Rossendalealive

Subje	ct:	, pan	els o ines	I to install to on the roof s Centre, F	of the	Status:	For Pu	blicat	ion
Repor	t to:	Cab	oinet			Date:	5 th Sep	otemb	er 2012
Repor	t of:	Dire	ector	of Busines	S	Portfolio Holder:			Services and nt Control
Key D	ecision:			Forward F	Plan 🛛	General Exception		Spe	cial Urgency 🗌
Comm	nunity Imp	act	Asse	essment:	Required:	No	Attach	ed:	No
Biodiv	/ersity Im	bact	Ass	essment	Required:	No	Attach	ed:	No
Conta	ct Officer	Α	dria	n Smith	•	Telephone:	01706	2524	19
Email	:	a	dria	nsmith@ro	ossendaleb	c.gov.uk			
1.	RECOM	MEN	DAT	ION(S)					
1.1	reduce th	ie Co g vol	ounc Iatilit	il's energy y. It is ther	costs and to efore recom	the roof of Futures P o ensure long term en mended that authoris going maintenance	nergy se sation b	ecurity e give	in a period of
1.2	All future	min	or ar	nondmonte	s to impleme	nting the decision to	ha dala	nater	to the Director of

2. PURPOSE OF REPORT

2.1 To seek authorisation for capital expenditure of £176,500 on 100kw of solar panels for the roof of the Business centre plus associated survey charges and maintenance costs for a ten year period. The project would provide half the electricity required for the building and would attract Government Subsidy guaranteed for 20 years.

3. CORPORATE PRIORITIES

- 3.1 The matters discussed in this report impact directly on the following corporate priorities:
 - A clean and green Rossendale creating a better environment for all.
 - A healthy and successful Rossendale supporting vibrant communities and a strong economy.
 - Responsive and value for money local services responding to and meeting the different needs of customers and improving the cost effectiveness of services.

4. RISK ASSESSMENT IMPLICATIONS

- 4.1 All the issues raised and the recommendation(s) in this report involve risk considerations as set out below.
- 4.2 Risks for the Council associated with implementing the project:
 - Savings based on assumptions about future inflation and energy prices
 - Officer time to resource this work is restricted
 - Constrains opportunities to spend funding in other Council priority areas

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- Company undertaking the work unable to fulfil its long term obligations
- 4.3 Risks to the Council of <u>not</u> implementing the project:
 - Opportunity of halving annual electricity bills at Business Centre foregone
 - Opportunity of long term investment opportunity lost
 - Energy cost inflation increases faster than rate of inflation
 - Failure to take advantage of the current Government feed in tariffs

5. BACKGROUND AND OPTIONS

- 5.1 A small array of solar panels (2.5kw) was installed on the roof of the Business centre in 2010. This has proved successful in reducing electricity costs, providing income through Feed-in Tariffs and reducing CO2 emissions.
- 5.2 The Council has held discussions with a number of companies about extending use of renewable technologies on the Business centre. As a result of this a detailed proposal has been developed by Schneider Electric, an international energy company, based on a comprehensive site survey. The Business Centre is an ideal location for solar panels due to a south facing roof with a shallow slope and lack of shading. The project would involve a substantial increase in solar panels to 100kw and would provide approximately 50% of current electricity need.
- 5.3 The panels have a rated minimum life of 25 years and are guaranteed for 10 years for replacement. Calculations on productivity are based on a "worst case scenario" Approximately £1,000 per year would be payable for a maintenance contract.
- 5.4 Every kw of energy produced by solar panels has a double benefit: a payment is received from the government (the Feed-in tariff or FIT) for the energy produced and electricity bill that would normally be payable for the energy consumed is reduced. The main savings to the Council would emanate from reduction of current electricity bills (we are currently on a fixed price contract but this expires next year and is expected to increase by around 15% with further increases in the medium term); Feed-in tariffs (FIT's) for generation (11.5p per kw) and Feed-in tariffs for export of any excess production to the grid (4.5p per kw). Using current energy rates there would be an immediate cost saving in bills of around £13,400 in year one, increasing with inflation to around £19,400 pa by year 10.
- 5.5 The feed-in tariff is fixed permanently from the date of construction for a twenty year period. It is calculated that over a 25 year period (the minimum expected life expectancy of the panels) there would be a net profit to the Council of over £100,000 with payback anticipated to commence in year 14. The calculations are based on "actual costs" using figures derived from the existing panels. The Government reviews FIT levels for new projects on a regular basis so to get the most advantageous rate of return on this scheme it is important that a decision is made as soon as possible.
- 5.6 It is also estimated that over 1100 tonnes of CO2 would be saved over the 25 year time period. This would contribute significantly to the Council's ability to meet national carbon reduction targets and demonstrate the Council's leadership role on the sustainability agenda.
- 5.7 Alternative panel providers have previously been investigated with indicative estimates in excess of the figure quoted. The advantage of utilising Schneider is that they are a large international company with significant buying power, project management expertise and expertise in this area. Given the need to expedite this project to gain FIT tariffs it is considered

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the most cost effective route is to proceed with Schneider. **COMMENTS FROM STATUTORY OFFICERS:**

6. SECTION 151 OFFICER

- 6.1 Financial matters are noted in the report. A number of other assumptions have been made:
 - General inflation of 2.5% over the 25 yr scheme
 - Energy inflation of 6.0% over the 25 yr scheme
 - Maintenance costs of £5k pa (plus inflation) after 10 yrs.
 - Cost of Capital, 4.0% over 25 yrs (and assumes the use of internal borrowing).
- 6.2 A net present value for future cash flows has been calculated at £127,700, with a rate of return on the capital investment of 1.6% pa.
- 6.3 Though noted in para' 5.7, Officers will ensure that Council procurement procedures are adhered to.

7. MONITORING OFFICER

7.1 No comments

8. HEAD OF PEOPLE AND POLICY (ON BEHALF OF THE HEAD OF PAID SERVICE)

8.1 There are no specific human resource implications.

9. CONSULTATION CARRIED OUT

9.1 The development of the project has involved close working between officers from Finance, Property Services and Planning. This has included meeting with providers and analysing different options. Other officers throughout the Council have been kept informed through the Green Team.

10. CONCLUSION

- 10.1 The proposed project represents a good opportunity for the Council to secure and stabilise a significant part of its future energy budget. It would reduce the annual energy bill substantially and also facilitate future energy security. Following the "break even" point in around year 10 the Feed-Tariffs would provide a regular income stream for the Council.
- 10.2 In order to gain maximum advantage from government Feed-in tariffs (FITs) a decision to progress with procurement is required as the FIT is fixed based on the date of construction. While the scheme would still represent "good value for money" under future FIT levels it would be less advantageous to the Council.
- 10.3 The installation of further Solar Panels on the Business Centre has been identified as a high priority by the Council's Green Team and would contribute significantly to the Council's environmental performance.
- 10.4 In conclusion, the project represents a good opportunity for the Council to secure financial benefits and environmental gains with a low level of risk.

	Appendices
Supporting documentation	Available from Adrian Smith, One Stop Shop, Rawtenstall

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