

Report of Head of Resources

INSTALLATION OF PHOTOVOLTAIC PANELS

1 Purpose of report

The council has been considering means by which its property could maximise returns, as well as enhance the authority's environmental contribution.

2 Executive summary

The council owns a number of operational and investment properties which may be suitable for the installation of photovoltaic panels (often known as solar panels). A study has demonstrated that this will result in income for the council which will help to supplement the running costs of the property service.

3 Appendices

Appendix A: return on investment for roof mounted systems

Appendix B: return on investment for ground mounted systems

4 Proposed action:

The committee is invited to RESOLVE

4.1 to approve the installation of photovoltaic panels on existing and new council-owned structures following satisfactory structural surveys;

4.2 that officers consult ward members and residents' associations on the desirability of applying for planning permission for the installation of photovoltaic panels on land owned by the council, as identified in the report;

4.3 to request a further report on the potential for investing capital receipts in renewable energy projects outside the borough.

5 Background

5.1 The council has commissioned a report on the potential for recouping some of its property maintenance costs from solar energy. Early indications demonstrate that a return on capital of somewhere in the region of 8% could be achieved if panels are attached to existing properties. Planning permission would not be required, but the permission of any tenants would be necessary.

- 5.2 This would have advantages in that it may be possible to sell electricity to tenants at favourable prices.
- 5.3 It would also be possible to site larger solar “farms” on areas of land, at a greater return, but this would require planning permission.
- 5.4 On 1 November 2013 the council received a letter from the Rt Hon Greg Barker MP, Minister of State for Energy and Climate Change. The letter made it clear that approval of photovoltaic panels at large scale must take full account of the principles set out in the revised planning guidance for renewables which was published by the government in 2013. The four over-arching principles state that sites should take into consideration the following environmental considerations:
- Landscape
 - Visual impact
 - Heritage
 - Local amenity

6 Discussion

- 6.1 A survey of council-owned property has been carried out and the following sites have initially been identified as suitable for installation of photovoltaic panels:
- (a) Saxon Court
 - (b) Trojan Centre
 - (c) Swansgate Shopping Centre
- 6.2 Other sites may be suitable and, if the principle of installation of panels was approved by members, further work would be done to ensure that all viable opportunities were pursued.
- 6.3 A structural survey would need to be carried out for each property to confirm that the property can take the added load.
- 6.4 Appendix A provides details of the expected capital investment required by the council, and the anticipated return. The following assumptions have been made:
- (a) a grid connection is available;
 - (b) the buildings will meet the relevant Energy Performance Certificate level to achieve the higher rate feed in tariff payment;
 - (c) the company appointed to carry out the installation is a member of a recognised Competent Persons Scheme;
 - (d) a minimum 20 year life;
 - (e) costs will include negotiation with the tenant of each building to arrange for the grid connection within the let property;
 - (f) costs will account for the management of the system, insurance, and a sinking fund for hardware replacements.
- 6.5 In addition to maximising the use of existing buildings, the council may wish to consider siting ground mounted panels which would provide a higher return, but would require planning permission and need to take account of the environmental considerations outlined in 5.4 above.
- 6.6 The potential investment and income relating to ground mounted panels is set out in Appendix B. The following locations have been identified as suitable sites:
- (a) Land to the south of Rixon Road;
 - (b) Land to the west of Finedon Road Industrial Estate

(c) Land south of Northen Way.

6.7 A further alternative would be to invest in renewable energy sources based outside the borough. To date this has not been investigated, but may be worth considering if there is the potential for a good return on capital investment.

7 Legal powers

Section 93 of the Local Government Act 2003

8 Financial and value for money implications

The council is likely to benefit from capital receipts in respect of the sale of land for development in the short term. The investment of those receipts is critical, in that they must support the revenue budget. A scheme of this kind provides a good return on investment.

9 Risk analysis

Nature of risk	Consequences if realised	Likelihood of occurrence	Control measures
Inability to connect to the grid	No return on investment	Unlikely	Full investigation before investment is made
Longer term prospects for fee in tariff	Reduced return on investment	Possible	Full investigation before investigation is made
Objections from local people	Reputational damage	Possible	Need to make residents aware of benefits Planning process allows for objections (relevant sites)

10 Implications for resources

This scheme assists with the maximisation of property assets.

11 Implications for stronger and safer communities

The provision of renewable energy helps the council to meet its environmental objectives.

12 Implications for equalities

There are no implications for equalities in this proposal.

13 Author and contact officer

Bridget Lawrence, Head of Resources

14 Consultees

Chief Executive
Section 151 Officer
Head of Planning and Local Development
Principal managers
Building Control
Energy Efficiency Officer

15 Background papers

Solar Photovoltaic Feasibility Report: August 2013

Appendix A

Location	Capital investment	Operating income	Operating expenditure	Return on capital
Saxon Court	£200,000	£20,630	£4,182	8.15%
Trojan Centre	£200,000	£21,409	£4,220	8.52%
Swansgate	£340,000	£38,896	£7,095	9.31%

Note:

The roof of the Swansgate Shopping Centre car park is approximately 5,000 square metres. It would be possible to install photovoltaic panels on a steel portal frame structure. The cost of the steel portal frame structure has not been investigated, but a provision of £40,000 has been added to the capital investment figures. There is an opportunity to sell electricity to the shopping centre.

Appendix B

Location	Capital investment	Operating income	Operating expenditure	Return on capital
Land: south of Rixon Road	£300,000	£39,948	£7,147	10.88%
Land: west of Finedon Road Industrial Estate	£950,000	£170,875	£28,694	14.95%
Land: south of Northen Way	£300,000	£39,948	£7,147	10.88%

Land south of Rixon Road



This site totals approximately 4.5 acres of which around 1.5 acres is light scrub and trees, and 3 acres is rough grassland currently grazed by horses. The site is well shielded by the high hedge line and could be used for a 250kW ground mounted solar PV array, assuming that a grid connection is available, through one of the adjacent industrial units.

Land west of Finedon Road Industrial Estate



This land, adjacent to Redhill Grange, totals approximately 100 acres with an area of approximately 30 acres to the east of the site that could be suitable for solar PV. The area could create a “buffer” between the Finedon Industrial Estate and the Redhill Grange development. The connection could be through the Bradfield Road Industrial area.

Land south of Northen Way



This land is a large parcel of grass and scrubland with a number of industrial units adjacent to it, also in the same ownership. An area on the southern side of the thick hedgerow would be suitable for a 250kW ground mounted system as it is well screened visually and it is likely that a grid connection to the adjacent industrial buildings would be available.