

## CABINET ITEM COVERING SHEET PROFORMA

**AGENDA ITEM**

**REPORT TO CABINET**

**17 MARCH 2011**

**REPORT OF CORPORATE  
MANAGEMENT TEAM**

### **CABINET DECISION**

**Environment – Lead Cabinet Member – Councillor Mrs Jennie Beaumont**

#### **PROCUREMENT OF SUSTAINABLE ENERGY SUPPLY**

1. Summary

Stockton-on-Tees Borough Council formally adopted the Renewable Energy Strategy following a Cabinet recommendation on 17 December 2009. This strategy recognised the need to develop low carbon and sustainable energy supplies to both provide security of supply and to counter the anticipated rising costs of fossil fuel based energy supply.

In addition the UK Government has set targets for carbon emissions reduction of 34% by 2020 and 80% by 2050. The latest Climate Change Committee Report, published on 6 January 2010 also recommends carbon emissions reduction of 60% by 2030. All these targets are related to the baseline year of 1990.

Conventional energy prices are predicted to rise considerably with a recent Ofgem report suggesting a doubling of wholesale energy costs by 2015 whilst five of the major utilities have predicted a 25% increase in prices by 2020.

Discussions with the Tees Valley local authority Directors of Environment have secured interest in approaching a Tees Valley wide initiative to seek supplies of renewable or low carbon energy supply through a long term contractual arrangement. In addition the Tees Valley local authorities have received a detailed report from Parsons Brinkerhoff, commissioned by Tees Valley Unlimited, that describes five potential district heating schemes, one for each local authority and using Combined Heat and Power plant for maximum efficiency.

In view of the high capital cost of renewable and low carbon energy supply it has been decided to test the market regarding the possibility of developing the Councils' future energy supply through a third party along the lines of a Power Purchase Agreement (PPA).

The publication of a 'Prior Information Note in the Official Journal of the European Union (OJEU) in December 2010 led to an information exchange on 1<sup>st</sup> February 2011 at the Education Centre. Over 30 companies of varying sizes have engaged with this process.

2. Recommendations

It is recommended that:

3. Members agree the principle of a 'joint venture' approach to procurement of sustainable energy supply for the five Tees Valley authorities.

4. Further work is carried out to explore the options for delivery mechanisms for the sustainable energy supply and report back to Cabinet.
5. Members give approval to taking the process forward to the next and more detailed stage in the form of a new OJEU Prior Information Notice.

3. Reasons for the Recommendations/Decision(s)

To enable Stockton-on-Tees Borough Council, in partnership with the other Tees Valley authorities to explore routes to the procurement of a long term, sustainable energy supply that provides security of supply, price stability and carbon emission reductions.

4. Members' Interests

Members (including co-opted Members with voting rights) should consider whether they have a personal interest in the item as defined in the Council's code of conduct (**paragraph 8**) and, if so, declare the existence and nature of that interest in accordance with paragraph 9 of the code.

Where a Member regards him/herself as having a personal interest in the item, he/she must then consider whether that interest is one which a member of the public, with knowledge of the relevant facts, would reasonably regard as so significant that it is likely to prejudice the Member's judgement of the public interest (**paragraphs 10 and 11 of the code of conduct**).

A Member with a prejudicial interest in any matter must withdraw from the room where the meeting considering the business is being held -

- in a case where the Member is attending a meeting (including a meeting of a select committee) but only for the purpose of making representations, answering questions or giving evidence, provided the public are also allowed to attend the meeting for the same purpose whether under statutory right or otherwise, immediately after making representations, answering questions or giving evidence as the case may be;
- in any other case, whenever it becomes apparent that the business is being considered at the meeting;

and must not exercise executive functions in relation to the matter and not seek improperly to influence the decision about the matter (**paragraph 12 of the Code**).

**Further to the above, it should be noted that any Member attending a meeting of Cabinet, Select Committee etc; whether or not they are a Member of the Cabinet or Select Committee concerned, must declare any personal interest which they have in the business being considered at the meeting (unless the interest arises solely from the Member's membership of, or position of control or management on any other body to which the Member was appointed or nominated by the Council, or on any other body exercising functions of a public nature, when the interest only needs to be declared if and when the Member speaks on the matter), and if their interest is prejudicial, they must also leave the meeting room, subject to and in accordance with the provisions referred to above.**

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#### **SUMMARY**

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Discussions with the Tees Valley local authority Directors of Environment have secured interest in approaching a Tees Valley wide initiative to seek supplies of renewable or low carbon energy supply through a long term contractual arrangement. In addition the Tees Valley local authorities have received a detailed report from Parsons Brinkerhoff, commissioned by Tees Valley Unlimited, that describes five potential district heating schemes, one for each local authority and using Combined Heat and Power plant for maximum efficiency.

In view of the high capital cost of renewable and low carbon energy supply it has been decided to test the market regarding the possibility of developing the Councils' future energy supply through a third party along the lines of a Power Purchase Agreement (PPA).

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#### **RECOMMENDATIONS**

It is recommended that:

1. Members agree the principle of a 'joint venture' approach to procurement of sustainable energy supply for the five Tees Valley authorities.
2. Further work is carried out to explore the options for delivery mechanisms for the sustainable energy supply and report back to Cabinet.

- Members give approval to taking the process forward to the next and more detailed stage in the form of a new OJEU Prior Information Notice.

## DETAIL

### Background:

- To enable Stockton-on-Tees Borough Council to implement the Renewable Energy Strategy and move towards long term security of supply by obtaining energy from low carbon and renewable sources is required.
- Discussions with the other Tees Valley local authorities has secured interest in developing a Tees Valley wide initiative to seek supplies of renewable or low carbon energy supply through a long term contractual arrangement. Total annual energy consumption and an indication of the cost of this energy per annum and for a notional 20 year contract period for the five Tees Valley local authorities is summarised in the table below using data from financial year 2009/10:

Local Authority	Electricity MWh				Gas MWh			Total electricity MWh	Total gas MWh	Total energy use MWh
	Council Buildings	Leisure	Schools	Street Lighting	Council Buildings	Leisure	Schools			
Darlington	3,002	2,689	7,152	6,703	7,859	7,910	19,950	19,546	35,719	55,265
Hartlepool	3,274	1,766	6,905	7,058	9,931	8,269	19,418	19,003	37,618	56,621
Middlesbrough	16,634	3,070	7,441	11,138	32,128	7,937	28,679	38,283	68,744	107,027
Redcar & Cleveland	5,253	2,134	9,899	8,369	9,777	9,748	25,536	25,655	45,061	70,716
Stockton-on-Tees	9,370	4,457	10,823	12,609	23,223	10,083	33,641	37,259	66,947	104,206
<b>TOTAL</b>	<b>37,533</b>	<b>14,116</b>	<b>42,220</b>	<b>45,877</b>	<b>82,918</b>	<b>43,947</b>	<b>127,224</b>	<b>139,746</b>	<b>254,089</b>	<b>393,835</b>
Approximate cost per annum:	£2,627,310	£988,120	£2,955,400	£3,211,390	£2,072,950	£1,098,675	£3,180,600	£9,782,220	£6,352,225	£16,134,445
Approximate cost over 20 years:	£52,546,200	£19,762,400	£59,108,000	£64,227,800	£41,459,000	£21,973,500	£63,612,000	£195,644,400	£127,044,500	£322,688,900

- Clearly with the predicted rise in price of 25% by 2020 by the energy companies the value of the contract and the potential savings associated with taking this route are very substantial.
- The North East Purchasing Organisation (NEPO) currently manage the procurement of energy supplies for the Authorities in the region. This proposal is looking at a sub-regional solution which if successful could be rolled out to the region and does not conflict with the arrangements with NEPO.

### Feed in Tariffs:

- The introduction of Feed in Tariffs (FITs) for renewable electricity generation installations of up to 5MW capacity has altered the financial view of renewables since this provides a regular income for 25 years that currently offers a return on investment of around 7% for a typical solar electricity (PV) installation. A review of FITs by the government was launched on 7 February to report by the end of 2011 and this may result in reduced FITs for larger scale (over 50kW) installations during the review process. FITs are scheduled to reduce from April 2012.
- An equivalent scheme for heating with no upper limit on capacity, the Renewable Heat Incentive had been planned to be introduced from 1 April 2011 and is now likely to commence this summer with further information from Government now expected in March.
- These developments have resulted in a variety of financing schemes whereby in return for a long term contractual commitment, typically 15 to 25 years, electricity may be supplied at

a fixed price plus inflation with the capital cost of the renewable electricity generating technology and its maintenance and upkeep met by the installing company.

8. These new financing schemes potentially provide an affordable route to the renewable energy supplies that we require but the market is confused regarding which scheme would provide best value throughout a long term contractual arrangement.
9. An alternative approach would be an in house solution using prudential borrowing to finance the capital outlay thus retaining Council control of the various income streams, sale of surplus electricity and other benefits such as sale of Renewable Obligation Certificates and Climate Change Levy Exemption Certificates. However, the recent increase in interest rate for prudential borrowing may be detrimental to this approach.
10. Whilst the above models relate to electricity generation the prospective launch of the RHI in June 2011 is likely to generate equivalent schemes for space heating and hot water and is therefore likely to result in more all embracing energy finance packages.
11. There are numerous organisations and installation companies who will offer to install solar electricity panels free of charge in return for the Feed in Tariff payments and may even offer free electricity as part of the package. We welcome the opportunity to see such panels installed on the roofs of our schools and office buildings; however this is only part of the solution as it would not provide sufficient energy to supply more than a relatively small part of our overall needs. A rough estimate of the potential electricity supply if all of Stockton-on-Tees Borough Council building were equipped with PV is that this could meet 10-20% of current electricity demand.
12. A solution to securing the necessary capital investment could be to enter into a Power Purchasing Agreement or equivalent that means that we purchase our energy directly from the generator of that power rather than through an energy supplier. The benefit for the local authorities would be to provide renewable energy at a stable price over a long-term agreement.
13. The developer of the renewable energy facility would have the ability to utilise this agreement to raise the capital investment to take the project forward. This development could be in the shape of wind farms on mainland UK, offshore or in the new emerging technologies such as anaerobic digestion, gasification or pyrolysis.
14. In view of the high capital cost of renewable and low carbon energy supply it has been decided to test the market regarding the possibility of developing the Councils' future energy supply through a third party along the lines of a Power Purchase Agreement (PPA).
15. In view of the potential scale of the project, potentially in excess of £300 million over 25 years, procurement has to include all EU Member States. A 'Prior Information Notice' was placed in the Official Journal of the European Union (OJEU), along with supporting information, to advertise the information event that was held on 1 February 2011.

#### District Heating:

16. Parsons Brinkerhoff, consulting engineers with strong power industry connections, have produced a comprehensive report for Tees Valley Unlimited that has identified strong candidates for district heating schemes in each of the Tees Valley local authority areas.
17. The scheme for Stockton-on-Tees is centred on Church Road and would initially serve Splash, Church Road Council offices including Municipal Buildings, the Central Library and Police Station but with the possibility of extensions into North Shore, Castlegate and the Victoria developments.

18. The Parsons Brinkerhoff report provides sufficient detail to enable at least initial market reaction to be sought, determining if there are suppliers willing to pursue the district heating projects and to provide outline costings. This would therefore be added to the information day on 1 February 2011.

#### Additional Drivers:

19. As fossil fuel supplies become scarcer the security of energy supply will become of increasing importance making a move towards renewable energy supply and high efficiency CHP of great benefit to local authorities in assuring continued service delivery.
20. The move away from conventional energy supply to a long term renewable and low carbon power purchase approach will also provide greater price stability enabling budgets to be set with much greater certainty.
21. Carbon Budgets set by the previous Government, on Budget Day, 22 April 2009, continue to be supported by the Coalition Government. These were for a 22% reduction in carbon emissions compared to 1990 by 2012; a further reduction to 28% below 1990 levels by 2017; and at least 34% below 1990 levels by 2022. The latest Climate Change Committee report is recommending a 60% reduction in carbon emissions compared to 1990 by 2030 thus it is important that a trajectory to achieve these reductions is set sooner or later.
22. This approach to energy supply will support improved energy management and provide the opportunity of developing revenue streams through the sale of surplus electricity, permission for which has been granted by the Coalition Government.

#### Resources:

23. Technical support to the development of the procurement process will be provided from within Technical Services and the Procurement, Finance and Legal Teams. As the project develops there will be a need to bring in external expertise as appropriate.

### **FINANCIAL IMPLICATIONS**

24. It is expected that the full process of developing the renewable energy and low carbon energy supply contract(s) will take at least 12 to 24 months and require resources equating to about £300k, shared by the five local authorities, £60k each. This estimate is based on BSF experience, a similar scale procurement exercise.

### **LEGAL IMPLICATIONS**

25. The outcome of this process is likely to be contractual arrangements for energy supply over a long period, likely to be 20 to 25 years requiring appropriate legal safeguards to be implemented regarding the supplying organisations.

### **RISK ASSESSMENT**

26. Considered low risk at this stage since the process is concerned with accumulating data to inform the developing procurement process.
27. Risk will be reassessed at appropriate points through the duration of the process.

## **COMMUNITY STRATEGY IMPLICATIONS**

### **Economic Regeneration and Transport**

28. The provision of renewable energy supplies and district heating/CHP provides significant opportunities for local business development for construction and ongoing maintenance support.

### **Environment and Housing**

29. The low carbon energy supply arising from this will contribute to borough wide carbon emission reductions and improved air quality due to reduced individual gas boiler plant.
30. District heating schemes would provide opportunities for the provision of low cost heat supplies to adjacent domestic dwellings.

### **Children and Young People**

31. The proposed low carbon energy supply is intended to provide long term price stability, reduced costs and therefore the potential for improved budget arrangements for schools and other Council operated support services for children and young people.

### **Liveability**

32. This will improve the efficiency of energy use within the Borough and provide improved security of energy supply.

## **EQUALITIES IMPACT ASSESSMENT**

33. The equalities impact assessment will be carried out later in the procurement process when more detailed potential outcomes are available.

## **CONSULTATION INCLUDING WARD/COUNCILLORS**

34. Consultation requirements will be identified and implemented as the next steps from the 1 February information meeting are determined.

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### Background Papers

OJEU Prior Information Notice  
Supporting Information  
Supplier Proforma

### Ward(s) and Ward Councillors:

Not ward specific.

### Property

Endorses the principles covered in the Asset Management Plan especially the asset management section 3 concerning efficient operation of buildings in terms of energy use.