

Nottinghamshire Police and Crime Commissioner

Notice of Decision



Nottinghamshire
POLICE & CRIME COMMISSIONER

Author:	Phil Ellis
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For Decision or Information	Decision
Date received*:	28 th November 2014
Ref*:	2014.059

*to be inserted by Office of PCC

TITLE: Arrow Centre – Solar Photovoltaic (PV) System

EXECUTIVE SUMMARY:

The Arrow Centre is currently being converted into the new EMSOU-FS facility and is due to be complete by end of January 2015. The main contractor is Derwent Valley Construction.

The proposal is for a new Solar PV system to be installed as part of the conversion works. This will be via an instruction to Derwent Valley Construction to tender and manage the installation prior to the completion date.

The main reasons for installing a PV system are as follows;

- Reduced electricity costs
- Reduce our demand from the grid
- Payback within approx 8 years
- Potential carbon savings of 20,684 kgCO₂/yr

INFORMATION IN SUPPORT OF DECISION: (e.g report or business case)

Arrow Centre Solar Photovoltaic (PV) Report

Capital costs required: £65,000.

Revenue savings: Feed-in-tariff (FiT) - £5,000 & energy saved £4,000 per annum.

Potential carbon savings of 20,684 kgCO₂/yr

(FiT rates are linked to RPI and are guaranteed for 20 years)

Is any of the supporting information classified as non public or confidential information?**

Yes

No

If yes, please state under which category number from the guidance**:

DECISION:


Decision - **To install a new 49.82 kWp solar PV system at the Arrow Centre.**

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OFFICER APPROVAL

I have been consulted about the proposal and confirm that the appropriate advice has been taken into account in the preparation of this report. I am satisfied that this is an appropriate request to be submitted to the Police and Crime Commissioner.

Signature:
Chief Executive



Date:

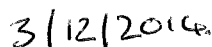
**DECLARATION:**

I confirm that I do not have any disclosable pecuniary interests in this decision and I take the decision in compliance with the Code of Conduct for the Nottinghamshire Office of the Police and Crime Commissioner. Any interests are indicated below:

The above request has my approval.

Signature: 
Nottinghamshire Police and Crime Commissioner

Date:



** See guidance on non public information and confidential information.

For Decision	
Public/Non Public*	
Report to:	Force Executive Board
Date of Meeting:	10 November 2014
Report of:	Arrow Centre – Solar Photovoltaic (PV) System
Report Author:	Phil Ellis
E-mail:	Phil.ellis@nottinghamshire.pnn.police.uk
Other Contacts:	
Agenda Item:	

*If Non Public, please state under which category number from the guidance in the space provided.

Arrow Centre – Solar Photovoltaic (PV) System

1. Purpose of the Report

- 1.1 The report is to seek approval of FEB to install new solar photovoltaic (PV) system at the Arrow Centre.
- 1.2 The Arrow Centre is currently being converted into the new EMSOU-FS facility and is due to be complete by end of January 2015. The main contractor is Derwent Valley Construction.
- 1.3 The proposal is for the PV system to be installed as part of the conversion works. This will be via an instruction to Derwent Valley Construction to tender and manage the installation prior to the completion date.

2. Recommendations

- 2.1 To install a new 49.82 kWp solar PV system at the Arrow Centre.
- 2.2 In order to obtain annual revenue saving from reduced electricity costs and a reduction in carbon emissions from the estate.

3. Reasons for Recommendations

- 3.1 The main reasons for installing a PV system are as follows;
 - Reduced electricity costs with 15% ROI
 - Reduce our demand from the grid
 - Payback within approx 8 years
 - Potential carbon savings of 20,684 kgCO₂/yr

4. Summary of Key Points

- 4.1 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).
- 4.2 The FiT was introduced by the government in order to incentivise the installation of solar PV systems. Our supplier is obliged to pay for every unit of electricity that we generate whether we use it or not. These rates are linked to RPI and are guaranteed for 20 years.

Option	Advantages	Disadvantages
New Solar PV System	ROI of 15% Carbon savings of 20,684 kgCO2/yr	

5. Financial Implications and Budget Provision

- 5.1 The estimate for the project is **£65,000**. This figure includes design, structural surveys, installation and project management.
- 5.2 Potential ROI of 15% (made up of FiT of £5k and electricity saved of £4k = £9k), with an NPV positive cashflow of £91k over the 20 years. These savings were based on the current usage where the Arrow Centre is under utilised, the savings on electricity could be larger but this is impossible to calculate at this point in time.
- 5.3 In order to fund the project, the proposal is to vire **£65,000** from B120 FHQ Open Plan Offices project which is under spent.
- 5.4 NPV summary below;

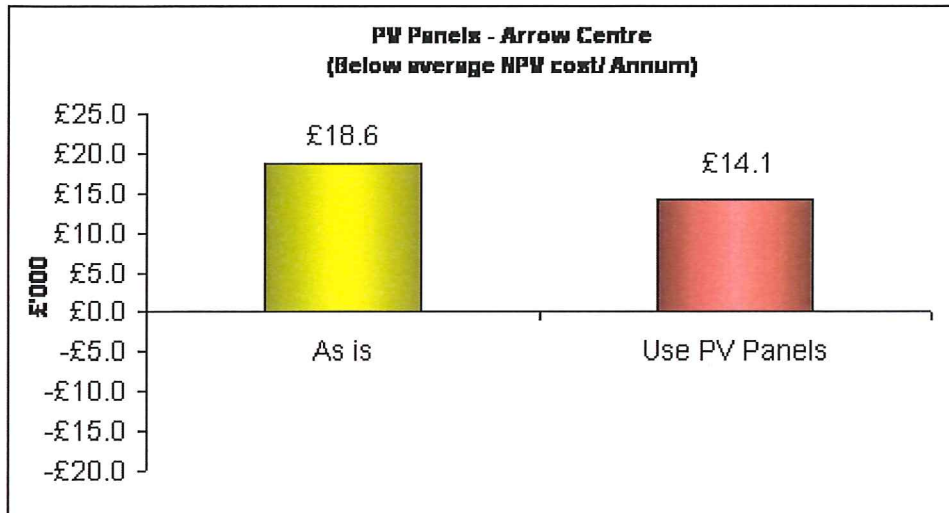
Per Annum	As is £	Use PV Panels £	Variance to "as is" £
Current Cost (as per assumption)	19600	19600	
Feed in Tariff	0	-5000	
Saving = 15% RPI linked	0	-4000	
	0	0	
		0	
Total	19600	10600	9000
Capital Outlay		65000	

NPV Summary

20yrs

Per annum

	£'000	£'000	
As is	£372.8	£18.6	
Use PV Panels	£281.6	£14.1	
Difference	-£91.2	-£4.6	Breakeven is 8 Years



6. Human Resources Implications

6.1 Not applicable.

7. Equality Implications

7.1 Not applicable.

8. Risk Management

8.1 Not applicable.

9. Policy Implications and links to the Police and Crime Plan Priorities

9.1 The project seeks to fulfil;

- Priority 2 of the current policing plan "Spending your money wisely".

10. Changes in Legislation or other Legal Considerations

10.1 Not applicable.

11. Details of outcome of consultation

11.1 Not applicable.

12. Appendices

12.1 Not applicable.