

Nottingham City Council Delegated Decision



Nottingham
City Council

Reference Number:

1799

Author:

David Williams

Department:

Communities

Contact:

David Williams

(Job Title: Energy Infrastructure Manager, Email: david.williams@nottinghamcity.gov.uk, Phone: 01158765651)

Subject:

Provision of Solar panels to Sneinton Markets

Total Value:

£146,000 (Type: Capital)

Decision Being Taken:

Recommendations:

- 1. To approve the delivery of a solar panel installation at Sneinton Market by the Council and a total spending of £146,525 from the Energy Development Fund to be repaid by the accrued income generated by Feed in Tariffs and export tariffs.**
- 2. To commence procurement through a compliant route for materials and specialist support services and to delegate authority to the Strategic Director of Commercial and Neighbourhood Services in consultation with the Director or Strategic Finance to award contracts to the successful bidder.**

The Sneinton Market project is a redevelopment of an existing site in Nottingham carried out by Wates and is being managed internally by Major Programmes. Solar Panels (PV) weren't considered in the scope of the redevelopment until late on where an opportunity arose for Highways and Energy Infrastructure (HEI) services to demonstrate their solar PV skills. This installation shall form part of the training programme for HEI and shall count toward MCS accreditation; the second of three required assessable test projects/ sites.

The Council will install the solar panels and ancillary electrical equipment itself during the renovation of the Market. In order to try to ensure that the refurbishment contractor will take all responsibility for the watertightness of the roof, the roofing subcontractor will waterproof the fixings and warrant the waterproofing of the installation of the panels.

Timescales for delivery of solar panel element of the works need to coincide with the existing re-roofing programme that is managed by the principal contractor, Wates. The anticipated programmed start date for the solar panel installation is w/c 12th January 2015 and is estimated to take 20 days.

The proposed installation at the Sneinton Market redevelopment shall consist of a c.150kW solar panel system and shall generate c. 135,000kWh per annum providing the council with average annual net revenue of c. £14,000. This represents a payback of 11 years. A detailed financial summary and cash flow can be found in Appendix 1.

The scheme has been made viable by the continuation of the FIT scheme. The City Council shall be entitled to receive FIT payments for solar electricity generated and receive the proceeds for any surplus solar electricity exported to the national grid, the income is broken down into two elements;

1. Feed in tariff - unit rate (p/kWh) payable for the renewable electricity generated
2. Export tariff - unit rate (p/kWh) payable for the excess renewable electricity that is exported to the national grid

It is important to consider that the cashflow above doesn't capture any electricity savings - this is because the landlord of the site doesn't currently incur any expenditure associated with the cost of electricity (there is no onsite usage for the landlord). Once the development is complete the landlord shall incur electricity costs for the aspects detailed below:

- CCTV
- Cupboard lighting
- Building mounted external lighting
- Walkway lighting
- Column lighting
- Various circuit boards and plug sockets

The installation of solar panels at this site provides the Council with the additional benefit of not incurring c £2,000 per annum electricity costs.

The Sneinton Market redevelopment is part of an ambitious solar delivery programme developed by Nottingham City Council. This programme seeks to install solar panels to Council owned properties over the period of 2014/ 15 and 2015/ 16.

The solar delivery programme is an ideal fit with Nottingham City Council's commercialism strategy to seek invest to save opportunities and to deliver council projects through a highly skilled, in-house team within the Highways & Energy Infrastructure (HEI) division of Commercial & Neighbourhood Services. As part of the installation programme it is proposed that HEI gain Microgeneration Certification Scheme (MCS) accreditation and NICEIC accreditation- NICEIC is a regulatory body for the electrical contracting industry. These are a prerequisite to access Feed in Tariff (FITs) payments. As part of this accreditation process HEI will provide renewable energy training and development opportunities for its technical teams and apprentices.

This decision supports the Council Plan to reduce the Council's carbon emissions by 31% by 2020 and forms part of the Council's carbon management action plan. It will also help to reduce the Council's dependency on fossil fuels, reduce carbon emissions and utility costs and contribute to energy security.

This project also supports the Council's energy strategy which states that 20% of the City's own energy generated from low or zero carbon sources

Since 2011 Nottingham City Council has installed solar panels to over 25 of its corporate buildings with a capacity of over 800kW in total. The largest example currently in the City is the installation at the Tennis Centre which comprises a 150kW Solar PV system and provides electricity savings of approximately £11,000 per annum.

Also in 2011 the Council installed PV to over 3000 domestic properties which enabled each resident to benefit from the free electricity generated by the system for the next 25 years, contributing further towards the Council Plan to reduce fuel poverty.

Briefing notes documents:

DDM_Sneinton Market PV_20141219_Financials.pdf

Other Options Considered:

Procuring full design, supply and installation through the existing commercial solar PV framework was rejected as it would add unnecessary additional cost to scheme by procuring a third party contractor for the installation reducing the return on investment of the scheme. The Council can make significant savings by procuring all materials separately and installing utilising suitably skilled and experienced in-house teams. Also this may reduce the opportunity to create local jobs.

Doing nothing option was rejected as it would offer no contribution to the Council policy or the energy strategy as outlined in the body of this report. It would also means that the Council is unable to take advantage of the FIT subsidy, export tariff payments and energy savings associated with a Solar PV installation

Background Papers:

Published Works:

Delegated decision 967 (2011) - 'Establishment of a procurement and implementation framework and appointment of suppliers for the installation of solar photovoltaic panels on council buildings'

Delegated decisions - 0006 (2012) Approval of additional funding to complete solar photovoltaic panel installations at Ambleside Primary School and Nottingham Tennis Centre and 1391 (2014) Wilford Hill Crematorium.

Executive board report December 2010 - Energy strategy implementation, solar photovoltaic programme on domestic properties. The Nottingham 2020 Sustainable Energy Strategy

Affected Wards:

St Ann's

**Colleague / Councillor
Interests:**

Consultations:

Those not consulted are not directly affected by the decision.

**Crime and Disorder
Implications:**

This installation has no significant impact on Crime or Disorder - it is a permanent fixture to the building and offers no opportunity for situational or anti-social behaviour.

Equality:

Please login to the system to view the EIA document: EIA_Sneinton Market_20141211.doc

Social Value Considerations:	The nature of this type of installation has intrinsic social values - revenue generated from the scheme shall indirectly benefit all citizens of Nottingham
Decision Type:	Portfolio Holder
Subject to Call In:	Yes
Call In Expiry date:	13/01/2015
Advice Sought:	Legal, Finance, Procurement, Equality and Diversity, Other: Ian Vernalls(ian.vernalls@nottinghamcity.gov.uk)
Legal Advice:	<p>The main legal concern relates to the potential difficulties of apportioning blame should any of the roofs leak and redress be sought from the main contractor. Provided that the correct agreements are in place the this risk should be met.</p> <p>Legal have been assisting and will continue to assist Advice provided by Brian Lewis Stewart (Solicitor) on 18/12/2014.</p>
Finance Advice:	<p>The cost of this decision is £146,000 to be met from the Energy Development Fund (EDF). The net income derived from the scheme is £14,000 in the first year. In the model used, this rises by just over 1% per year until replacement inverters are installed from year 9. Payback for the scheme occurs in year 11 of operation of the scheme and over a 20 year period it has an NPV of £37,000.</p> <p>The net income will be credited back into the EDF in order to fund future investments.</p> <p>Advice provided by Ian Greatorex (Finance Business Partner) on 19/12/2014.</p>
Procurement Advice:	<p>There are no significant procurement concerns with this decision.</p> <p>The CPU will support purchase of the materials and specialist support for this project via further competition from the compliantly procured Buy for Good framework, which is available for the Council to use in accordance with Contract Procedure Rules.</p> <p>Advice provided by Dawn Cafferty (Procurement Category Manager) on 15/12/2014.</p>
Equality and Diversity Advice:	There are no significant adverse equality impacts to this proposal. Advice provided by Adisa Djan (Equalities and Diversity Consultant) on 12/12/2014.

Other Advice:

Major Programmes is project managing delivery of the ERDF-funded "Downtown" project at Sneinton Market. The project includes re-roofing works and an opportunity has been identified to install solar PV panels. Property colleagues are aware and supportive of including solar PV in the scheme. The HEI team will co-ordinate the installation with the principal contractor, Wates Group Ltd, to ensure necessary technical / structural integration and efficient / timely completion. A start on site is required w/c 12th Jan 2015 to avoid unnecessary delay / cost to the Downtown project.

Advice provided by Ian Vernalls, Programme Manager, Major Programmes on 19/12/14 Advice provided by Mark Leavesley (Constitutional Services Officer) on 19/12/2014.

Signatures

Alan Clark (Councillor) (Portfolio Holder For Energy and Sustainability)

SIGNED and Dated: 06/01/2015

Andrew Vaughan (SD for Commercial and Neighbourhood Services)

SIGNED and Dated: 06/01/2015

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Appendix 1 : Cashflow forecast for Sneinton Markets

Year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Expenditure																						
Energy Development Fund (£)																						
Materials (Panels, Inverters, Electrical)	101,250																					
Specialist roofing services (Third party)	5,000																					
Total Energy Development Fund	106,250																					
Cash Flow																						
Revenue Expenditure (£)																						
Monitoring		100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Replacement Inverters		0	0	0	0	0	0	0	0	2,500	2,500	2,500	2,500	2,500	0	0	0	0	0	0	0	
Maintenance/ Contingency		1,465	1,465	1,465	1,465	1,465	1,465	1,465	1,465	1,465	1,465	1,465	1,465	1,465	1,465	1,465	1,465	1,465	1,465	1,465	1,465	
RPI (2%)		31	63	96	129	163	197	233	269	793	890	989	1,090	1,194	500	541	584	626	670	715	761	
Labour (HEI)	40,275	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Expenditure		1,597	1,628	1,661	1,694	1,728	1,763	1,798	1,834	4,858	4,956	5,055	5,156	5,259	2,065	2,107	2,149	2,192	2,236	2,280	2,326	
Income (£)																						
Feed in Tariff		-11,056	-10,944	-10,832	-10,721	-10,609	-10,497	-10,385	-10,274	-10,162	-10,050	-9,939	-9,827	-9,715	-9,604	-9,492	-9,380	-9,269	-9,157	-9,045	-8,934	
Export Tariff		-4,277	-4,234	-4,190	-4,147	-4,104	-4,061	-4,018	-3,974	-3,931	-3,888	-3,845	-3,802	-3,758	-3,715	-3,672	-3,629	-3,586	-3,542	-3,499	-3,456	
RPI (2%)		-354	-708	-1,062	-1,416	-1,769	-2,121	-2,473	-2,825	-3,176	-3,525	-3,874	-4,222	-4,569	-4,915	-5,259	-5,601	-5,942	-6,281	-6,619	-6,954	
Total Income		-15,686	-15,886	-16,085	-16,283	-16,481	-16,679	-16,876	-17,073	-17,269	-17,464	-17,658	17,851	18,043	18,234	18,423	18,610	18,797	18,981	19,163	19,344	
NET Income		-14,090	-14,257	-14,424	-14,589	-14,753	-14,917	-15,079	-15,239	-12,411	-12,508	-12,603	12,695	12,784	16,168	16,316	16,462	16,605	16,745	16,883	17,018	
Net Income (assume no borrowing)		146,525	-14,090	-14,257	-14,424	-14,589	-14,753	-14,917	-15,079	-15,239	-12,411	-12,508	-12,603	12,695	12,784	16,168	16,316	16,462	16,605	16,745	16,883	17,018
DF (5.57%)	1	1	0.947	0.897	0.850	0.805	0.763	0.722	0.684	0.648	0.614	0.582	0.551	0.522	0.494	0.468	0.443	0.420	0.398	0.377	0.357	
Discounted Cashflow	146,525	-14,090	-13,505	-12,942	-12,399	-11,878	-11,375	-10,892	-10,427	-8,044	-7,680	-7,330	-6,994	-6,671	-7,992	-7,639	-7,301	-6,976	-6,664	-6,364	-6,076	

It is estimated that between years 10 and 15 in the lifetime of a solar panel system the inverter will need to be replaced and this has been factored into the financial model for this scheme. The financial return figures quoted in the table above show this as a reduction in return between years 9 and 13 – the cost of the inverters has been spread across the 5 years



Net Present Value	-£36,712 Positive
Payback period	The payback period for this project is 11 years
Sensitivity / IRR	Analysis shows that the Discount Factor used for the investment appraisal of this project could increase to 8.78% (a 58% increase on the discount factor), before it would be seen to be making a loss. This illustrates that this project is not unduly sensitive to any fluctuations in the cash flow.

(Note cashflows, IRR and NPV exclude costs of borrowing as the initial cost is shown in year one; discount factor should be a composite of risk / return, borrowing cost and inflation)

It is important to consider that the cashflow above doesn't capture any electricity savings – this is because the landlord of the site doesn't currently incur any expenditure associated with the cost of electricity (there is no onsite usage for the landlord). Once the development is complete the landlord shall incur electricity costs for the aspects detailed below:

- CCTV
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The installation of solar panels at this site provides the Council with the additional benefit of not incurring c £2,000 per annum electricity costs.

Equality Impact Assessment Form

Name and brief description of proposal / policy / service being assessed
An internally led solar photovoltaic (PV) installation project
 A solar panel installation to Sneinton Markets

Information used to analyse the effects on equality
 Similar schemes.

	Could particularly benefit (X)	May adversely impact (X)	How different groups could be affected: Summary of impacts	Details of actions to reduce negative or increase positive impact (or why action not possible)
People from different ethnic groups	<input checked="" type="checkbox"/>	<input type="checkbox"/>	This scheme will deliver energy savings to the City Council and provide a revenue return by accessing external subsidies such as the Feed In Tariff. This revenue return will indirectly benefit all citizens of Nottingham.	N/A
Men, women (including maternity/pregnancy impact), transgender people	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Disabled people or carers	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
People from different faith groups	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Lesbian, gay or bisexual people	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Older or younger people	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
Other (e.g. marriage/civil partnership, looked after children, cohesion/good relations, vulnerable children/adults)	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

Outcome(s) of equality impact assessment:
 No major change needed Adjust the policy/proposal Adverse impact but continue Stop and remove the policy/proposal

Arrangements for future monitoring of equality impact of this proposal / policy / service:
 Assessment to be reviewed at time of regular scheduled audits of the systems

Approved by (manager signature): Adrian Hill | Date sent to equality team for publishing: 11 December 2014