

**Preliminary Market Consultation Exercise**

**For**

**Graiseley Net Zero Neighbourhood Development project for Wolverhampton City Council**

**17 / 04 / 2024**

**Introduction**

The purpose of this Preliminary Market Consultation (PMC) is to seek input from potential suppliers to enable the Council to obtain an insight into how they might approach the delivery of the Council’s Net Zero Neighbourhoods Programme and gain an understanding into the likely level of interest from the market.

Potential suppliers will not be prejudiced by any response or failure to respond to the PMC. Potential suppliers must also note that a response to this notice does not guarantee an invitation to participate in any future procurement that WCC may conduct. Any procurement exercise will be carried out strictly in accordance with the Public Contracts Regulations 2015.

Please be aware that we are subject to the disclosure requirements of the Freedom of Information Act (FoIA) and that potentially any information we hold is liable to disclosure under that Act. For this reason, we would strongly advise that any information you consider to be confidential is labelled as such.

**Please note** that this notice is for conducting a PMC exercise and is **not a call for competition**. It does not formally begin the procurement process or constitute any commitment by WCC to undertake any procurement exercise or form any contractual relationship.

**Instructions to Participate**

If you feel that your organisation can contribute to this PMC exercise, please complete the questionnaire and submit through the WCC e-tendering system [www.wolverhamptontenders.com](http://www.wolverhamptontenders.com).

As part of the PMC process we may be inclined to invite participants to WCC offices to give a demonstration of their proposal. This is entirely optional and could be as simple as a remote clarification meeting. The date and times will be confirmed following the closure of the PMC exercise.

For information on how to submit your response, please follow this link <https://procontracthelp.due-north.com/ViewandRespondtoanITTasaSupplier.html>

**The closing date for responses is May 3rd 2024**

**Background**

The Net Zero Neighbourhoods Programme evolved out of the West Midlands Combined Authority’s 2041 Net Zero Strategy to address the financial, and technical challenges of place-based decarbonisation taking a holistic regeneration approach to retrofit, energy, transport, green infrastructure, and waste to achieve the greatest social, environmental, and economic benefits whilst achieving rapid decarbonisation.

A key element of the programme is to understand how novel funding and delivery models could be employed that can leverage significant public and private sector investment to support delivery, that can contribute to a self-sustaining financing model that can help to bridge the gap between existing public sector funding arrangements through private finance.

Testing an array of potential solutions is the first step in identifying where the value proposition lies before making the strategic case for a more considered and cross sector funding arrangement for the next 15 – 20 years. The learnings from this programme have wider reaching national implications.

**Graiseley Net Zero Neighbourhood**

The Council’s NZN Delivery Plan was drafted in June 2022 covering a neighbourhood area in the ward of Graiseley. The highly deprived and fuel poor neighbourhood comprises predominantly of early 20th century terraced housing, which exhibit low levels of energy efficiency and scope for significant benefits through the scheme.

The community has a large minority ethnic population, an array of faiths and languages, with at least 20 -25% of homes without an English-speaking adult. Furthermore, the population is extremely transient with private rented properties making up circa 50% of all properties in the area, 15% are social homes, and the remaining are owner occupied.

To address these, the existing plan sought to explore:

1. Implementing community retrofit and energy interventions at scale.
2. Providing the enabling infrastructure for electric mobility
3. Supporting a mode shift to active mobility, also through the provision of a safer and high-quality public realm
4. Delivering healthier and greener public spaces
5. Trialling flagship initiatives to encourage waste minimisation and the uptake of circular economy practices.

Further development of the scheme concept and feasibility studies first need to be conducted.

**Concept Development**

Further funding has been awarded to develop the concept further through detailed feasibility of a series of yet-to-be-defined options, that would help to shape a final business case.

1. Review and update of the existing plan to reassess the area, reconfirm the assumptions, including using the local area energy planning tools to identify any additional energy project opportunities
2. Undertake comprehensive community engagement to co-create a vision for a Net Zero neighbourhood across transportation, built environment, energy, biodiversity, and waste management, as well as supporting residents with energy efficiency advice.
3. Data collection and physical assessments of properties and wider neighbourhood to support Heat and power decarbonisation modelling at domestic level to understand the most appropriate pathway to net zero, outlining associated cost. This will include detailed rooftop solar modelling to feed into the energy system modelling work.
4. Data Collections and Energy system modelling at DNO level to understand the impact of different technological interventions (e.g. heat electrification, renewable energy, EV charging) and how microgrids might be employed to mitigate costly and lengthy connection issues and maximises benefits for the community. Also assessing the achievability of balancing neighbourhood energy generation and demand.
5. Business/Finance modelling to evaluate existing funding opportunities, and how the scheme could leverage further third-party investment or co-investment to achieve the identified place-based outcomes. Further, identifying delivery/business models to attract commercial investment interest from institutional investors or others.
6. Final Business case development

**Note:** A key aspect of this scheme is around energy systems and the opportunities that community level microgrids or hybrid microgrids with storage present to mitigate investment risk at DNO level, speed up delivery timelines, and extract maximum value in terms of energy cost savings for residents, and or support community wealth building. There may be an opportunity to deliver a legacy asset to give confidence to the neighbourhood that the scheme will progress to deliver e.g a demonstrator home.

The scheme is anticipated to run for 2 years. An outline of required activities is below.

**Lot 1 Community Engagement**

* Deliver multiple community engagement workshops across the neighbourhood with residents, key stakeholders, councillors, landlords, local school, community centres, businesses to communicate key concepts of the scheme, understand community concerns, barriers, and expectations.
* Deliver Community Energy Efficiency advice to enable behaviour change to reduce energy demand as a first step, and provide advice and support around other sustainability aspects (waste, green infrastructure, sustainable travel etc)
* Deliver co-creation events across demographics, with community groups and local schools to empower ownership over neighbourhood vision.
* Develop a digital or virtual reality model of the neighbourhood that encompasses the fool range of interventions, to use as a communication tool for stakeholders.
* Community engagement would need to be on-going throughout the project lifecycle.

**Lot 2 (a,b,c,d) Data Collection**

Community engagement is critical to building trust within the community to enable effective data collection. At least a full year of primary data collection will be required to inform the modelling.

1. A Sensor installation, such as smart meters/thermal sensors that will enable automatic meter reads for both gas and electricity to understand individual and collective energy demand and peak energy demand profiles, the types of sensors and data required, and whether this is across all properties or using a sample approach is a consideration for this market warming exercise.
2. Detailed modelling of solar potential across the entire neighbourhood will be required to understand the aggregate total generation and peak generation and modelled against community energy use to understand anticipated consumption and export ratios throughout the year. this will inform the retrofit pathways and energy systems modelling.
3. Retrofit assessments/EPCs will also be required to inform the retrofit pathways modelling, and SAP modelling and to determine overall capital cost of works that will inform final business case.
4. Structural Surveys will complement retrofit assessments to identify only potential structural considerations, rooftop structural integrity for solar whether these are sampled or across the whole neighbourhood.

**Note:** Retrofit of properties will need to address improvements in internal air quality and address aspects of mould and mildew. What other data considerations may be required to ensure that this is adequately considered?

**Lot 3 Retrofit & Heating Decarbonisation Pathways**

This activity will take data from energy use and retrofit assessments to evaluate the retrofit options alongside solar potential and outline the viable pathways to decarbonisation for individual properties and across the neighbourhood, to

* Identify the most effective energy reduction strategies including how to balance carbon and cost impacts of heat decarbonisation.
* Outline the requirements for achieving the lowest possible SAP rating/ energy efficiency.
* Modelling of different heating solutions including Air to air and air to water source heat pumps, and or community heat networks (hypothetical).

Cost benefit analysis of the different interventions is also required.

**Lot 4 Energy systems modelling**

This activity will take aggregate data from the data collection, the retrofit modelling, and solar potential to understand the before and after impacts on the local distribution network and to:

* Define any anticipated network impacts that could arise because of the interventions.
* Understand the impact of additional loads on the network e.g. community EV charging points.
* Model different mitigations and options to help minimise grid impacts e.g. community battery storage at secondary substation level, or smaller scale batteries at property level – and provide recommendation of battery sizing that would be required to balance energy generation and demand.
* Understand energy flows around the neighbourhood, include schools and commercial properties, and how this could be used to help to look at opportunities for grid services to help unlock additional value or energy cost savings.
* Cost benefit analysis of recommended options is also required.

**Lot 5 Business/financial Modelling**

This activity will help to understand any financial delivery models that could be employed to deliver the scheme including:

* Existing public or private funding that could be used to support delivery.
* Any existing funding gaps that need to be resolved
* Evaluation of the socioeconomic benefits to identify how the scheme could leverage multistakeholder funding with a focus on the potential energy system benefits that could be realised from reducing demand on local grid infrastructure & impact on local constraint management.
* Business modelling to outline commercial opportunities that could attract private sector/institutional investment.

**Lot 6 – Business Case Development**

Compilation of all data outputs and recommendations into full business case.

**Lot 7 – Neighbourhood design**

This activity will require concept design of the neighbourhood considering community feedback, outputs of the modelling work, and ancillary measures such as highway redesign, sustainable transport and EVCP integrations, green infrastructure, and waste.

This will be used as a communication tool for all stakeholders to demonstrate and visualise what a Net Zero Neighbourhood would look like.

**Contracting Options**

The scheme has been broken down into different lots and could be tendered under a single supplier arrangement or broken up into individual lots (see image below).



**Lot 7** – NZN Design



**Project Timeline**

**Timetable**

|  |  |
| --- | --- |
| **Stage** | **Date** |
| Preliminary Market Consultation advertised | 17th April 2024 |
| Preliminary Market Consultation Closing Date | 3rd May 2024 (12 noon) |
| [Demonstrations/clarification meetings] | WC 6th May – 17th May 2024 |

**Questionnaire for participants:**

**Company Details**

|  |  |
| --- | --- |
| Company Name |  |
| Company Address |  |
| Contact Person & Job Title |  |
| Contact Details |  |
| Company’s main Business |  |

Answer all questions that apply to your organisation’s delivery capacity and service offer:

|  |  |
| --- | --- |
| **#** | **Questions**  |
| 1.
 | Which lot(s) would you be interested in tendering for and why? explain how you would approach delivery and outline any specific considerations that need to be included against each lot.  |
| **Supplier Response:** |
|  | Regarding data collection specifically (if relevant), what methods would you employ to ensure robust and efficient data collection that can be applied across the neighbourhood to inform the detailed retrofit and energy modelling, what innovative digital approaches might you take? |
| **Supplier Response:** |
|  | Regarding community Engagement (if relevant) what methods of engagement could be used to generate community support, how can digital be further employed to improve effectiveness and efficiency of community engagement? |
| **Supplier Response:** |
|  | Please provide details of outline costs that you would anticipate for the delivery of the lot(s) within the time frames proposed? |
| **Supplier Response:** |
|  | If you were tendering as a single supplier, do you have internal capacity to fulfil all lots or would you rely on subcontracting? If so, please indicate the breakdown. |
| **Supplier Response:** |
|  | Are there any changes to the lots and their interrelationships you would advise, or any additional considerations you believe are missing from the proposal?  |
| **Supplier Response:** |
|  | Are there any existing frameworks that the authority should be aware of that would be able to cover all requirements? |
| **Supplier Response:** |
|  | Please provide any general comments (e.g. on project structure, timeline, deliverability)  |
| **Supplier Response:** |
|  |

If you need any further information please contact Perminder Balu (Perminder.balu@wolverhampton.gov.uk) or Oliver Thomas (oliver.thomas@wolverhampton.gov.uk)

Alternatively, you can message directly via the e-tendering portal and your response will be dealt with via the portal.