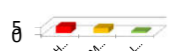




District Heat Risks



City of Bradford Metropolitan District Council
Civic Quarter District Energy Network (DEN) Detailed Design
Risks & Issues Register

Risks	
High	4
Medium	3
Low	1

Total Risks

Prepared by
Company
Date
Version

N Hartley
Sustainable Energy Limited
01/11/16
DRAFT

ID	Risk / Question / Comment / Concern / Issue	Potential Impact	Area	Originator	Impact	Prob.	Status	Owner	Proposed Mitigation / Action	Comment	Action due date	Risk value Impact	Risk Value Prob	Overall Risk
1	Air Quality objections - previous experience has shown that there is potentially significant resistance to the scheme from the AQ department	Delay to Detail Design programme and business case production	Planning / Local Authority approvals	CBMDC	L	M	Open	CBMDC	CBMDC to engage with AQ early on and discuss potential impacts etc.	Discussions with AQ department have reached a satisfactory conclusion. A dispersion model has been commissioned to study the net effect of the district energy network on emissions - this is currently on hold pending completion of the revised feasibility study	Dispersion model to be updated following revised feasibility study - Jan 2017	1	2	2
2	InCommunities Social Housing scheme participation - removal of these buildings from the proposed heat network will have a significant impact on the business case	Negative impact on business case. Potential to delay project	Network / CHP sizing	SEL	H	M	Closed	CBMDC	CBMDC to set up an MOU with InComm and confirm interest in scheme	InCommunities social housing confirmed as not to be taken forward in the scheme.	Risk Closed	0	0	0
3	InCommunities Social Housing - Ashton, Osmond and Taunton houses to be demolished. Plans, housing density and energy usage data required for revised heat and energy mapping.	Increased uncertainty of business case	Network / CHP sizing	CBMDC	M	M	Closed	CBMDC	CBMDC to provide contact details of developers / InComm representative.	Note 22/Apr/16: Latest indications suggest that these buildings are no longer earmarked for demolition. Impact reduced due to likelihood of replacement with similar density social housing which could be connected in future Note June/2016: InCommunities confirmed not to be taken forward in the scheme.	Risk Closed	0	0	0
4	The conclusions in the previous masterplanning exercise were based on a heat demand derived from high level investigation and, in some cases, were inaccurate	Increased uncertainty of business case	Network / CHP sizing	SEL	L	M	Closed	SEL	SEL to re-visit previous analysis and revise where required	Improved quality data has been obtained from potential connecting buildings. Actual energy consumption data has been used where available.	Risk Closed	0	0	0
5	Changes to plans for new developments alter the modelled heat demand and business case for the network In particular City Park One and Public Service Hub (which were at early stages of development during previous works)	Increased uncertainty of business case. Potential to delay project	Network / CHP sizing	SEL	L	L	Closed	SEL / CBMDC	CBMDC to provide contact details of developers / updated plans for the relevant buildings. SEL to re-visit previous analysis and revise where required	Note Nov / 2016: some uncertainty remains although latest planning information has been obtained for all development buildings.	Risk Closed	0	0	0
6	Potential heat/electricity users do not take up the district energy offer	Negative impact on business case	Network / CHP sizing	SEL	H	L	Open	CBMDC	Stakeholder engagement plan. CBMDC producing DEN Prospectus to appeal to potential network users.	Additional potential users such as Wardley House to be considered. Business case for Civic buildings only with future connection capability is still strong. Ongoing engagement required with owners / operators of potential connection buildings. CBMDC to create a Heads of Terms document and open initial negotiations with potential DEN customers.	Ongoing	3	1	3
7	The installed biomass boiler is unable to gain RHI accreditation, or obtains accreditation after current tariff has expired (deadline March 2017)	Negative impact on business case	Business Case	SEL	L	L	Open	CBMDC	Commissioning due to start 12/Dec/2016	Resources are mobilised for commissioning and RHI application activities.	01/03/17	1	1	1
8	Increases in energy prices make the project unfeasible	Negative impact on business case.	Business Case	SEL	H	L	Open	CBMDC		Monitor only	Ongoing	3	1	3
9	DE network solutions presented do not consider future developments or else rely on future development to be viable	Future connections to the network are limited. Opportunities for increased revenue and carbon reduction are restricted	Network / CHP sizing	SEL	H	L	Closed	SEL	Re-visit and revise future proofing considerations as necessary. Agreement between CBMDC and SEL on extent of additional capacity / future proofing to be included	November 2016: futureproofing considerations have been build in to the scheme model. See Detailed Design Report.	Risk Closed	0	0	0
10	Physical barriers prevent the development of a district heating network	Abortive work / re-work required	Network / CHP sizing	SEL	L	L	Closed	SEL / CBMDC	CBMDC to liaise with local Highways, Environmental Health and Planning Departments to provide all necessary information to receive planning approval, and to obtain necessary permits for road works and closures (for installation of distribution pipe work).	Unlikely to occur to the extent that it impacts the project - alternative routes can usually be located. November 2016: 3D Technical Design Limited employed to carry out an advanced feasibility study of proposed network route - this has been carried out and the results are available within the report. The conclusion is that the proposed route is feasible with some risks which will be mitigated through GPR surveys of high risk zones.	Risk Closed	0	0	0
11	Feasibility of physical network installation to be confirmed.	Potential for delay	Network / CHP sizing	SEL	L	L	Closed	CBMDC	CBMDC to liaise with local Highways and Planning Departments to determine extent of surveys, trial holes etc.	3D Technical Design Limited employed to carry out an advanced feasibility study of proposed network route - this has been carried out and the results are available within the report. The conclusion is that the proposed route is feasible with some risks which will be mitigated through GPR surveys of high risk zones.	Risk Closed	0	0	0
12	Executive board approval process not currently included in programme	Potential for delay - failure to meet DECC funding application deadline	Programme	DECC	M	L	Open	SEL	CBMDC to advise processes / programme impacts etc.		Ongoing	2	1	2
13	Programme to consider all other CBMDC processes and decisions	Potential for delay	Programme	DECC	M	L	Open	CBMDC	As above		Ongoing	2	1	2
14	Pools and DEN programmes not aligned	Potential for abortive work in sizing EC early in the programme	Programme	CBMDC	M		Closed	SEL / CBMDC	Bring EC design forward to enable planning stage submissions to be made in line with pools programme	Pools and DEN projects to be merged under a single procurement. Implications of this are to be discussed. September 2016: Pool project cancelled. Revised feasibility study to be undertaken to assess feasibility of network without the pool connection.	Risk Closed	0	0	0
15	High cost of grid connection	Negative impact on business case	Business Case	SEL	H	H	Open	SEL / CBMDC	Engage with Northern Powergrids. Investigate options for purchase of existing connection assets. Negotiate price.	Initial budget estimate is £1.85M for full import / export connection although this is based purely on increased demand at the new connection and does not consider the reduced demand caused by buildings switching from the grid to private wire. An estimate of connection costs is to be used in the techno-economic model.		3	3	3
16	Technical connection issues for Private Wire Network	Negative impact on business case	Business Case	SEL	H	L	Open	SEL / CBMDC	Engage with Northern Powergrid. Locate substations and existing grid assets which may be purchased and form part of the PW network.	Plant room surveys and discussions with Gateshead District Energy project suggest that this is a low probability risk as technical issues with electrical connections are rare, although connection costs can vary significantly - this will be built into the techno-economic model.	Jan-17	3	1	3
												0	0	0
												0	0	0
												0	0	0