

CAPITAL INVESTMENT BUSINESS CASE

Chelson Meadow Community Solar - Joint Venture



EXECUTIVE SUMMARY

The Executive Summary is a short summary of the Business Case and should be the last section you complete, this will enable you to extract or only the key facts from relevant sections i.e. 'project on a page'. The summary is a 'snapshot' of the business case which will need to tell the story and sell the proposal.

The in principle business case for the Chelson Meadow Solar Farm was approved at cabinet October 2022. This gave approval to continue the feasibility and development work needed in order to build a solar farm at Chelson Meadow. The in principle business case set out the following opportunities surrounding the construction of the solar farm:

- To reduce the Council's carbon emissions by approximately 60%, with 75% of the electricity need being met by renewable energy.
- To reduce the corporate energy costs. Our best current estimate for this is an average annual saving of between £170K and £440K until 2030.
- To guarantee future energy costs over a 15 – 20 year period through a Virtual Power Purchase Agreement with the solar farm.
- To generate an income over just under £1 million over the life of the solar farm through a lease on the land which will be paid annually.
- To generate an income by offering construction finance and long-term debt to the project. By borrowing at PWLB rates and loaning onwards to the joint venture on commercial terms, the Council's debt margin would be up to c£1.2million over the life of the project.
- To create a 50/50 joint venture with PEC to construct the solar farm. This will result in 50% of the surplus returning to PCC – estimated to be £1.5 million over the life of the project.

This business case seeks to secure agreement for the last point above - to co-create and join a joint venture (Chelson Community Solar) which will construct, own, and run the proposed Chelson Meadow solar farm.

Two final business cases regarding the construction finance and the virtual power purchase agreement are due at the March Cabinet.

SECTION I: PROJECT DETAIL

Project Value (indicate capital or revenue)	£15,740,840 (required for construction for solar farm)	Contingency (show as £ and % of project value)	5%
Programme	Low Carbon	Directorate	Place
Portfolio Holder	James Stoneman	Service Director	Paul Barnard

Senior Responsible Officer (client)	Kat Deenev	Project Manager	Paul Elliott
Address and Post Code	Ballard House	Ward	Plymstock Radford

Current Situation: *(Provide a brief, concise paragraph outlining the current situation and explain the current business need, problem, opportunity or change of circumstances that needs to be resolved)*

The current plan is to build the solar farm in summer 2023 in order that the benefits of competitive energy prices are realised as soon as possible, as well as completing the relevant action within the Climate Emergency Action Plan. Because of various planning conditions the construction can only take place over the drier months of the year.

The minimum commitment to this project required by the Council is to agree to lease the land to the project. However, the Council can be involved at a greater level, and subsequently receive far greater benefit from the project if it agrees to:

1. Provide a long-term loan to the joint venture to enable construction and subsequent operation of the solar farm.
 - *This enables the Council to make a finance margin – by capturing the value between the rate the Council borrow at, and the increased rate the Council lend to the joint venture at on commercial terms. At current rates the value of this is estimated to be £1.2m over 20 years.*
2. Create a joint venture with Plymouth Energy Community (PEC) to run and manage the solar farm.
 - *This enables the Council to benefit from a share of the surplus generated by the joint venture - based on current modelling this is estimated to be approximately £3million to be split 50/50 between the council and PEC.*
3. Purchase the electricity generated by the solar farm.
 - *The solar farm can provide locally generated green power equivalent to 75% of the council's electricity needs. By signing a long-term Virtual Power Purchase Agreement (VPPA) with the joint venture the Council will gain long-term security on energy prices as well as provide security of income for the project - giving additional confidence on the projects ability to repay finance loaned to the project. This provides the Council significant opportunity to hedge against long-term energy price increases as well as reduce its carbon emissions.*

This business case considers the second point regarding the creation of a joint venture with PEC. Points 1 and 3 will be considered in separate business cases brought to cabinet on 9th March 2023.

Proposal: *(Provide a brief, concise paragraph outlining your scheme and explain how the business proposal will address the current situation above or take advantage of the business opportunity) and (What would happen if we didn't proceed with this scheme?)*

The creation of a joint venture is at the heart of the existing collaboration agreement between PEC and the Council. This agreement sets out the intent for both PEC and the Council to create and join the joint venture on an equal 50 / 50 basis. The project has been developed with this collaborative ethos in mind, with both risk and initial financial commitment shared by both parties to date.

The creation of the joint venture - to be called Chelson Community Solar (CCS) – enables both parties to share both the risks and benefits associated with the construction and management of the solar farm.

The joint venture will perform several functions:

- The employer in terms of solar farm construction contract.
- The owner of the solar farm once built, including operation and maintenance.
- The selling of power generated by the solar farm.
- The generation of income through the selling of power.

Both PEC and the Council will have equal share holding of CCS, with a 50% ownership each. This will also be reflected in terms of governance, with 2 members from each organisation becoming directors of the initial board. The initial directors will be Alistair MacPherson and Lee Richards from PEC, and Anthony Payne and Kat Deeney from PCC.

Draft heads of terms for the joint venture have been already been agreed with members of the Chelson Meadow Working Group, which include the S151 officer, Head of Legal, and Strategic Director for Place. These have subsequently been used to draft articles of association and shareholders agreement, which are with the Council's legal team for review.

The creation and subsequent joining of the joint venture provides an income generation opportunity for the Council. It is estimated that over the lifetime of the solar farm (circa. 20 years) a surplus income of approximately £3,000,000 will be generated. Under the draft articles and shareholder agreement this would be equally split between PEC and the Council.

The 50% ownership of the joint venture also provides an opportunity for the Council to have meaningful input into how the Council might purchase the power generated by the solar farm. The virtual power purchase agreement (VPPA) is a key element in maximising the opportunity of the solar farm. Should the Council choose to purchase the power, the joint venture is a key mechanism to ensure that a sound and beneficial VPPA is reached.

It is feasible that the solar farm could be built by PEC without the need for joint venture creation. However, this would could have several negative impacts:

- Result in a delay of construction until 2024.
- Deny the Council the opportunity of benefiting from the forecast income generation via the joint venture.
- Deny the Council an input into how the solar farm operates, and ultimately how and who the power is sold to.

The resource required to actually create the joint venture in terms of process and cost are all in place, with the costs being agreed in the previous business case that was approved in October 2022.

Similarly, the risks associated with simply setting up the joint venture are minimal. For example if the joint venture was created and the solar farm construction was subsequently delayed, the joint venture could still exist without issue.

Milestones and Date:		
Contract Award Date	Start On Site Date	Completion Date
March 2023	July 2023	December 2023

SECTION 2: PROJECT RISK, OUTCOMES AND BENEFITS

Risk Register: *The Risk Register/Risk Log is a master document created during the early stages of a project. It includes information about each identified risk, level of risk, who owns it and what measures are in place to mitigate the risks (cut and paste more boxes if required).*

Potential Risks Identified		Likelihood	Impact	Overall Rating
Risk	Joint Venture is created but construction delayed	Medium	Low	Low
Mitigation	This would have a low impact upon the joint venture	Low	Low	Low
Calculated risk value in £ (Extent of financial risk)	£0			
Risk	Timely construction – without the Joint Venture in place the solar farm is unlikely be able to be constructed in summer 2023.	Medium	High	Medium
Mitigation	Governance arrangements in place, and business cases structured and planned for CMT and cabinet meetings. Shadow board in place for smooth transition. Resource in place to run timely procurement of construction partner	Low	Low	Low
Calculated risk value in £ (Extent of financial risk)	£0			
Risk	Joint Venture defaults on loan payments – the business case for the solar farm does not stack up and its income it insufficient to meet its costs	Medium	High	Medium
Mitigation	Solar farms are a tried and tested technology with known and predictable performance. The financial model to assess viability of the business case has been developed and tested by an experienced team. Power prices are increasing and there are long-term national commitments to the role low carbon power has to play in supplying electricity in a resilient and	Low	Low	Low

	sustainable way. PEC are also experienced in developing and managing solar farms.			
Calculated risk value in £ (Extent of financial risk)	£0			
Risk	Conflicts of interest of proposed board directors.	Medium	Low	Medium
Mitigation	Advice and guidance to be sought from PCC legal			
Calculated risk value in £ (Extent of financial risk)	0			

Outcomes and Benefits	
<p>List the outcomes and benefits expected from this project. <i>(An outcome is the result of the change derived from using the project's deliverables. This section should describe the anticipated outcome)</i> <i>(A benefit is the measurable improvement resulting from an outcome that is perceived as an advantage. Benefits are the expected value to be delivered by the project, measurable whenever possible)</i></p>	
Financial outcomes and benefits:	Non-financial outcomes and benefits:
<ul style="list-style-type: none"> • £1.5m of income generated over life of project • Construction possible in 2023 (instead of 2024) resulting in: • Energy bill savings for the Council should the Council decide to purchase the power from the site at a time when power prices are particularly high 	<ul style="list-style-type: none"> • Largest Community Owned Solar project in UK • Huge Carbon savings (60% of Council total) attributable to this project if constructed.

Low Carbon	
What is the anticipated impact of the proposal on carbon emissions	The solar farm will save approximately of 3,300 t/CO2 per year
How does it contribute to the Council becoming Carbon neutral by 2030	If the Council choose to purchase the power from the solar farm 75% of the council's current electricity demand will be met by renewables. Overall this will reduce the Council's CO2 emissions by up to 60%.

Have you engaged with Procurement Service?		Yes
Procurement route options considered for goods, services or works	The initial procurement will be carried out by Plymouth Energy Community on behalf of the project team. If the Council approves the creation of the joint venture then then the JV will be the 'employer' for the appointed consultant.	
Procurements Recommended route.	N/A - External procurement	
Who is your Procurement Lead?	N/A - External procurement	
Is this business case a purchase of a commercial property		No
If yes then provide evidence to show that it is not 'primarily for yield'	N/A	
Which Members have you engaged with and how have they been consulted (including the Leader, Portfolio Holders and Ward Members)	Planning committee briefed and consulted. Site visit and briefings for Environment portfolio holder. Action in the Climate Emergency Action Plan.	

SECTION 4: FINANCIAL ASSESSMENT

FINANCIAL ASSESSMENT: *In this section the robustness of the proposals should be set out in financial terms. The Project Manager will need to work closely with the capital and revenue finance teams to ensure that these sections demonstrate the affordability of the proposals to the Council as a whole. Exact amounts only throughout the paper - not to be rounded.*

CAPITAL COSTS AND FINANCING

Breakdown of project costs including fees surveys and contingency	Prev. Yr.	22/23	23/24	24/25	25/26	26/27	Future Yrs.	Total
	£	£	£	£	£	£	£	£
No capital costs involved in the creation of the Joint Venture		0	0	0	0	0	0	0
Total capital spend		0	0	0	0	0	0	0

Provide details of proposed funding: *Funding to match with Project Value*

Breakdown of proposed funding	Prev. Yr.	22/23	23/24	24/25	25/26	26/27	Future Yrs.	Total
	£	£	£	£	£	£	£	£
As above								
Total funding								

Which external funding sources been explored	N/A
Are there any bidding	No

constraints and/or any restrictions or conditions attached to your funding	
Tax and VAT implications	None expected but to be confirmed with finance colleagues
Tax and VAT reviewed by	

REVENUE COSTS AND IMPLICATIONS

Cost of Developing the Capital Project (To be incurred at risk to Service area)

Total Cost of developing the project	The cost of setting up the Joint Venture is relatively small – approx. £2K . This is already part of the projects development cost and budget has already been secured for this.
Revenue cost code for the development costs	
Revenue costs incurred for developing the project are to be included in the capital total, some of the expenditure could be capitalised if it meets the criteria	Y
Budget Managers Name	Paul Elliott

Ongoing Revenue Implications for Service Area

	Prev. Yr. £	22/23 £	23/24 £	24/25 £	25/26 £	26/27 £	Future Yrs. £
Service area revenue cost							
Other (eg: maintenance, utilities, etc)							
Loan repayment (terms agreed with Treasury Management)		0	0	0	0	0	
Total Revenue Cost (A)		0	0	0	0	0	
Service area revenue benefits/savings							
Annualised revenue income <i>From surplus through power sales</i>		0	75,000	75,000	75,000	75,000	75,000
Total Revenue Income (B) from surplus through power sales		0	75,000	75,000	75,000	75,000	75,000

Service area net (benefit) cost (B-A)			75,000	75,000	75,000	75,000	75,000
Has the revenue cost been budgeted for or would this make a revenue pressure	Revenue to be included in the capital total so no pressure overall.						
Which cost centre would the revenue pressure be shown	n/a		Has this been reviewed by the budget manager			Y	
Name of budget manager							
Loan value	n/a	Interest Rate		Term Years		Annual Repayment	
Revenue code for annual repayments							
Service area or corporate borrowing							
Revenue implications reviewed by							

Version Control: *(The version control table must be updated and signed off each time a change is made to the document to provide an audit trail for the revision and update of draft and final versions)*

Author of Business Case	Date	Document Version	Reviewed By	Date
Paul Elliott	12/01/2023	v 1.0		12/01/2023
	00/00/2022	v 2.0		00/00/2022

SECTION 6: RECOMMENDATION AND ENDORSEMENT

Recommended Decision

It is recommended that the Leader of the Council:

- Approves the business case to co-create and join a joint venture (Chelson Community Solar) with Plymouth Energy Community, which will construct, own, and run the proposed Chelson Meadow solar farm.
- Approve Anthony Payne - Strategic Director for Place, and Kat Deeney – Head of Environmental Planning – as initial directors on the joint venture board.
- Appoint a shareholder representative for the Joint Venture.

Cllr James Stoneman		Strategic Director - Anthony Payne	
Either email dated:	16.01.23	Either email dated:	17.01.23
Or signed:		Signed:	
Date:		Date:	