

District Heating Networks: Approval to procurement process for selection, with other stakeholders of an Energy Services Company

Report of the Head of Economy and Enterprise

Please note that the following recommendations are subject to consideration and determination by the Cabinet (and confirmation under the provisions of the Council's Constitution) before taking effect.

Recommendation: That

- (a) DCC becomes a shareholder of a public sector Energy Services Company (ESCo);**
- (b) DCC, subject to a successful procurement of a private sector energy partner, commits to invest £147,000-£177,000 Capital into the joint venture company as a share of the required public sector equity stake, to achieve a return;**
- (c) DCC leads on the procurement of an energy sector partner, on behalf of the ESCo, providing an income stream on a full cost recovery basis.**

1. Summary

This report considers the formation of an Energy Service Company (ESCo), in partnership with 5 other public bodies to procure a private sector partner to deliver District Heating Networks in Exeter.

2. Background/Introduction

Following Cabinet approval in November 2012 to investigate the formation of an ESCo to deliver district heating in the Exeter area, DCC and 5 public sector partners (Exeter City Council, East Devon District Council, Royal Devon and Exeter Foundation Trust, Teignbridge District Council and University of Exeter) have been working to establish the feasibility and viability of supplying competitively priced low carbon heat. This has been supported by £285k funding from Department of Energy and Climate Change (DECC) through their Heat Networks Delivery Unit.

Heat networks, also called district heating (DH) and combined heat and power (CHP) enable heat generated at a central point to be distributed to a number of buildings through insulated pipes (See Appendix I for local schematic). This generally uses the heat produced as a by-product of electricity generation, using heat that would be wasted in large power stations, making this a low carbon option. The Exeter area is at the forefront of district heating in the UK, with the rollout of Cranbrook and a similar scheme at Monkerton and Science Park recently announced.

DCC's investment in the ESCo will enable the Council to achieve a return on investment and influence the development of the network and potential future energy projects across Devon. It will also contribute towards delivery of economic outputs, energy security and strategic carbon reduction as guided by district local plans.

3. Proposal

3.1 Overview

Two separate Exeter schemes have now been identified as being technically feasible and economically viable:

- A city-wide retrofit scheme connecting primarily public sector heat loads, the RD&E hospital to the city centre;
- A scheme taking heat from the Marsh Barton EfW plant to SW Exeter.

The city centre retrofit scheme envisages a large new gas CHP at the RD&E which provides electricity and heat for the hospital and exports low carbon heat to Exeter City Council buildings (Civic Centre and new pool complex), and other private sector DH ready buildings along the route. See Appendix I. Currently this does not include County Hall as the economic case is weak and we already have a low carbon heating solution. DCC could join the scheme at a later date.

A public sector ESCo could lead on a SW Exeter scheme, using heat from the Marsh Barton Energy from Waste plant, working with EON and Viridor. However, timescales and procurement may mean it is more suitable to support the private sector in delivering this scheme without public sector direct investment. DCC already has a stake in heat from the EfW.

The immediate aim of the ESCo is to procure a private sector partner with whom to form a Joint Venture Company (JVCo) to deliver the scheme. Following procurement the ESCo provides a vehicle for public sector partners to influence JVCo's development.

Next stages would be:

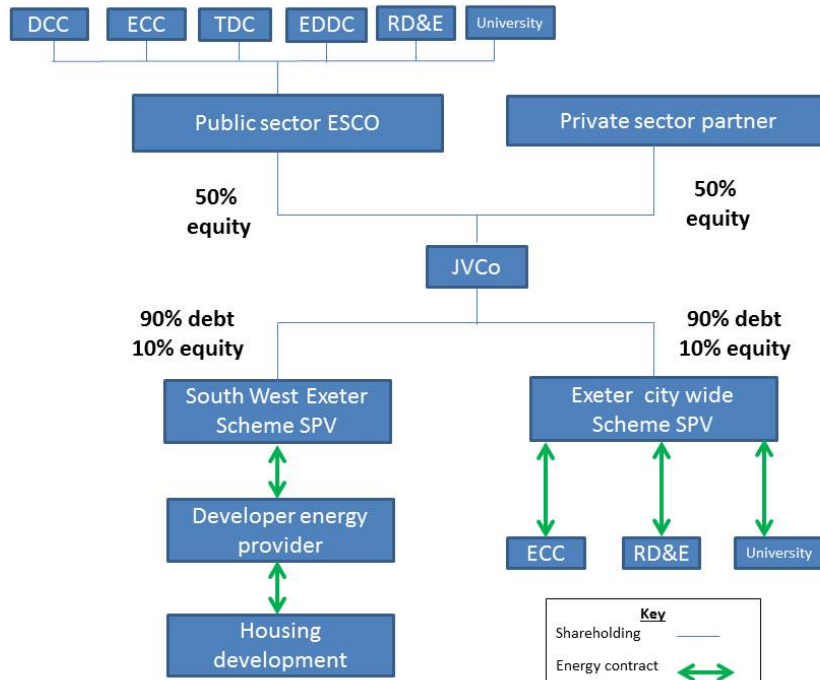
- a. Partner approvals
- b. Set up an ESCo
- c. ESCo procures a Private Sector Partner
- d. Successful procurement set up JVCo – capital investment required
- e. JVCo sets up Special Purpose Vehicle for Exeter City Scheme and raises finance
- f. JVCo sets up Special Purpose Vehicle for SW Exeter Scheme, should this apply

3.2 Corporate / Legal Structure

The proposed legal structure envisages a public sector joint ESCo being established. This entity will then procure a private sector partner (PSP) which will fund up to 50% of the equity of a JV company (JVCo). Each public sector stakeholder therefore has a 1/12th (8.3%) net interest in the JVCo.

Each of the two schemes being considered for investment, with shareholders able to take an interest in either or both, would be set up as separate Special Purpose Vehicles (SPV's). See schematic below.

It is envisaged that the estimated £16m investment for the city wide SPV would be largely project financed by financial institutions (typically 10% equity and 90% debt).



3.3 Benefits

Participation in the ESCo provides a number of potential benefits to the Council:

- It is anticipated the project will make a healthy return of 9.7% IRR (internal rate of return) on investment with a relatively small capital outlay.
- Potential to link in the EfW plant and use the heat generated.
- Economic benefits - such as job creation and retention and energy security.
- Ability to connect County Hall to the scheme at a future boiler replacement date.
- Public sector investment giving confidence to the private sector to participate in procurement and maximising bid offers.
- It reinforces Devon's local relationships with other public sector bodies for the maximum collective benefit.
- Enables future schemes to be developed, for example Newton Abbot and Barnstaple.
- Investment in low carbon heat supports Devon's commitment to low carbon development in the Exeter growth point area and provides a vehicle for future expansion into other technologies and ventures, supporting Innovation Exeter and Exeter Futures agendas. Potential to raise investment through linkage with the Exeter Futures model.
- Government remains committed to renewable heat and Heat Networks and grant funding (from a £300m capital pot aimed at projects currently supported by HNDU) may likely be available for the project.
- Networks proposed are an initial phase and can be extended on commercial terms to third party consumers, some of which are already "district heat" ready through Exeter City Council's planning policy.

3.4 Resources and Timescales

The RD&E hospital, as host of the energy centre, is critical to the city wide scheme and has therefore been the first partner to seek internal approvals. The RD&E Board approved investment on 27th January 2016, with the Exeter City Council approval on 23rd February. East Devon District Council has approved participation in the ESCo but no investment in the JVCo, as these schemes are not in their district. Subject to other Partner approvals in

March, the next stage is to agree ESCo shareholder structure and procure a private sector partner, likely through a negotiated tender process. DCC would need to provide resources to enable the procurement to be completed as follows:

Requirements	Proposed DCC resource
<i>Capital funding</i>	Economy & Enterprise may be able to allocate up to £147,000-£177,000 in 17/18 to cover capital expenditure. A funding proposal has gone in to Corporate Capital Group – a verbal update will be provided.
<i>Revenue funding</i>	Should the approval be given, the other partners would like DCC to lead on procurement and would be prepared to fund DCC procurement staff. Economy and Enterprise would need to provide a minimal revenue resource along with partners towards ESCo annual corporate requirements e.g. report and accounts. Procurement team are happy to consider this on a full cost recovery basis.
<i>Staff resource</i>	To date time has been up to 0.5 FTE. A full time procurement project manager would be required for up to 12 months to lead on the JV partner procurement, funded by the partners. Support of around 0.1 – 0.2 FTE would potentially be needed between Economy, Procurement, Legal, Finance and Waste teams during the process. Ongoing limited staff time would be required for participation in the ESCo and JVCo.

Planned Timescales:	Date
Partner decisions	Jan - Apr 2016
Public sector ESCo formed	April/May 2016
Private Sector Partner (PSP) procurement process	Spring 2016 onwards
Private Sector Partner appointment (subject to successful procurement)	Mid 2017
JV Co and SPV's set up, debt funding identified	2017/18
Scheme delivery	2018/19
Investigate and apply for grant funding	Spring/Summer 2016

4. Consultations/Representations/Technical Data

The 2012 City Centre and SW Exeter technical studies are available on Exeter City Council and Teignbridge District Council website. Technical studies for the RD&E hospital and the business case documents are considered commercially sensitive.

5. Financial Considerations

Business case information has been reviewed by Capital Finance personnel with respect to the methodology employed and basis of returns anticipated. However the procurement process will further refine these financial models.

Looking at the business case produced by Deloitte, under the base case assumptions, the JV is forecast to make a project IRR of 9.7%, equity IRR of 21.5% and EBIT over 25 years of £42.6 million (in nominal terms). The base case assumes the company is financed by 10% equity 90% debt gearing at a 6% interest rate. It is expected that each public sector stakeholder will invest in the JV equally, with a total equity injection of £1.75million (nominal) shared between investors in the geared company.

A sensitivity analysis has been performed which demonstrates the JV is expected to perform satisfactorily under various scenarios, including a 10% increase in operating costs, or discounts to heat or electricity sales.

Including the SW EfW link reduces the project IRR from 9.7% to 9.4%, slightly reducing returns to shareholders.

The project group will need to come to an agreement on how much capital each stakeholder is willing to invest, and the preferred commercial way forward for setting up the JV.

The forecast result assumes a 90% geared 50:50 JV with the private sector, with each of the public sector partners sharing the public sector investment equally. This would result in nominal dividends of £1.6 million received over the 25 year project period. If the number of partners was reduced to 5, the investment would be £177k per partner to achieve the same returns.

There is a potential to apply for additional grant funding to increase the returns from the scheme from DECC later in 16/17 and an Expression of Interest has been submitted to HotSW LEP for Growth Deal 3 funding.

6. Environmental Impact Considerations

The scheme has been estimated by University of Exeter, as part of the technical feasibility work, to reduce carbon emissions by 3,600 tonnes per year when built out. The use of district heating is an integral part of the Exeter and East Devon Growth Point Board's aim to promote sustainable growth in the area and links with Exeter City Council and Teignbridge District Council planning policies including on the use of district heating and carbon reduction in new developments.

7. Equality Considerations

Following the carrying out of the Impact Assessment it is considered that this investment would not discriminate against or disadvantage any group.

8. Legal Considerations

The implications/consequences of the recommendations and proposed course of action have been considered and taken into account in the preparation of this report.

Internal legal support will be required at the setting up of the ESCo, for example, to approve shareholder agreements and support provision of a Director. Legal support has historically been provided mainly through external funding and procured advice and it is expected that through the procurement process this will continue. However, some DCC legal resource will be required at key stages and at the setting up of the Joint Venture Company, should there be a successful procurement. DCC will likely need to allocate a Member or Officer to be a Director of the Joint Venture set up. The number of Directors has not yet been agreed but it is expected there will be one or two required across the six public sector partners.

9. Risk Management Considerations

The risk sharing partnership and financing structure of the Joint Venture is designed to minimise risk to the public sector. However, the apportionment of risks will be a critical element of the process to procure a private sector partner. The table below summarises some key risks and mitigation measures.

Risk	Mitigation
Other partner(s) do not approve ESCo.	Partners have senior management commitment. If needed, other 5 partners cover the additional 1/6 of investment and procurement costs between them. DCC schedule means we will be aware of the majority of other partners' decisions by Cabinet date.
Lack of competitiveness in procurement.	Ensure competitive tension through robust procurement strategy including good marketing material, PIN soft market testing.
Failure to procure a suitable Private Sector Partner.	Financial evaluation shows that there is value in the project for the Private Sector Partner. Suppliers are interested in principle. A Suppliers Day will be used to estimate suppliers' appetite and address any key issues. The apportionment of risks will be agreed as part of the procurement process.
Poor design, commissioning or installation.	Transfer risk to contractors through procurement by JV. Effective monitoring and quality control. Rigorous commissioning and testing to be specified in contracts. Appropriate insurance etc.
Future energy prices fluctuate.	JVCo in a better position to manage energy price risk than partners individually. DECC forecasts factored into business case.
New partner wishes to get involved, causing project delays.	The involvement of any new partner would have to be considered very carefully, to ensure this does not have a negative impact on the procurement exercise and time taken to carry this out.
Partner drops out during procurement process.	Shareholder agreements will be set up so that as long as a "successful" procurement is achieved partners cannot drop out during the process. Definition of "successful" to be agreed by all partners upfront.
Regulation of the heat market.	Likely to have a positive impact on market penetration.

10. Public Health Impact

Not applicable, other than a potential for reduced energy costs for the RD&E hospital.

11. Discussion

Becoming a shareholder in the ESCo and investing in the JVCo would produce a return on investment and enable the ability to work with partners to deliver this and future energy projects. This may enable cost reductions through energy efficiency as well as income generation. We are already working with Teignbridge and North Devon on district heating

opportunities in Newton Abbot and Barnstaple. This would also enable economic benefits for the area, including more resilient energy supply, sustainable growth, jobs created/safeguarded and an income stream for the wider public sector. This also gives potential to investigate opportunities to work with the private sector more widely, such as with Exeter City Futures, to enable improved investment models and investigate other opportunities.

We are currently in a position where a number of partners are in their approval process. If insufficient partners approve the next stages then this project will not go ahead, although not all six partners are required to provide a viable level of investment to move forward.

12. Options/Alternatives

The main alternative is to continue “business as usual” with DCC not participating in the scheme, meaning we would not have the opportunity to influence development, use of heat from the EfW or make a financial return.

Option	Pros	Cons
Continue “business as usual”.	No cost or risk to DCC.	No return on investment; less control over potential to utilise heat from EfW plant; no opportunity to work with partners on future schemes; reputational risk with public sector partners.
Increase size of DCC capital investment to increase shareholding and return on investment.	Potential for increased income; more control over JVCo.	Potential for increased risk; potential need for increased Member/staff involvement.
Contribute revenue funding to procurement process.	Equal sharing of procurement costs across all partners. Increased overall procurement budget.	Likely revenue costs for DCC in 16/17 of approximately £80k; less incentive for partners to utilise most cost effective procurement route.
Become a shareholder of the ESCo but not invest in the Exeter scheme.	No financial risk.	No return on investment; less control over potential to utilise heat from EfW plant; partners may not accept a non-investing partner in the ESCo.

13. Reason for Recommendation/Conclusion

Investment in the ESCo has the potential to enable the Council to achieve a return, deliver economic benefits to the area and work in partnership with public and private sector bodies to influence the development of the Exeter schemes and potential future energy projects across Devon. As the Council is taking a relatively small stake in the scheme and is not required to contribute revenues for procurement, the financial risk is relatively low. Shareholder agreements will be set up to ensure the risks are shared appropriately, with ongoing operational risks taken on by the private sector partner delivering the scheme.

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Local Government Act 1972: List of Background Papers

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Background Paper	Date	File Reference
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Nil

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