

**Meeting date:** 18<sup>th</sup> March 2021  
**Report to:** Economic Development and Managed Growth Scrutiny Board



**Subject/report title:** Solihull Town Centre Low Carbon Energy Network

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**Wards affected:**

- All Wards |  Bickenhill |  Blythe |  Castle Bromwich |  Chelmsley Wood |  
 Dorridge/Hockley Heath |  Elmdon |  Kingshurst/Fordbridge |  Knowle |  
 Lyndon |  Meriden |  Olton |  Shirley East |  Shirley South |  
 Shirley West |  Silhill |  Smith's Wood |  St Alphege

**Public/private report:** Public

**Exempt by virtue of paragraph:**

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**1. Purpose of Report**

- 1.1 To consider the progress made towards the commercialisation of the Solihull Town Centre Low Carbon Energy Network.

**2. Decision(s) recommended**

- 2.1 Consider the refinement of the commercial delivery model and the progress of the procurement strategy that has been made since the submission of the Outline Business Case.
- 2.2 Consider the outline Board and Governance structure proposed for the Council's Special Purpose Vehicle that will be established subject to Full Business Case approval by Cabinet.
- 2.3 Consider the programme and key milestones for submission of the Full Business Case.

**3. Matters for Consideration?**

- 3.1 Scrutiny considered the Outline Business Case for the Solihull Town Centre Low

Carbon Heat Network on 9<sup>th</sup> March 2020 and Board Members requested that Officers present an update on commercialisation progress prior to submission of a Full Business Case.

- 3.2 The Outline Business Case was approved by Cabinet Members on 13<sup>th</sup> February 2020 and, following further review of the findings by Scrutiny, Officers proceeded with funding applications to the West Midlands Combined Authority (WMCA) and Heat Networks Investment Project (HNIP).
- 3.3 Both funding applications were successful in securing funding to support the commercialisation of the Energy Network. The HNIP funding application additionally secured substantial grant funding to support the construction of the Energy Network.
- 3.4 The funding awarded is as follows:
  - a) WMCA have awarded £1.76m commercialisation funding (including budget for any site remediation required at the former swimming pool site at Tudor Grange Leisure Centre) subject to the grant being converted to quasi-equity in the event that the Council proceeds to full business case approval and undertakes construction. A Grant Funding Agreement will be developed to finalise the terms of this quasi-equity arrangement.
  - b) HNIP have awarded a total of £6,591,000, of which £631,000 is for commercialisation funding and £5,960,000 for the construction phase of the project. The construction funding is subject to an updated funding application being resubmitted following commercialisation activity. A Grant Funding Agreement has been agreed and signed by the Director of Resources covering both commercialisation and construction funding.

#### **4. What options have been considered and what is the evidence telling us about them?**

- 4.1 The commercialisation phase of the Solihull Town Centre Low Carbon Energy Network will confirm the capital and operational cost of the project, secure customer commitment to network connection and provide certainty to the Council such that decisions to award contracts and a commitment of funding can be made. The key commercialisation activities are as follows:
  - a) Procure a Design, Build, Operation and Maintenance (including Metering and Billing) (DBOM) Contractor to deliver Phase 1 of the Energy Network, with provision to expand the contract to extend the Network in later Phases.
  - b) Submit a Full Planning Application and secure planning approval for the Energy Centre.
  - c) Secure agreements with customers for heat and power supply and building connection to the Energy Network.
  - d) Undertake a range of education and engagement activities with key stakeholders.

- e) Establish a Special Purpose Vehicle (SPV), which will also be an Energy Services Company (ESCO), to undertake the following functions: hold the Energy Network assets, enter into contracts for delivery and customer heat and power supply, and manage and operate contracts on behalf of the Council as sole shareholder.

4.2 A Council-owned SPV continues to be proposed on the basis that the forecast Phase 1 financial return is considered too low to attract private sector investment and subsequently public sector grant/ equity and commercial borrowing will be required to support investment in the Energy Network. A separate subsidiary company is a requirement of the HNIP grant, but also allows the Council to ring-fence risk, the flexibility for third party transactions, and will enable the Council to sell top up electricity (in addition to that generated at the Energy Centre) to customers via a private wire network.

4.3 Commercialisation activity has been underway since the 9<sup>th</sup> March 2020 Scrutiny meeting, initially commencing with submission of funding applications, followed by the procurement of a specialist team of advisors to support development of the Full Business Case.

## **5. Reasons for recommending the preferred option**

### **5.1 DBOM procurement progress**

5.1.1 The procurement was launched on 4<sup>th</sup> February with an initial Selection Questionnaire deadline of 9<sup>th</sup> March 2021. Three Bidders will be taken through to Dialogue and be invited to submit a Final Submission.

5.1.2 Prior to launch of the procurement, the advisor team have worked alongside Officers to refine the roles and responsibilities to fall to the Council's ESCo or its appointed DBOM partner. In particular, the following key items significantly influence the commercial or financial risk profile and the Council with its advisors have finalised the approach, informed by feedback from a Market Engagement Day held with ten specialist Design and Build and/or Operation and Maintenance contractors in November 2020.

#### a) Type of Contract

The Council will procure a single Principal Contractor to deliver the Design, Build, Operation and Maintenance (including Metering and Billing) activities required to deliver the Energy Network. This approach is common in the heat network sector and combining these requirements passes the interface risk between the design and build and operation and maintenance elements of the project to the private sector. It will encourage design efficiencies that should result in lower operational costs.

#### b) Form of Contract

The DBOM contract will be a bespoke form based on the Standardised Operation and Maintenance Set (SOMS) contract templates developed by Triple Point Investment Partnership on behalf of the Department for Business,

Energy and Industrial Strategy (BEIS). The SOMS templates align with the template supply and connection agreements also being used by the project and are designed specifically for energy network schemes. The drafting embeds the full design, build, operation and maintenance terms into one contract. Whilst the SOMS contract templates are still relatively new to the market, contractors stated their familiarity and acceptance of a bespoke form of contract during market engagement. The DBOM contractor will retain the right to decide how to flow any contractual terms down to sub-contractors.

c) Duration of Contract

The DBOM Contract will be for an initial 15 years with up to a 10-year extension period (extended at the discretion of the Council's ESCo). The duration of the DBOM Contract is viewed as critical to driving quality, as a longer term Operation and Maintenance phase will incentivise good design practice and best value lifecycle and carbon reduction. A 15-year initial term is aligned to the replacement lifecycle of major heat generation plant.

d) Major plant replacement

Major heating plant replacement costs will be separately funded, with end of plant replacement decisions being the responsibility of the Council's ESCo to enable future further decarbonisation and investment informed by future energy policy. Day to day and planned maintenance and repairs will be the DBOM Contractor's responsibility and therefore included in the Operation and Maintenance service charge. The DBOM Contract does not preclude the DBOM Contractor bringing forward external investment at a future date.

e) Metering and Billing services

The OBC stated that the DBOM contract may reserve the right to bring metering and billing in house at a point in the future. Whilst responses from the market suggested that this would be acceptable with adequate notice, it has been decided that the contract will not explicitly reserve this right. Metering and Billing is a highly specialised service which requires significant infrastructure investment and staff resource, and there are no known wider Council plans that present economies of scale. The Metering and Billing service is therefore best managed by specialist service providers and the risk passed to the DBOM Contractor.

f) Heat Price Strategy

As per the OBC, customer heat supply prices will originate from an agreed counterfactual (without intervention) position incorporating current gas purchase price, existing heating system efficiency, and current operational and maintenance costs. This counterfactual position will be calculated into a cost per kilowatt hour of heat based on actual (or forecast) heat demand and used as the starting point for customer heat supply charges. The heat supply charge will include a fixed and variable price; the fixed portion of which will seek to cover fixed Operation and Maintenance for the Energy Network. The fixed supply charge will be indexed against the Consumer (or Retail) Price Index to

cover general cost increases. The variable portion of the heat supply charge will be directly linked to customer heat usage and be indexed to an approved Gas Price Index to ensure increases (or decreases) in the cost of input fuel to the Energy Centre are reflected in the price that customers pay for heat.

The DBOM Contract will pay a fixed price for heat and power which will encompass all planned and unplanned maintenance costs associated with operating the Energy Network. The Council's Energy Services SPV will sell on this heat and power to its customers. The indexation used in customer supply agreements will match that used for the DBOM Contract to mitigate price risk to the Council's Energy Services SPV over the duration of the contract.

g) Key Performance Indicators (KPIs)

A target CO<sup>2</sup> content per kilowatt hour of heat will be specified in the KPI Schedule to incentivise efficient and low carbon heat operations. Failure to meet the target CO<sup>2</sup> KPI may result in points and payments being levied against the DBOM Contractor. Further KPIs will incentivise key performance items such as heat and power availability, water quality (direct link to maximising operational life of network), customer satisfaction and accuracy of billing. Where there is potential for direct financial detriment to the Council's Energy Service SPV for KPI failure, service payments will be levied.

## **5.2 Energy Centre update**

- 5.2.1 A Full Planning Application for the Energy Centre has been submitted on 10<sup>th</sup> March.
- 5.2.2 A pre-planning public consultation was undertaken in January and February 2021 where an energy centre design document, informed by a series of surveys and assessments including noise, air quality, arboriculture, ecological, flood risk and transport, was published on the website and views were invited from residents, businesses and visitors.
- 5.2.3 Due to COVID-19 restrictions the consultation could not be face to face however all material was published to the Council's website and details on the proposals and how to engage with the consultation were shared directly with email subscribers, detailed in a letter to over 300 properties in the vicinity and via a range of social media channels.
- 5.2.4 67 people responded to the online consultation. The importance of Solihull progressing opportunities to reduce carbon emissions was agreed by the majority of respondents and over 70% agreed climate change impacts the local area. The majority were supportive of a Town Centre Energy Network.
- 5.2.5 The majority thought the building was well suited to the location. Loss of green space and a section of park, impact on wildlife and noise were mentioned by others. The proposed building has been designed to fit within an area adjacent to the Leisure Centre and partly the site of the old swimming pool to limit impact on the open space and park as much as possible. A new footpath will be provided to better link the leisure centre and the park and improve access.

5.2.6 General feedback raised questions on the choice of technology to achieve carbon benefits, the choice of location and the time scale for construction, as well as who will benefit from the energy it produces. The Frequently Asked Questions on the website have been updated to address these points raised.

### **5.3 Customer agreements progress**

5.3.1 The Council has issued an updated Heads of Terms to all Phase 1 customers and is currently drafting the full Supply and Connection Agreement that will secure customers to the Energy Network. Solihull College and University Centre have signed and returned the Heads of Terms with no changes. A Customer Information Pack is currently being prepared to support Board and Governor engagement and indicative heat and power sale tariffs will be shared with Phase 1 customers in March to secure commitment from all other customers.

### **5.4 Education and Skills progress**

5.4.1 An Education and Skills Plan is being drafted with Officers to embed community wide learning opportunities into both the commercialisation, construction and delivery phases of the Energy Network. Provision for digital display of Energy Centre operational data has been provided for in the design specification. The delivery of Social Value commitments is already underway and will be facilitated by this Plan.

### **5.5 Council ESCo progress**

5.5.1 The Council ESCo will hold the Energy Network assets, enter into contracts for delivery and customer heat and power supply, and manage and operate contracts on behalf of the Council as sole Shareholder. There are two distinct workstreams in establishing this ESCo:

- a) Devising the company structure and governance of the ESCo as well establishing a management and operational requirements; and
- b) Creating an ESCo brand and marketing materials.

5.5.2 As presented in the OBC, the ESCo will be established as a company limited by shares to provide long term flexibility in how profits are distributed or re-invested, share capital is managed and provide an option for Council exit. The ESCo structure will seek to align with good practice from existing Council subsidiaries. It will also reflect the good governance recommendations from The Report in the Public Interest into Robin Hood Energy published by Grant Thornton, which can be summarised as follows:

- a) Achieving an appropriate balance between Council involvement to hold the company to account and the company having the freedom to manage. Accountability might be managed by means of an agreed framework.
- b) It is not seen as good practice for Councillors to be on the boards of local authority companies, and other mechanisms should be used to ensure that the company meets the Council's policy objectives.

- c) Non-executives (including, where relevant, councillors) should have, in aggregate, the required knowledge and experience to challenge management. This is of particular importance where the company is operating in a specialised sector which is outside the normal experience of councillors.
- d) A properly defined shareholder representative role should be the focus for the relationship between the shareholder (Council) and company, and the channel through which the subsidiary trading company is held to account by the council.
- e) The Council should ensure that it has in place within its own governance structure appropriate bodies to oversee the operation of the trading company.

5.5.3 The proposed ESCO company structure and governance arrangements are presented in Appendix 1. In response to the recommendations in 5.5.2 a) to e), this structure will address good governance in the following ways:

- a) A Shareholder Agreement between the Council and ESCo defining rules of governance, the roles and responsibilities of each party, and define the council's rights in relation to company information to allow the Council to monitor the ESCo performance effectively.
- b) A Shareholder Panel which includes Council Officer and Councillors to oversee the Shareholder Agreement.
- c) An ESCo Board comprised of Officers with relevant experience in the operation and governance of a trading company, including local authority Energy Networks.
- d) A Shareholder Representative who will be the single point of interface between the Shareholder Panel and ESCo. This will be a defined role within a local authority Officer post.
- e) By way of independent audit and scrutiny, it is proposed that the Audit Committee provides periodic oversight of the trading company and its activities.

5.5.4 The ESCo board is expected to be formed of Council senior Officers covering the Commercial, Operational and Financial activities of the ESCo. It is not considered necessary or affordable to appoint a dedicated Executive Director in the initial Phase of Energy Network delivery.

5.5.5 The ESCo Board will direct all management and operational functions of the ESCo and make appointments where required; establishing Service Level Agreements with existing Council departments for other more general support functions including Human Resources and accountancy services. These management and operations roles are summarised in Appendix 2. At present, it is anticipated that the ESCo will require 3.5 Full Time Equivalent posts.

## 5.6 Programme and key milestones towards Full Business Case

5.6.1 With the Contract Notice published on 4<sup>th</sup> February 2021, the programme to submission of the Full Business Case has been updated to November 2021. Subject to Cabinet decision to approve the FBC and proceed with the Energy Network, the ESCO will be incorporated and contractor notified of Award of contract. Subject to HNIP approval of the Construction Funding Request, the DBOM Contract will be signed.

5.6.2 The key milestone dates are as follows:

Milestone	Date
Issue Contract Notice and Procurement Documents.	February 2021
Identification of Preferred Bidder	September 2021
Internal Governance including preparation of FBC and approval of Preferred Bidder	September 2021 to November 2021
Council Cabinet decision (date to be published)	November 2021
Issue Intent to Award letter	November 2021
Incorporate ESCO	November 2021
Standstill Period ends	November 2021
Issue Contract Award Notice (subject to HNIP)	November 2021
Approval of HNIP Construction Funding Request	December 2021
Contract signed	December 2021

## 6. Implications and Considerations

6.1 How the proposals in this report contribute to the delivery of Council Plan priorities:

Priority:	Contribution:
Securing inclusive economic growth.	One of the key aspects of delivering a low carbon future is to move towards net zero without leaving anyone behind. This will be a key aspect of the Low Carbon Energy Framework, and will be embedded in any carbon reduction action including the Town Centre Heat Network. The Energy Network has been designed to allow for future expansion enabling a greater part of the community to benefit, plus the opportunity to utilise the SPV vehicle to



	expand the scope and benefit of the Energy Network.
Planning & delivery for Solihull's low carbon future (to include biodiversity implications).	<p>The UK commitment to net zero emissions by 2050 and WMCA 2041 ambition supports the need to commence the switch from fossil fuels to low carbon or renewable heat alternatives. The developing energy framework will establish a net Zero Action Plan which is part of Solihull's response to the Climate Emergency and will support progress against the net zero targets of 2030 for the Council's own emissions and 2041 for the Borough's emissions as a whole.</p> <p>The Town Centre Energy Network will be a key contributor to the above action plan, supporting long term affordable and low carbon heat supply for town centre occupiers and future connection potential for new build. Through the Energy Network local air quality improvement opportunities are sought via the removal of individual heating plant in connected buildings. This also represents an energy initiative which brings education opportunities to the town centre and builds pride in Solihull's low carbon commitment.</p>
Managing demand and expectation for public services.	There is a high level of public expectation on Local Authorities to act decisively on Climate Change. The Town Centre Energy Network will support this by providing long term affordable and low carbon heat supply for town centre occupiers and future connection potential for new build.
Developing our approach to services for adults and children with complex needs.	None
Making the best use of our people and physical assets.	The Energy Network will enable the removal of individual heating plant in connected buildings and allow for a number of key Council assets to meet decarbonisation targets and lead the way in our response to a low carbon future.

## 6.2 Implications for children and young people, vulnerable groups and particular communities:

6.2.1 There are significant education opportunities for children and the wider community. The Covid-19 pandemic has restricted the ability to engagement with education providers and member of the community in traditional ways, but an Education and

Skills Plan is being created to maximise engagement opportunities and enhance understanding of net zero.

- 6.2.2 The proposed location of the Energy Centre presents a unique opportunity to engage members of the public and local community in low carbon and renewable energy initiatives and the design has considered the educational resources that may be offered at the Energy Centre.
- 6.2.3 The procurement of technical, commercial and legal advisors for commercialisation and contract delivery phases, and the DBOM procurement, enables added Social Value to be delivered in the local area. Existing Social Value commitments by the external advisor team are already being delivered and the Education and Skills Plan will further ensure these benefits are widely realised. The DBOM procurement will focus attention on key Social Value Themes, Outcomes and Measures most important to Solihull and commitments will be required during both construction and operational phases. The Social Value will be measured against the national Social Value Themes, Outcomes and Measures that can be found here: <https://socialvalueportal.com/national-toms/>.
- 6.3 Consultation and Scrutiny:
  - 6.3.1 An EDMG Scrutiny Board meeting was attended in March 2020 to update the Board on the Outline Business Case and recommendations accepted by Cabinet Members.
  - 6.3.2 A pre-planning public consultation was undertaken during January and February 2021 to gather feedback on the proposed Energy Centre design.
  - 6.3.3 The project team hosted a Market Engagement Day in November 2020 to gather feedback on a series of key questions from design, build, operation and maintenance contractors operating in the district heating sector.
- 6.4 Financial implications:
  - 6.4.1 The commercialisation phase of work continues well within its funding envelope having secured funding from both HNIP and WMCA.
  - 6.4.2 Work will be required to devise an ESCo management and operational cost as part of the financial model refinement for FBC.
  - 6.4.3 Following exit from the European Union, the State Aid regime previously used to confirm the maximum allowable grant funding amount is no longer applicable. The State Aid calculation will need to be revisited and reassessed following the publication of guidance from HNIP.
  - 6.4.4 A HNIP Construction Funding Request must be submitted by 28 February 2022 in order to allow draw down of the construction funding. The commercialisation programme continues to progress in advance with this key milestone,
- 6.5 Legal implications:
  - 6.5.1 The following key legal implications are relevant to the commercialisation phase of the project:

- a) The proposed site of the Energy Centre is within the leased area of Tudor Grange Leisure Centre. A draft Deed of Surrender of this land is under negotiation.
- b) A legal opinion on the value of allowable grant funding must be undertaken during commercialisation. Guidance is not yet published on the calculation method for Energy Network projects.
- c) The Council will be required to 'underwrite' the obligations of the ESCo and act as supplier of last resort.
- d) The ESCo will be the main contracting party for the design, build, operate and maintenance contracts required to deliver the District Heat Network and metering and billing aspects of the energy network. It will also contract with each customer in the form of a connection and heat (and electricity where applicable) supply agreement.

## 6.6 Risk implications:

6.6.1 A risk register for the scheme is maintained in accordance with the UK Central Project Management Framework and corporate risk management process. The top 5 risks are outlined below:

Risk	Risk Mitigation Plan
<p><b>Political</b> Loss of political support to continue the project due to re-prioritised projects in light of COVID-19 and/or Cabinet portfolio changes</p>	<ul style="list-style-type: none"> <li>• COVID-19 impact analysis undertaken - will continue to be reviewed.</li> <li>• Continued engagement and sign off by portfolio holder throughout project and key gateways.</li> <li>• Cabinet and Economic Development Scrutiny oversight at key gateways</li> <li>• Report to Full Cabinet and EDMG Scrutiny at end of OBC and at FBC submission</li> </ul>
<p><b>Technical</b> Catastrophic Energy Centre plant failure e.g. explosion, fire, gas engine or heat pump failure that cannot be repaired.</p>	<ul style="list-style-type: none"> <li>• Specification and design to mitigate the risk of explosion or fire by the DBOM contractor carrying out a suitable HAZID/HAZOP design process and to implement recommended measures.</li> <li>• DBOM contract to require contractor to accept this risk, and to take out suitable insurance.</li> <li>• Insurances cover discussion underway with Council's insurance team.</li> <li>• Energy Centre design to mitigate against the threat of an attack/terrorism</li> </ul>
<p><b>Technical</b> Heat Network supply availability lower than expected caused by: - poor design, installation or lack of maintenance, especially water</p>	<ul style="list-style-type: none"> <li>• DBOM contract has penalties for low availability of network to reflect compensation payments to customers</li> <li>• DBOM contractor to be responsible for cost of repairs to network, incentivising high quality in design, installation, operation</li> <li>• DBOM contract to include penalty payments if water treatment not carried out correctly.</li> <li>• KPIs to be defined for use in the contract to enable penalties</li> </ul>

<p>treatment</p> <ul style="list-style-type: none"> <li>- Lack of pressure or temperate at customer connection</li> <li>- Leak on the network resulting in the need for shutdown for repair work</li> </ul>	<p>to be imposed</p>
<p><b>Demand</b> Potential customers will not connect, or planned developments are not brought forward resulting in negatively impacting economic case.</p> <p>Private wire electricity sales are a critical revenue stream for the network.</p>	<ul style="list-style-type: none"> <li>• Meetings with each phase 1 customer to review Heads of Terms</li> <li>• Signed Heads of Terms to be secured to provide Council and DBOM bidders confidence.</li> <li>• The proposed network has limited the number of private wire connections, thereby reducing this risk. Customer interest to be pursued in coming months.</li> <li>• SEL have engaged with the DNO and obtained utilities information to locate substations and existing grid assets which may be purchased / adopted to form part of the PW network.</li> <li>• Demand risk, or delay to securing demand security (heat supply agreement) to be mitigated through considering alternatives for heat and power supply.</li> </ul>
<p><b>Technical/Legal</b> Feasibility of the energy centre location due to:</p> <ul style="list-style-type: none"> <li>- Uncertainty of ground conditions</li> <li>- Lease surrender for land does not come forward</li> <li>- Public concern about proposed location/design of Energy Centre</li> </ul>	<ul style="list-style-type: none"> <li>• Pre Planning Application submitted to planning team for Energy Centre. Full planning application also submitted 10<sup>th</sup> March 2021.</li> <li>• Lease surrender for energy centre land underway- agreement to move existing storage shed.</li> <li>• Public and ward member engagement continues to be a priority.</li> <li>• Site investigations commissioned and ongoing. Network Rail consultation underway.</li> <li>• Structural commission underway to identify structural foundation requirements and increase in capital cost</li> </ul>

## 6.7 Statutory Equality Duty:

6.7.1 In Solihull, on Council led projects the Council's Fair Treatment Assessment (FTA) is used to:

- Help identify the likely impacts on certain protected groups whether such impacts disproportionately affect any protected group.
- Identify the actions we will take to address or mitigate against any negative impact identified from the assessment.

6.7.2 The project team will continue to liaise with the Equality and Diversity Lead to agree the most suitable stage within the project to formalise the assessment.

**7. List of appendices referred to**

7.1 Appendix 1 – ESCo Board and governance structure

7.2 Appendix 2 – ESCo management and operational duties

**8. Background papers used to compile this report**

8.1 None

**9. List of other relevant documents**

9.1 None