

THE REEF SOLAR CAR PORT

Summary: The Corporate Plan and Net Zero Action Plan both required the exploration of the deployment of solar PV on the Council's car parks. This report summarises this possibility on the Council's Car Park at the Reef Leisure Centre, Sheringham in terms of sustainability, climate action and return on investment for the Council. It proposes a scheme that it is considered brings multiple benefits and will serve as a demonstration project and pilot for potential further schemes of a similar nature.

Options considered:

1. To build a 2 bay solar car port at the Reef. Reducing the Council's carbon footprint, supplying the Reef with renewable energy and providing a return on investment for the Council
2. To build a 3 bay solar car port at the Reef. Reducing the Council's carbon footprint, supplying the Reef with renewable energy and providing a return on investment for the Council
3. To not build a solar car port at the Reef. Not contributing to our Net Zero Strategy and Action plan or protecting against the fluctuations in energy prices to the leisure centre.

Conclusions: It is recommended that the scheme is approved for the project to construct a two bay solar array (option 1) on the Reef Car Park as outlined in the business case and that supplier A is appointed as the contractor.

Recommendations: **It is recommended:**

- **To appoint supplier A to design and build a solar car port at the Reef, in accordance with the costs and specifications for two rows of photo voltaic arrays as set out in the business case (confidential appendix A) within the allocated budget for this scheme**
- **To delegate to the Assistant Director for Sustainable Growth, in consultation with the Portfolio Holder for Climate Change and Environment, agreement on the detailed design of the scheme**
- **To delegate to the Assistant Director for Environmental and Leisure Services to negotiate a suitable agreement with Sports Leisure Management Ltd. (Everyone Active) for matters relating to the electricity supply and any operational matters relevant to the site and the**

leisure contract

- **To delegate to the Environment and Climate Policy Manager to explore options for further installations at other Council-owned assets (e.g. other leisure centres) as soon as this project is successfully underway**

Reasons for Recommendations:

- To generate renewable energy to supply the Reef Leisure Centre and aid the Council's transition to Net Zero, reducing carbon and producing an associated cost saving from carbon avoided
- To provide a return on investment reducing the Council's and/or its contractor's energy costs
- To help protect the electricity supply to the Reef against ongoing energy price increases thus helping secure the use of the asset for the District
- To demonstrate the viability, acceptability, desirability and deliverability of this renewable technology to inform decisions about its potential roll-out on other parts of the Council's estate
- To showcase the scheme to inspire landowners, businesses and the wider community to embrace renewable energy generation

LIST OF BACKGROUND PAPERS AS REQUIRED BY LAW

(Papers relied on to write the report, which do not contain exempt information and which are not published elsewhere)

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| Cabinet Member(s) Cllr Nigel Lloyd | Ward(s) affected Sheringham South |
| Contact Officer, telephone number and email: Kate Rawlings, kate.rawlings@north-norfolk.gov.uk 01263 516174 | |

1. Introduction

- 1.1 In order for the Council to achieve its aim of carbon net-zero by 2030, it will be necessary to decarbonise its estate. Generating low/zero carbon energy will be an essential means by which that can be achieved. The Council has few buildings from which to generate power from photovoltaic cells; however, the District's car parks have a large surface area from which some power generating opportunities might arise.
- 1.2 The new leisure centre site lends itself perfectly to such an installation with the new facility able to utilise much of the electricity supply on site. This is a particularly timely intervention as the recent increase in energy prices has posed a threat to the future of local authority swimming facilities nationally. In

November 2022 Swim England warned that over 100 Local Authority pools were under immediate threat of closure due to increased energy prices.

2. Current Position

- 2.1 Following internal discussions in late 2021, the project team appointed contractors to investigate the suitability of the site, a potential design for the solar units and outline costs, anticipated energy use by the Reef and generation capacity of the solar arrays.
- 2.2 These investigations concluded that a suitable design could be provided that would have minimal interference on the existing leisure centre and car park, could provide a reasonable amount of renewable electricity for the leisure centre and provide an acceptable return on investment.
- 2.3 On this basis, a planning application was submitted and subsequently approved (on 27 Jan 2023) for a potential three array installation at the site. Full details are available on the Council's website reference PF/22/2901.
- 2.4 In addition, a procurement exercise for the full design and build of the scheme was successfully run during January/February 2023. The outcome of this is included in the business case (attached as confidential appendix A) and a preferred supplier selected.
- 2.5 If the recommendations of this report are agreed, design work can commence almost immediately with construction on site taking place in May and June 2023. This would enable the array to be in use during the favourable summer months this year generating renewable electricity and start to make a return on the capital investment.

3. Business Case

- 3.1 The full business case is given in exempt appendix A. In summary, this projects that the capital expenditure for the main construction cost would be paid back in 6 years with a first year return on investment of 15.32%.
- 3.2 The total budget for the project, in addition to the construction costs, includes a sum for repairs and maintenance, optimism bias and other professional fees and charges.
- 3.3 There have been costs associated with getting the project to this point including feasibility, design, planning and survey fees totalling some £17,822.
- 3.4 The business case uses figures associated with preferred Supplier A.
- 3.5 In addition, the business case considers the alternative options proposed.

4. Corporate Plan Objectives

- 4.1 Corporate Plan Theme Climate, Coast & Environment Objective 1 is to develop and implement an Environmental Charter and Action Plan. In the resultant Net Zero Strategy and Action Plan, section 5.1.2.2 Renewable generation, requires assessment of opportunities across the council estate of renewable energy opportunities.
- 4.2 In addition Corporate Plan theme: Financial Sustainability and Growth (4.2) requires exploration of the potential for the installation of solar panels - photo voltaics (PV) - on the Council's assets. Initially undertaking a business case to assess the viability of PV above some of the Council's car parks

5. Medium Term Financial Strategy

- 5.1 This project will involve a capital investment with an anticipated return on investment as detailed in the business case.
- 5.2 The additional financial savings from carbon avoided by renewable energy generation from the solar carport have not been included in the business case.

6. Financial and Resource Implications

- 6.1 In addition to the capital investment this project will involve a small ongoing repair and maintenance budget, which is included in the business case assumptions.
- 6.2 The project will require internal project management resource and ongoing management of the completed asset and assumptions and assessments have been made about this and included within the business case.

7. Legal Implications

- 7.1 A contract will need to be entered into with the chosen contractor – it is anticipated that this will be a standard JCT design and build contract.
- 7.2 The provisions of the Leisure Management contract will be reviewed and discussions will be held with the Leisure Operator but it is not anticipated that there are any impediments to the proposed scheme and the Council's Leisure Operator is supportive in principle as it too has challenging carbon reduction targets and energy price challenges.
- 7.3 Whilst the solar carport will be constructed on land owned by the Council the car park is contained within the area leased to Everyone Active. The lease was granted with the knowledge of this potential project but this will be reviewed and amended in consultation with the Leisure Operator.

8. Risks

- 8.1 Financial risk is covered in the business case. An optimism bias element is included in the business case to ensure a balanced decision can be made and this is set at 10% on the basis that designs have progressed significantly, with planning permission granted, and a compliant tender process has been undertaken.
- 8.2 Project risks as part of the construction of the scheme and its subsequent operation will be incorporated in a risk register, developed as part of project's governance.

8. Sustainability

- 8.1 In designing and managing this project, officers have looked for the most sustainable solutions on offer. Evaluation of the environmental credentials, approach and materials offered by the contractor made up a significant part of the award criteria in order to deliver a low carbon solution with low maintenance requirements and a long life.
- 8.2 The addition of the solar carport will support the cost effectiveness of running this community facility and contributing to the District's health and wellbeing.

9. Climate / Carbon impact

- 9.1 The main aim of this project is to generate renewable electricity to supply the Reef which will result in the reduction of the Council's carbon footprint, whilst increasing the financial and environmental sustainability of the leisure centre.
- 9.2 The project supports the Council's commitment to Net Zero and the implementation of the Net Zero Strategy and Action Plan.
- 9.3 As is the case with almost all construction projects, there will be environmental impacts associated with materials, labour and the end of life disposal. The project team has looked to minimise these as part of the procurement process. These are considered to be acceptable in light of the other improvements and benefits associated with the project.

9.4 To assist in highlighting the climate and carbon impact of this project. Two assessment tools have been trialed which can be seen in Appendix B.

10. Equality and Diversity

10.1 This project will support a specific public community facility which has been designed as “accessible for all”.

11. Section 17 Crime and Disorder considerations

11.1 There are no direct implications as the solar carport scheme will not change the use of the site from a car park. Potentially the carport may create shadowed areas but the lighting provision will be designed with community safety in mind.

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12. Conclusion and Recommendations

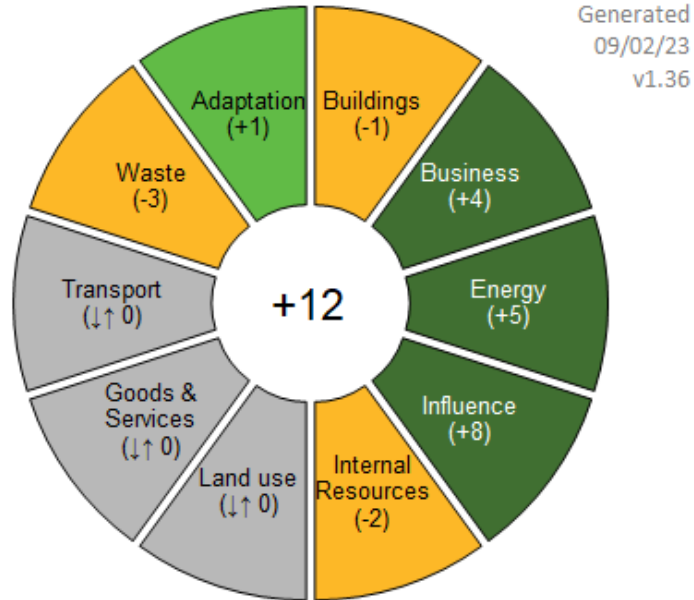
12.1 It is recommended that the scheme is approved for the project to construct a two bay solar array (option 1) on the Reef Car Park as outlined in the business case and that supplier A is appointed as the contractor.

12.2 **It is recommended:**

- **To appoint supplier A to design and build a solar car port at the Reef, in accordance with the costs and specifications for two rows of photo voltaic arrays as set out in the business case (confidential appendix A) within the allocated budget for this scheme**
- **To delegate to the Assistant Director for Sustainable Growth, in consultation with the Portfolio Holder for Climate Change and Environment, agreement on the detailed design of the scheme**
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Appendix A – Business Case – Exempt Paper

Appendix B Climate Impact Assessment Tools



North Norfolk District Council has committed to being a carbon neutral organisation by 2030 (6 years and 10 months away)

Reef Leisure Centre Solar Car Port

