

## Report for Information

<b>Report to</b>	Sustainable Development Panel	<b>Item</b>
	25 January 2012	<b>8</b>
<b>Report of</b>	Environmental strategy manager	
<b>Subject</b>	PV Project at City Hall	

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### **Purpose**

To update members on progress on the PV Project at City Hall.

### **Recommendations**

The report is for information.

### **Financial Consequences**

There are no direct financial consequences of this report.

### **Strategic Priority and Outcome/Service Priorities**

The report helps to meet the strategic priority “Aiming for excellence – ensuring the Council is efficient in its use of resources, is effective in delivering its plans, is a good employer and communicates effectively with its customers, staff and partners”

### **Contact Officers**

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### **Background Documents**

## **Background**

1. As part of agreeing the budget for 2011/12 Council agreed that £250,000 be used for a spend to save initiative to finance investment in solar energy generation or other alternative energy supplies on the council's operational property assets, together with a scoping exercise to begin immediately as the basis for a feasibility study to deliver this initiative.
2. Following the completion of a feasibility study on the 13 July 2011 Cabinet agreed to progress a project to install a 40kw basic system of photo voltaic panels (PV) on City Hall, subject to the necessary consents and approvals to the final design.
3. This report provides a progress update on the work undertaken to complete the project.

## **Progress update**

4. The project is progressing in line with the original timescale to have the panels installed by the 31 March 2012.
5. The required planning consents have been achieved and the contract awarded to Opus Green ([www.opus-green.co.uk](http://www.opus-green.co.uk)).
6. The panels have been ordered and the electrical supplier (UK Power Network) has received all the necessary paperwork from Opus and has raised no issues for the required G59 licence.
7. As part of preparing for the installation works with Opus a number of detailed technical issues have been identified that are currently being worked through, namely:
  - The approach to attaching the new PV panels to our particular roof grillages structures.
  - The need to potentially "switch off" part of the power to City Hall during installation and how this can be managed.
  - The impact of the new panels on the City Hall voltage optimisation unit and the lightening protection system.
8. Once these issues have been resolved work will commence on their installation. The panels should take about two weeks to fully install (subject to the weather) once final installation commences on site.
9. The technology will also provide both hard wire and internet data feeds from the PV power unit to calculate the 'real time' power production.
10. The project team and Opus are working hard to resolve the remaining issues and ensure everything is completed by 31 March 2012. It is expected the installation will be completed by then but the connection may not be fully up and running.

## **Proposed changes to the FIT tariff**

11. The proposed changes to the Feed in Tariff (FIT) announced by the government on the 31 October 2011 within their FIT consultation which closed on the 23 December 2011, would mean that the council would receive either 15.7p/kwh or 9.0p/kwh of electricity generated for the project, depending on whether City Hall has reached a C DEC rating by 2013, rather than the 31.4p/kwh on which the original project appraisal was based.
12. However, a successful legal challenge has currently halted the government plans to bring in the changes to the FIT for projects that are completed after December 2011. It is believed that the government is currently trying to get that legal ruling overturned.
13. The government's proposed changes and the ongoing legal disputes mean there is now considerable uncertainty about the tariff rates that will be available for new installations and the effect on the solar market.

## **Potential project payback under the government's proposed FIT arrangements**

14. The original feasibility study calculated a potential payback for the project of up to 12 years.
15. The payback has now been recalculated to take into account the potentially reduced figures from the FIT, should these be eventually applied to the project following the legal process, but also to take into account the actual costs of the panels following the procurement process which were lower than originally expected.
16. As such, despite the potentially reduced FIT the payback would remain at approximately 12 years (it would be 7-8 years without a FIT change). However, this is based on City Hall achieving a C rating for energy efficiency and therefore achieving the full FIT under the government's changed arrangements.
17. Currently, City Hall is at Grade D on 89 points and would need to reduce this score by 14 more points to achieve a grade C (100 is average) by 2013. If this was not achieved the FIT would potentially be lower and the payback on the project would be increased to approximately 15 years.
18. However, historically City Hall has improved year on year and with the further work planned to improve the building it is expected that a C rating can be achieved within the required timescales.
19. If following the legal process the new FIT is not applied to the project then the payback would be 7-8 years.

## **Non-financial benefits of the project**

20. The original non financial benefits of the project remain unchanged. In particular, the council's carbon management plan uses the principles of the energy hierarchy to reduce emissions from our operational assets, which is regarded as good practice by the Carbon Trust. This is summarised below:

- Stage 1: Minimise wasted energy – Controls and awareness raising
- Stage 2: Efficient conservation – Installing efficient technology
- Stage 3: Onsite renewable energy + offsetting.

21. Currently, the council is predominantly at stage 2. However, as the council will soon need to move into stage 3 it is believed that this project provides a good opportunity to test out a key approach to energy generation. The learning from this project will then be able to be applied to ensure that when the council's carbon management programme moves fully to stage 3 of the energy hierarchy the most efficient and effective approach can be utilised across the council's wider asset base.

22. It is also believed that due to the nature of the project that it will help to further raise awareness of energy efficiency and environmental sustainability issues within the wider City which supports the council's environmental strategy.

## **Conclusion**

23. It is expected that the project will be delivered within the agreed time scales.

24. However, due to changes made by the government to the FIT and the ongoing legal changes the final payback period of the project cannot be certain.

25. Although, it is not expected to be significantly worse than the 12 years that was calculated as part of the original feasibility study.