

Finance and Resources Committee

10.00am, Friday, 6 December 2019

The Friends of Duddingston Primary School Solar PV Proposal

Executive/routine Wards Council Commitments	Routine Craigentinny/Duddingston
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1. Recommendations

- 1.1 That Committee approves the grant a 21-year Licence to The Friends of Duddingston Primary School to install solar PV panels on Duddingston Primary School.

Stephen S. Moir

Executive Director of Resources

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The Friends of Duddingston Primary School Solar PV Proposal

2. Executive Summary

- 2.1 The Friends of Duddingston Primary School (The Trust) have submitted a proposal for the installation of 30kW of solar photovoltaic panels on the roof of Duddingston Primary School. This report seeks approval to grant a 21-year licence to The Trust to install solar panels on Duddingston Primary School. The Trust have pre-registered for the UK Government's [Feed In Tariff](#) Scheme, and therefore need to install and commission the solar panels by the end of March 2020. In addition, The Trust have also secured (subject to due diligence) a grant from Scottish Power's [Green Economy Fund](#) which will cover around 50% of project costs. It is the intention of The Trust to raise the remaining funding through fundraising activities, with any shortfall being met via a loan.

3. Background

- 3.1 The Friends of Duddingston Primary School (The Trust) is a [registered charity](#). The objectives of The Trust are to advance the educational experience of children attending Duddingston Primary School. The Trust has been a registered charity since 2014 and is run by volunteers.
- 3.2 Following dialogue with Duddingston Primary School and Council Officers, The Trust were successful in receiving pre-accreditation for the Government's [Feed In Tariff](#) Scheme. This will provide The Trust with a 20-year index linked payment for electricity generated from the solar panels and also a payment for electricity exported from the site (deemed at a rate of 50% of total solar generation).
- 3.3 The Council has already made a significant commitment to community-owned solar PV panels across its estate. In September 2015, Edinburgh Community Solar Co-operative raised £1.4m through a community share offer and went on to install 1.4MW solar PV across 24 Council owned buildings. The expansion of this scheme for up to a further 11 Council owned buildings is currently under consideration, following [approval of the Finance and Resources Committee](#) on 15 August 2019.

4. Main report

- 4.1 The Trust have submitted a proposal for the installation of 30kW of solar photovoltaic panels on the roof of Duddingston Primary School. The proposal and associated financial model has been reviewed by Officers in Property and Facilities Management and Finance.
- 4.2 The key driver for the proposal is to generate revenue for the objectives of The Trust (see [3.1](#)). There is potential for financial benefit to the Council which has been outlined in section 6 of this report. The scheme will help further the expansion of community energy co-operatives in Edinburgh and will also support the Council's objectives to increase renewable energy generation and reduce carbon emissions.
- 4.3 To help finance the scheme, The Trust have secured (subject to due diligence) a £16.2k grant from Scottish Power Energy Network's [Green Economy Fund](#). This will fund around 50% of total project costs. The remaining funding for the project will be secured either through fund raising activities or via a loan.
- 4.4 To meet the pre-accreditation requirements under the Feed in Tariff Scheme, The Trust will need to install and commission the solar PV system by the end of March 2020. This places a time pressure on the delivery of the works, which are anticipated to take 5 days to complete. The February school holiday week has initially been targeted for the majority of works but, as there are other asset management works scheduled during this period, this will depend on the ability to safely coordinate works.
- 4.5 The Trust have procured a contractor, through [Local Energy Scotland's](#) Solar PV Collective Purchase Framework, to design and install the solar PV System. Work is already underway on some preparatory elements of the project, including grid connection and building warrant applications and system design. The Trust has applied for support from Scottish Government's Community and Renewable Energy Scheme (CARES) to provide cover for any abortive costs from this work were the project not to proceed.
- 4.6 Through the scheme with Edinburgh Community Solar Co-operative, the Council has a defined approach and legal structure for the licence of roof space to community organisations for solar PV. This will provide a good foundation on which to build an appropriate agreement specific to The Trust's proposal. A key focus of any agreement, would be to ensure that any benefit accrued by The Trust from the panels, is distributed in line with the objectives outlined in their proposal. Furthermore, the legal agreement will also seek protections that The Trust will continue to deploy appropriate resource in both the management and maintenance of the solar installation and any accrued funds.
- 4.7 The licence agreement would last for a period of 21 years or 20 years after the panels have been commissioned whichever is shortest. Following the end of the agreement, the Council will retain the option to either own and operate the panels or request that The Trust decommission and remove the system. If there is an ongoing positive impact from the project and The Trust wishes to continue to operate the

panels beyond the 20-year period, then this option could be pursued at the discretion of the Council.

- 4.8 Under the proposal from the Trust, it is proposed that the tariff paid by the Council will be fixed at 12.4p/kWh for the duration of the project. This matches the current rate paid for electricity on the site. Therefore, on the assumption that electricity prices continue to rise, the Council will receive an increasing financial benefit from reduced cost electricity from solar PV generation. It is likely that some of the solar electricity generation from the panels will be exported to the grid. Under the terms of the Feed in Tariff agreement, 50% of solar PV generation will be assumed to be exported. To simplify the charging/invoicing structure between The Trust and the Council, and to avoid the costs associated with export metering, The Trust will also assume 50% of generation is exported. From analysis of current consumption, it is likely that more than 50% of the electricity will be used on site, providing a further financial benefit to the Council.
- 4.9 The Council will incur some modest costs in the application of staff time for design review, development of the legal agreement and during the installation phase to maintain overview of health and safety.

5. Next Steps

- 5.1 Subject to approval to grant a licence, work will be undertaken to finalise the legal agreement between the Council and The Trust.
- 5.2 The formal planning of installation works will take place, including the preparation of appropriate health and safety plans and the coordination of works with other scheduled works.
- 5.3 Any remaining design review and survey work will be undertaken.

6. Financial impact

- 6.1 The financial model provided by The Trust has been reviewed by Council Finance Officers. Based on the scenario testing carried out, it is likely that the proposal is financially viable and will result in a net benefit to The Trust of around £50k. The range of benefit outlined in the above scenario testing ranged from the £30k to £50k over the duration of the scheme.
- 6.2 Direct financial benefit for the Council is not the principal driver for this project however, based on detail provided to date, it is possible to provide an indicative outline of potential savings. As export for the panels will be deemed rather than metered, this could potentially create an initial financial benefit to the Council in the region of £500 - £1000/annum. On the assumption that energy costs will increase at a rate of 2.5%/annum over the next 20 years, the total saving to the Council from the scheme could range from £18k-£36k. It is important to note that there is a

degree of exposure to increased costs through the removal of panels for works, however this is largely mitigated by the fact that the roof of the school is new.

- 6.3 Through the encouragement of energy co-operatives there is the opportunity to accelerate the expansion of distributed generation across Edinburgh. This offers the potential to support Council targets with limited financial commitment from the Council.
- 6.4 If the Trust are successful in securing 100% funding for the project, without the requirement for any borrowing, then it is anticipated that the project could generate up to £50,000 towards enhancing the educational experience of children attending Duddingston Primary School.

7. Stakeholder/Community Impact

- 7.1 The proposal from The Trust has a strong community focus and could have significant benefit for the children and associated communities surrounding the school.
- 7.2 The expansion of building mounted solar PV panels across the Council estate will contribute towards the reduction of building related carbon emissions and assist in the delivery of Council obligations under the [Climate Change Act \(Scotland\)](#). Based on current carbon emission factors for electricity, the system could reduce the schools carbon footprint by up to 6tCO₂ per annum. This figure will reduce as the electricity grid decarbonises.

8. Background reading/external references

- 8.1 [Finance and Resources Committee, August 2019, Edinburgh Community Solar Co-operative – Phase 2](#)
- 8.2 [Transport and Environment Committee, June 2019, Business Bulletin, Edinburgh Community Solar Co-operative, Page 3-4](#)
- 8.3 [Finance and Resources Committee, August 2015, Approval to Grant a Licence to Edinburgh Community Solar Co-operative to Install Solar PV Panels on Council Owned Buildings](#)
- 8.4 [Corporate Policy and Strategy Committee, Tuesday 14 May 2019, Sustainability Approach](#)

9. Appendices

- 9.1 None.