



Milton Keynes
City Council

Milton Keynes Waste Recovery Park Procurement

Market Engagement Questionnaire.

October 2024

Introduction

Background

Milton Keynes City Council (MKCC) is seeking to engage and discuss with potential contractors an innovative new contractual approach for the operation of the Milton Keynes Waste Recovery Park (MKWRP).

MKCC is looking to build a strong relationship with the successful contractor to develop a contract that delivers continuous improvement. The Authority has a strong client-side function which has a good understanding of the operational and financial performance of the MKWRP and will continue to work alongside the successful contractor to drive efficiency.

We are seeking a contractor with strong financial standing and will be following the Cabinet Office guidance adapted to this contract to establish the robust financial evaluation of bidders and their wider corporate structure.

Milton Keynes Waste Recovery Park

MKWRP was developed in 2013-15 and is a critical asset in the ownership of the Authority, profiled to provide significant financial and service benefits over a delivery horizon of 30 - 40 years. Delivering performance of an asset of this technology and at current levels is a positive and notable achievement, particularly given that recent availability figures indicate some other plants in the UK are not fully operational.

MKWRP comprises three adjoined and interlinked technologies which work in to increase the amount of recycling through extraction of recoverable resources from the residual waste. These are principally:

- a mechanical treatment (MT) process with a design capacity of 132,000 tonnes per year (2 shifts), extracting plastics and metals from the residual waste using technology provided by Stadler. The MT process recovers metals and dense plastic for recycling and creates a biomass fraction which is transferred to the anaerobic digester and a residual fraction that is transferred to the advanced thermal treatment facility;
- a dry anaerobic digester (AD) provided by Jones Celtic Bio Energy with a design capacity of 32,000 tonnes per year which treats the biomass fraction from the MT producing green gas which is utilised in 2 gas engines and a compost-like output; and
- an Energos advanced thermal treatment (ATT) facility with a design capacity of 92,000 tonnes per year (two lines) which gasifies the residual material from the MT and an oversize fraction from the AD into a synthesis gas, which is combusted to generate high temperature steam in a boiler and sent to a turbine to produce electricity.

MKCC delivers around 58,000 tonnes per year to MKWRP contract with approximately 50,000 from households and street cleansing activities and another 8,000 tonnes from household waste recycling centres and bulky waste (pre-shredded). The design capacity is 132,000 tonnes per year with the balance being made up of third party residual waste.

Current Operational Performance

- The MT facility has an average availability above 90% and is processing over 9,000 tonnes per month and cumulatively over 115,000 tonnes per year.
- The AD facility has an average availability of 95% and is processing between 2,000 and 2,700 tonnes per month subject to fermenter change overs. The AD consistently generates 500 MWh per month utilising 2 gas engines.
- The ATT facility is achieving an average availability of 87.5% (inclusive of shutdowns) and processes around 89,000 tonnes per year. The ATT generates an average of 3,500 MWh per month (approx. 42GWh per annum).
- The facility benefits from a private wire connection (export) to the MKCC environmental services depot with scope to extend to neighbouring sites.

New Services Contract

Basis for a New Contract

MKCC is considering a new contract for the MKWRP based on procurement around the existing key service objective subject to a new commercial model and risk provisioning *through the competitive dialogue process*.

The key objectives of the service are:

- Manage contract waste in accordance with the waste hierarchy
- Maximise diversion from landfill
- Enhance the Authority's recycling performance
- Generate energy from contract waste
- Recover value from contract waste
- Deliver an affordable service in accordance with best value principles
- Operation and maintenance of the facility to achieve a design life to at least 2042
- Handling of all outputs from the facility including but not limited to: transfer and sale of recovered materials, transfer and disposal of reject and process residues, and provision of all associated off-take materials and final disposal destinations including contingency provision for disposal as necessary
- Maximise the revenue through marketing and sale of energy (electricity and heat) and any associated government incentives

The Authority's preference is for a competitive dialogue process, with an aspiration for a procurement start date of March 2025, which will consider and engage the market on new and existing options regarding matters on technology, investment profile, commodity utilisation and risk transfer.

New Commercial Model

The Authority has already made additional necessary investments to retain MKWRP operations and is expecting to continue to do so over the life of the new contract.

Within the new contract, the Authority is seeking a partnership approach to propose and deliver initiatives which will minimise the Authority's operational and capital spend over the contract term. It is anticipated that, to reduce the potential revenue implications of a new contract and to maintain attractiveness to the market, the new commercial model could include the following mechanisms:

- Use of MKCC capital funding to support life cycle replacement of the plant as a "spend to save" process.
- Use of MKCC capital funding to enhance and improve the plants efficiency and capacity for processing material and generating electricity / heat.
- Expansion into future commodity market provision such as heat offtake and self-purchasing electricity generated through a corporate sleeved Power Purchase Agreement.
- Use of the Anaerobic Digestion facility asset for treatment of source separated household organics.
- Employment of bespoke modular complementary technologies to offset post treatment disposal costs.
- Commitment to reviewing disposal options and management of cost for Local Authority and Third Party Waste (TPW) post treatment waste streams.
- Creating more economically advantageous TPW arrangement for commercial and industrial requirements within Milton Keynes.
- Exploring initiatives to stabilise and reduce residual waste volumes.
- Reviewing options to improve extraction of fossil-based carbon in the Mechanical Treatment Plant through use of robotics and automated extraction to mitigate impact of Greenhouse Gas Emissions Trading Scheme Order (UK ETS).
- Expansion of the Authority owned private wire.

The expectation is that the contract length will be between 10 to 15 years in duration.

Managing Contract Risks

The Authority recognises that risks which would typically be transferred to the contractor through a public private partnership may need to be shared by the Authority in the initial stages of a new multi-phased contract. During the dialogue, the Authority would like to discuss the risk sharing position and the expectation is that, during the contract life, there will be a transfer of the appropriate risks from MKCC to the contractor whilst ensuring sufficient flexibility in the new contract for further risk mitigation.

The current expectation on the new contract is that it will have three stages, each with a slightly different risk and reward perspective, generally as follows:

Figure 1 – Considered Contract Stages

Stage	Considered Duration	Risks and reward
Stage 1 – “Learning”	Up to 24 months of the new contract	The contract operates generally on a cost-plus basis with MKCC taking an appropriate proportion of the risks around the facility performance and giving the Contractor some initial price certainty. In return MKCC will be seeking a degree of operational assurance. This period gives the Contractor time to learn about the facility and prepare plans on how to optimise the operation
Stage 2 – “Steady state”	Up to 60 months	With a better understanding of the facility, it should be possible for the Contractor to accept more risk and reward around how the facility operates, and where improvements and reward sharing can be made.
Stage 3 – “Developing”	Up to expiry	Further transfer of risk to the Contractor, with the Contractor involved in initiatives with MKCC to develop and implement further improvements across the waste management service, with rewards for these improvements.

Outline Project Programme

The timing of the procurement will be subject to a more detailed project programme which is still being developed. However, as a general guide, this is roughly how the work is expected to develop over the next 2 years:

Task	Complete
Publish Tender	21/02/2025
Deadline for selection questionnaire Submissions	31/03/2025
Issue Invite to Participate in Dialogue 1	11/04/2025
Dialogue Stage 1	06/05/2025
Clarifications	05/06/2025
Prepare and Submit Detailed Solution	15/07/2025
Issue Invite to Participate in Dialogue 2	05/08/2025
Dialogue Stage 2	30/08/2025
Clarifications	29/09/2025
Close dialogue and Issue Call for Final Tender	30/09/2025
Prepare and Submit Final Tender	09/11/2025
MKCC Approvals and Governance	18/01/2026
Award Preferred Bidder and Finalise Contract	03/02/2026
Contract Award	06/03/2026
Service Commencement	01/04/2026

Questions

MKCC continues to develop its approach to the new contract but is interested in the views of the current market and, as part of this market engagement, would appreciate, at this stage, any relevant feedback and comments based on the questions below.

Your responses will only be used internally for discussion points and used as pointers of key areas for consideration within the contract documentation and potentially discussion at a later market engagement event.

Please feel free to elaborate on the answer to each question and don't be restricted by the size of the answer box below.

Area	Question
Commercial	1. For a contract of this type, what would encourage you to bid in terms of the duration of contract? Are there any key factors that you would consider as both attractive and unattractive to the contract length?
	Answer:
	2. For a contract of this type, what would encourage you to bid in terms of the clauses that may encourage a bid? Are there any key factors that you would consider as both attractive and unattractive to the contract terms?
	Answer:
	3. As the contract develops MKCC is looking to change the allocation of risk through the phases identified in Figure 1. Please comment on any appropriate incentivisation that may be needed to facilitate the transfer of risk.
	Answer:

	4. Comment on the ability to structure the contract to support the continuous improvements and evolve through the phases identified above in Figure 1.
	Answer:
	5. We are anticipating issuing a financial model to capture the expected cost of operations which will form part of the evaluation and then, in some format, a schedule to the contract. Based on this proposed approach how comfortable would you feel in completing this financial information without pricing excessive risk, specifically in the following 13 areas:
	a. Price for the sale of waste process materials/recyclable materials e.g. ferrous and non-ferrous materials
	b. Price for the sale of electricity generated from the ATT to the grid or via the MKCC private wire.
	c. FITs/REGOs/ROCs
	d. Price for waste disposal costs, eg. IBA, APCR, Compost Like Output
	e. Staff costs to operate and manage the MKWRP
	f. Cyclical maintenance
	g. Plant and equipment renewal or replacement (lifecycle)
	h. Operating materials
	i. Plant and vehicle hire/costs
	j. Insurances
	k. Other property costs eg. utilities, licenses
	l. Contractor overheads
	m. Contractor profit

	6. As part of the procurement process, the Authority recognises that sharing data regarding the operation and costs of the MKWRP will be important. Please can you provide an overview of information that you would need as part of a tender pack to ensure you could bid effectively.
	Answer:
Technical	1. Given the new commercial model proposed and appropriate risk appointment discussed in this document, what broad level of certainty would you be comfortable to offer, if any, in terms of availability, throughput or generation. In providing your answer you may wish to refer to the “Considered Contract Stages” (Figure 1) and discuss in relation to the three separate facilities which form MKWRP?
	Answer:
	2. We are anticipating changes in environmental legislation over the lifetime of the contract (e.g. UK ETS). How do you feel these should be most effectively dealt with under the new contract to mitigate the impact on MKCC?
	Answer:
	3. MKCC commissioned a feasibility study for the deployment of district heating across Milton Keynes in 2022 and is currently finalising a business case to utilise the waste heat from MKWRP within a local network. What is your view around working with MKCC to integrate the MKWRP into a heat network including potential strengths, weakness, opportunities, and threats?
	Answer:

	4. As detailed above, approximately 50% of the capacity of MKWRP is made up of third party waste. Please detail the experience that you have had with accessing third party waste and the risks identified and managed with securing this tonnage.
	Answer:
	5. What level and quantity of technical data do you require regarding the existing MKWRP operations, bearing in mind the level of risk that the contactor may be taking in the “learning” stage. Please be as specific as you can in this response.
	Answer:
Procurement	1. Are you interested in bidding on this procurement, and could you commit suitable resources to the proposed procurement timeline?
	Answer:

To participate in this market engagement opportunity, please submit your responses to corporateprocurement@milton-keynes.gov.uk by 5pm 28th October 2024.

While there is no specific template required, the Authority requests clear and concise answers to as many of the questions included above as possible. Your response will be reviewed exclusively by the project team and will contribute to the development of the tender opportunity.

Following the review, the Council may arrange individual 1-1 engagement sessions. Kindly indicate your interest in participating in these sessions within your response.

We look forward to your valuable input.

