Climate Change Scrutiny Committee is:

1. Invited to comment on the report and note the options in Section 3.1 available to the Council; and
2. Endorse the recommendation that the Executive is asked to agree that the Deputy Chief Executive and City Treasurer and the Chair of the Zero Carbon Coordination Group establish a delivery team to develop the options further, with a view to returning to the Executive with a proposal.

The Executive is asked to:

1. Note the options in Section 3.1 available to the Council; and
2. Agree that the Deputy Chief Executive and City Treasurer and the Chair of the Zero Carbon Coordination Group establish a delivery team to develop the options further, with a view to returning to the Executive with a proposal.

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 1.4 of the Council's Climate Change Action Plan 2020-25 targets 7,000 tonnes of annual CO₂ savings by 2025. The CCAP 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 half the city's CO₂ emissions over the next 5 years.

Our Manchester Strategy outcomes	Contribution to the strategy
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

It is expected that the Revenue requirements needed to take this forward will be met from existing directorate budgets; if this is not possible, the financial consequences will be that an additional funding requirement is needed to establish a delivery team, including the cost of engaging the necessary external technical support.

Financial Consequences – Capital

It is not expected that there will be any immediate financial consequences to the Capital budget from the content of this report. However, it should be recognised that the outcome of the report options will have capital cost implications.

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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.

Feasibility Study and Options Appraisal for Large Scale Energy Generation for Manchester City Council – Local Partnerships (April 2021)

1.0 Introduction

- 1.1 Action 1.4 of the CCAP targets 7,000 tonnes of annual CO₂ savings via a “feasibility and business case for a large-scale energy generation scheme from large scale Solar PV or Onshore or Offshore Wind on Council land and buildings, or sites in third party ownership”.
- 1.2 Local Partnerships were appointed in November 2020 to deliver a Feasibility Study. A working group to inform, support and manage the study was established led by the Deputy Chief Executive with officers from Estates, Commercial Services, Financial Services and the Zero Carbon Team.
- 1.3 The Local Partnerships brief was to consider:
- The amount of energy generation assets required to deliver the 7,000 tCO₂ annual savings.
 - The size and type of assets with the potential to deliver this, including options for Council-owned land and buildings, partnerships with other land and building owners or developers in the city as well as options both within and beyond the city boundary and Greater Manchester.
 - Funding and financing options including prudential borrowing, private financing, government grants etc.
 - The range of operating models available including power purchase agreements (PPAs), own and operate, etc.
 - The opportunity to deliver maximum, medium to long-term benefits for the Council in both commercial and climate action terms to, and beyond, 2025.
 - An assessment of the risks and benefits of individual opportunities.
 - The Council’s current and future capacity to deliver, including the administrative and specialist capacity requirements for the development, procurement, commissioning and operation.
 - An assessment of the different business models available in terms of investment cost, commercial risk and speed of deliverability supported by an option appraisal on Net Present Value (NVP), using commercially available data.
- 1.4 The study, “Feasibility Study and Options Appraisal for Large Scale Energy Generation for Manchester City Council”, was completed in April 2021.
- 1.5 Progress updates were presented to SMT in August and December 2020 and the final study was presented to SMT in June 2021. A briefing was held with the Leader, Cllr Craig and Cllr Rawlins on the 8th September 2021.

2.0 Key findings of the Feasibility Study and Next Steps

- 2.1 Solar PV is recommended as the most appropriate renewable technology. Onshore wind developments are very limited in availability and are often subject to planning challenges. Offshore wind is generally too large a scale to be suitable.

- 2.2 The size of requirement needed to deliver 7,000 tCO₂ annual savings is equivalent to ~33MW of solar PV. To deliver benefits beyond this point and contribute more significantly to the Council meeting its target to be zero carbon by 2038, then ~45-50MW of solar PV would be required. The Council should consider adopting this size of requirement to future-proof residual emissions through to 2038, facilitating an earlier reduction of a greater proportion of the Council's (Scope 2) electricity emissions and maximising the potential for carbon reduction through renewable energy.
- 2.3 The Council has maximised capacity on its own buildings for renewable energy generation. 6.67MW is already scheduled to be installed via roof-mounted solar PV installations on the Council's estate. These are being delivered by Phase 1 of the Estates Carbon Reduction Programme, the Public Sector Decarbonisation Fund and the ERDF Unlocking Clean Energy project. The generation from these schemes is already accounted for in the CCAP.
- 2.4 There is no suitable land in Council ownership to deploy 45-50MW of solar capacity. An area of ~100 Ha of land is required to deliver the 7,000 tCO₂ requirement. The study examined 35 historic landfill sites across the city, concluding that many had been reclaimed as amenity spaces or were not suitable due to location issues, e.g. proximity to housing. They also looked at opportunities at Heaton Park and the adjacent reservoir, both excluded due to land use and heritage status. The study also explored Council-owned land adjacent to Wythenshawe Hospital which was excluded as it is allocated for employment in the spatial framework. Manchester Climate Change Partnership (MCCP) members were also canvassed and there was a review of planning applications to identify any schemes submitted with potential partnership opportunities.
- 2.5 No opportunities were identified within Manchester for a partnership project. Two ground mounted solar projects are planned in Rochdale (5MW) and in Salford (1.7MW). The size of these schemes is not large enough to facilitate collaboration. No other third-party developments were identified for acquisition.
- 2.6 Since the publication of the feasibility study, the GMCA Go Neutral project has assessed opportunities for small-scale renewable energy assets across the city-region. Based on initial findings it is estimated that ~7-14MW of additional capacity could be available on Council-owned buildings and small parcels of land in Manchester.
- 2.7 The feasibility study concludes that the Council needs to look out of area to deliver the required size of generation, given there is no local opportunities for solar PV at the required scale. Additionally, the study noted that where levels of irradiance are higher, solar PV schemes deliver a better return on investment (ROI). Irradiance levels are potentially 13% higher in the south of the UK compared to Manchester and would generate a higher ROI.
- 2.8 To provide the Council with a deeper understanding of the available options, Local Partnerships used data from Aurora Energy Research (provider of commercial modelling and forecasting data for renewable technologies) to

generate an options appraisal based on current and forecasted pricing. The Net Present Value (NPV) calculations were appraised over an 8 year and a 25-year period and were compared to a 'do nothing' scenario, i.e. the Council's current green tariff.

- 2.9 This calculation showed that all options have positive NPV outcomes compared with 'do nothing'. There is a solid value for money basis to either enter into a suitable PPA or asset purchase agreement and the Council should therefore seek to change its current supply arrangements.
- 2.10 A budget of £27m–£30m is the estimated cost for an asset purchase. A solar asset is anticipated to have a life of 35-40 years. Should this option be selected, and a suitable facility identified, the Council would need to be prepared to move at speed as the numbers of projects of this kind coming to market are relatively few and are likely to be in high demand.
- 2.11 To progress effectively, we are bringing together a project team that incorporates appropriate internal capacity within our Corporate Landlord functions (including our Energy Management and Facilities Management Teams). We will supplement this by securing appropriate expert advice to implement the recommendations around purchase of a solar facility twin-tracked with a PPA. This twin-track approach allows us to progress the two recommended options in line with the findings of the feasibility study and is necessary to allow us to make the right purchase to meet our needs within the CO2 targets and timescales set in our Climate Change Action Plan.
- 2.12 The project team will develop a business plan which will be brought back to Executive to secure the appropriate approvals that will allow us to make any future asset purchase and / or enter into a PPA in a timely and effective manner.

3.0 Recommendations

- 3.1 The Council will act on the findings of the feasibility study and undertake work to deliver the purchase of a solar PV facility, and alongside this, develop options to enter into suitable Power Purchase Agreements (PPAs). This twin-track approach is to ensure we meet the overall objective of reducing the overall emissions target as the availability of solar sites of the size required is dependent on market availability and the PPA option is also needed to ensure we can meet the target in full within the timescales set in the Climate Change Action Plan.
- 3.2 Carol Culley, as Deputy Chief Executive and Chair of the Zero Carbon Coordination Group is delegated to establish a delivery team which builds on existing Council capacity and skills and draws in necessary external experts to develop the options, with a view to returning to the Executive with a proposal having carried out appropriate due diligence work on these options.

4.0 Contributing to a Zero-Carbon City

- 4.1 Action 1.4 of the CCAP targets 7,000 tonnes of annual CO₂ savings by 2025 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 half the city's CO₂ emissions over the next 5 years.

5.0 Contributing to the Our Manchester Strategy

(a) A thriving and sustainable city

- 5.1 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

- 5.2 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

- 5.3 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

- 5.4 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

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

6.0 Key Policies and Considerations

(a) Equal Opportunities

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

(b) Risk Management

- 6.2 The key risk is to successful delivery of the Council's Climate Change Action Plan as action 1.4 is targeted to generate 7,000 tonnes of annual CO₂ savings by 2025 and the earlier this is delivered, the greater the contribution to staying within the carbon budget for the five year period.

(c) Legal Considerations

- 6.3 The legal issues to note from the content of this report are that in regard to a an asset purchase, PPA or a hybrid it will be necessary to consider the relevant public contracts regulations and the Council's own Contractual Standing Orders in regard to procurement and the processes associated with procurement and associated decision making along with relevant decision making processes for the acquisition of an asset and any agreements entered into in association with any proposal. In this regard appropriate delegated decision making powers and approvals will also need to be considered. Legal Services will provide support and advice in regard to such matters and also in regard to the recommendations in this report seeking such appropriate expert technical and professional support and advice as shall be appropriate.

Appendices

Appendix 1 – Feasibility Study and Options Appraisal for Large Scale Energy Generation for Manchester City Council – Local Partnerships (April 2021)