

NEWCASTLE-UNDER-LYME BOROUGH COUNCIL

**CORPORATE LEADERSHIP TEAM'S
REPORT TO**

Cabinet
17 October 2023

Report Title: Keele Sustainable Solar Energy Project

Submitted by: Deputy Chief Executive

Portfolios: Finance, Town Centres & Growth

[Click here to enter text.](#)

Ward(s) affected: Keele

<u>Purpose of the Report</u>	Key Decision Yes
<p>To outline to Cabinet plans to produce a detailed feasibility study and business case and to obtain authority to submit a planning permission for a solar array at Keele, prior to any construction on site or agreements with third parties for the purchase of the energy produced, subject to a further report.</p>	
<p><u>Recommendation</u></p> <p>That Cabinet:-</p> <ol style="list-style-type: none"> 1. Approves the production of a detailed feasibility study and business case for the solar array at Keele, details to be provided through a further report, 2. Authorises the Deputy Chief Executive, in consultation with the Portfolio Holder for Finance, Town Centres & Growth, to submit a planning application for the solar array at Keele; 3. Receives a further report on the progress and next steps required prior to any installation works being undertaken on site or end user agreements are signed. 	
<p><u>Reasons</u></p> <p>The Council adopted a Sustainability Environment Strategy in 2020 which states the Council will reduce our reliance on fossil fuels by investigating green energy investment. Following an initial high-level feasibility study the Council has procured planning consultants to design a suitable solar array scheme and to submit a planning application for the facility and associated connection infrastructure. It is therefore appropriate that Cabinet reviews progress in taking forward a suitable scheme and delegates authority to submit a planning application. There will be further Cabinet reports prior to any contracts and licences being awarded for the construction or supply of the energy produced.</p>	

1. **Background**

- 1.1 The Climate Change Act 2008 places the government under a legal duty to reduce greenhouse gas emissions by 80% below 1990 levels by 2050 and the Council has been working to reduce our emissions since. In 2019 the Council passed a climate emergency motion with the aim of becoming carbon neutral with respect to the Council's own estates and activities and those related to our residents and businesses. Following this, the Council adopted a Sustainable Environment Strategy in 2020. This Strategy is the vehicle for helping the Council achieve its aims of caring for and enhancing our natural environment and to adapt and mitigate the effects of climate change. It states the Council will reduce our reliance on fossil fuels by investigating green energy investment.
- 1.2 In line with seeking alternatives to greenhouse gas emissions one of major responses nationally has been to seek alternative energy generation. The Council was successful in securing Carbon Reduction Funding (CRF) from the government for four projects, one of which was to consider the feasibility of the Council building a solar array on land it owns adjacent to Keele Cemetery.

2. Issues

- 2.1 As part of the Government funded CRF programme Wardell Armstrong were appointed to do a high level feasibility study to outline if there was potential for a solar array at Keele. The study considered suitability of the site, connection into the electricity grid, and or potential off-takers (end users) for the facility, including the adjacent Cemetery facility.
- 2.2 The high level assessment of the site topography of the 14ha field would allow 8.9ha being able to be used for solar. Further work is ongoing to plan a workable scheme layout which works in conjunction with Keele cemetery and future burial needs. Based on the number of deaths and preference for burial the Council is likely to see the requirement for approximately 100 burials per year. At present the Council has a few sites open for burial and therefore customers have a choice of site. Over the forthcoming years some of these sites will become full and the choice will reduce and therefore the percentage of people being buried at Keele will increase. Despite this there is still sufficient capacity at the existing site and therefore solar panels could utilise a significant proportion of the site for the next 25 years. The proposed scheme layout will reflect demand for memorial space and solar panels.
- 2.3 There are a variety of types of solar panels that could be used but primarily they are either single or double sided, fixed or tilting. The final choice of panel will be dependent on the more detailed plans, subject to planning permission and then the procurement process in due course.
- 2.4 There are a number of options for the takers of the electricity that have been investigated and consideration has been given to the national grid and potential nearby off site takers (end users). The information on these options is confidential as it includes business sensitive information and would affect the Council's ability to negotiate the future sale of the power. Details are set out in the confidential appendix to this report.

3. Proposal

That Cabinet:-

- a. Approves the production of a detailed feasibility study and business case for the solar array at Keele, details to be provided through a further report;
- b. Authorises the Deputy Chief Executive, in consultation with the Portfolio Holder for Finance, Town Centres & Growth, to submit a planning application for the solar array at Keele;
- c. Receives a further report on the progress and next steps required prior to any installation works being undertaken on site or end user agreements are signed.

4. **Reasons for Proposed Solution**

- 4.1 Investigating and seeking planning permission to deliver green energy generation schemes is in line with the Council's Sustainable Environment Strategy. In order to deliver a green energy generation scheme the Council needs to work with specialist external consultants as the knowledge and capacity of resources is not available in-house. Wardell Armstrong are currently working on the plans for a planning application which will be subject to consultation. Subject to Cabinet considering the principles of the proposal Officers will then work with consultants to develop a suitable scheme for submitting to Planning.
- 4.2 Discussions are taking place with Keele University about the Council's ambitions and Keele have offered to provide consultancy support. Keele have valuable knowledge of solar panels through their Smart Energy Network Demonstrator (SEND) which utilises solar panels to provide electricity to their campus.

5. **Options Considered**

- 5.1 The Council has a choice whether to seek opportunities to develop green energy schemes.

6. **Legal and Statutory Implications**

- 6.1 The application for the planning permission will be decided through the normal Planning process and will be subject to the relevant consultations.
- 6.2 Should the development proceed then the Council will need to complete further negotiations and legal agreements with potential energy buyers.

7. **Equality Impact Assessment**

- 7.1 It is considered that there are no equality impacts associated with this proposal.

8. **Financial and Resource Implications**

- 8.1 The cost of the planning consultants to develop the plans and submit a planning application is met from the master planning for sites in the capital programme.
- 8.2 There are a range of options available to the Council in terms of buying or leasing the solar panels, the approach the maintenance, and connection to electricity buyers. A compliant tendering process will need to be undertaken at the appropriate time.

8.3 Officers will be required to negotiate with potential electricity buyers to secure a contract.

8.4 Further reports will be made to Cabinet before any scheme development takes place.

9. **Major Risks**

9.1 There is a risk assessment on GRACE which identifies some key risks to the Council. Without a suitable design the Council is at risk of not securing planning permission thus risks losing the costs of designing and seeking planning permission. Part of the mitigation against this is working with expert consultants that know about the solar arrays and the local context. Without a suitable design the Council also place in jeopardy the future use of the land and expansion of the Keele cemetery or even the successful integration of the two site uses. It is therefore essential that the master planning consultants seek to deliver suitable designs to meet a range of needs. One of the key parts of the project will be to ensure the successful sale of the electricity generated, as the scheme plans develop the Council will need to negotiate with potential buyers to secure contracts.

10. **UN Sustainable Development Goals and Climate Change Implications**

10.1 The plans to develop a solar array supports the realisation of the following UNSDG objectives:-



11. **Key Decision Information**

11.1 This is not a key decision.

12. **Earlier Cabinet/Committee Resolutions**

12.1 None.

13. **List of Appendices**

13.1 Solar Site Plan.

14. **Background Papers**

14.1 The confidential high level feasibility study completed by Wardell Armstrong.