Project: Harewood Whin Green Energy Park

Date: 30/5/25

Title: Strategic Outline Business Case Version 4 Final Version

Executive Summary

1. The Strategic Outline Business Case (SOC) reflects the feedback received at the Project Board meeting on 16/4/25, where the decision was made to recommend to Executive a 'Phased' approach to developing the Green Energy Park on the former landfill site at Harewood Whin. A phased set of project stages over time will create the best opportunity for the earliest delivery of benefits and mitigates the risks of one large project.

2. Within the report, a 'Deep Dive' test has taken place into the assumptions used as a base to model the content presented in the SOC and to understand the level of confidence in those assumptions and associated risks. Annex sets out those risks.

3. This version of the business case and the following Outline Business Case is not a definitive position. It is intended to guide how to scope then plan the project ahead. There are many decisions still to be made to develop a Full Business Case (FBC), to start concluding the contractual options of the project and gain further certainty over the modelled numbers.

4. Key points with varying levels of risk are as follows:

- The recommendation to reduce the solar planning application from 28MW to 16MW and to not explore a direct off taking opportunity at this time, has not removed the possibility for a viable project. How to execute that opportunity depends on CYC's risk appetite and the strategic view it takes on the benefits delivered over a long term roadmap of the site, versus seeing the initial project phases as 'stand alone' in the assessment of their benefits/impact.

- A viable project can be achieved, creating financial and environmental value over time. The financial value in actual cashflow terms for the approved solar planning amount of 16MW could range between £7m and £17m, if deciding to model on a 30-year basis. This assumes City of York Council (CYC) take the responsibility for delivery of the project and do not 'outsource' its delivery.

- The delivery of this financial benefit relies though on many variable factors. Such as securing electricity income at a minimum level of nearly 11p per kWh, using the Smart Export Guarantee (SEG) contracting route and ensuring execution of the plan to deliver a maximum scheme of 4.99MW on two separate phasing's/grid connections, to total 10MW. Then finding a solution for the remaining 5MW e.g. delivering that via an agreement with neighbouring

developer Solar2. Other variables such as costs of installation, borrowing rates etc all remain a risk.

- Only with an electricity income approaching 11p per kWh and assuming the combination of the other financial variables doesn't move negatively, then an project phase of 5MW can be self-financing, with a delayed initial borrowing payback, until income is generated. This initial phase can deliver between £4m and £7m of the 16MW cashflow possibility stated above.

- Achieving the £7m - £17m financial benefit, really depends on CYC's appetite for risk and how confident they feel in their ability to execute a specialist project of this nature, over a long-term roadmap and how they mitigate the risks of variability during the project.

- An alternative approach may be to accept a much lower level of return for CYC and work with a partner organisation to deliver the solar installation. They would likely need to model a full 16MW scheme and that could prove difficult to deliver financial viability for them, as developers often look for more scale to justify larger grid connection costs and we know that anything over 10MW would likely incur a much longer lead time for grid connection. Continuing discussions with Solar 2, might offer the very low risk opportunity of renting the land to them on a 'per acre' basis, to effectively extend their solar operation and utilise further their grid connection. This could provide the council with an annual income of approximately 50K.

- A further alternative to mitigate risk, would be to agree an upfront PPA deal with for example a city partner institution. This is likely though to return a price per kWh that we know from our financial modelling makes this difficult to deliver a positive return and some variables still remain as risks with the council during construction and operation.

5. If CYC decide to progress the initial phases of the project and deliver 5MW of solar, this provides the 'first step' on the Roadmap for the delivery of a Green Energy Park, with the possibility of much larger financial/environmental/possible operational benefits unlocked as that Roadmap unfolds. It also puts the Council in control of the pace it delivers the onwards phases/delivery approach within the Roadmap. If any of the variables within the business case are not performing as hoped, the Council can hold at 5MW and assess when, how, if it progresses further phases based on its small scale 5MW learnings.

Project Background

6. On 20/2/24 City of York Council (CYC) approved the initiation of a project to progress a business case, to provide a Green Energy Park (GEP) at the former landfill site at Harewood Whin. Revenue funding of £243,500 had been obtained via the Net Zero Fund, administered by York & North Yorkshire Combined Authority (YNYCA), with the intention of supporting the completion of both a Strategic Outline Business Case and an Outline Business Case no later than 30/6/25.

7. The business case required using the government's Green Book approach https://assets.publishing.service.gov.uk/media/66449468ae748c43d3793bb8/Project_Business_Case_2018.pdf
   Three key stages exist within the Green Book Approach:
   Stage 1 – Scoping the scheme and preparing the Strategic Outline Case SOC)
   Stage 2 – Planning the scheme and preparing the Outline Business Case (OBC)
   Stage 3 – Procuring the solution and preparing the Full Business Case (FBC)

   This document provides the key deliverable for Stage 1 above. It summarises progress on the scope of the project and enables the Project Board to make key decisions to direct the project, as it progresses towards Stage 2 and the Outline Business Case.

8. During the project work to date, some key decisions have been made and some significant external events have occurred that have shaped the content of this report:
   The decision to remove any further review for a direct 'off taking' opportunity.
   Progress with a solar first approach for the Green Energy Park.
   Planning approval obtained for a reduced solar installation. Reducing the current opportunity from 28MW of solar to 16.5MW of solar. These decisions have an implication and make payback against a business case more difficult to achieve.

9. Many variables remain within the high-level business case numbers/short list of options still at this stage. The biggest variable being the rate of income CYC can obtain from electricity generation.

10. Despite these variables a 'roadmap' exists for the Harewood Whin site, where a positive financial business case exists/alongside delivery of key environmental benefits and further project work towards a Full Business Case can progress.

11. Should CYC decide to deliver the project themselves, the risks of variables can be mitigated by starting out with a smaller scheme of 5MW and if the variables prove to work in CYC's favour then the roadmap then exists to continue to maximise further opportunity from the site, or at worst to hold at 5MW until they do improve and accept that the project will, even at a breakeven position, deliver the other environmental benefits that make the project compelling.

Section A) Making the case for change

Strategic Context

12. In 2019 City of York Council (CYC) declared a 'Climate Emergency' and have since set an ambition for York to be a net-zero carbon city by 2030. The impact of climate change within the city, can be visibly seen through regular flooding events and is felt through poor air quality from transport and inefficient domestic energy consumption within a relatively condensed city.

13. CYC working in partnership with the York & North Yorkshire Combined Authority (YNYCA), has the opportunity to provide civic leadership within the city and to find and then progress significant carbon reduction projects such as Harewood Whin, to demonstrate real progress against the net zero 2030 target and the Local Area Energy Plan actions.

14. The reputation of CYC as a civic leader can be enhanced through delivering a project like Harewood Whin and can help demonstrate to strategic partners in the City of York, that it is possible to achieve both the dual benefit of decarbonisation and real financial returns

15. The site has the potential to deliver up to 32MW of large-scale renewable generation, over time, through ground mounted solar PV and/or onshore wind. This could eventually generate up to 39,000.000 kWh of electricity per annum. This is nearly four times as much electricity, as is consumed at present by City of York Council, who in 2022/2033 consumed 10,344,485 kWh at a cost of £3.6m.

16. It could also contribute towards annual carbon savings of up to 8,125 tCO2e. Other technologies such as EV charging, hydrogen production, and battery storage could provide additional carbon savings and revenue generation opportunities if developed on site.

17. There is the possibility over time to find innovative ways to use the excess electricity provided at Harewood Whin and CYC could develop mutually beneficial strategic electricity contracting partnership arrangements, to provide financial and environmental benefits to other key city partners.

18. At a national/international level, all of the UK must meet net zero by 2050, in line with the target set out in legislation. The UK has also committed to a 68% reduction in emissions by 2030, as part of its nationally determined contribution towards the Paris Agreement, which commits to hold “the increase in the global average temperature to well below 2°C above pre-industrial levels” and pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels.

Spending Objectives

Existing Arrangements

19. Revenue funding is in place to provide an Outline Business Case. No revenue funding is in place, to progress the project to a Full Business Case or to develop the roadmap of capital works projects.

20. No capex funding is as yet secured and no indication has been obtained that either CYC or and YNYCA will be able to identify capex contribution towards project costs. Capex would significantly improve the financial returns for the project, reducing the level of interest paid versus 100% borrowing. In future opportunities like this could be more viable, if revenue generated can then be

reused to support the next projects and reduce the levels of borrowing needed.

21. It is assumed that the 'preferred way forward' selected will have to be 100% 'self-financing' and to provide the council with two key objectives:
    - To generate revenue for CYC
    - To deliver a significant contribution to the councils own and city wide net zero ambitions for 2030 and beyond.

Council Needs

22. To establish an effective use for the former landfill site at Harewood Whin. In excess of 200 acres exist at the site, with only a small land area used for recycling operations by Yorwaste.

23. To establish a pipeline of 'green infrastructure' projects to help deliver its net zero ambitions for 2030 and beyond.

24. To obtain further revenue funding in the region of £200,000 (£150,000 general project costs, £50000 dedicated Project Management resource) to progress to and complete the next stage of a Full Business Case.

Evolution of the Project Scope

25. A long list of options was presented on 5/2/25 after the initial project work. As part of this review a key decision was made to remove the option of direct off taking at Harewood Whin. At this meeting the short list of options became clearer. A decision was also made by the Project Board to support a reduced sized scheme (16.5MW not 28MW solar), to enable resolution of issues with planning. This provided further clarity on the short list of options, with a clear reduced solar first approach.

26. The short list of options presented at the Project Board on 16/4/25 is summarised as below:

Criteria	0.5 MW	5 MW	10 MW	28MW
Size (kWp)	500	5,000	10,000	28,000
Cost of Capital + Interest including grid connection	706,943	8,870,579	16,580,522	45,762,241
Grid Connection cost	1370	1,100,000	2,000,000	8,000,000
Opex (total across 25 years)	297,845	2,978,455	5,956,910	16,679,348
Annual Generation (kWh/yr)	492,886	4,629,605	9,222,480	25,679,832
Income	1,945,494	15,924,799	22,621,403	62,988,890
Cash Flow (over 25 yrs) (£)	940,706	4,075,765	842,666	547,301
ROI (25 years)	110%	28%	-8%	-10%
NPV	469,538	1,493,231	-823,455	-2,869,992
Lifetime Carbon Savings (tCO2e)	563	5,294.5	10,546	29,367.93

27. Detailed cash flow modelling was presented at the Project Board on 16/4/25 in support of the above short list of options and was included in the appendix section of the SOC Version 1.

28. From the above short list of options, it was agreed that 'Do Nothing' does not meet the Council needs. This then left two key strategic roadmap routes for the site and a key decision for the Project Board to support in the Outline Business Case.

    Strategic Option A) Progress a series of 'Phased' Solar installations.
    Strategic Option B) Wait and progress a large 28MW solar installation.

    Strategic Option A) was agreed as the approach to recommend to Executive.

Project Approach – Assuming CYC Deliver the project themselves

29. Phase One - Yorwaste solar project

    Installing up to 1MW of solar to support their own operations on site. CYC will need to work with Yorwaste to agree the revised conditions of the lease for Yorwaste to enable these works to take place. It should be noted that at this point it would be prudent to also cover the possibility of the future CYC renewable phases on the site and their impact/or mechanisms to change the lease in future.

30. Phase Two – CYC install a solar installation up to 4.99MW.

    It is proposed to limit to this level initially, to provide the best risk/reward opportunity of maximising an electricity income via the Smart Export Guarantee Scheme (SEG). SEG. The scheme provides a beneficial income return for small energy generators up to 5MW. As an example, current income rates are in excess of 10p per kWh via the SEG route, versus rates of 7.5p per

kWh achieved through normal PPA (Power Purchase Agreements), such as via CYC's existing electricity provider Npower, or through separate contracting arrangements. Also confirmed by Solar 2 as their rate.

Grid connection approach, cost and timing is also more beneficial on schemes up to 5MW. Previously any schemes over 1MW needed to receive national review/approval, but in the near future this will increase to 5MW, enabling local level grid approval. That significantly reduces the time to wait for a grid connection to less than two years. Previously on larger schemes we were expecting in excess of five years wait. Connections up to 10MW can also be made at Gale Lane substation, not the larger substation at Poppleton, which we know has a long waiting list for connections. A revised grid connection cost will be requested shortly, to further assure the numbers in our cash flow modelling.

Specific benefits are detailed in the benefits section to follow, but this phase creates the opportunity to generate enough revenue to be self-financing, with excess cash generated for CYC and additional environmental benefits achieved.

It reduces the risk exposure by limiting borrowing levels to approximately £5m and limiting the size/scope of the installation, to ensure CYC have the opportunity to operate at a smaller scale first and to adjust and learn, before entering into further larger scale project phases.

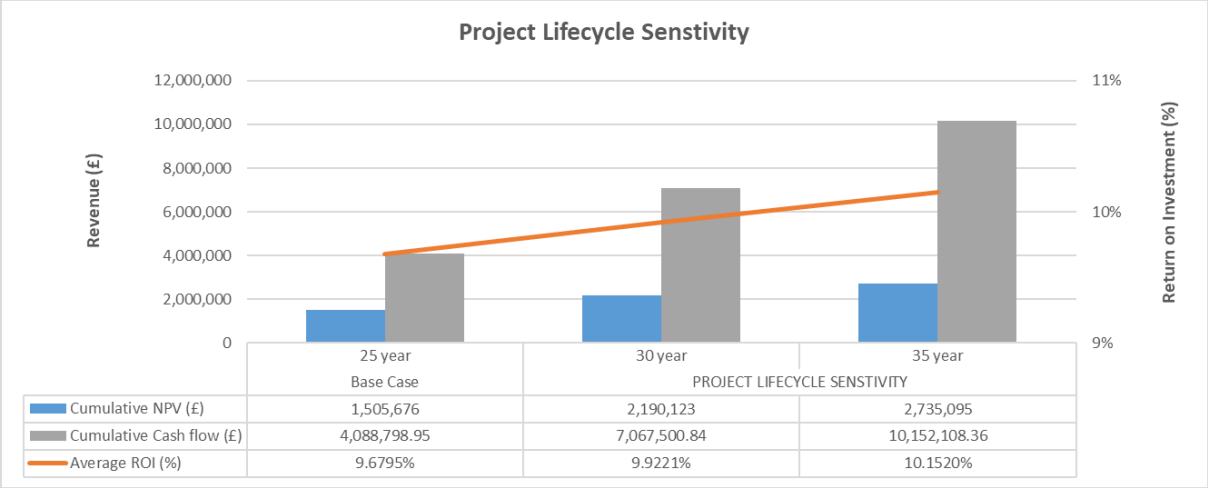
This phase/opportunity is not without risk though.

The cashflow modelling and assumptions provided later in this document evidence the position based on current information/energy markets.

SEG/PPA rates are normally secured at the point that generation is ready. This means that all investment has already been made on solar installation and grid connection. The target rate minimum of 10.8p per kWh may not be achieved if the SEG scheme rates change. SEG contracts are usually 12 months in duration, so risk remains over a 30-year term. There are possible ways to mitigate this and know the rate at the outset e.g. through energy auctions to agree an up front 'strike price'. These can be complex and will only really deliver something closer to the PPA rate of 7.65p per kWh and our cash flow modelling suggests that we don't really want to be settling at that level, as the breakeven point for 5MW suggests we need at least 8p per kWh.

It should be noted that CYC pay 9p per kWh as a commodity price via its contract with NPower. So the SEG income target will be higher than we are paying at present for our basic energy commodity price. The actual cost we pay to NPower though is 26p per kWh, as we have additional charges such as metering costs, broker costs, climate change levy and an additional 1.25p per kWh that we pay as a Council for the green energy tariff, where we receive REGO (Renewable Energy Guarantee of Origin) Certificates and that enables us to have zero reporting for electricity use in our organisational emissions scope reporting.

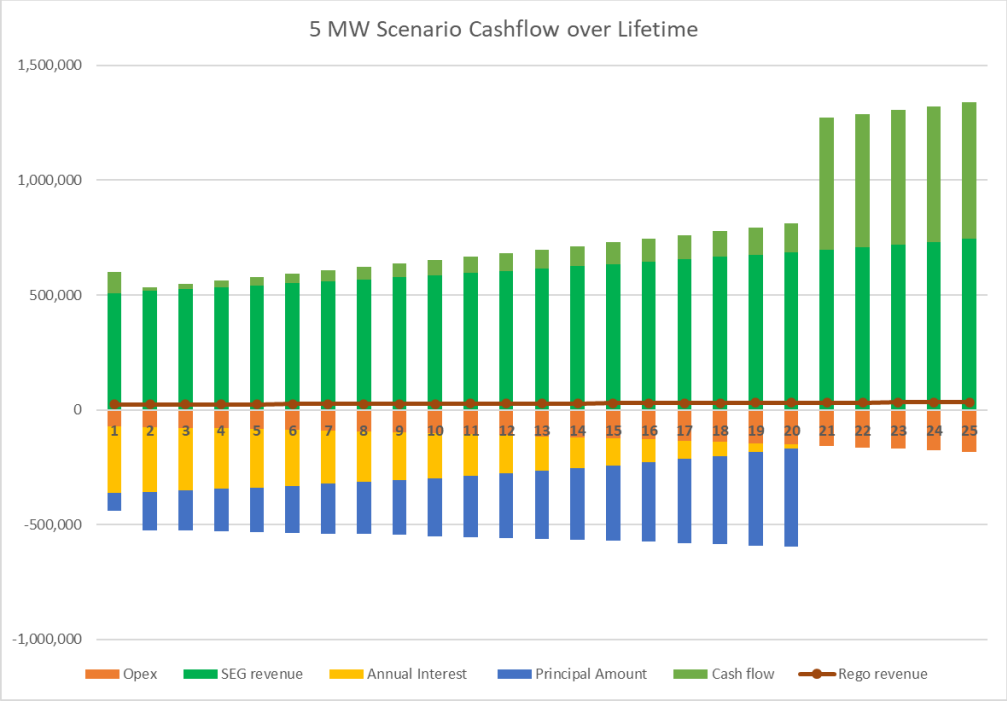
A summary of the opportunity for 5MW SEG solar installation:



This graph shows how the original 25-year 5MW phase was modelled (a small positive change in numbers, since last modelled) and how if CYC increase the period modelled to 30 years, a much larger cash return is possible. If CYC could then repeat this opportunity in phase three, then potentially this doubles the return at 10MW.

The borrowing level used was 5.4% over 20 years, so anything after 20 years becomes mostly cash generated for CYC.

The cashflow from the recent sensitivity analysis shows a target of 11p per kWh (close to the 10.8p per kWh). This demonstrates the opportunity for CYC to execute a 5MW initial project phase. With further upside possible if expanding this modelling to 30 years or beyond.



Year	Capex	Opex	SEG revenue	REGO Revenue	Annual Interest	Principal Amount	Cash flow	Cumulative Cash flow
Y1	0	-71519	509257	23148	-288108	-79698	93079	93079
Y2	0	-74379	517364	23517	-283149	-165823	17529	110609
Y3	0	-77354	525600	23891	-273294	-174778	24065	134673
Y4	0	-80449	533968	24271	-263729	-184216	29845	164519
Y5	0	-83667	542469	24658	-253648	-194163	35648	200167
Y6	0	-87013	551105	25050	-243696	-204648	40798	240964
Y7	0	-90494	559878	25449	-231823	-215699	47311	288276
Y8	0	-94114	568792	25854	-220019	-227347	53166	341442
Y9	0	-97878	577847	26266	-207577	-239624	59033	400475
Y10	0	-101793	587046	26684	-195006	-252564	64368	464843
Y11	0	-105865	596392	27109	-180642	-266202	70792	535635
Y12	0	-110100	605886	27540	-166074	-280577	76676	612311
Y13	0	-114504	615532	27979	-150719	-295728	82560	694871
Y14	0	-119084	625331	28424	-134916	-311697	88059	782930
Y15	0	-123847	635287	28877	-117478	-328529	94310	877239
Y16	0	-128801	645400	29336	-99499	-346270	100167	977407
Y17	0	-133953	655675	29803	-80549	-364968	106008	1083415
Y18	0	-139311	666114	30278	-60756	-384676	111648	1195063
Y19	0	-144883	676718	30760	-39525	-405449	117621	1312684
Y20	0	-150679	687492	31250	-17336	-427343	123383	1436066
Y21	0	-156706	698436	31747			573478	2009544
Y22	0	-162974	709555	32253			578834	2588378
Y23	0	-169493	720852	32766			584124	3172502
Y24	0	-176273	732328	33288			589342	3761844
Y25	0	-183324	743986	33818			594480	4356324

31. Phase Three – Further Options for additional 10MW (planning approval in place)

    Option a) Progress another 5MW solar SEG installation – repeat the phase two SEG project and secure a new grid connection.

    Option b) Progress another 5MW – 10MW and explore the possibility of connection via the neighbouring solar developer Solar 2 and agree a mutually beneficial commercial arrangement.

    Option c) Progress a 10MW solar installation, with a PPA rate. Some economy of scale with grid connection/installation costs might possible at the time this is considered and make the current business case numbers improve.

32. Phase Four Onwards – Explore opportunities for further planning application beyond 16MW, for an additional 12MW solar, to take the site to the original 28MW solar target and explore further renewable technology and off taking opportunities in addition to just the solar installation.

Benefits to City of York Council

33. ***Financial Benefits***

a) On a 5MW solar scheme over 30 years CYC could achieve cashflow of in excess of £7m, with Net present value of in excess of £2m.

b) Further phases up to 10MW could add an additional £10m of cashflow to the Council.

c) The Council currently pays an additional amount for a Green Energy Tariff of £195K per year. This offsets electricity use in its emissions reporting. Approximately half of this would be saved at 5MW and all of this could be saved once we achieve 10MW, as we demonstrate that at this point we are producing enough renewable energy to offset the Councils annual electricity consumption. This is based on the current contracted rate and this could reduce when the next electricity contract is negotiated for March 2027.

34. ***Environmental Benefits***

a) 5MW of electricity generation is approximately 50% of the Councils annual generation. Once a total of 10MW is delivered from Harewood Whin CYC will achieve an electricity neutral position. CYC can then stop buying any Green Energy Tariff and obtaining the Renewable Energy Guarantee of Origin (REGO) certificates that cost us 195K p/a. CYC can use evidence of the renewable generation to achieve a zero electricity score in the emissions reporting.

b) Beyond 10MW the opportunity is then created from the additional electricity produced than the council consumes, to offset further scope 1 and scope 2 emissions (mainly caused by fleet and heating emissions). As an example its estimated that each additional 5MW can offset 25% of the scope 1 and scope 2 emissions that remain. So if CYC achieve solar installation on all the area

allowed by planning approval, it provides 25% more electricity than CYC consume and CYC can achieve a 25% reduction in scope reporting. On future phases (that don't currently have planning approval), there is a further 12MW available and an that point, we would be close to the point that CYC would fully offset all carbon emissions produced and with other council wide renewable projects we would create the possibility of carbon neutral status for the Council.

c) There are wider indirect benefits achieved through civic leadership to deliver green energy. CYC can demonstrate the possibility of success to others in the city and that opens up more renewable projects in the city that support the wider city drive to net zero. York as a city becomes a greener/cleaner place to live and the council will have taken an active leadership role in making that new future a reality in support of the newly adopted Local Plan.

d) Politically the elected Council in York will be aligned with the Labour national government on the drive towards net zero 2050 and the drive to grow the economy through green infrastructure projects. The project will support the businesses in the region who are required to deliver this green economic growth.

Key Risks

a) Electricity Income Generation Rate – Securing the actual tariff is both complex and difficult to achieve before investing in the solar infrastructure. There is no guarantee that the rate achieved will be sufficient and no guarantee how long or for how many years over the 30-year period that the target rate is achieved.

b) Grid Connection – Costs remain estimates. Need to request a further budget cost and estimated timescale.

c) Borrowing Approach – Another variable that needs to be secured.

d) Ground Conditions – Will the former landfill site have the ability to install the proposed solar installation and will the additional costs allowed for installation on landfill actually be correct. Results of a Ground Investigation are awaited.

e) Capital costs - We will only know the full value following a competitive tender process. Factors could change between now and that process and the tenders received back might exceed the estimates modelled.

Commercial Case

35. It is difficult to approach and involve potential suppliers directly in the scheme, due to CYC's procurement guidance, however with the appointment of Arcadis CYC have been able to gain industry supported information and therefore confidence in the approach/costs to delivery and ongoing operational aspects of the project. Within initial financial modelling for this stage, we have tried to be relatively conservative, rather than too ambitious.

Financial Case

36. There is confidence that the phased approach can be self-financing with 100% debt. Example borrowing costs have been supplied by the National Wealth Fund (Formerly UK Investment Bank). They operate at gilt rate plus margin of 0.4%. With the recent tariff related economic turbulence, this rate is currently high at 5.4%. There is upside should this reduce and as such we have shown that significant upside can occur, as the borrowing rate reduces towards 4%. Timing and fixing any capital costs of borrowing will be a significant success factor for the project. Alternative borrowing approaches are also under review. Public Works Loans are currently more expensive than the National Wealth Fund and Abundance Climate Change Bonds have also been explored. CYC Treasury team have been engaged.

Management Case

37. Following the preferred way forward recommendation, funding and resources already exist to complete the Outline Business Case (OBC) by 30/6/25. This work, subject to further direction of this SOC scope, is on track and the OBC will then progress through CYC governance processes, with approval targeted by 30/9/25.

38. Work on the Full Business case is hoped to commence from 1/10/25, subject to CYC approvals. This work, and subsequent approvals are expected to take an estimated 12 months in duration. An agreed revenue funding amount of £150,000 via the Local Area Net Zero Accelerator Fund (LENZA) is currently in the final stages of approval for this purpose.

39. Project Management resource to progress the Full Business Case will require additional funding. It is expected that this funding will be made available via the Energy Generation Accelerator Programme (EGAP). This funding may also provide the opportunity to deliver Project Management to other EGAP funded projects within CYC, creating wider benefit from this Project Management resource.

40. Within the Full Business Case work, it is expected that the appropriate route is explored and agreed for any capital delivery works. Options such as adding the project to any potential pipeline of low carbon infrastructure projects to be delivered by the City Leap programme will be explored, or if City Leap is not sufficiently progressed to deliver these capital works, then we will explore other established CYC delivery mechanisms with a requirement for dedicated Project Management resource.

41. The key work between 1/7/25 & 30/9/25 / From OBC to FBC

- Scrutiny early July
- Final accounts/payments to reconcile in July
- YNYCA – final claim in July
- Payment of claim/reconciliation of X037 CYC Budget code – July/August

- Ground Investigation Results/Assessment of any impact on the project – July/August
- Submission papers and support for the Exec Approval review on 2/9/25
- Funding for FBC - TBC
- Resourcing of PM for FBC – TBC

42. The Critical Path Roadmap Ahead

Roadmap	Q2 2025	Q3 2025	Q4 2025	H1 2026	H2 2026	H1 2027	H2 2027	H1 2028	H2 2028	H1 2029	H2 2029	2030	Onwards
Planning 3 Yr Period	Starts 28/4/25	Discharge Pre Start Conditions			Discharge All Conditions			Ends 28/4/28		Further Planning needed to utilise the full solar site and technologies beyond solar			
Ground Investigation	Mobilise	Test/Results											
Yorwaste Lease	Lease lapsed/needs revisions before any works on site												
Yorwaste Phase One 1MW	Agree Approach		Procure & Mobilise		On Site Installation Phase One								
CYC Phase Two	OBC Completed	OBC Approved	Full Business Case /Approval										
Revenue Funding for FBC	Secured with YNYCA												
Grid Connection	Budget Quote			Full Quote/Secure Start				Grid Connection Phase Two		Grid Connection Phase Three			
Borrowing			Deal Secured										
CYC Installations								Procure & Mobilise	Phase Two Installation	Procure & Mobilise	Phase Three Installation		
Current CYC Electricity Purchase Contact				Negotiation (PPA needed ?)		Contract Signed							
CYC Electricity Income Contract			Negotiation		Contract Signed								
CYC Fleet Electrification / Possible Direct Offtaker								Next Decision point					
CYC Future Installations / Possible Offtakers on site or locally or Solar 2												Phase Four	
Mound 3/Other technologies - Utilise the full site													Phase Five

From 1/10/25 - Full Business Case – The Work Required

43. Assuming the recommended way forward Strategic Option a) phased approach, is agreed/CYC want to continue to develop a project, then the known work for the Full Business Case will be as follows below. These will become a series of work packages (mini projects), where we deep dive further into these subjects and progress the project viability/knowledge on assumptions. There will inevitably be other areas of work to explore but, these specific areas give a good understanding of the key work, as known at this time:

44. Project Management - resource required.

45. Consultant Appointment – Assuming CYC procurement rules do not allow a direct appointment of current consultants, then a competitive procurement process will be required. Specifications for the work will be needed and management of the process with procurement colleagues. There may be risk to manage around the budget and if quotes received fall within the maximum budget amount.

46. Ground Investigation – This is now procured and underway. Results will be received over the summer and then actions taken as appropriate against the plans ahead.

47. Solar Installation – Further work following ground investigation will be needed to revisit the technical solution required, its cost and to firm up operating/maintenance costs that are assumed within the SOC.

48. Grid Connection – A full quote will be needed, a provisional place in the grid secured and a contractual negotiation with Northern Powergrid about the phasing of payments to then be needed. A solution will be needed regarding timings of payments, as it is likely that some money will be needed 'at risk' to progress grid connection, before the full business case is approved. If not the cost and queue place are likely to slip further.

49. Electricity – Further work in the absence of a CYC Energy Manager will be needed to verify the council's consumption, likely demands ahead and carbon neutrality point. Via Yorkshire Purchasing Organisation (YPO) during 2026 there will be contractual negotiations for the future electricity contract, which ends in March 2027. We need to ensure the PPA rates are included/agreed in advance of this, as an option. We also need to progress a solution for the additional cost (approx. 200K p/a) we are incurring now to procure green energy tariff as supported by REGO (Renewable Energy Guarantees of Origin). We need to continue to explore how and at what cost could CYC produce their own REGO certification for the energy produced at Harewood Whin. Potentially this 200K p/a saving. Need to ensure that no double carbon accounting within PPA agreements though, but to ensure we maximise the position for CYC regardless.

50. Yorwaste – Phase 1 is likely to involve Yorwaste executing their own on site solar for up to 1MW to supply their own on-site needs. Supporting this phase and ensure it aligns to the future roadmap work on the site is vital. In support of this work and future roadmap work, the lease with Yorwaste will need to be revisited and concluded.

51. Planning – Discharging the planning conditions before Phase 1 begins and ensuring they remain delivered as part of any CYC works planned ahead.

52. Phase 3 options – having used only a maximum of 6MW on phase 1 and phase 2, the options remain under review for phase 3 to utilise the rest of what is approved by planning/continue to create a roadmap of delivery. Options for a further CYC scheme with SEG/PPA/new grid connection, connection via Solar 2 or direct off taking opportunity/ies. All future options/opportunities will need to remain under review.

53. Future Site Possibilities – Phase 4 – The possibilities for Mound 3 (e.g. a local residents energy scheme) should we wish to revisit planning Phase 5 – the possibilities for additional technologies wind, battery, possibly hydrogen in future. Remain focused on the longer-term opportunities for the Green Energy Park and possible ongoing pipeline of opportunity.

54. Consultation/Communication – Now planning has been approved for the 16.5MW scheme, there needs to be more proactive communication and consultation as the Full Business Case develops.

55. Borrowing – A secured way forward and solution for capex funding is required. This is likely to be 100% funding requirement and the outcome of this rate and approach will be vital to the success of the project.

56. Management Case/Delivery Model for Capex Delivery – Agree on the operational/commercial approach to delivery and make arrangements for the project delivery phase prior to the conclusion of the FBC.

57. Project Management Tasks – Deliver/maintain a project plan, organise Project Board/Governance, manage all financial aspects of budget and quarterly funding claim, manage accounts reconciliation and close all final accounts.

58. Produce the Full Business Case – Manage the delivery of all requirements that are needed during the project as the components to then completing the eventual full business case, pulling together all the work of the project, completing/presenting the FBC and manging all CYC approvals.

Decision Required

59. Project Board are asked to approve the recommended scope direction and how they want the Outline Business Case to be presented.

Appendix

A) Sensitivity Analysis

Annex - Financial Models_Senstivity Ana

B) Risk Summary -The work undertaken/level of risk for the assumptions we have within our business case.

Copy of Harewood Whin Risk Summary v: