AGENDA ITEM NO 9

BRISTOL CITY COUNCIL
CABINET

2 February 2009

Report of: Acting Strategic Director (Resources)

Title: Avonmouth Wind Turbines Project Ward: Avonmouth

Officer presenting report: Alun Owen, Head of Property

Contact telephone number: 0117 9037481

RECOMMENDATION

That a procurement process is initiated to select a wind turbine developer for a joint venture for the Avonmouth Wind Turbines.

Summary

The City Council has a number of options of how to procure the wind turbines as identified in paragraph 15

The significant issues in the report are:

The appraisal of the Council's procurement options, taking account of:

- The level of financial investment
- The level of revenue to be received
- The amount of CO_2 reduction the council wish to claim

Policy

1. The Council has a target of reducing CO_2 emissions by 3% per annum. This project will contribute to the achievement of the Corporate Plan: Our City – ambitious together.

Consultation

Internal

Alex Minshull

External

Burges Salmon LLP

Context

2. Following extensive research and consultation, planning permission for two wind turbines up to 3MW each was granted in January.

3. The wind turbines have the potential to generate 12,600 MWh of green electricity annually. This represents over 20% of the council's electricity requirements.

4. Renewable Energy Generators benefit from a number of market mechanisms which can enhance the income they receive from the renewable electricity they produce. The main benefit is through the Government's Renewables Obligation initiative. Electricity generators are awarded Renewable Obligation Certificates (ROC) for each mega watt hour (MWh) generated from a defined renewable source by OFGEM.

5. All suppliers of electricity must be able to demonstrate that each year a proportion of the total electricity they supply to their customers has come from accredited renewable electricity generating sources. The proportion requirement is increasing.

6. If the supplier does not meet its target, it has to pay the statutory buy out price, which this year is £34.30/MWh, to OFGEM. All proceeds from buyout payments are recycled to suppliers in proportion to their renewable supply.

7. When the electricity supplier purchases renewable electricity from the generator, he can purchase the ROC at the same time, enabling him to help meet his renewables obligation. Generators can adopt a number of strategies with regard to the sale of electricity and the ROCs depending on their appetite for risk and the aims of their project. The value of a ROC to a supplier according to the last OFGEM annual report 2006-2007 was £49.28, although a generator is likely to receive less than this amount. This system is designed to increase the % of renewable electricity and so, among other things, help reduce the UK's CO_2 climate change impacts.

8. If the generator or other holders do not wish to sell the ROCs, they can be voluntarily "retired".

9. There are separate initiatives in place that benefit organisations and bodies reducing their CO_2 emissions and footprints. For large local authorities, it is anticipated that there will be financial penalties for failure to achieve carbon reduction targets from 2011. In general, the renewables/carbon reduction schemes have a common theme that no double counting can take place. Practically, what this means for this project is that BCC cannot both claim a CO_2 reduction benefit from renewables generation and also benefit from selling ROCs associated with that generation. This means that for the City Council to claim a CO_2 reduction from Avonmouth wind turbines, it can only do so if the equivalent ROC amount is "retired".

10. The City Council has a local target of 3% year on year reduction in CO_2 emissions. Whilst some of this can be achieved without wind turbines, ensuring they are built and retiring at least some of the ROCs, will help ensure that this target is achieved.

Proposal

11. The cost of building the two wind turbines is estimated to be between £5 - 6m.

12. The wind turbines have a life expectancy of at least 25 years.

13. Using the current selling price of electricity and ROCs, the income generated is estimated to be £1.2m per annum.

Income Stream	***MWh***	***£/MWh***	***£***
Electricity	12,600	40.00	504,000
ROCs	12,600	45.00	567,000
Levy Exemption	12,600	3.65	45,990
Total			1,116,990

Options for Procurement:

14. The options for the project are:

A. The City Council builds and operates the wind turbines itself;

B. The City Council procures a partner to build and operate the wind turbines, and shares in the income;

C. The City Council procures a partner to build and operate the wind turbines in return for a fixed rental.

15. These options have been assessed in terms of construction/ operational risks, income risks and potential financial/carbon reduction benefit. It is recommended that Option B is adopted and that a procurement process is undertaken to select a development partner, on the grounds that:

Option A would involve the City Council carrying construction and operational risks, which would be better handled by an experienced wind turbine developer, and

Option C would transfer all of the risk to the developer with a consequential reduction in the financial return, while also removing the opportunity for the Council to choose between whether to take benefit by selling ROCs or by 'retiring' ROCs (and taking credit for carbon reduction).

16. The procurement process would, however, allow potential partners to offer alternative proposals of 'income shares' and 'fixed rental' returns to the Council.

17. The timescale for the procurement process will be:

Out to OJEU advert	February 2009
Expression of interest	April 2009
Shortlisting and interviews	May 2009
Out to tender	June 2009
Tenders returned	August 2009
Tender acceptance	September 2009

Risk Assessment

As set out in the Options for Procurement Section of this report.

Equalities Impact Assessment

None for this development.

Environmental Impact Assessment

Options A and B in this report would contribute to the achievement of the Council's CO_2 reduction targets.

See Appendix A Environment Impact Checklist.

Legal and Resources Implications

Legal

Any procurement must be open and transparent, must comply with European, national and the council's own rules on procurement and must not be state aid. If the transaction includes the leasing or sale of land, that must also comply with legislation governing the terms on which local authorities dispose of land. As it is not one of the council's normal functions to generate and market electricity, the structure of the agreement eventually proposed may need to be checked to ensure that the council is not inadvertently exceeding its powers.

(advice provided by Dru Brooke-Taylor for the Head of Legal Services)

Financial It is estimated that the project will show a positive financial return, although the actual figures will depend on the movement of energy and ROC prices and the outcome of the procurement process. The Council will have the option of taking the return terms of money or carbon reduction.

(Comments provided by C Reynell)

Land The Council owns the proposal site for this development at Avonmouth.

Personnel There are no personnel issues directly arising from this report.

ACCESS TO INFORMATION
Background Papers:

Carbon management and electricity generators/supply (Briefing paper)

Appendix A

Environment Impact Checklist

Title of report: **Avonmouth Wind Turbines Project** **Ward: Avonmouth**

Report author: **Acting Strategic Director (Resources)**

Anticipated date of key decision: **2 February 2009**

Summary of proposals: **RECOMMENDATION**

Summary

The City Council has a number of options of how to procure the wind turbines as identified in paragraph 15 of the report. The report recommends that a procurement process is initiated to select a wind turbine developer for a joint venture for the Avonmouth Wind Turbines.

Will the proposal impact on...	Yes/ No	+ive or -ive	If yes...	
			Briefly describe impact	Briefly describe mitigation measures
Emission of Climate Changing Gases?	Yes	Positive	Wind turbines make a positive contribution as they limit the requirement for fossil fuel derived climate change gases	
Bristol's vulnerability to the effects of climate change?	Yes	Positive	In overall terms will reduce the production of CO_2 for the lifespan of the turbines	
Consumption of non-renewable resources?	Yes	Positive	Will reduce in overall terms the need for non renewable resources	
Production, recycling or disposal of waste	No	Neutral		
The appearance of the city?	Yes	Positive	This is a subjective point but to some they may add to the visual amenity of the area.	
Pollution to land, water, or air?	No	Neutral		
Wildlife and habitats?	No	Neutral	This issue forms part of the submission of the environmental impact assessment in the planning application which has now been approved.	

Consulted with: Alex Minshull

Summary of impacts and mitigation - to go into the Cabinet/ Council Report	
Environmental Impact Assessment *The environmental impacts of the development of the turbines has been considered in a formal Environmental Impact Assessment and in the determination of the planning application - see background papers.* *The decision in this paper is for the procurement model rather than the decision to develop the turbine. There are no significant differences in the environmental impacts of the three options.* *Based on current knowledge of the Carbon Reduction Commitment, Option B is likely to give the Council greatest control of the carbon credits and may offer greatest financial advantage from the carbon savings.*	
Checklist completed by:	
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Verified by Environment and Sustainability Unit	Alex Minshull