

Meeting: Cabinet/Council **Date:** 11 July 2024/18 July 2024

Wards affected: Barton with Watcombe

Report Title: Nightingale Solar Farm

When does the decision need to be implemented? Immediately

Cabinet Member Contact Details:

Cabinet Member: Cllr Chris Lewis, Cabinet Member for Place Development and Economic Growth and Deputy Leader, chris.lewis@torbay.gov.uk

Director Contact Details: Alan Denby, Director of Pride in Place, alan.denby@torbay.gov.uk

1. Purpose of Report

- 1.1 To provide an update as considerable time has passed since the previous decision (August 2021) and to seek updated authorisation for prudential borrowing to bring the project forward, subject to the income generating a positive margin. The margin will be defined on completion of procurement and a final refinement of project costs.
- 1.2 On 24th August 2021 Cabinet approved to increase the budget to £3,100,000 acknowledging the refined cost estimates having identified an organisation as the potential end user. Latest estimated costs are contained in Exempt appendix 1. An increase to the budget is requested. The income (unit price) charged to the end user will increase to cover the increased costs so that the net income exceeds the loan repayment costs.
- 1.3 For background reading the previous cabinet papers (August 2021) can be found in appendix 2.

2. Reason for Proposal and its benefits

- 2.1 On 24 June 2019, Torbay Council declared a 'Climate Emergency'. Torbay Council is a partner of and supports the work of the Devon Climate Emergency Response Group, which is aiming to produce a collaborative Devon-wide response to the climate emergency to help us get to net zero carbon emissions by 2050 at the latest and prepare Devon for the necessary adaptation to infrastructure and services required to respond to climate change.
- 2.2 Torbay Council's current Energy and Climate Change Strategy for Torbay describes how we aim to help minimise the economic, social and environmental costs of climate change in

Torbay by demonstrating leadership and providing encouragement in working toward emission reductions and resilience to our changing climate.

- 2.3 The UK central government also has its net zero commitments called: Net Zero Strategy: Build Back Greener. This strategy sets out policies and proposals for decarbonising all sectors of the UK economy to meet Central Governments net zero target by 2050. Renewable energy, including solar power, forms part of this strategy.
- 2.4 The solar farm would allow the end user to buy and use sustainable electricity generated on Torbay Council owned land to power the end users site. The end users site serves residents throughout Torbay and beyond. It would be a positive step, towards meeting the targets set out in the Climate Change Strategy.
- 2.5 The objective is to provide a 3.2MWP solar farm to generate renewable energy over a 25-year period which will:
 - Contribute to Torbay's net zero target by reducing our carbon footprint by 734 tonnes of CO₂ a year or 18,350 tonnes of CO₂ over a 25-year period. These figures are approximate based on average sunlight.
 - Generate a surplus for Torbay Council. The detail of which is available within exempt appendix 1.
- 2.6 The business case has been considered by Capital and Growth Board and is now recommended to Cabinet for approval.

3. Recommendation(s) / Proposed Decision

That Cabinet recommends that Council accept the following proposals;

- 3.1 That the Director of Pride of Place be authorised to proceed with the next stage of the Nightingale Solar Farm project that is to conduct the EPC tender process and negotiation of the Power Purchase Agreement and to then develop a final business case based on revised income and costs.
- 3.2 That Council approve up to £4,151,000 of prudential borrowing subject to the securing a unit rate per M/Wh that exceeds the loan repayments, covers projected maintenance and other operational costs including anticipated equipment replacement costs and produces an appropriate surplus per annum over the life of the scheme commensurate with levels of risk.
- 3.3 That the Chief Executive, in consultation with the Leader of the Council, Finance Director and Cabinet Member for Finance, be given delegated authority to review and agree that the final business case meets the conditions in 3.2 above, and subject to that agreement is then authorised to agree and finalise the detailed terms and enter into contract with The Health Trust or another user of the electricity.

- 3.4 That, subject to the Council entering into contract as per 3.3 above, the Director of Pride of Place in consultation with the Cabinet Member for Place, Development and Economic Growth be authorised to proceed with the project to deliver a solar farm on Nightingale Park.
- 3.5 That, in the event that the Chief Executive should determine that the final business case does not meet the criteria in 3.2 above, a paper should be brought back to cabinet and Council to determine the future of the project.
- 3.6 That a report be presented to a future Cabinet Meeting after completion of the scheme, as to the potential use of up to 10% of the actual surplus generated to be made available for community use within 1 mile straight line distance of Nightingale Park.

Appendices

Appendix 1: Exempt appendix - financial summary

Appendix 2: The previous August 2021 Cabinet papers with Exempt appendices.

Background Documents

Cabinet report 24th August 2021 *“Project update for the creation of a solar farm on land at Nightingale Park to sell the electricity for a return on investment and help meet the Council’s carbon neutral priority.”*

1. Introduction

1.1 On 28th July 2020 informal Cabinet authorised the borrowing of £2,000,000 to allow the delivery of a solar farm at Nightingale Park for the purposes of selling the power to end users in the area and to the national grid if necessary and provided delegated authority to the Chief Executive in consultation with the Chief Financial Officer to agree and finalise any Power Purchase Agreement with end users.

1.2 On 24.08.21 the budget was increased to £3,100,000 based upon knowing who the end user was going to be resulting in a more detailed set of project costs being produced. Cabinet approved the request of funding for £3,100,000 subject to conditions below:

That the i) to iii) of the exempt decision made by the Cabinet 11 August 2020 (Minute 115h/08/20 refers) be rescinded and that the following be approved:

1. That, subject to the criteria in the Growth Fund strategy being met and a detailed business case approved by the Section 151 Officer in consultation with the Cabinet Member for Economic regeneration, Tourism and Housing, Cabinet authorise up to £3.1m from the Growth Fund to fund the construction and delivery of the solar farm.

2. That, Delegated authority be given to the Chief Executive in consultation with the Leader of the Council to agree and finalise the detailed terms of the power purchasing agreement with an end user.

3. If necessary delegated authority be given to the Chief Executive in consultation with the Leader of the Council to agree and finalise the terms of setting up a separate special purpose vehicle with the Health Trust, if this is deemed the most appropriate route to ensuring both the sale of the energy by the Council and its purchase by the Health Trust is undertaken in accordance with the requirements of the Public Contracts Regulations.

4. If the HealthTrust have not entered into a formal agreement to purchase the power generated by the solar farm by 31st October and subject to a detailed business case being approved by the Section 151 Officer then delegated authority be given to the Chief Executive in consultation with the Leader of the Council to use the power directly to create a sustainable energy source for the Council.

5. That the Cabinet reconfirms their decision in respect of iv) of the exempt decision made by the Cabinet 11 August 2020 (Minute 115h/08/20 refers):

'That a report be presented to the next Cabinet Meeting after completion of the deal, as to the potential use of up to 10% of the surplus generated, being made available for community use within 1 mile, straight line distance of Nightingale Park.'



- 1.3 The previous cabinet papers from August 2020 and August 2021 explain how a private wire solar scheme at Nightingale Park can provide power to the nearby Torbay Hospital.
- 1.4 Planning consent has been obtained on 16.06.22 reference P/2021/1287. This is for a 3.2MWp solar farm. The consent has been granted for a 3-year period whereby work must have started (but not completed). Enabling works to provide a new access road into the site and the levelling of the area to be filled with solar panels has been completed and therefore has implemented the planning consent. The Council can finish the consent at its own pace.
- 1.5 A grid connection to export power up to 999kv has been accepted in October 2022. This allows the private wire from the solar farm to connect to the end users site whilst using the existing grid connection for any export of excess power into the national grid capped at 999kv. The solar farm has been designed to meet the power requirements of the end users site but at times there may be excess power that the hospital cannot use which can be exported into the national grid. However, it should be noted that the end user is contractually obliged to purchase all the power produced at the site and then they will either store any power that is not used or export it to the grid.
- 1.6 The Heads of Terms (HoTs) for the Power Purchase Agreement (PPA) have been signed by the end user and Torbay Council. They are not legally binding but do show a commitment toward the project and enable the Power Purchase Agreement discussions to proceed. Legal advice received in relation to the next phase is that the Power Purchase Agreement should only be signed in tandem with the EPC and O&M contract. One should not be signed without the other and both must accord with the obligations of the other. Solicitors are advising on the commercial EPC contract and the Power Purchase Agreement.

- 1.8 The financial appraisals to date have been produced to test different unit prices for the solar power to be sold. The unit price will be agreed through the Power Purchase Agreement. The Power Purchase Agreement can progress now the HoTs are being signed. In principle the terms upon which the power would be sold to the end user are:
1. A 25-year power purchase agreement (PPA). This is confirmed in the HoTs.
 2. The end user will buy 100% of all power generated from the planning approved site. A unit price of £ per MWh is stated within the HoTs although once the procurement is complete and the final build costs are known there may be a need to revisit this.
 3. Torbay Council will develop the solar array at its own cost, estimated at £4,151,000 (the EPC and O&M tender has not been run yet which will constitute the biggest cost to the scheme).
 4. Based on the planning consented scheme the end user would pay Torbay Council for the power the solar farm would generate, over a 25-year period. At which point the Council's loan will be repaid. The unit price will be index linked over the 25 years. The unit price has not been agreed yet and would need to be agreed through the Power Purchase Agreement (PPA). Before the PPA can be drafted for a final time and signed, a successful EPC and O&M tender process must be completed with a final tender price agreed which will demonstrate the viability of the project.
- 1.9 The end user will be contractually obliged to purchase 100% of the power produced by the solar farm at the rate agreed.
- 1.10 The solar panels typically have a useable life span of up to 40 years. The efficiency of the panels reduces with their age. Typically, they are guaranteed to achieve 80 to 85% efficiency after 25 years. Degradation will be fully modelled as part of the due diligence during the tender stage with the EPC and O&M contractor.
- 1.11 After 25 years the PPA with the end user could be renegotiated. We do not envisage the end user moving its operation from its current site so it is entirely plausible that the end user would seek to negotiate a new arrangement.
- 1.12 All of the capital required to develop the solar farm will be repaid over the 25yr term, matching the length of the PPA agreement and therefore the surplus to the Council from year 26 will be considerably more.

2. Options under consideration

- 2.1 Build out the planning consented scheme after negotiating the Power Purchase Agreement and receiving EPC and O&M tender responses which confirm that the scheme is viable.
- 2.2 As an alternative to the private wire connection with an end user there is potential to sell the renewable power direct to the national grid.

- 2.3 The wider network has limited capacity. The earliest possible connection may not be until 2028 but this is likely to extend out to 2036 when more capacity within the network is expected. The issue with the wider network is that it needs upgrading to be able to handle significant extra capacity. Such upgrades delay the timeframe for a connection to be made. In addition to the programme delays there are also financial considerations. To connect to the grid will cost at least £420k (Sep 21 estimate – this is likely to be more now). Furthermore, the unit price when feeding into the national grid is likely to be considerably less when compared to a private wire end user scenario which would make the project unavailable.

3. Financial Opportunities and Implications

Funding

- 3.1 Previously the Council has approved a budget of £3,100,000 from the Economic Development Growth Fund.
- 3.2 The next phase of work will consist of procurement EPC and O&M contractor and is estimated to require a budget of £61,600. This will include a period of technical design with the selected preferred supplier. Following this technical stage a Full Business Case (FBC) will be submitted and approved by CGB as a final viability check before committing to a contract.
- 3.3 The money will be borrowed from the Public Works Loan Board. The capital cost summary and ongoing revenue costs are detailed at exempt Appendix 1.
- 3.4 The financial loans costs are repaid over the 25-year PPA period. The unit price charged for the electricity will cover the Councils loan repayment costs and further details of this can be found in the exempt financial summary appendix 1.

4. Legal Implications

- 4.1 The Power Purchase Agreement will progress shortly now the HOTS are signed. In principle the terms upon which the power would be sold to the end user are:
- A 25-year power purchase agreement (PPA). This is confirmed in the HoTs.
 - The end user will buy 100% of all power generated from the planning approved site. A unit price of is stated within the HOTS.
 - Torbay Council will develop the solar array at its own cost, estimated at £4,151,000 (the EPC and O&M tender has not been run yet which will constitute the biggest cost to the scheme).

- Based on the planning consented scheme end user will pay Torbay Council for the power the solar farm would generate. The unit price has not yet been finalised but the amount charged will be in excess of the Councils loan repayments and running costs.

5. Engagement and Consultation

- 5.1 Public consultation for the project has been carried out in line with the usual planning application process.
- 5.2 The key stakeholder and end user of the renewable energy, has been closely engaged with both during the strategic work up of the project which is ongoing.
- 5.3 A comms plans will be produced by Torbay Council comms team once a committed start on site date is defined. This will likely include local news and social media messages which will be updated as we progress through key stages of delivery.

6. Purchasing or Hiring of Goods and/or Services

- 6.1 The solar project is at a stage where an EPC and O&M contractor must be appointed to progress but can only be appointed in tandem to the signing of the Power Purchase Agreement.
- 6.2 These contractors would then be responsible for acquiring the various components and delivering the scheme.

Market analysis

- 6.3 The solar consultant has looked at comparable solar scheme costs that are reflected in the financial appraisal. The comparable solar farms are of a similar MW rating to the Councils to 3.2MWp scheme. The comparable schemes are either live or recently completed.
- 6.4 The costs from the comparable schemes provided by the solar consultant have informed the build costs contained within the financial appraisal.
- 6.5 The operating costs have been discussed with the solar consultant who has provided advice on comparable sized schemes. The O&M contract will be initially provided by the EPC contractor for a period of 2 years. After 2 years should the council be happy it could reappoint the same contractor or look to appoint another contractor.

Route to market

- 6.6 The Councils procurement team have identified the CCS framework as having a lot specific for EPC and O&M contractors. The solar consultant has reviewed the list of contractors on the CCS Framework. The CCS Framework has been confirmed as being acceptable to use by the Council's Procurement Officer. There is no cost for the Council to use the framework. The cost is passed on to the contractor which will be reflected in the contractor's tender response.

- 6.7 Using the framework ensures there has already been an element of pre selection using robust quality and price criteria and furthermore reduces the number of potential bidders to a more manageable amount.
- 6.8 Using this framework is more likely to produce more committed responses from providers on the framework than in an open competition procedure where it is common to receive interest with no real potential behind them. As we will know the details of potential bidders in advance of the procurement process commencing targeted market engagement activities can be undertaken to establish the potential level of respondents.

7. Tackling Climate Change

- 7.1 The following text is an extract from the Council's Climate Change Strategy which remains in force:

Climate change is having a major impact on our planet. On 24 June 2019, Torbay Council declared a 'Climate Emergency'. Torbay Council is a partner of and supports the work of the Devon Climate Emergency Response Group, which is aiming to produce a collaborative Devon-wide response to the climate emergency to help us get to net zero carbon emissions by 2050 at the latest and prepare Devon for the necessary adaptation to infrastructure and services required to respond to climate change.

- 7.2 Torbay Council's current Energy and Climate Change Strategy for Torbay describes how we aim to help minimize the economic, social and environmental costs of climate change in the Bay by demonstrating leadership and providing encouragement in working toward emission reductions and resilience to our changing climate.
- 7.2 The UK central government also has its net zero commitments called: Net Zero Strategy: Build Back Greener. This strategy sets out policies and proposals for decarbonising all sectors of the UK economy to meet Central Governments net zero target by 2050. Renewable energy including solar power forms part of this strategy.
- 7.3 The solar farm would allow the end user to buy and use sustainable electricity generated on Torbay Council owned land to power its site. Its site serves residents throughout Torbay and beyond. It would be a positive step, towards meeting the targets set out in the Climate Change Strategy.
- 7.4 The project will contribute to Torbay's net zero target by reducing our carbon footprint by 734 tonnes of CO₂ a year or 18,350 tonnes of CO₂ over a 25-year period. These figures are approximate based on average sunlight.

8. Associated Risks

- 8.1 If the end user does not sign the PPA there will be abortive costs. To date £809,219 has been spent with a further £33,210.90 committed. The next phase is estimated to cost £61,600 leading to potential overall abortive costs of £870,819. There are no competing

private wire schemes in the area. Negotiations have been positive throughout and it is considered that this scenario is unlikely.

- 8.2 The EPC contract and PPA contract must be signed in tandem to ensure the obligations within each can be met when viewed in the round. This will involve some co-ordination internally and externally and potentially could add time to the programme. Progress has been slow during the HoTs discussions.
- 8.3 Inflation has meant that the longer it has taken to deliver the solar farm the higher the build costs, further prolongation of the programme will increase the scheme costs further.
- 8.4 The end user has made obligations within the HOTS that need to be reflected in any unit price agreement. The figures (£) will be negotiated through the Power Purchase Agreement. The greater the requested obligations the greater the unit price requested by the Council to cover the associated risks.

9. Equality Impacts - Identify the potential positive and negative impacts on specific groups

	Positive Impact	Negative Impact & Mitigating Actions	Neutral Impact
Older or younger people			X
People with caring Responsibilities			X
People with a disability			X
Women or men			X
People who are black or from a minority ethnic background (BME) (Please note Gypsies / Roma are within this community)			X
Religion or belief (including lack of belief)			X
People who are lesbian, gay or bisexual			X
People who are transgendered			X
People who are in a marriage or civil partnership			X

Women who are pregnant / on maternity leave			X
Socio-economic impacts (Including impact on child poverty issues and deprivation)			X
Public Health impacts (How will your proposal impact on the general health of the population of Torbay)	Clean energy will prevent the use of fossil fuel alternative and help to sustain a cleaner atmosphere and environment for all in the local area.		

10. Cumulative Council Impact

None

11. Cumulative Community Impacts

None