BISEPS

Business clusters Integrated Sustainable Energy PackageS

RENEWABLE ENERGY FINANCING AND GOVERNANCE

OPTIONS APPRAISAL AND FEASIBILITY STUDY:

WSCC ADDENDUM

Final report dated 8 March 2019

Contents

Report

1 BACKGROUND

1.1 West Sussex County Council ("**WSCC**") has procured a number of work packages as part of the EU funded project, "BISEPS" (Business clusters Integrated Sustainable Energy PackageS). The Options Appraisal and Feasibility Study dated 6 February 2019 builds on the work completed in the BISEPS Ramboll: BISEPS Manor Royal Re-Energised – Renewable Energy Feasibilities Studies, to analyse optimised technical solutions for the Manor Royal Business District ("**MRBD**") exploring at a high level the potential to maximise on-site energy consumption (and therefore the value of the energy generated) via private wire, local electricity networks, peer to peer trading and other related options. It also provides details on suitable funding mechanisms and business models to support businesses on the MRBD to develop such potential for localised low carbon energy solutions.

1.2 The Options Appraisal and Feasibility Study used three models to analyse the options available for businesses on MRBD:

(a) **Model 1:** building specific technologies and consumption, no trading of energy between businesses

(b) **Model 2**: multi-building, "intelligent" technologies with trading of energy between businesses

(c) **Model 3(a):** site wide energy business across all Clusters with site wide business engagement and site wide trading of energy via sleeved electricity supply arrangements

(d) **Model 3(b):** site wide energy business across all Clusters with site wide business engagement and site wide trading of energy via private wire.

The technical arrangements and summaries of these models are set out in Appendix 1 to this report.

1.3 The conclusion of the Options Appraisal and Feasibility Study showed that a majority of businesses on MRBD are interested in renewables and/or some form of centralised management which could reduce power import prices and increase the value of locally generated power, but a lack of understanding of options available, priority and cost of capital (including perceived cost of capital/ lack of understanding of potential returns and/or savings) inhibit investment. If businesses wished to realise the benefits of economies of scale and intelligent collective management of power, such inertia should be exorcised, and interest exercised in a collaborative manner. This collaborative model was represented in Model 2 and, building on Model 2 with added forms of peer to peer trading, Model 3a and Model 3b.

1.4 The key recommendation of the Options Appraisal and Feasibility Study was that in order to gain momentum for collaboration on energy generation and consumption on the MRBD, the initial focus of further work in Q1/ Q2 2019 should be directed at Model 2 and the creation of a collaborative vehicle for co-operation (the Centralised Energy Management Company ("**CEMC**")), which could create proof of concepts by progressing low carbon projects on the MRBD in stages and encouraging collaboration between businesses in order to achieve best value for power purchase and sale.

1.4.1 From WSCC's perspective, the choice of structuring of project delivery, contracting arrangements and investment strategy, will be influenced by governance and leadership, procurement, vires and state aid, and accounting treatment considerations as well as its and each partner's desired exit strategy, project returns, tax position, separation of risk and limits on liability and any energy-specific regulatory requirements (please see Section 6 of the Options Appraisal and Feasibility Study for further discussion on energy-specific regulatory requirements).

1.5 This WSCC Addendum examines the potential roles WSCC could play in the development of the proposed Model(s) on MRBD, how WSCC could add value, the benefits to WSCC and the risks to WSCC. It also sets out the general framework within which WSCC, as a Local Authority, will need to undertake any relevant activities.

2 EXECUTIVE SUMMARY

2.1 Framework

As a Local Authority, WSCC operates within a specific framework of powers and restrictions. These include: the general powers granted by the Local Government Act 2003 and the Localism Act 2011, the restrictions placed on local authorities to buy and sell power under the Local Government (Miscellaneous Provisions) Act 1976 (as amended by the Electricity Act 1989) and various non-statutory obligations including to act reasonably, take account of relevant factors and consider risks. These are examined in more detail under Section 3 below and will shape the way in which WSCC can engage with the future development of low carbon distribution energy on MRBD (and other similar estates).

2.2 Potential Roles

WSCC has to date promoted the development of low carbon, local energy within West Sussex, through direct development of projects and including through its arrangements with Your Energy Sussex and Robin Hood Energy. There is the potential to undertake a number of different types roles with regard to future development of distributed energy projects, particularly on sites such as the MRBD. Consideration of these roles will be shaped by WSCC's appetite to risk, available capital and restrictions placed on WSCC in its role as a Local Authority, managing public funds. We examine these matters in more detail at Sections 4, 5 and 6 below, but these can be summarised as follows:

(a) **Promoter**: WSCC could continue to promote distributed, low carbon schemes, highlighting the benefits to relevant stakeholders and facilitating (by way of introduction and encouragement of collaboration) those with resources (capital, land, off-take etc) to develop such projects. Separately, WSCC could encourage the relevant planning authority (for example Crawley Borough Council) to promote, via e.g. planning policies or imposing conditions on the grant of planning permission and ongoing obligations in a s106 agreement, decentralised, low carbon energy solutions.

(b) **Funder:** WSCC could invest equity or debt into the CEMC (subject to relevant restrictions on its activity as a Local Authority, in particular, State Aid), taking advantage of its ability to borrow money for investment at favourable rates and its longer-term investment horizon (taking into account the wider and longer-term economic benefits of projects).

(c) **Active Shareholder in CEMC**: As well as lending or investing money into the CEMC to enable it to develop projects on MRBD, WSCC could also take an active role in the establishment and governance of the CEMC.

2.3 Specific risks/ issues for WSCC

As well as ensuring that WSCC act within its powers and adhering to the general statutory restrictions placed on the generation, distribution and sale of power (which are set out under the Options Appraisal and Feasibility Study) WSCC must consider the statutory restrictions placed on the use of public funds/ activities of a public body, including the restrictions on the sale of electricity included under the Local Government (Miscellaneous Provisions) Act 1976 (LGA 1976), the Procurement Rules and the State Aid Rules. Note that this addendum does not intend to provide a comprehensive guide to all legislation applicable to a public body undertaking activities, but sets out at a high level a number of key restrictions that WSCC must take into account before in investing into the MRBD projects/ the CEMC.

3 FRAMEWORK

3.1 WSCC's powers

3.1.1 This note does not intend to provide a comprehensive guide to all the powers and constraints placed on WSCC as a local authority, but sets out at a high level the key considerations WSCC should take into account. We have assumed that WSCC will take project specific advice before engaging in any activities in relation to investment or delivery of low carbon distributed energy on the MRBD, particularly in relation to involvement in the CEMC, as part of the development of project specific business cases.

WSCC's main source of powers to engage in the project will derive from the Localism Act (2011). This Act confers on local authorities the ability to undertake commercial activities as part of its general power of competence. Section 1 (1) of the Localism Act 2011 provides that "*a local authority has power to do anything that individuals generally may do*". This therefore means that WSCC has a general power of competence to engage in the MRBD (and other) low carbon distributed energy schemes. However, this general power does not allow local authorities to do anything that is specifically prohibited in legislation (a '*pre-commencement limitation'*)[1]. We do not examine every possible limitation, however one key limitation is set out below at Section 7.2 in relation to a local authority's ability to sell electricity.

Where a local authority is exercising its general power for a commercial purpose then it must do so using a distinct legal entity[2] and cannot trade in services that they already have a statutory requirement to provide. Accordingly, where the local authority proposes to undertake a joint venture, a special purpose vehicle (SPV) will need to be incorporated as a clean legal structure for the joint venture enterprise (the proposed CEMC structure would work for this purpose).

This SPV may be used as the actual development delivery vehicle or to procure the appointment of a single private sector delivery partner (with supporting supply chain) for the entire construction and operation of each element of a scheme or project, or simply to procure discrete packages of works and services from different contractors (possibly from a procured framework of suppliers) with the SPV potentially being the primary operational company in the SPV/ delivery structure.

3.2 WSCC Strategy

3.2.1 It is clear from WSCC's 2016-2020 Energy Strategy and Action Plan that the progression of low carbon and distributed energy projects are within WSCC's aims. We note that in addition to improving sustainability of its own energy consumption and tackling residential fuel poverty, WSCC has the following objectives and priorities:

- ***Priority 4:*** *To develop the commercial provision of low-carbon energy and energy-related services in West Sussex and ensure the creation and retention of jobs in this area*

3.2.2 We note that this is supported by six Key Principles including:

- ***Maximising business opportunities****: Projects must generate enough income to pay back the initial investment and help to create new sources of income in the longer term. Internal rates of return (IRR) will be examined on a project-by-project basis; however, a starting point IRR of 6% is envisaged.*

- ***Sustainable economic development****: Targeted recruitment and training opportunities will be identified alongside any projects to ensure we get maximum economic benefit from any initiatives.*

[1] Section 2 of the Localism Act 2011

[2] This follows on from sections 93 and 95 of the Local Government Act 2003

- ***Increasing energy security****: Projects must support increased energy security and protect communities from price volatility.*

- ***Reducing consumption and increasing energy efficiency:*** *Projects must reduce energy consumption, leading to lower costs for all.*

3.2.3 Investing in MRBD (and potentially other low carbon, decentralised energy schemes), whether financially or in-kind, can contribute to delivering this strategy.

4 POTENTIAL ROLES: PROMOTER AND PLANNING AUTHORITY

4.1 Promotor

4.1.1 A role that WSCC already undertakes, WSCC could continue to promote distributed, low carbon schemes, highlighting the benefits to relevant stakeholders and facilitating, by way of introduction and encouragement of collaboration, those with resources (capital, land, off-take etc) to develop such projects. It could also assist in commissioning further studies, for example in relation to the viability of the private wire network (under Model 3b) and in assisting with identifying potential funding options for such infrastructure. It could also continue to take a role in defining the scale and timing of the potential development of the CEMC (under Model 2), publicising the opportunity and communicating the benefits of this Model to key stakeholders. As a trusted local entity, WSCC has a unique ability to attract developers, investors, operators and customers to participate in the scheme.

4.1.2 This role would of course be limited in its "returns" to WSCC in all senses, as there would be no revenue streams generated which would flow to WSCC and WSCC's ability to ensure projects progress would be limited.

4.2 Planning Authority

4.2.1 Although WSCC is not itself the relevant Planning Authority, WSCC could encourage for example, Crawley Borough Council (CBC), in its role as Planning Authority, to promote, via planning requirements, decentralised, low carbon energy solutions. This could be via, for example, an obligation to consider the viability of such solutions before any new builds are permitted.

4.2.2 In relation to the development of a district heating network across the MRBD (and wider), CBC could require under its policies that the networks be incorporated into new developments of sufficient scale and adequate justification to be given by developments if it is not and/or for new district heating schemes being installed to be "ready" for connection to neighbouring schemes.

4.2.3 CBC in its role as Planning Authority could also promote specifications for buildings that make their design and construction better suited to on-site generation build, connection to a district heating scheme and a private wire electricity network – if done well, this can generally help raise the energy efficiency and sustainability standards for buildings.

4.2.4 Finally, CBC could in theory (provided compatible with their wider planning policies) impose conditions on the grant of planning permission and ongoing obligations in a s.106 agreement in relation to the development of on-site low carbon energy solutions and could simplify the construction of generation plant and networks through, for example, a Local Development Order (LDO).[3] LDOs grant automatic planning permission for specified development in defined areas. They are flexible and can be used for different uses and developments in different areas and streamline the planning process.[4]

[3] Introduced by the 1990 Town and Country Planning Act

[4] What types of area-wide local planning permission are there? | Planning Practice Guidance

5 POTENTIAL ROLES: FUNDING

5.1 Equity

5.1.1 In order to "kick-start" the MRBD project, WSCC could seed the CEMC with equity made available from internal reserves, including prudential borrowing.

5.1.2 An advantage to the CEMC of receiving equity over debt is that equity investors, although seeking a higher return than debt, accept that they will only get that return when the company makes a profit. Therefore, the cashflow risk of a new venture being required to service debt (interest and capital repayments) while seeking to create revenue is mitigated.

5.1.3 Equity investment is defined not by a required rate of interest but by an anticipated Return on Equity ("RoE"), which is a function of the anticipated dividend stream and the exit value of the shares. This can vary considerably. WSCC's required rate of return will be a function inter alia of its cost of borrowing, perception of project risk and discount for anticipated social benefits.

5.1.4 With PWLB at c 2.00% to 2.50% this is relatively low but WSCC would have to service this debt while waiting for CEMC to generate profits. Further, as a public body with the various restrictions placed on the use of public funds (including its fiduciary duties), WSCC may require a higher rate of return to offset the perceived risk of the investment. Note in these scenarios, State Aid considerations will of course also be key (see further Section 7.4).

5.1.5 Other equity funding options for the CEMC may include:

(a) **Private Equity.** Numerous funds specifically targeting clean energy, including energy networks, exist although their requirements are likely to be in the double-digit (>10%) RoE requirement.

Lower RoE requirements are associated with the specialised form of private equity such as Venture Capital Trusts and Enterprise Investment Schemes (EIS) however, since changes to the schemes brought about in April 2016, generation assets have not been able to access these funds.

(b) **Corporate Venture Capital ("CVC").** Corporate investors may be perceived as a form of 'empathetic' funder, interesting in setting up structural collaborations with external ventures or parties to drive mutual growth. Examples of this might include energy companies, existing third party ESCo providers and, in particular, the BID and existing MRBD businesses wishing to benefit from both cheaper energy and returns on the commercial enterprise delivering it.

(c) **Crowdfunding**. Crowdfunding can also be raised in the form of equity, whereby there is no regular interest or bond coupon payable, just dividends as and when the business is profitable. This has the added advantage of being a collective of smaller individual investors who, While empathetic to its social and environmental goals, would not require or create control or undue influence over the CEMC.

Application to MRBD:

Model 1	No	No SPV or WSCC investment role in assets developed by and for individual businesses only
Model 2	Yes	WSCC could drive the development of the CEMC as a cornerstone investor, however it will have restrictions in relation to the risk it is prepared to accept and State Aid considerations.
Model 3	Yes	

5.2 Debt

5.2.1 The availability of traditional senior debt funding depends on (a) confidence in the availability of revenues to service debt ("probability of default") and (b) the perceived level of security available to repay the loan in the event of default ("loss given default").

(a) **Unsecured or Non-Recourse Loans.** The risk averse nature of senior lending means that, absent the presence of any form of enhanced security or recourse (see below) it is unlikely that a private sector funder (bank) will have an appetite for lending into the CEMC until it has proven revenues.

The one exception to this may be **Crowdfunding** platforms where those with a localised or socially responsible investment appetite may have a particular interest. However, as this relies on a large number of individuals and corporations to invest, it is not best suitable as an anchor investment strategy.

(b) **Secured Loans.** Security in a project finance can be enhanced by a number of factors including:

- Guaranteed revenues (take-or-pay) with strong counterparty credit
- Securitisation of government subsidies such as RHI, FiT (as will be replaced by the Smart Export Guarantee), etc
- Involvement of Concessionary Funds to offset risk and increase leverage
- Recourse to the residual values of project assets
- Recourse to property rights or other contracts of value held by the CEMC

This may work for individual businesses and/or projects with MRBD but it unlikely to be available for the CEMC with public sector intervention.

5.2.2 The option exists for WSCC to lend the CEMC money unsecured at a rate and on terms that are favourable to its business model. Ultimately, this rate is likely to be higher than WSCC's own cost of borrowing (PWLB) in order that WSCC can service the underlying debt and make a profit (or 'arbitrage') but it must also be cognisant of State Aid limits. In order to enhance the financial viability of the CEMC, the terms of the loan are likely to be more favourable than those generally available in the market. This generates a State Aid benefit which must be kept within allowable limits.

5.2.3 Of course, WSCC could sponsor a fund that provides concessionary finance to individual projects, but this would also attract an ongoing overhead for management of the capital, evaluating applications and managing individual investments.

Application to MRBD:

Model 1	No	No SPV or WSCC investment role in assets developed by and for individual businesses only
Model 2	Yes	WSCC could provide a lower risk, economically viable funding solution to enable the CEMC to establish itself, while earning a fixed return for WSCC through arbitraging PWLB. However, note again the need to consider the State Aid restrictions placed on the funding.
Model 3	Yes	

5.3 Guarantees

5.3.1 An alternative to making a financial investment (equity or debt) may be for WSCC to provide a form of guarantee:

(a) **Parent Company Guarantee[5].** The best form of security for CEMC would be a parent company guarantee ("PCG") from WSCC, which would enable it to raise 'secured' debt at the most favourable rates available in the market. The risk still exists for WSCC that it would have to make good should the CEMC fail, but that is no different to losing debt or equity on the project, other than no capital is required up front.

(b) **Demand Guarantee.** An alternative may be an LBE energy demand guarantee that, depending on the amount of demand and other terms of the guarantee, would provide sufficient assurance to lenders that the CEMC would achieve sufficient revenues to reliably service their debt and thus reduce risk premiums and the interest rates.

5.3.2 Specific advice would be required (and separate specialist tax advice) as to the appropriate State Aid and accounting treatment by WSCC of either form of guarantee, given the specific context and contractual arrangements, but it is understood that Local Authorities are subject to the FRS 102 framework as adapted by CIPFA and IASAAC Code of Practice. FRS102 provides that:

Financial guarantee liabilities are not recognised when it is not probable that the entity will be required to transfer the economic benefits in settlement. Instead the entity will need to disclose a contingent liability in the notes to the accounts.

Therefore, financial guarantees may be considered contingent liabilities that need not be on-balance sheet to the public sector.

5.3.3 Financial Guarantees need not considered to be State Aid provided that the guarantee does not cover more than 80 % of the outstanding loan or other financial obligation[6]. Note again that specific legal advice should be sought on the detailed arrangements if a guarantee was considered to be an option for WSCC support to the CEMC.

Application to MRBD:

Model 1	No	No SPV or WSCC guarantee role in assets developed by and for individual businesses only
Model 2	Yes	A PCG for the CEMC would enable it to tap the private funding markets at much more affordable rates and advantageous gearing
Model 3	Yes	A PCG or demand guarantee for use of the private wire could unlock the viability of any private investment, enabling the highest carbon saving and social NPV solution

[5] An example of a Local Authority PCG is Glasgow City Council, which has a guarantee to its property subsidiary to cover 80% of a Barclays loan facility. It can be seen from the Financial Statements that they are classed as contingent liabilities, given they are unlikely to be called upon. See https://www.glasgow.gov.uk/CHttpHandler.ashx?id=42909&p=0

[6] See https://eur-lex.europa.eu/legalcontent/EN/TXT/PDF/?uri=CELEX:52008XC0620(02)&from=EN

6 POTENTIAL ROLES: OWNERSHIP OF CEMC

6.1 Three major distinctions of ownership models for utilities can be identified:

- Full public control by the state or municipality
- Mixed ownership and management – public and private (and potentially public and public)
- Full private control

The BISEPS study and recommendations are based on a collaborative approach to the energy transition on MRBD, supported by WSCC. Therefore, with the exception of the consideration of WSCC owning distribution assets, the notion of WSCC being the sole investor/owner (i.e. full public control) is not considered.

6.2 While operation, management, financing and customer relations are factors that may lead to models that include O&M contracting, leasing or ESCo concessions, when considering a mixed ownership structure for the CEMC, the following options may apply:

6.3 Mixed Ownership: Minority Private Partnership

6.3.1 Bringing a minority private partner into the CEMC may attract specific capital and management skills while retaining majority municipal ownership and control. This can be achieved through either:

(a) Procurement, whereby WSCC (and the BID) selects a partner[7].

or

(b) Initial Public Offering ("IPO") or share offering, whereby the investor chooses the energy company[8].

6.3.2 A majority interest, if available, would give WSCC control over the CEMC as opposed to more direct influence should it so desire. However, a majority interest comes with scale and balance sheet issues, particularly if this were also to raise expectations of impartiality and thus similar investment support to other business districts within West Sussex, and of course procurement considerations (see Section 7.3).

Application to MRBD:

Model 1	No	No SPV or WSCC investment role in assets developed by and for individual businesses only
Model 2	Yes	WSCC could drive the development of the CEMC albeit WSCC would need to consolidate its assets on balance sheet and consider its procurement approach.
Model 3	Yes	

6.4 Mixed Ownership: Majority Private Partnership

6.4.1 An extension of the equity release model is to sell a majority of the shares to an investor (or investors), ceding both everyday management responsibility and control. The minority holding provides some influence in the company by agreement with the majority owner; albeit structures and share classes can be devised such that, for a period at least, public control can be exercised even with a majority private sector ownership.

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[7] For an example of this structure, see [Link required: *Dusseldorf sold 49.9% of shares in the municipal multi-utility to EnBW in 2001 (subsequently increased to majority shareholding*)]

[8] For an example of this structure, see [Link required: *Brescia, where 30% of the shares in the multi-utility company are traded on the stock market and 70% retained by the municipality*)]

6.4.2 In this way, a relatively small investment provides a vested interest and, if available, a seat at the board table in order to influence the strategic direction of the CEMC. This may be attractive to a capital constrained Council interested in ensuring an alignment of energy development with its strategic objectives[9].

Application to MRBD:

Model 1	No	No SPCV or WSCC investment role in assets developed by and for individual businesses only
Model 2	Yes	WSCC could be a founder but minority partner in the creation of the CEMC[10] without having the business on balance sheet
Model 3	Yes	

6.5 Full Private Ownership with Municipal Support

The final form of CEMC ownership is one which is wholly owned by the private sector but the local municipality fully supports the company through a separate collaboration agreement. Such support would be based on political intention to introduce and expand local energy generation and networks in pursuit of strategic aims. This is similar to the Promotion Role discussed at Section 4.1 above, however involves more formal involvement via a collaboration agreement[11] which could set out binding outcomes and obligations on the parties.

Application to MRBD:

Model 1	No	No SPV required for assets developed by and for individual businesses only
Model 2	Yes	WSCC would be a stakeholder and utilise influence and control (planning) to support the CEMC without being an investor; promoting and directing commercial provision and utilisation of low carbon energy
Model 3	Yes	

6.6 Ownership of specific assets

6.6.1 Many decentralised energy networks are vertically integrated into a single entity (this is particularly true in the decentralised heat sector). However, examples exist whereby the generation assets and the distribution (and in the case of electricity, private wire) networks are owned and operated by separate companies. Historically such division resulted from power companies taking responsibility for generation and the local municipality being responsible for distribution and sales. In relation to electricity, following privatisation and as part of the process to introduce competition, the monopoly elements of the market (transmission and distribution) were separated from generation and supply.

6.6.2 In privatised models the differing characteristics of distribution and generation assets lend themselves to different investment approaches; high up-front capital cost followed by steady,

[9] For an example of this structure, see [Link required*: Prague, using a 'golden share' model*)]

[10] A potential leadership role for the Manor Royal BID

[11] For an example of this structure, see [*Link required: Southampton, where Engie owns and operates the Southampton District Heating Company, working with the District Council to promote DH for its environmental benefits and to support economic viability.]*

predictable long term returns through use of system charges for the distribution networks vs lower capital, higher operating and lifecycle costs of generation equipment, subject to market forces.

6.6.3 With WSCC's strategic role in energy and the desire to create efficiency and resilience through connectivity between networks across the county, the opportunity to engage with and influence more strongly the CEMC distribution networks (private wire and heat pipework) may be attractive to WSCC.

6.6.4 Pipe infrastructure as an asset class may be more appealing to the Council with lower risk, longer term unitary proceeds suited to public sector and pension fund investors. Although WSCC already has 'form' in owning energy assets, the more resource intensive management of generation assets with prevailing market risk may be less attractive to public body administrators.

6.6.5 Consideration of private wire infrastructure for the transmission of electricity will require a detailed analysis to establish economic and physical feasibility. To the extent that WSCC were considering investment into this asset class, following the detailed physical and economic feasibility analysis (i.e determining whether Model 3b is possible), considerations would need to be given to the statutory restrictions set out under the Electricity Act 1989 in relation to distribution (see further detail under the Options Appraisal and Feasibility Study) and what entities would be best placed to undertake the ownership and/or operation role of this infrastructure[12].

6.6.6 **Application to MRBD:**

Model 1	No	There is no distribution network required for self-consumption models
Model 2	No	There is no private wire distribution network required
Model 3	Yes	Model 3 could be developed with two separate asset classes with generation assets owned by the CEMC and/or individual businesses, whilst distribution assets could be owned by a separate entity (such as WSCC), with long term stable revenues obtained from use of system charges.

[12] For an example of a municipality retaining ownership of a private wire network, see [*Link required: Warsaw: Vattenfall bought the CHP generation company in the privatisation process, while the distribution company, SPEC, was retained by the municipality (now owned by Veolia)].*

7 LEGAL CONSIDERATIONS

As well as the need to establish that WSCC has the necessary powers to enter into its chosen role in relation to MRBD as set out above, WSCC will need to consider various other restrictions on its activities, including general public law duties, its ability to sell heat and electricity and Procurement and State Aid implications. As set out above, this note does not intend to provide a comprehensive guide on these issues, but sets out at a high level the considerations that WSCC must make before in investing into the MRBD projects/ the CEMC.

7.1 General local authority duties

While it may be clear-cut that sufficient statutory powers exist for WSCC to engage in the MRBD project (see Section 3.1 above), WSCC should nonetheless take account of its fiduciary duties and the degree to which its involvement in the projects and particularly any investment into the CEMC, may expose WSCC to project risks (especially any financial risks). The existence of powers does not absolve an authority from acting prudently. The Section 151 officer[13] of a local authority, in particular, will take this into account. This will be especially important where WSCC gives any guarantees (see Section 5.3).

Depending on the role WSCC decides to take, there may be a range of other legal powers to consider and matters ancillary to that and specialist advice should be sought once a specific role is pursued. For example, if the CEMC is wholly or majority owned by WSCC, there will be a need to consider directors' duties, indemnification/insurance of directors, conflicts of interest generally, plus company audit and secretarial functions.

WSCC should also consider their duty to achieve best value and demonstrate that they have fulfilled their other public law duties.

7.2 Restrictions on local authority power to sell electricity

7.2.1 Although this is frequently overlooked, local authority power to sell electricity is still restricted and, to the extent that the CEMC might be controlled by WSCC (where for example, the CEMC is set up initially by WSCC/ WSCC is a majority shareholder), the restrictions applying to local authority involvement in the sale of electricity will apply the CEMC for so long as it remains under the Council's control.

7.2.2 The LGA 1976 prohibits Local Authorities from selling electricity unless produced in conjunction with heat. Section 11 sets out as follows (emphasis added):

[13] An officer appointed by a local authority under section 151 of the Local Government Act 1972 to ensure the proper administration of their financial affairs.

(1) Subject to subsections (2) and (3) of this section, a local authority may—

(a) produce heat or electricity or both;
(b) establish and operate such generating stations and other installations as the authority thinks fit for the purpose of producing heat or electricity or both;
(c) buy or otherwise acquire heat;
(d) use, sell or otherwise dispose of heat produced or acquired or electricity produced by the authority by virtue of this section;
(e) without prejudice to the generality of the preceding paragraph, enter into and carry out agreements for the supply by the authority, to premises within or outside the authority's area, of such heat as is mentioned in the preceding paragraph and steam produced from and air and water heated by such heat.

(2) Nothing in subsection (1) of this section shall be construed as exempting a local authority from the requirements of Part I of the Electricity Act 1989.

(3) Except in such cases as may be prescribed, a local authority shall not be entitled to sell electricity which is produced otherwise than in association with heat.

7.2.3 This restriction was partially lifted by the Sale of Electricity by Local Authorities (England and Wales) Regulations 2010 (LA Regs 2010). However, the relaxation under the LA Regs 2010 only relates to electricity generated from renewable sources. The provision states as follows (emphasis added):

2. Exception from the restriction on selling electricity in section 11(3) of the Local Government (Miscellaneous Provisions) Act 1976

For the purpose of section 11(3) of the Local Government (Miscellaneous Provisions) Act 1976, a local authority shall be entitled to sell electricity produced from the following sources—

(a) wind;
(b) solar;
(c) aerothermal;
(d) geothermal;
(e) hydrothermal and ocean energy;
(f) hydropower;
(g) biomass;
(h) landfill gas;
(i) sewage treatment plant gas; and
(j) biogases.

7.2.4 Therefore, it would be ultra vires (i.e. outside of) WSCC's powers to use the CEMC (for so long as it remains under the Council's control) to sell any electricity other than:

(a) electricity which the CEMC had generated itself in association with the production of heat (i.e. its own solar or CHP); and

(b) electricity which the CEMC had generated itself from any of the listed renewable energy sources; and

(c) electricity which the CEMC had acquired from someone else but which was generated from any of the listed renewable energy sources.

7.3 Procurement

7.3.1 Under the Procurement Rules, established under the Public Contracts Regulations 2015, the Utilities Contracts Regulations 2016 and the Concessions Contracts Regulations 2016, WSCC will be considered to be a "contracting authority" and required to comply with the rules in relation to its procurement activities.

7.3.2 The obligation to comply with the Procurement Rules could extend to the CEMC to the extent that it is considered to be a "public undertaking". This is an undertaking over which a contracting authority exercises directly or indirectly a dominant influence by virtue of (a) their ownership of that undertaking; their financial participation in that undertaking or (c) the rules which govern than undertaking. Most obviously this will be the case where the contracting authority has a "dominant interest" by virtue of its share ownership, financial stake, or voting rights.

7.3.3 Where the CEMC is established by WSCC, either as a wholly owned subsidiary or as a JV structure, it could therefore be considered to be a public undertaking and subject to the Procurement Rules.

7.3.4 The following guidance sets out the circumstances in which each of the Public Contracts Regulations 2015, the Utilities Contracts Regulations 2016 and the Concessions Contracts Regulations 2016 would apply to a distributed energy scheme and analyses the various combinations of ownership that WSCC could take in the CEMC (for example, public sector led/ private sector ownership, public/ private joint venture: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/717804/Procurement_and_State_Aid_guidance.pdf

7.3.5 Note that where WSCC is an investor only, it is likely that the Procurement Rules will *not* apply.

7.3.6 Where the Procurement Rules do apply to WSCC or CEMC, the relevant financial thresholds should be checked to determine whether the relevant contracts being procured will be caught[14]. To the extent that they are, an appropriate procurement route will need to be followed.

7.4 State Aid

7.4.1 State aid can occur whenever state resources are used to give selective assistance to an undertaking. Article 107(1) of the Treaty on the Functioning of the European Union sets out the conditions which must apply for a measure to represent State aid:

"Save as otherwise provided in the Treaties, any aid granted by a member state or through state resources in any form whatsoever which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods shall, in so far as it affects trade between member states, be incompatible with the internal market"

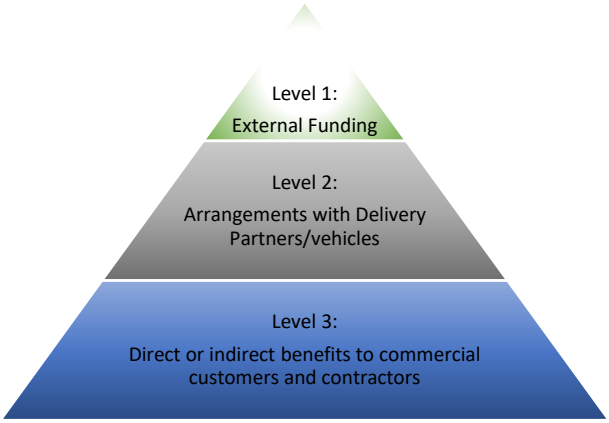
7.4.2 An 'undertaking' is any organisation engaged in economic activity and can include non-profit organisations, charities and public bodies. An entity providing energy (electricity and heat) under discretionary powers will virtually always be an undertaking for State Aid purposes.

7.4.3 BEIS has prepared clear and useful guidance on the basics of State aid which is available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/443686/BIS-15-417-state-aid-the-basics-guide.pdf

7.4.4 State Aid will be relevant to most of WSCC's activities in relation to this project, including the use of public funds (including European funding) as any agreement involving state resources and an undertaking – even a simple contract for services - can attract State Aid considerations. Different considerations will apply depending on the delivery structures used and the parties involved.

7.4.5 Broadly, State Aid considerations are likely to arise at three levels in relation to local energy schemes:

[14] The Crown Commercial Service Procurement Policy Note: New Threshold Levels 2016 sets out the current thresholds



7.4.6 External Funding

Firstly, any external funding (being from state resources) injected into the scheme could give rise to State Aid considerations. WSCC will not only need to satisfy themselves that the project is State Aid compliant, but also to satisfy any of its funding bodies (including those in receipt of EU funding). This may involve obtaining legal opinions confirming the State aid position addressed to both the funding body and WSCC. Where external funding has been obtained this does not automatically preclude further external funding being utilised in the same scheme, although different funding sources may apply their own conditions restricting the use of separate external funding.

7.4.7 Joint Ventures and Wholly Owned Companies

State Aid issues will clearly be relevant where a private sector partner is brought on board to help deliver the project. Note that an 'undertaking' for State Aid purposes is based upon the recipient's activities, not their status as a public or private body[15]. This means that aid to public authorities offering goods or services on a market must be considered just as carefully as aid to private sector bodies.

Similarly, a company or other entity wholly owned by the local authority which undertakes any commercial elements of a project is likely to be an undertaking and so any funding or support provided to such an entity, such as the CEMC will also need to be considered for State Aid purposes.

7.4.8 Downstream aid to third parties

If State resources are used to generate energy which is then sold at below-market rates (i.e. below the rates the recipients would be able to obtain elsewhere on the available market), the sale of this energy to undertakings has the potential to be illegal State Aid to those undertakings. When developing a commercially attractive offer, for example including discounted rates on price for MRBD businesses, care will need to be taken to avoid illegal State aid.

In addition, aid to any contractors or partners used in the delivery of the project must be considered carefully alongside any public procurement obligations.

7.4.9 Sub-economic schemes

It may be that financial modelling shows that elements of MRBD scheme will deliver returns below thresholds that would be acceptable to the private sector (this may be the case, for example, with the private wire element of the scheme). If that is the case, but the scheme or involvement is considered worthwhile for broader economic reasons or wider social or environmental reasons,

[15] See further: page 4 of this BEIS Guidance.

then support, in the form of State Aid is likely to be necessary for the scheme to progress. In that case, certain exemptions or notifications will need to be relied on.

7.4.10 Revenue Generating Projects

The Common Provisions Regulations[16] pertaining to projects which generate revenues aim to ensure the effective use of public resources and avoid the over financing of projects. The regulations make separate provisions for projects which generate revenues after completion (article 61) and those which generate revenues only during implementation (article 65 (8)).

Pursuant to Article 61(6), for projects where it is objectively not possible to estimate in advance the revenue which will be generated with a reasonable degree of confidence, there is an option to leave the calculation on net revenue until after the completion of the project (but before programme closure) at which point any necessary deduction should be made. Article 61(6) requires that "the revenue generated within three years of the completion of an operation shall be deducted"

Net revenue is defined in the regulations as: "Cash in-flows directly paid by users for the goods and services provided by the project……, less any operating costs and replacement costs of short-life equipment incurred during the corresponding period". Ie it is a measure of profitability.

In the case of WSCC and the BISEPS studies, two scenarios arise which could be considered to be revenue generating projects:

(a) **Revenue from BISEPS report.** If, post completion, WSCC were to make the report available for a fee then it would have to consider if it were doing so as a 'state aid relevant' party or as an economic undertaking.

Typically, Local Authorities are relevant parties as, due to the local aid criteria, they are exempt state aid or it may be that eg the *de minimis* rule might apply depending on the entity receiving the revenue and the gross equivalent of all aid that it is receiving, including aid outwith the BISEPS project. Assuming WSCC is acting as a relevant party then the obligations relating to revenue generating projects do not apply per Regulation (EU) No 2018/1046, (Article 272 (26)(e) modifying Article 61(8) of Regulation n°1303/2013).

In the event that WSCC was not deemed to be a state aid relevant party in this context, then the income and expense components of any net revenue would have to be monitored for 3 years post completion, even if there were no eventual profit.

(b) **Revenue from Investment in a scheme**. If WSCC were to receive revenues from the CEMC, or any economic undertaking deriving benefit from the BISEPS study, it would have to consider whether (i) the BISEPS report constituted a state resource and (ii) whether it was being used to give selective assistance. To the extent that the BISEPS study and the outcome of any cluster intervention arising will be publicly available, then it is unlikely that its use in MRBD could be considered selective.

Should the value of the BISEPS study be deemed state aid in the specific context, then the value of that aid would have to be assessed and factored into the overall value of WSCC's contribution as set out above.

We would flag that, to provide specific advice, the specific BISEPS grant conditions and any specific proposed revenue or investment would be required, together with the overall aid position of the recipient. Therefore, if WSCC has further concerns regarding the status of the funding provided for the BISEPS study, we would recommend that it seek a specific legal opinion on this point.

[16] https://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:347:0320:0469:EN:PDF

7.4.11 Quantifying State Aid

In order to address or eliminate any State Aid, the amount of potential aid must first be quantified. The following table provides a simplified approach to quantification:

Measure	Quantum of aid
Investment	Value of the investment. Where MEOP provides that a private investor would not make the investment in question, the quantum of aid will be the total investment value. If MEOP provides that a private investor would make an investment on different terms (in a manner which can be valued) the quantum of aid will be the difference between the two values.
Grant	Value of grant (i.e. the amount)
Disposal of assets or shares at undervalue	Difference between 'market' value and direct value obtained. See the Commission Guidance Paper on State aid compliant financing, restructuring and privatisation of state owned enterprises
Disposal of land	Difference between 'market' value of land and direct value obtained – see Commission Communication on sales of land
Loans at discounted interest rates but on otherwise 'market' terms	The difference between the total interest to be charged over the term of the loan and the total interest which would be charged over the term of the loan if an appropriate market rate of interest were to apply. The Commission Communication on establishing the reference rate sets out how to establish the market rate of interest. See also part 4.2.3.4 of the Commission Communication on sales of land
Guarantee	The market value of the guarantee or, in certain circumstance where the guarantee applies to reduce the interest payable under a loan, the total reduction in interest payments attributable to the provision of the guarantee. The Commission Notice on the application of Articles 87 and 88 of the EC Treaty to State aid in the form of guarantees and the related Corrigendum provide further guidance on this.
Provision of services or access to resources (such as premises) at nil cost or at a discount	If provided free of charge, the market value of the services or access provided. If provided at a discount, the difference between the market value and the discounted price charged.

7.4.12 Consequences of granting State Aid

Granting illegal State aid can give rise to several significant risks, including:

(a) orders for the recovery of aid (regardless of the impact on the recipient);

(b) aid schemes being suspended;

(c) withdrawal of the right for a member state or public authority to use the General Block Exemption Regulation;

(d) claims for damages from competitors of aid recipients;

(e) judicial review proceedings against the granting authority; and

(f) fines from the Commission.

However, note that the following BEIS Guidance encourages public bodies to take a risk-based approach[17]. These risks can also be mitigated by including appropriate contractual protection in key

[17] See page 97 for more detail.

documents, such as provisions requiring the repayment of aid and interest and indemnities in the event of a finding of illegal State aid.

7.4.13 Avoiding/ addressing State Aid

Once the quantum of any State Aid has been established, it will be necessary to either identify an appropriate exemption or obtain approval from the European Commission by notifying it of the proposed scheme through the Department for Business, Innovation & Skills. The key relevant exemptions are:

(a) De Minimus Regulation: Where only a small quantum of aid is to be provided, it may be possible to rely on the De Minimis Regulation. Further guidance on the application of the De Minimis Regulation is available at paragraph 8 of this BEIS Guidance.

(b) General Block Exemption Regulation: The current General Block Exemption Regulation contains several exemptions permitting aid for specific projects. See page 8 of this BEIS Guidance.

(c) Market Economy Operator Principle (MEOP): Generally, loans, guarantees and contracts for goods, works or services entered into at market rates will comply with the MEOP. If a local authority can demonstrate that a private operator operating under normal market economy conditions would act in the same way as the local authority, then the action taken will not result in illegal State aid. This is the Market Economy Operator Principle ("*MEOP*"). BEIS' detailed guidance on State aid deals with MEOP at page 16.

The following BEIS guidance provides a detailed analysis of State Aid for distributed energy schemes:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/717804/Procurement_and_State_Aid_guidance.pdf

8 RECOMMENDATIONS

Following completion of the Options Appraisal and Feasibility Study we have recommended that a number of next steps are undertaken, firstly to determine whether there is sufficient appetite within WSCC to progress the project (and what Model is preferred) and secondly, to address key issues of viability in order to develop more detailed business plans. Within the context of those recommendations, specific actions for WSCC may be:

8.1 Establish critical mass of stakeholders

8.1.1 Recommend that WSCC leads in the mapping of MRBD businesses and selection of core stakeholders.

8.1.2 Once these businesses are identified, the technical, commercial and financial advice can be tailored to the specific circumstances for WSCC to make an informed decision on the nature of its ongoing involvement.

8.2 Encourage businesses progressing Model 1 to consider Model 2

8.2.1 Where businesses are only interested in a Model 1 approach, via the BID, WSCC should encourage progression of unilateral low carbon on-site, but to do so with a view to wider future engagement, such that the structure adopted does not though preclude them from joining a collaborative project in due course.

8.2.2 WSCC should encourage businesses to participate in Model 2 (with a view to Model 3a or Model 3b if proved economic in the future) and make them aware of the benefits that should be realised under Model 2 as identified in the Options Appraisal and Feasibility Study.

8.3 Progress Model 2

8.3.1 Recommend that, in order to gain momentum, the initial focus of further work, led by WSCC, in Q1/ Q2 2019 be directed at Model 2, which could be established at relatively low cost and complexity as in its initial basic formulation, Model 2 is simply the creation of a collaborative vehicle for co-operation, which can create proof of concepts by progressing low carbon projects on the MRBD in stages and encouraging collaboration between businesses in order to achieve best value for power purchase and sale.

8.3.2 As with the BISEPS study, the onus of funding this activity will be on WSCC but, as with any start - up, allows WSCC to be in control as the majority shareholder; both in terms of the scope of development work being undertaken and the future shareholding in the CEMC.

8.3.3 At each stage, WSCC should review its role in the CEMC, its available funding and risk appetite and determine the basis on which it wants to continue to be involved as further calls on capital investment are required; either as an investor or supporting stakeholder through divesting, holding or increasing its initial shareholding.

8.4 Explore feasibility of Model 3a

8.4.1 Following establishment of CEMC and progression of Model 2, recommend determining the appetite for businesses to trade their power locally, utilising corporate PPA structures

8.4.2 Note that there is nothing to prevent the CEMC exploring Model 3a alongside projects under Model 2, we simply propose that the Model development is undertaken in stages, to enable stage by stage engagement by WSCC and the MRBD businesses and a period to establish proof of concept.

8.5 Explore feasibility of Model 3b

8.5.1 Recommend that further desktop studies are undertaken to establish the technical feasibility of a private wire structure across the MRBD (either privatising the existing infrastructure of laying a new microgrid). Establishing feasibility on a cluster by cluster and then on a whole MRBD estate

basis may be a useful exercise if it is likely that some clusters may be more technically feasible than others.

8.5.2 If viable, this is likely to be the point at which a significant amount of additional capital is required to install the private wire network. This may be a gateway decision point for WSCC to consider its future role:

(a) Investing further to maintain full or majority ownership. Such as decision may give rise to a revival of the motives for public ownership and strengthen the relations between WSCC, MRBD and its businesses. A progression of this public ownership may be when WSCC starts to buy and operate energy systems in other business districts. The management skills in the MRBC CEMC are then used in other areas;

(b) Holding the existing shareholding but allowing dilution through the entry of additional shareholders in the business. This would allow WSCC to maintain a vested interest and influence in the CEMC but potentially change from being a majority (on balance sheet) investor in a lower-valued development business to a minority (off balance sheet) investor in a significant venture; or

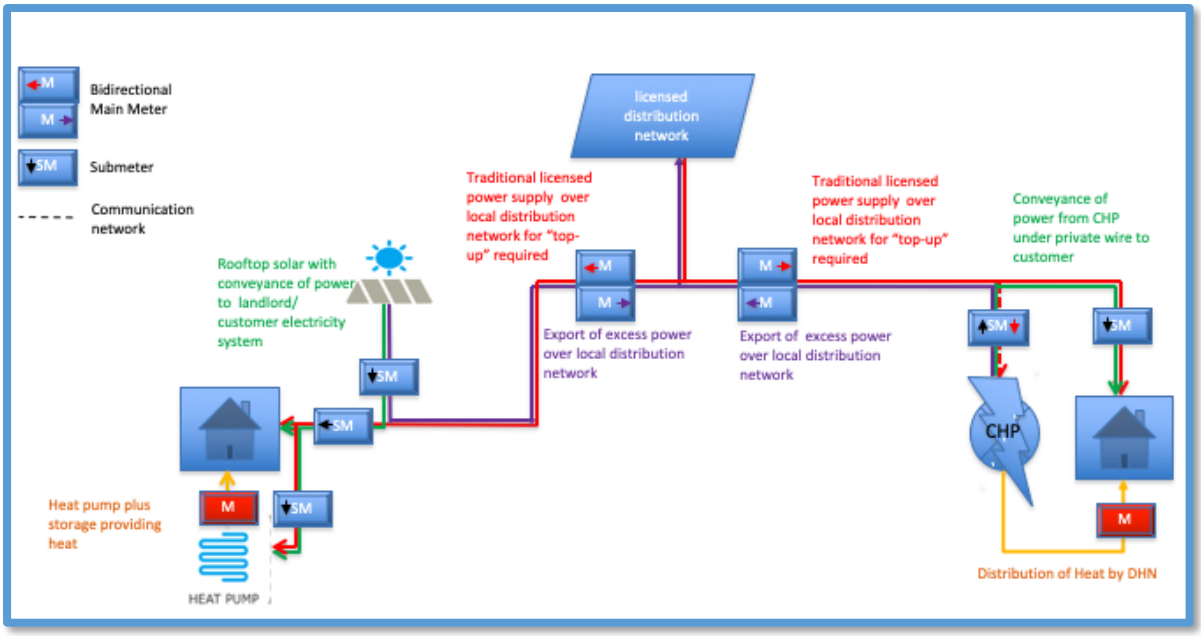
(c) Divestment of its shareholding in order to allow private-sector commercialisation of the CEMC. Exit timing is the most crucial decision in investing after the initial equity investment decision. The exit crystallises returns for investors and until exit any return is a projection and not a reality. The importance of the exit decision lies in timing. Waiting for the highest price in circumstances where there is risk the market may fall away increases risk and is not a sound strategy. Equally, selling a successful investment too early may leave additional value that could have been realised through a more patient approach. Simply because an investment was originally entered into as a "long-term" investment does not mean that it should not be exited earlier if the right circumstances apply. Such considerations are even more pertinent for a public body exiting (in part or in full) during development, when there is considerable public risk capital invested and likely credit enhancement created through contracted returns from the public sector, yet the value is suppressed by lack of proven revenues.

ANNEX 1:

Model Overviews

1. Model 1: Simple building-specific technologies

Model 1: Physical structure



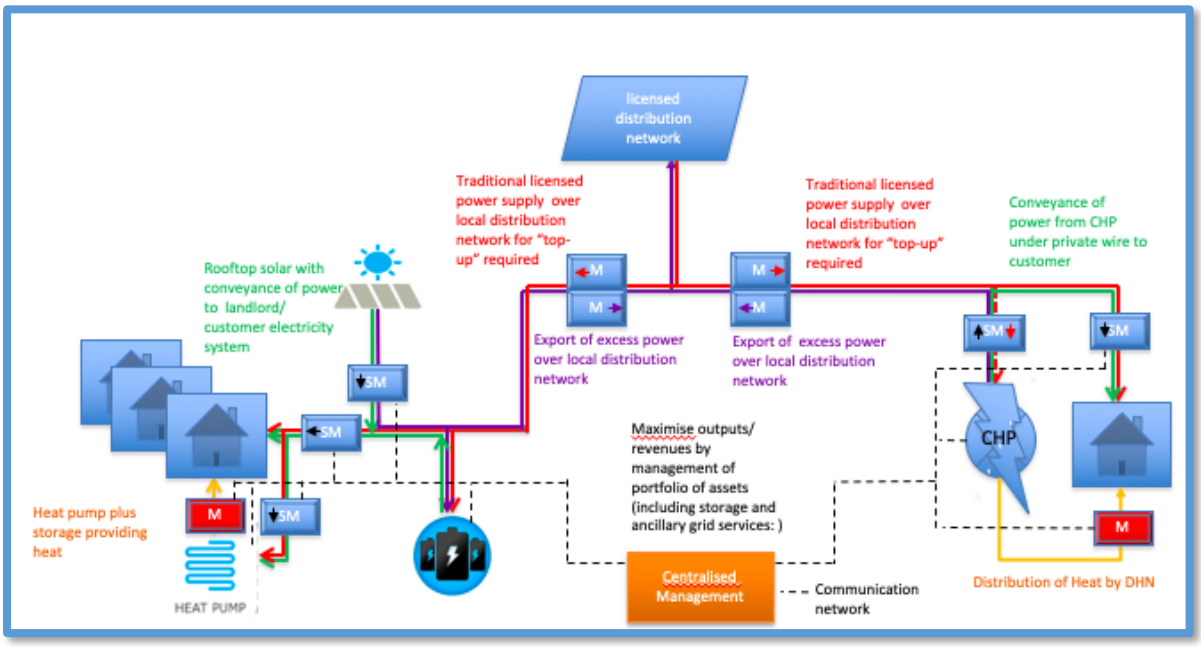
This model illustrates the simplest solution that could be implemented on the MRBD.

The key features of this model are shown overleaf:

Model 1	Detail
Technology	• Rooftop solar/ GSHP/ CHP, serving individual businesses with heat or electricity.
Trading/ off-take	• Heat is supplied directly to the individual business via a heat distribution network. • Electricity is supplied via private wire behind the grid supply point meter to the on-site consumer business. • Where the generator of the heat or electricity is not the same entity as the consumer, a power purchase agreement will be entered into governing the terms on which the electricity or heat is supplied to the consumer by the generator and the price of such power. • Excess electricity which is not consumed on-site by the relevant business can be sold via the public distribution network to a licensed electricity supplier under a Power Purchase Agreement.
Funding	• If individual businesses are undertaking their own projects, these may be self-funded (via on-balance sheet funds or a corporate loan). • If a third party developer undertakes a number of (for example) roof-top solar project across the MRBD, there may be opportunities for project finance.
Governance structure	• If individual businesses are undertaking their own projects, there may be no specific governance structures in place. • Where there is a desire to limit risk of a capital project, the renewable assets could be ringfenced within a simple Special Purpose Vehicle (SPV) structure. • Where a third-party developer undertakes projects, again, a SPV structure may be established to hold multiple assets across the MRBD, or if there are multiple investors, a Joint Venture (JV) structure may be relevant.

2. Model 2: “Intelligent” multi-building, multi-technology models:

Model 2: Physical structure



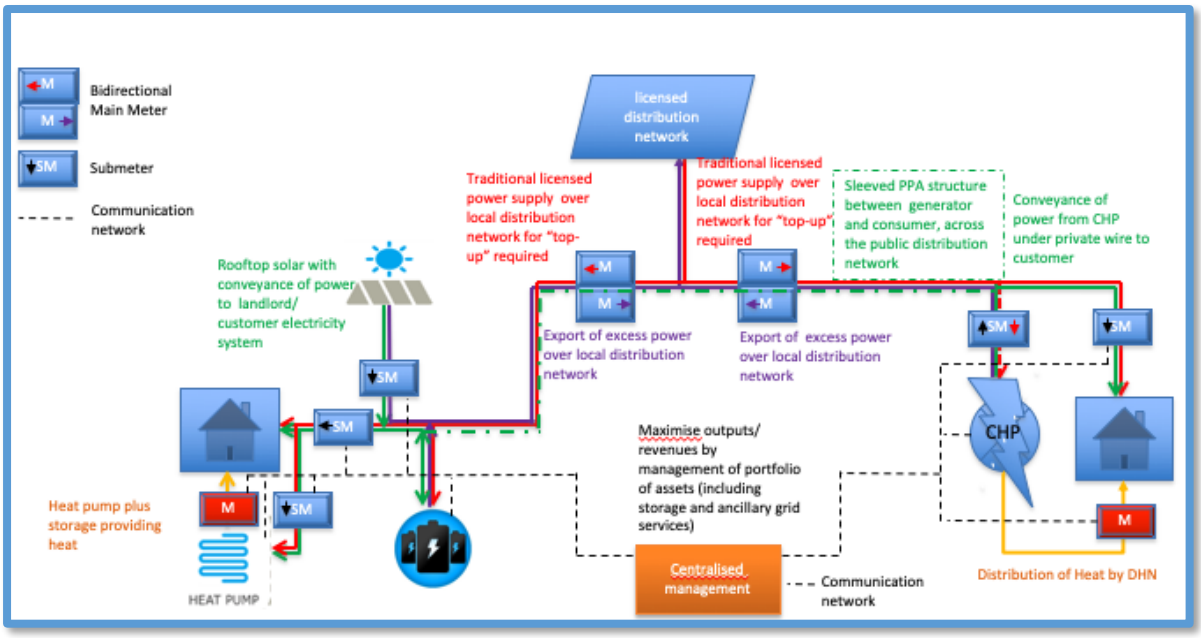
This model illustrates a more integrated and “intelligent” solution that could be implemented on the MRBD.

The key features of this model are shown overleaf:

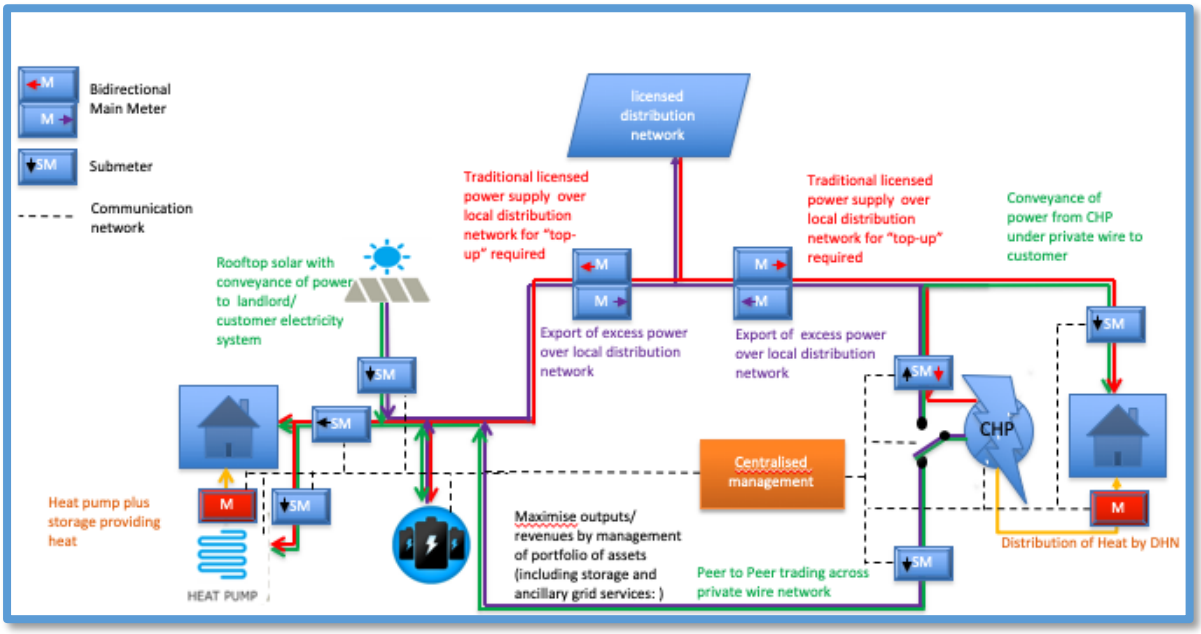
Model 2	Detail
Technology	• Rooftop solar/ GSHP/ CHP plus battery storage and electrical vehicle charging, serving individual businesses with heat or electricity, but managed centrally to maximise outputs/ revenues.
Trading/ off-take	• Heat is supplied directly to the individual business via a heat distribution network. • Electricity is supplied via private wire behind the grid supply point meter to the on-site consumer business. • Where there is centralised management of power generation, power purchase agreements may be entered into between the on-site generators/ businesses and the centralised energy management company (CEMC), governing the terms on which the electricity or heat is supplied to the consumer (including, for example, the optimisation of such electricity generation using storage facilities/ electrical vehicle charging and/or ancillary services to the grid, including entry into the capacity market) and the price of such power and/or services supplied. • Excess electricity which is not consumed on-site by the relevant business can be sold via the public distribution network to a licensed electricity supplier under a Power Purchase Agreement. Where there is centralised management of such sale of power, a better price may be able to be obtained by the CEMC given volume advantages/ potential ability to smooth dispatch. • The CEMC may also arrange for site-wide electricity supplies from a licensed supplier to provide the electricity needs not met by on-site generation. Aggregated demand may enable a better price for such supplies and/ or enable a deal to be struck with a supplier in relation to the sale of excess power.
Funding	• If individual businesses are undertaking their own projects, these may be self-funded (via on-balance sheet funds or a corporate loan). • If the CEMC facilitates projects, with a view to aggregating power generation for the purposes of optimisation (to obtain best value for businesses on the MRBD in relation to on-site electricity consumption and export/ ancillary services), project finance may be a suitable source of funding. Debt providers may be able to lend at more competitive rates due to the guaranteed off-take arrangements with the CEMC. Businesses across the MRBD may also invest into the CEMC.
Governance structure	• Where the CEMC manages energy generation and on-site supply across the MRBD, a SPV will need to be established. The SPV will be comprised of those businesses which wish to invest into/ take an active management role in the project and/or (depending on the model adopted), purchase energy from the SPV. Manor Royal BID and WSCC may also be key investors/ shareholders in the project. • The CEMC SPV will need a robust governance structure, with key stakeholders forming the board of directors. Representatives from, for example, the Manor Royal BID, WSCC and those investing substantial equity or other forms of contributions should be included. • The CEMC SPV may be established as a form of socially responsible/ not for profit organisation which could then reinvest in the locality/ undertake further projects in the locality which are environmentally and socially beneficial.

3. Model 3: Full sitewide Energy Company with business engagement and inter-trading

Model 3(a): Physical structure (with sleeved electricity supplies)



Model 3(b): Physical structure (with additional private wire connection)



This model represents a fully integrated on-site energy solution, providing heat via heat networks and electricity either under **Model 3a** via sleeved PPA arrangements, or under **Model 3b,** utilising microgrid networks across the MRBD site, managed centrally to optimise pricing for businesses on the MRBD in relation to energy generated, consumed on-site and in relation to electricity, exported for sale to the grid.

Model 3(a)/(b)	Detail
Technology	• Rooftop solar/ GSHP/ CHP plus battery storage and electrical vehicle charging, serving multiple businesses with heat and/or electricity through site wide infrastructure (private wire micro grids/ estate wide heat distribution networks), managed centrally to maximise outputs/ revenues.
Trading/ off-take	• Heat is supplied to business via an estate wide heat distribution network. • Electricity is supplied via private wire microgrids across the MRBD (**Model 3b**), **or** where such arrangement is not initially feasibility (technologically or commercially), supplied via the local distribution network using a sleeved PPA contract structure (**Model 3a**). • Power purchase agreements may be entered into between the on-site generators/ businesses and the CEMC, governing the terms on which the electricity or heat is supplied to the consumer (including, for example, the optimisation of such electricity generation using storage facilities/ electrical vehicle charging and/or ancillary services to the grid, including entry into the capacity market) and the price of such power and/or services supplied. • Peer to peer trading across a microgrid may be established, enabled via smart/ real time meter data (**Model 3b**). • Excess electricity which is not consumed on-site by the relevant business can be sold via the public distribution network to a licensed electricity supplier under a Power Purchase Agreement. Where there is centralised management of such sale of power, a better price may be able to be obtained given volume advantages/ potential ability to smooth dispatch (through management of generation, storage and demand). • The CEMC may also arrange for site-wide electricity supplies from a licensed supplier to provide the electricity needs not met by on-site generation. Aggregated demand may enable a better price for such supplies and/ or enable a deal to be struck with a supplier in relation to the sale of excess power.
Funding	• Where the CEMC undertakes the development of projects, with a view to aggregating power generation for the purposes of optimisation (to obtain best value for businesses on the MRBD in relation to on-site electricity consumption and export/ ancillary services), project finance may be a suitable source of funding. Debt providers may be able to lend at more competitive rates due to portfolio size and spread (including potentially strong balance sheets) of off-takers across the MRBD. Businesses across the MRBD may also invest into the CEMC, providing equity/ existing renewable assets/ land as contributions. • The CEMC may also be the entity which owns and operates (through appropriate sub-contractors) the micro-grid across the site (**Model 3b**). It will be essential to determine the commercial viability and the availability of funding for such infrastructure.
Governance structure	• As for Model 2, where the CEMC owns (and manages) energy generation and on-site supply across the MRBD, a SPV will need to be established. The SPV will be comprised of those businesses which wish to invest into the projects and/or (depending on the model adopted), purchase energy from the SPV. Manor Royal BID and West Sussex Country Council (WSCC) may also be key investors/ shareholders in the project. • The CEMC SPV will need a robust governance structure, with key stakeholders forming the board of directors. Representatives from, for example, the Manor Royal BID, WSCC and those investing substantial equity or other forms of contributions should be included. • The CEMC SPV may be established as a form of socially responsible/ not for profit organisation which could then reinvest in the locality/ undertake further projects in the locality which are environmentally and socially beneficial. • Where grid infrastructure is also owned and managed by the CEMC (**Model 3b**), a separate SPV ("GridCo") may be desirable, to ring fence the risks of such an asset/ enable a different investment class which may be eligible for e.g. some grant/ innovation funding.