



Nottinghamshire

POLICE & CRIME COMMISSIONER

From: Charlotte Radford
Tel: 801 2012
Date: 19 December 2012

DMR Ref:	2012/009
Timing: (please delete as appropriate)	Urgent (it needs to be seen within 3 days)

PART ONE

EXECUTIVE DECISION MAKING REPORT

NOTTINGHAMSHIRE OFFICE OF THE POLICE AND CRIME COMMISSIONER

Solar Photovoltaic Panels (PV)

CLEARED BY Kevin Dennis

DECISION:

1. To approve the proposals for installing Solar Photovoltaic Panels on 7 Police buildings, as set out in the attached Business Case.
2. To amend the capital programme for 2012/13 to allow the scheme to proceed.

EXECUTIVE SUMMARY:

Please see the attached Report and Business Case.

Nottinghamshire Police and Crime Commissioner

The above request has my approval.

Signature:

Date:

21/12/12

7. What are the resource implications and will the proposal achieve greater efficiency and value for money?

The management of the project can be undertaken utilising existing staff within the Estates Team. There will be cost savings from implementing the project as set out in the attached Business Case.

8. Provide any supplementary information to support your proposal

Please see attached Report and Business Case.

9. Public Access to Information

Information in this form is subject to the Freedom of Information Act 2000 (FOI Act) and other legislation. Part 1 of this form will be made available on the PCC website within 2 working days of approval. Any facts and advice that should not be made automatically available on request should not be included in Part 1, but instead on a separate Part 2 form. Determent is only applicable where release before that date would compromise the implementation of the decision being approved.

Is the publication of this approval to be deferred? No

10. Any Further Action Required: No

ORIGINATING OFFICER'S NAME AND CONTACT DETAILS

Tim Wendels – Head of Estates and Facilities – Tel: 101 (Notts) Extn: 800 2370



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PROJECT BRIEF (PB)

Project: Solar Photovoltaic Panels (PV)

Release: 3

Date: 6 December 2012

Author: Phil Ellis

Approval: Tim Wendels
ACO Margaret Monckton

Project Brief Document**2 Purpose**

- 2.1 To assess the feasibility of the installation of solar photovoltaic panels (PV) with a view to reducing Nottinghamshire Police's reliance on electricity from the National Grid, and hence reducing costs and CO₂ emissions.

3 Background

- 3.1 PV panels convert the Sun's energy into electricity, panels are usually roof mounted and the electricity generated from the PV panels goes towards powering the building.
- 3.2 In 2009, the government introduced Feed-in-Tariffs (FiT) as incentives for organisations and homeowners to install PV panels. Nottinghamshire Police's electricity supplier is obliged to pay Nottinghamshire Police for every unit of electricity the PV system generates. The payment is payable regardless of whether we use the generated power or not, and the FiT rate is guaranteed for 20 years and linked to RPI.
- 3.3 The FiT rate is based on the size of the PV system installed, which is dependent on the peak output of a building (kWp), and for the majority of buildings being reviewed the PV system size is 10-50kW offering a FiT rate of 13.03p/kWh.
- 3.4 Nottinghamshire Police currently pay approximately 9p/kWh for electricity.
- 3.5 The Carbon Reduction Commitment (CRC) was introduced by the government in 2008 as an emissions trading scheme/tax. The ultimate aim of the scheme is to reduce carbon emissions and in turn reduce energy bills. Currently, CRC does not affect Nottinghamshire Police however it is highly likely that the qualifying thresholds will be reduced, therefore Nottinghamshire Police will be part of the CRC in the future. At the current emissions rate this could cost Nottinghamshire Police approximately £160K in tax per annum.
- 3.6 PV panels are not included within the current Carbon Management Plan and there is no current provision within the Capital Programme for PV Panels.
- 3.7 The scheme has been tendered and the successful contractor is ready to proceed should the Business Case be accepted.

4 Proposal with options

- 4.1 The proposal is to install PV panels to the following buildings: Tom Ball Hall; West Bridgford; Oxclose Lane; Mansfield; Newark; Ollerton; HQ.

Option 2 – Leased Option

Site	System Size	System Cost	Savings (yr1)	Cumulative (yr20)
Tom Ball	49.92 (kWp)	£0	£275	£38,604
West B'ford	49.92 (kWp)	£0	£287	£40,332
Oxclose	41.28 (kWp)	£0	£237	£33,352
Mansfield	35.76 (kWp)	£0	£206	£28,891
Newark	48.96 (kWp)	£0	£272	£38,157
Ollerton	9.60 (kWp)	£0	£51	£7,102
HQ	9.60 (kWp)	£0	£52	£7,369

7 Investment Appraisal**Summary – Capital Option**

	Capital Cost	Discounted Cashflow	Payback (Years)	Average Annual Revenue Savings	Average Annual Return
Sherwood Lodge	13,336	24,083	7	1,247	9%
Ollerton	13,491	22,570	7	1,140	8%
Newark	58,022	128,287	6	8,290	14%
Mansfield	46,454	94,615	7	6,087	13%
Oxclose Lane	50,905	111,943	6	7,231	14%
West Bridgford	61,789	135,141	6	8,728	14%
Tom Ball Hall	88,017	100,476	9	6,185	7%

Summary – Lease Option

	Capital Cost	Discounted Cashflow	Payback (Years)	Average Annual Revenue Savings
Sherwood Lodge	-	5,047	-	368
Ollerton	-	4,864	-	355
Newark	-	26,133	-	1,908
Mansfield	-	19,787	-	1,445
Oxclose Lane	-	22,842	-	1,668
West Bridgford	-	27,622	-	2,017
Tom Ball Hall	-	26,439	-	1,930

- 7.1 Each building has a positive discounted cashflow for each of the capital or leased option.
- 7.2 Each building provides an annual revenue saving for each of the capital or leased options



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AGENDA ITEM 9

Meeting: Chief Officer Team

Date of Meeting: 10th December, 2012

Report of: ACO Margaret Monckton

SOLAR PHOTOVOLTAIC (PV) PANELS

1. PURPOSE OF REPORT

- 1.1 To seek the approval of COT to the installation of PV Panels on the roof of seven Police buildings in accordance with the attached Business Case.

2. RECOMMENDATION

- 2.1 To agree to the installation of PV Panels on the roof of seven Police buildings, as set out in the attached Business Case and to select Option 1 – Purchased Option as the way forward.

3. REASONS FOR RECOMMENDATIONS

- 3.1 In order to obtain an annual revenue saving from reduced electricity costs and a reduction in carbon emissions from the estate.

4. SUMMARY OF KEY POINTS

- 4.1 The attached Business Case proposes the installation of PV panels on the roof of seven Police buildings. The Business Case provides details of two options for the installation of PV panels – a purchased option and a leased option. The purchased option requires an up front capital payment to purchase the equipment and pay for its installation. The leased option does not require an up front capital payment but has considerably lower revenue savings. Full details are provided in the Business Case.
- 4.2 The revenue savings come from a combination of electricity generated by the PV panels reducing the overall amount of electricity required from the national grid and income from what is known as the Feed-in-Tariff (FiT). The FiT is a Government incentive for organisations and homeowners to install PV panels. Our electricity supplier is obliged to pay for every unit of

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9. DETAILS OF CONSULTATION

9.1 The Business Case was considered and approved by the Corporate Services Board on 4th December, 2012 for onward referral to the Chief Officer Team.

10. BACKGROUND PAPERS AND RELEVANT PUBLISHED DOCUMENTS

10.1 Tender documentation.

REPORT AUTHOR:	Tim Wendels Extn. 800 2370
OTHER CONTACTS:	