DECISION-MAKER:		COUNCIL					
SUBJECT:		THORNHILL DISTRICT ENERGY SCHEME					
DATE OF DECISION:		20 NOVEMBER 2013					
REPORT OF:		CABINET MEMBER FOR HOUSING AND SUSTAINABILITY					
CONTACT DETAILS							
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STATEMENT OF CONFIDENTIALITY

Confidential Appendix 1 contains information deemed to be exempt from general publication by virtue of category 3 to paragraph 10.4 of the Councils Access to Information Procedure Rules as contained in the Constitution. Publication of this information may be to the Council's financial detriment.

BRIEF SUMMARY

The Council is in the process of securing Energy Company Obligation (ECO) grant funding. This is a significant opportunity to provide for insulation and environmental improvements to the Council's housing in the City and also includes funding for new heating and hot water systems in Thornhill. Initial proposals to develop this project were approved by Cabinet on October 15th.

An ECO funded energy improvement programme supports the Council's strategic aspirations to:

- improve insulation and heating in its housing stock,
- provide support to residents with the aim of responding to fuel cost rises and tackling fuel poverty.
- reduce carbon emissions and contribute to a more sustainable city.
- promote job creation and retention in Southampton to support the city's economic development.

Council is requested to approve the next phase of the Thornhill District Energy scheme, which includes: negotiating a best value contract price with the preferred ECO partner for a Design and Build, (DB) contract to build a district energy station, securing ECO funding, seeking planning approval and engaging with residents.

A decision to proceed or not with the scheme will not be taken until early 2014 when final prices on all elements are available for final financial modelling and risk assessment. The proposed scheme also provides the opportunity to generate electricity and so reduce the costs of energy for the Council's civic buildings. The confirmation of this aspect of the project is likely to be critical to the case to proceed with the scheme.

As part of this overall investment programme the Council is recommended to provide capital funding for the Thornhill District Energy Scheme from the HRA Capital

programme. Substantial Energy Company Obligation (ECO) funding support is available. It is expected that this will fully meet the General Fund's capital costs and this is essential to the financial viability of the scheme. There will also be ongoing revenue implications for the Housing Revenue Account (HRA) and General Fund (GF).

A more detailed financial business case has been prepared which includes the longer term capital and revenue implications of the scheme, an analysis of the associated risks and benefits and how the risks need to be managed and mitigated.

The detailed financial business case is based on the preferred ECO contractor commencing works in early 2014 (utilising appropriate delegated approvals). Subsequent stages of the project would see design, build and operation of the plant, laying heating mains, connecting the flats to the new facility and setting up the payment mechanisms by April 2015.

The tight timescales for this project arise from the end date of April 2015 for the Government's current round of ECO funding.

RECOMMENDATIONS:

- (i) To approve the financial recommendations set out in the confidential appendix to this report to deliver a district energy scheme, insulation and other associated measures for the suitable homes in Thornhill.
- (ii) To delegate authority to the Director, Place, after consultation with the Head of Legal and Democratic Services to enter into negotiations with the preferred ECO delivery partner to design and build a suitable scheme that represents the best value for the respective residents of Thornhill, and for the Council.
- (iii) To delegate to the Director Place, after consultation with Chief Financial Officer, the Director of Corporate Services, Head of Housing Services and the Cabinet Members for Resources and Housing and Sustainability, to review the progress with the resolutions of the risks identified in this report and take a final decision whether to proceed with the scheme or whether a further report should be submitted to Cabinet or Council as appropriate.
- (iv) Subject to (iii) to delegate authority to the Head of Legal and Democratic Services to agree and sign the relevant contracts and; to delegate authority to the Director ,Place, after consultation with the Head of Legal and Democratic Services to take any other action necessary to implement the scheme.

REASONS FOR REPORT RECOMMENDATIONS

- 1. This is a significant opportunity to provide for a new heating and hot water system to one of the Council's large housing areas of the City.
- 2. The scheme has the potential to meet a number of the Council's key strategic objectives by providing the opportunity for savings for residents on their fuel bills, a reduction in Carbon and the generation of a long-term revenue stream for the Council.

ALTERNATIVE OPTIONS CONSIDERED AND REJECTED

- 3. An alternative option is for the longer term development of a heating system upgrade in the Thornhill estate in anticipation of further ECO funding support being available post April 2015. This approach carries a risk that ECO funding may no longer be available for this purpose and that a the scheme could not proceed.
- 4. An option not to invest in this scheme would leave residents with inefficient and expensive heating and not address fuel poverty.

DETAIL (Including consultation carried out)

Background

- 5. On 15 October 2013 Cabinet gave approval for a further feasibility stage in the development of a delivery programme for the Thornhill district energy (DE) scheme
- 6. The Council wishes to address the continuing rise in energy bills affecting its tenants and leaseholders in the City. A large proportion of the Council housing stock in the City has heating systems that are inefficient, costly to run and generate relatively high amounts of Carbon.
- 7. Alternative and appropriate heating system technologies are being considered for use across all of the Council's housing stock. These include:
 - Newer more efficient and controllable electrical heating systems;
 - Individual gas boilers and where appropriate communal gas or biomass boiler district heating systems for tower blocks and larger blocks of flats;
 - District Energy networks with gas Combined Heat and Power (CHP) and biomass boilers for two or more multi occupied buildings.
- 8. District Energy (DE) covers both district heating and cooling, and can also include Combined Heat and Power (CHP) through electricity generation and using the wasted heat for a hot water network. These schemes are seen to be the most cost effective and efficient ways to deliver heat and hot water in areas such as Thornhill with high building densities and demonstrate the following benefits:
 - Helping to tackle fuel poverty by providing residents with more control over current and future energy costs with prices below alternative domestic tariffs;
 - Improving building performance and reducing long term maintenance and replacement costs for alternative heating systems;
 - Producing a potential revenue stream for the scheme owner;
 - Significantly reducing CO2 levels on a whole lifecycle basis.

- 9. Although residents will inevitably be subject to future energy price rises, DE schemes provide the scope to fix prices below market rates to offer a degree of protection to consumers. The gas required as a fuel for a CHP engine can be purchased in bulk at a commercial rate that is much cheaper than the domestic alternative. Additional recycled fuels such as woodchip can also be utilised in appropriately designed schemes.
- 10. The Thornhill area of the City is considered to be the best starting point for developing a DE scheme, in conjunction with energy efficiency improvements, for the following reasons:
 - The area qualifies for ECO funding in the current programme criteria with a scheme that could be brought forward quickly, delivering substantial carbon savings.
 - Most of the properties identified are in need of insulation with a large number of the current heating and hot water provision being provided by electricity.
 - There are 3 tower blocks and a large number of walk up blocks within the scheme area, comprising over 1,100 individual properties in a very closely defined geographical area. This reduces the cost of installing the heat distribution network and provides a good level of heat load to sustain a scheme. This would constitute Phase 1 of the scheme.
 - Within the same area, there are a number of potential additional future connections including a further 450 housing units, schools, and the Antelope Retail Park, providing for further potential financial benefits to energy consumers and the Council. The 450 extra dwellings would constitute Phase 2 of the scheme which is not part of the detailed financial appraisal at this time.
 - There is a clearly identifiable location for the heat station, on a portion of the land currently owned by the Council on the old Eastpoint site.
- 11. Although Thornhill is seen as the best choice for an initial DE scheme, it is important to emphasise that this forms part of a much wider energy efficiency programme in the Council's housing stock. The delivery of a DE scheme in Thornhill is part of a wider major programme of energy efficiency works throughout the City which could be facilitated through ECO funding.
- 12. The potential availability of substantial Energy Company Obligation (ECO) funding allows the Council to deliver measures across the housing stock to maximise this available subsidy and improve the housing stock in the City. ECO funding is currently guaranteed until April 2015 to support insulation and heating upgrades to Council housing. The lack of certainty over future ECO funding post April 2015 is a significant driver for the actions and the timescales relating to ECO schemes planned across the City, including Thornhill.
- 13. As advised previously, due to the time constraints on the availability of ECO funding Council is requested to approve the commencement of negotiations with the preferred ECO delivery partner to deliver the scheme using the provisions in the negotiated ECO contract.

Financial Appraisal

- 14. A detailed financial evaluation has been undertaken of Capita's outline operational and financial model for the Thornhill scheme. Capita's study was a key element of the feasibility study approved by Cabinet in October. The main project outputs have been identified following the more detailed financial appraisal. More detail of the financial elements is provided in the attached confidential report but the paragraphs below provide a summary of the results.
- 15. The scheme would provide substantial savings for around 670 tenants currently using electricity for their heating and hot water many of whom are experiencing fuel poverty. Smaller savings would be available for around 430 tenants currently using gas.
- 16. The initial capital contribution from the HRA can be funded from savings in the 2013/14 capital programme and virements within the 2014/15 HRA capital programme. Using the current assumptions on the level of ECO funding available to support the scheme there is no initial General Fund borrowing. The level of ECO funding to support the project cannot be formally established until an agreement is reached with an energy supplier on a 'Best and Final Offer' basis, which would run concurrently with the negotiations for the design and build contract.
- 17. The main ongoing risks for the scheme are in the General Fund. A particular issue is the need for an electricity 'sleeving' arrangement, which is the proposed mechanism for the Council to use generated electricity to reduce its own energy costs for civic buildings. This is key to securing a future income stream to ensure scheme viability (a definition for 'sleeving' of energy is found at paragraph 30 on Page 7). This arrangement is subject to more detailed investigations including early negotiations with the Council's energy supplier. An initial meeting has been positive.
- 18. The financial and technical work carried out to date will also be externally validated and updated as better information becomes available. All work carried out by the Council so far would suggest the Thornhill DE scheme is viable with electricity 'sleeving', but the potential issues that could change that assessment include:
 - If the external validation significantly changed the technical or financial assumptions.
 - External funding from ECO and / or Renewable Heat Incentive (RHI) not being available at required levels.
 - Failure to secure a satisfactory 'sleeving' deal for the generated electricity

Other Issues

19. All tenants with homes identified as part of the scheme will be required to take the replacement heating system being provided by the council as a landlord's fixture. This requires consultation with them before a decision is made which affects their supplies. At least 430 homes on the proposed scheme currently have gas boilers. It is proposed that those tenants with older gas heating appliances will also be required to move onto the new DE

scheme. Based on feasibility work so far, these residents will have lower fuel bills, initially, and also potentially into future. As existing pipework and radiators will be retained in the gas properties there will be minimal disruption to these residents from the switch over. Electrically heated homes will require the installation of radiators and heating pipes.

- 20. The Council will need to operate the scheme in balance and it will need to set its charges to a minimum required to, fully recover its costs. For example, if costs increase, charges to tenants would also need to increase accordingly to reflect this. It should be noted, however, that due to the increased efficiencies of district heating and the ability for the Council to negotiate commercial rates for fuel the cost for tenants for heating are likely to remain lower than the price individual domestic customers could negotiate for gas or electricity
- 21. This charging policy will be an important part of the future management of the scheme. Tenants on the scheme will no longer have the ability to go elsewhere for their energy so the Council will need to do its best to ensure that charges to tenants and leaseholders will be kept below the level of domestic alternatives. Further details of arrangements will be developed in conjunction with the operation and maintenance options for the scheme to be determined during the next 2 3 months.
- 22. The Council is required to obtain relevant planning consent for the district energy centre. Planning consent will also be required for the heating pipe network and the external insulation works and other works as required. A potential location for the energy centre for the scheme has been identified at the old Eastpoint school site. Pre planning negotiations have commenced to seek planning permission by the end of February 2014.

Resident Engagement

- 23. An early programme of resident engagement has commenced in the Thornhill area on the proposals to provide new heating systems and provide insulation measures. This has included an introductory letter to all residents in the area and attendance at tenants meetings. The local housing office and other local groups have been briefed on the scheme proposals. A project team has been set up to support the consultation elements and assist in the delivery of the scheme. A further programme of engagement is planned for appropriate stages in the development of the scheme.
- 24. The initial response from tenants has been positive for the provision of lower cost more controllable heat combined with insulation works to their properties. Due attention will be paid to the Housing Act requirements on formal consultations and responding to any comments. Consultation will also take place with leaseholders affected. Planning discussions will involve wider consultation with neighbours and will be linked to the tenant liaison process.

Project Timescales

25. The timescales for the delivery of the scheme are still tied to the availability of ECO funding up until April 2015 for completed schemes. However, the ability to make immediate use of the ECO contractor to deliver the scheme reduces the risks of delivery to this timescale and the risks associated with a

separate procurement exercise. The ECO contractor will be formally appointed later this month but negotiations on contract mobilisation have already commenced.

26. Members are requested to provide in principle approval for negotiations to be carried out with the preferred ECO contractor to deliver a design and build (DB) solution with the intention that works would commence in February 2014.

Contractual Issues

- 27. Provisions have been written into the ECO contractor's contract that allow for the design and build of district heating schemes such as that proposed for Thornhill and to secure ECO funding for these projects. This provision removes the time risk to the Council of entering into an additional OJEU procurement exercise
- 28. A full survey of the current electric space and hot water heating has commenced to design the more detailed scheme requirements. This work also supports the development of the design to seek planning consent. The completion of Employers Requirements, the contract negotiations and ongoing planning process will reduce the delivery risks and support a commitment from the ECO contractor and ECO utilities to secure a best and final offer price for the contract and the ECO subsidy.

Risks

29. Members are advised that all the financial and other key risks identified in this report could have implications on the viability of a scheme and therefore a decision will need to be made in early 2014 whether or not to progress to delivery. A decision by Council to continue to progress feasibility and planning of this project at this time does not therefore mean that the scheme will definitely go ahead. All the identified risks need to be fully assessed and monitored, and the financial model will be continually updated as firmer information becomes available.

Sleeving (or Netting)

30. This term refers to the ability to pass on the electricity generated from the Thornhill DE scheme for uses by the Council to replace other electricity provision at a lower cost. The Council currently pays an average of 9p/KW. 'Sleeving' or 'Netting' is widely operated by industry. A link to the Npower website is provided here: http://www.npower.com/Large-Business/Generating-energy/Selling-power/Third-party-netting/

There are currently no examples of local authorities undertaking this practice. However, initial discussions with energy companies have been positive in this regard. Other local authorities nationally have expressed an interest in this method of electricity generation and information and guidance on selling locally generated energy including 'sleeving' is to be facilitated through local authority energy collaboration.

RESOURCE IMPLICATIONS

Capital/Revenue

- 31. As it will be necessary for the Council to enter into negotiations with the preferred ECO contractor to obtain the best value for the respective residents of Thornhill and the Council the resource implications arising out of the scheme are the subject of the attached confidential report.
- 32. Capita has prepared a fee proposal for their continued work on this project up to February 2014 for a total value of £194,000. This includes the £120,000 reported to Cabinet at its meeting on 15 October. There is budget provision in the HRA revenue budget for 2013/14 to meet this cost.

Property/Other

33. The provision of ECO funding and Council capital funding will significantly improve the standard of the relevant housing stock in the Thornhill estate, reduce fuel poverty and improve the health and well-being of tenants.

LEGAL IMPLICATIONS

Statutory power to undertake proposals in the report:

- 34. Section 1 of the Localism Act 2011 permits the Council to do anything that any other person or private body could do (the 'General Power of Competence') subject to complying with any other statutory requirements such as the Housing Act 1985. The use of the power is also subject to a number of pre and post commencement limitations, none of which are considered to apply in this case.
- 35. The Housing Acts 1985 gives the council the powers to undertake these changes. Under s105 of the Housing Act 1985 the Council is permitted to introduce changes to the management of the housing service following a period of consultation with residents. Where Leaseholders may be affected by any changes the Council will be required to undertake consultation under the Commonhold and Leasehold Reform Act 2002. A consultation plan will be developed alongside the further development of the proposal.

Other Legal Implications:

36. The Thornhill DE project will be delivered in accordance with Finance and Contract procedure Rules and any procurement and subsequent delivery of the project will be subject to compliance with the requirements of the Equalities Act 2010, in particular the Public Sector Equality Duty and having regard to the need to reduce crime and disorder in accordance with S.17 of the Crime & Disorder Act 1998.

POLICY FRAMEWORK IMPLICATIONS

- 37. As mentioned in the main body of the report the delivery of a District Energy scheme in Thornhill satisfies a number of Council policies and key objectives, which are included in the provisions of the Southampton Connect Plan, and the Council's housing and property strategies.
- 38. The Council approved the development of a Strategic Energy Action Plan (SEAP) in December 2012 as a response to the priority issues of energy cost, energy security and CO2 reduction, as well as other key priorities such as jobs

and economic growth. One of the main SEAP project streams is to secure Energy Company Obligation (ECO) funding which is currently available from the energy utilities to support the delivery of insulation and to fully or partly fund new heating installations in selected Council owned housing areas of the City.

39. In March of this year DECC published its strategy for heat, which sets out a framework for delivery which accords with the proposals outlined in this report: A link to the strategy Low Carbon Heating in the UK. is provided below: <u>https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/1</u> 90149/16_04-DECC-The Future of Heating Accessible-10.pdf

KEY DECISION?	Yes	
WARDS/COMMUNITIES AFFECTED:		ALL

SUPPORTING DOCUMENTATION

Appendices

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1.	Thornhill District Energy Scheme CONFIDENTIAL APPENDIX				
Documents In Members' Rooms					
1.	None				
Equality Impact Assessment					
	Do the implications/subject of the report require an Equality Impact Yes Assessment (EIA) to be carried out.				
Other Background Documents Equality Impact Assessment and Other Background documents available for inspection at:					
Title of Background Paper(s)Relevant Paragraph of the Access to Information Procedure Rules / Schedule 12A allowing document to be Exempt/Confidential (if applicable)					

1.	Equality Impact Assessment	
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