

Bioresources Bid Assessment Framework

September 2022

Version 1.0



Contents

	Contents	2
	Glossary	3
1	Background	4
1.1	Purpose	4
2	Overview	5
2.1	Description of bioresources activities	5
2.2	Competition law compliance	6
2.3	Procurement rules	6
3	Bid Assessment Process	7
3.1	Overview of the Bid Assessment Process	7
3.2	Pre-bid stage	8
3.3	Pre-qualification stage	9
3.4	Fine screening stage	11
3.4.1	Third-party independent solutions	11
3.4.2	Shared investment solutions	12
3.5	Full evaluation stage	12
3.6	Communication of decision	13
3.7	Contract negotiation	13
3.8	Time limits and solution clarification	13
3.9	Managing conflicts of interest and confidentiality	13
3.10	Governance and appeals	14
3.11	Audit	15
3.12	Review of market activity	15
Appendix A.	Pre-Qualification Form questions	16

Figures

3.1	Bid Assessment Process Flow Diagram
3.2	Anglian Water Pre-Qualification Screening Criteria

Glossary

Term	Definition
£k	£thousand
£m	£million
AMP	Asset Management Plan period
Anglian Water	Anglian Water Services Limited (company number 2366656)
BAS	Biosolids Assurance Scheme
BBASG	Bioresources Bid Assessment Scrutiny Group
BBAT	Bioresources Bid Assessment Team
BR	Bioresources
CHP	Combined heat and power
DPC	Direct procurement for customers
DS	Dry Solids
In house	Refers to the provision of bioresources services delivered within Anglian Water Services
Incumbent	Current water company licenced by Ofwat under the Water Industry Act 1991
Management control	Third party service provision under direct management control of the incumbent service provider, i.e. Anglian Water Services
Ofwat	Water Services Regulation Authority
PQ	Pre-qualification
PR14	The Periodic Price Review 2014
PR19	The Periodic Price Review 2019
PR24	The Periodic Price Review 2024
STCs	Sludge Treatment Centre
TBC	To be confirmed
TDS	Tonnes Dry Solids
Third party	Refers to a service provider which is not an incumbent provider of Bioresource services
UCR16	Utilities Contracts Regulations 2016
WRC	Water recycling centre

1 Background

Ofwat's final guidance for sewerage companies' Bioresources Bid Assessment Framework 2 specifies that all water companies should produce a bid assessment framework to support the bidding market for bioresources activities. We are committed to furthering the bioresources market to incentivise innovation, collaboration, and trading in the long-term interest of our customers and other stakeholders, whilst meeting our statutory duties and maintaining the required levels of service and protecting the environment.

Our Bioresources Bid Assessment Framework (BBAF) sets out the structured process for the assessment of solutions or schemes proposed by third parties. This document should be read in conjunction with Anglian Water's Bioresources Strategy 2020-2045 and Bioresources Strategy Supplementary Note found on our Bioresources web pages. The framework aims to provide third parties with confidence and clarity about the integrity of the bid assessment process.

We invite both initial enquiries and informal approaches from suppliers for clarification and discussion of innovative ideas and the potential opportunity of trialling concepts. Where appropriate we welcome fully formed proposals (see Section 3.8). We will also be seeking specific tendering services in certain circumstances and these will be advertised on our website and relevant media sites.

If you would like to get in touch, please email the Bioresources Bid Assessment Team at bbat@anglianwater.co.uk or visit our website where you will find direct contact details of our Bioresources management team

1.1 Purpose

The BBAF is aimed at suppliers that can offer solutions to support the strategic aims of our Bioresources strategy and wider business goals, for example providing solutions that help us achieve our net zero goals by 2030. Examples include provision of new sludge treatment capacity or innovative services such as nutrient recovery or biogas upgrading.

Solutions that are provision of services that support our in-house Bioresources operations under Anglian Water management control are considered tactical solutions; these will be directed and considered under our traditional procurement of framework partners. Examples of this could include frameworks for sludge tankering support services or maintenance contracts for equipment such as dewatering centrifuges. Tactical solutions would also include short term capacity trading or provision of mobile treatment technologies.

¹ Ofwat (2022), Bioresources bid assessment framework - final guidance (February, 2022)

² Anglian Water (2018), Anglian Water Bioresources Strategy 2020-2045³ (September, 2018)

2 Overview

This bid assessment framework draws upon and reinforces the key principles derived from procurement law and competition law. Relevant obligations and rules include:

- Competition law;
- Procurement rules; and
- The current and future regulatory framework

2.1 Description of bioresource activities

Bioresource activities include all operations and services required to collect, transport, treat and sustainably recycle all associated products that arise from the processing of sewage sludge, a by-product of the treatment of wastewater at our water recycling centres (WRCs). We produce approximately 150,000 tonnes dry solids (TDS) per annum of sewage sludge at our Water Recycling Centres (WRC) at over 1,100 locations across the operational region. This sewage sludge requires treatment prior to safe recycling back to the environment. Current bioresources activities we carry out include;

1. Transport and Logistics

Covers the collection of raw sewage sludge from source WRCs and the onward transport and associated logistic services to deliver sludge to Sludge Treatment Centres (STC) for treatment. Transport & logistics services also include the transport and logistic services associated with the collection and delivery of treated biosolids products produced at the STCs to end user customers.

2. Pre-Treatment & Conditioning

It is common on our larger WRC sites that sludge is received from small satellite sites, blended with indigenous sludge and pre-conditioned by screening and dewatering before onward transport to a STC for treatment. Any pre-conditioning activity where raw sludge is dewatered to greater than 10% dry solids (DS) content is considered to be a bioresources activity.

3. Sludge Treatment Centres (STC)

Sludge Treatment Centres are facilities where sludge is received, treated and transformed into products that can be safely and sustainably recycled. All of Anglian Water's STCs are co-located at Anglian Water WRCs where wastewater is treated. We have 10 STCs, all of which use advanced anaerobic digestion technology to produce a final biosolids cake product assured under the Biosolids Assurance Scheme (BAS) and biogas that is used as a fuel to power combined heat & power (CHP) engines producing heat and renewable electricity for use in the bioresources process. Excess electricity from generation is exported to the co-located WRC or to the national grid. The STCs can be considered as comprising of three process streams;

- Sludge treatment stream (e.g. advanced anaerobic digestion)
- Energy recovery & generation (e.g. biogas systems, CHP, biomethane upgrading)
- Liquor treatment or recovery (e.g. treatment and/or recovery from high strength liquors arising from the treatment stream).

4. Recycling Operations

This comprises the management of recycling all products arising from the treatment of sewage sludge. Typically this is the safe, sustainable recycling of biosolids products into agriculture as a beneficial ‘soil conditioner’ and sustainable alternative to artificial fertiliser: -a quality assured product under the BAS Standard. This includes;

- Product sales & marketing
- Acquiring permits for safe recycling
- Assuring relevant environmental rules covering the safe recycling of sewage sludge derived products under Sludge Use in Agriculture Regulations are safely and sustainably returned to the environment
- Management of storage areas and stockpiles
- Spreading & land management services

Currently, we recycle the vast majority (>95%) of our bioresources products into agriculture as a ‘soil conditioner’. This is marketed under the Nutri-bio brand. Further information on our current bioresources products can be found at www.nutri-bio.co.uk. In 2022, we produced approximately 360,000 tonnes of treated BAS certified biosolids product for use in agriculture.

Recognising there is scope to depart from the current approach to bioresource activities, we welcome innovative bioresource approaches and solutions which may deliver greater benefit to our customers and the environment.

More detail on bioresources market information, including the location of Anglian Water’s current STCs, is available on the Ofwat website: ofwat.gov.uk/regulated-companies/markets/bioresources-market/bioresources-market-information

2.2 Competition law compliance

Companies are obliged to comply with competition law. During the tender process, we will take appropriate action to ensure that we do not:

- Artificially narrow competition (where the design of the procurement is made with the intention of unduly favouring or disadvantaging certain parties);
- Distort competition in the market by abusing a dominant position
- Facilitate collusion between third parties.

2.3 Procurement rules

The legal framework that governs the procurement process is dependent on the nature and value of the contract. The Utilities Contracts Regulations 2016 (UCR16) set rules about the procurement of goods and services by water companies, but the rules do not apply in all cases. The application of the UCR16 will be case-specific, and as such we note that third parties will not always have a right of action under this legislation, if they consider they have been treated unfairly during the bid assessment process.

Where procurement rules (such as the UCR16) apply, companies are obliged to adhere to key principles, which include obligations to ensure transparency, equal treatment/non-discrimination for all third parties and proportionality.

We will apply these principles to our Bid Assessment Framework and aim to adhere to these when assessing third-party solutions, not only those falling under the UCR16.

Procurement law will, where relevant, take precedence over our Bid Assessment Framework. We will update our Bid Assessment Framework when necessary to reflect developments in the law.

This Bid Assessment Framework applies regardless of the size of contract, including when contracts are below the thresholds of procurement legislation. However, as explained in section 1.1 of this document the primary purpose of the BBAF is for strategic investments. Tactical solutions that support our day to day in-house operations will be directed through our traditional procurement of framework partners.

3 Bid Assessment Process

3.1 Overview of the Bid Assessment Process

Anglian shall appraise third party solutions following our internal solution screening methodology (as set out in this section) to ensure that all solutions are evaluated on a transparent and non- discriminatory basis and with all third parties being treated equally. All third parties are required to bear their own costs associated with submitting solutions for assessment in accordance with this Bid Assessment Framework.

Third party solutions / proposals shall be subject to a staged screening process, which will be undertaken in a number of stages:

1. Pre-Bid Stage - opportunity for co-development of early concept solutions that are not adequately defined to complete a pre-qualification form. Where applicants provide further or additional information during the screening stages that conflict with information given in an earlier stage of the process, we reserve the right to review the evaluation of any of the previous stages, and following clarification, revise the outcome of any screening criteria decision.
2. Pre-Qualification Stage - where the solution is tested for failure against a pre-determined list of basic requirements, as presented in Figure 3.2.
3. Fine Screening Stage - solutions which pass the Pre-Qualification Stage will then be subject to further feasibility testing to ensure all screening criteria are passed.
4. Full Evaluation Stage - solutions which pass the Fine Screening Stage will be tested using specialist strategic and tactical planning software. This allows comparable assessment of options in context of our geographical operating area and any system wide constraints and dependencies to support decision making in identification of “Best Value”.

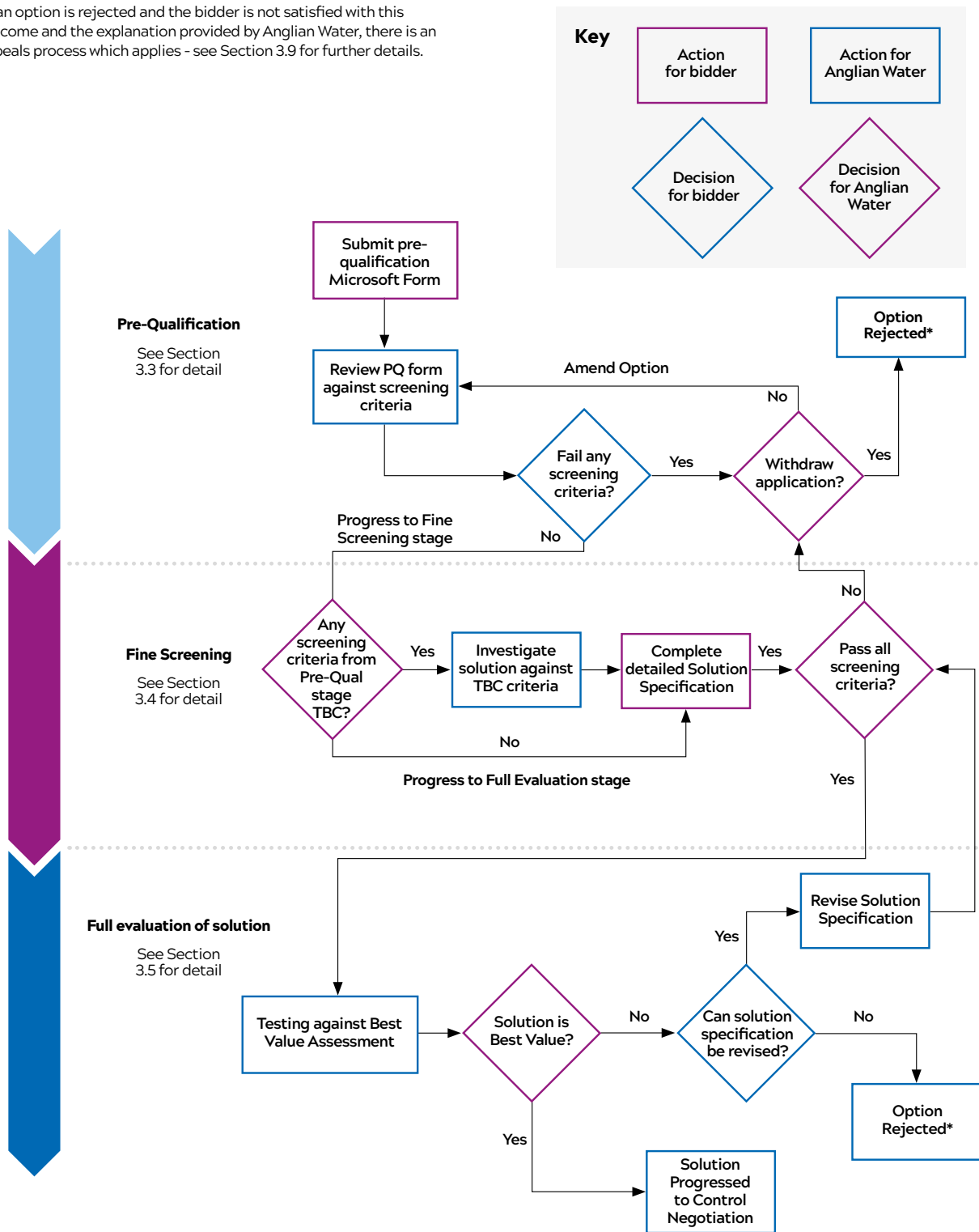
If we are contacted by third parties with early concept solutions that are not adequately defined to complete a pre-qualification form we will use the Pre-Bid Stage and offer advice on bid development. This additional stage provides the opportunity to co-develop solutions allowing schemes to be recognised and captured.

All screening criteria are assigned equal weighting in Bioresources solution development and appraisal.

Figure 3.1 summarises the bid assessment process in a flow diagram.

Figure 3.1: Bid Assessment Flow Diagram

*If an option is rejected and the bidder is not satisfied with this outcome and the explanation provided by Anglian Water, there is an appeals process which applies - see Section 3.9 for further details.



3.2 Pre-Bid Stage

To encourage early concept ideas, we have introduced an optional pre-bid stage where third parties can discuss solutions not adequately defined to complete a pre-qualification form. This stage provides the opportunity to co-develop solutions allowing us to offer advice on bid development. Once a concept is developed this can move into the pre-qualification stage.

During this stage we may choose to do some preliminary modelling using specialist strategic and tactical planning software. This allows comparable assessment of options in context of our geographical operating area and any system wide constraints and dependencies to support decision making in identification. This may also include use of a high-level strategic model currently under development through funding from Ofwat's second Water Breakthrough Challenge to provide feedback on the potential success of solutions prior to moving to the next stage. This preliminary assessment would be based on draft information and would not influence the formal appraisal modelling in the subsequent stages.

Initial contact to discuss early concept ideas is welcomed via email by contacting BBAT@anglianwater.co.uk.

3.3 Pre-Qualification Stage

Where the BBAT concludes that sufficient information has been provided and a solution passes all of the screening criteria, the third-party will be invited to proceed to the next stage. To ensure a third party does not commit excessive resources to producing a detailed specification of a Bioresources solution if it were rejected for some fundamental reason, we will start by subjecting all third-party proposals to high-level coarse screening.

All third-party solutions/ proposals will be screened against the same criteria that are used to assess any in house solutions that are developed. The screening main criteria and sub-criteria are presented in Figure 3.2 below.

Third parties should complete the pre-qualification stage questionnaire via Microsoft Forms. Access to the Microsoft Form can be arranged by contacting BBAT@anglianwater.co.uk. The questions for the pre-qualification stage questionnaire are presented in Appendix A.

It should be noted that pre-qualification is conducted on a pass/fail basis. If a solution fails on any one criteria, then it is rejected overall. The BBAT may request further information from the bidder during pre-qualification to enable the BBAT to accurately assess whether the solution will pass a given criteria.

There may be instances where there is not sufficient information available to complete all the criteria in the Pre-Qualification Stage. Criteria may therefore be specified as "TBC", with an explanatory comment as to why the information is not available and when it may become available. The BBAT will assess whether information relating to any TBC criteria is required before the solution can progress beyond the Pre-Qualification Stage, or whether such information can be subsequently provided as part of the Fine Screening Stage, and the bidder shall be notified accordingly.

Where the BBAT concludes that a solution fails one or more screening criteria at pre-qualification or further information (i.e. TBC criteria) is required, the bidder will be notified and provided with an explanation as to why the solution cannot proceed to the next step. At this stage, the bidder may either:

1. accept the decision and withdraw the application,
2. gather further information and resubmit its application
3. appeal the decision (see section 3.10 for more information)

We will not consider or assess any solutions proposed by any Anglian Water associated group companies, but this will not preclude any in house schemes being developed and assessed using the same criteria against which all other third-party solutions/proposals are considered.

Figure 3.2: Anglian Water Pre-Qualification Screening Criteria

Main screening criteria	Sub-criteria	Sub-criteria description
Does not address problem	Capability to produce sludge to enhanced treatment standards (compliance with Biosolids Assurance Scheme)	Does sludge treatment conform to the standards required by Anglian Water for agricultural recycling? (If applicable)
	Robust, resilient and sustainable service	Will the option be resilient and deliver the predicted service both now and in the future?
	Provides a resilient and sustainable alternative to producing product for agriculture	Does the solution offer a viable and credible alternative to recycling end products to agriculture
Solution is not promotable	Supportive of our Net Zero aspirations	Does the solution support Anglian Water’s Net Zero Strategy to 2030?
	Compliance with all health, safety & environmental requirements	
	Protection of the land bank & wider environment	Are there any significant environmental/ecological risks that would make the option too risky when an environmental/ social assessment is undertaken?
	Low nuisance	Is the solution likely to cause any significant or minor nuisance to Anglian Water customers? (i.e.. traffic; noise; odour)
	Compliance with AW’s standard procurement requirements (e.g. Modern Slavery, Data protection)	
High risk of failure	Robust, resilient and sustainable service	Are the likely construction/ technology complexity/supply chain risks acceptable to ensure the option will be delivered on time?
Tactical solution	Solution offered must support strategic aims for Bioresources strategy i.e. provision of new sludge treatment capacity etc.	
Innovative proposal however too novel/experimental to be considered strategic	Where solutions are innovative and of interest to us although deemed too novel to be considered strategic, we will support bidders to access our Innovation Discovery team and/or Ofwat’s Innovation Competitions.	

3.4 Fine Screening Stage

For any solutions passing Pre-Qualification Stage, the applicant will be invited to submit a detailed specification for their solution, as part of the Fine Screening Stage. There are several purposes for this specification:

1. To carry out further investigations / testing against all criteria which were specified “TBC” at the pre- qualification stage (where there was previously insufficient information to make a pass/fail decision).
2. To provide us with sufficient information to model the costs of any solution components which would be delivered by Anglian Water in order for the solution to deliver its bioresources strategic objectives.
3. To enable economic, resilience and environmental appraisal of feasible third-party solutions, providing a fair and consistent comparison with in-house feasible solutions.

During this stage, we recommend that applicants should start by addressing any “TBC” screening criteria remaining from the Pre-Qualification Stage, before moving on to any more detailed costing. The screening criteria likely to present the greatest challenges to third parties are those relating to (but not limited to) risks associated with:

- Operational resilience
- Supplier failure
- Sludge quality
- Contract
- Capacity
- Compliance

For solutions which fail on any screening criteria in the Fine Screening Stage, we will inform the applicant of the reason for failure and the solution will be classified as rejected. The applicant then has the same response solutions as for pre-qualification failure. For a solution which passes all screening criteria at this stage, the solution is defined as “Feasible”, and will be taken forward for detailed cost and value evaluation, as described below.

3.4.1 Third-party independent solutions

For solutions where all capital investment is to be delivered by the third-party applicant independently of Anglian Water, the benefit of the solution would be provided to Anglian Water based on annual payments/ fees which may comprise fixed and volumetric- dependent cost components. In these instances, we would apply the same principles and process used in Anglian’s Direct Procurement for Customers (DPC) assessment. Specifically, the process will follow test to assess the Value for Money (VfM) for customers along with size and discreteness tests of a solution.

3.4.2 Shared Investment Solutions

For any solutions requiring elements of capital investment by Anglian Water, these components of the solution must be clearly specified, in order for us to determine the associated capex and opex using our in-house cost models. The third-party components of the solution would then be provided either at a specified level of service in return for annual payments/fees, which may comprise fixed and volumetric-dependent cost components, or a one-off payment to transfer rights of access to the relevant component(s).

- The third party must provide the following, with all related costs to be covered by itself:
 - A high-level solution specification, with sufficient details for making reasonable estimates of costs of Anglian Water solution components;
 - An estimate of costs for all such components of the solution;
- The third-party applicant may commission Anglian Water to undertake this specification and cost estimation. We will endeavour to meet the requests where possible, either internally or through our third-party supply chain, subject to resource availability, and at a cost in line with contract rates agreed with our supplier base. All such costs will be borne by the bidder.

Note that where development costs may be prohibitive or technical services are difficult to procure, we are willing to discuss what support may be appropriate. This will only be relevant to solutions that progress to the fine screening stage and will be conditional upon a commercial agreement (e.g. exclusivity regarding the solution for a future period).

3.5 Full Evaluation Stage

If the solution passes the pre-qualification and fine screening stages, a full evaluation of the solution is undertaken. The final stage of the process assesses whether the solution represents “best-value” for customers and the environment. This assessment considers the solution within the context of the overall Anglian Water Bioresources strategy to assess:

Adaptability and flexibility

Is the solution flexible enough to cope with uncertain future needs? Does it include potentially ‘high regret’ solutions, or limit future choices?

Risk and resilience

How resilient is the solution to risk scenarios and other hazards, and what are the residual risks associated with each?

Customer preferences

How well does the solution align with customer preferences?

Environmental and social impacts

What are the environmental and social impacts associated with the solution?

Economic appraisal

Assessed on a least cost basis. Although solutions that do not achieve least cost will not be deemed unsuccessful, it will feed into the best value assessment and decisions.

3.6 Communication of Decision

Bidder solutions which are considered to represent best-value will progress to the contract negotiation stage. For solutions which do not meet the best-value criteria, the solution will not progress beyond this stage. We will inform the third-party applicant and the solution will be classified as rejected.

For solutions which do not meet the best-value criteria, we will provide an explanation to the bidder with sufficient detail to enable the bidder to revise its solution for re-submission if feasible and appropriate, taking into account any timescales for delivery of the company's commitments. Subject to the foregoing, the bidder may: accept the decision and withdraw the proposal; accept the decision and submit a revised offer (timescales permitting); or appeal the decision. In the case of submission of a revised solution, it will be reassessed in accordance with this bid assessment process but only re-evaluating any elements which have changed.

A written appraisal will be provided to the third-party applicant on request.

3.7 Contract Negotiation

For solutions which are to be included in the best-value bioresources strategy, we will classify the solution as referred and arrange for a detailed delivery environment. This assessment considers which commercial model and contract type will be negotiated with the bidder.

3.8 Time limits and solution clarification

Applicants may submit Pre-Qualification forms for solutions at any time, in order to determine the feasibility of their solution. The time limits are described below. However, these are subject to change if there are significant changes; in this case, these timescales will be amended and republished.

Anglian Water's BBAT will aim to progress and respond to a potential bidders' Pre-Qualification application within 90 days of receipt and confirm the outcome of the first stage of the bid assessment process. The timescales for stage 2 of the process (Fine Screening) will depend significantly on the investigations required and complexity of the solution and are therefore not subject to a time limit. However, the BBAT will progress all solutions as quickly as possible, subject to operational constraints, legal requirements and the response time of the applicant.

Bidders should be aware that review of solutions will require the input of a number of technical specialists, whose resources and availability are limited and constrained by operational requirements. The interests of our customers will take priority at all times.

3.9 Managing Conflicts of Interest and Confidentiality

In order (i) to prevent, identify and remedy any conflicts of interest arising from the bid assessment process, (ii) to avoid distortion of competition and (iii) to ensure equal treatment of all applicants, we have established an independent Bioresources Bid Assessment Team (BBAT) to carry out the solution screening and appraisal process. This team excludes Anglian Water employees who are involved in developing in house bioresources solutions. All decisions relating to any actions set out in this section will ultimately be taken by the BBAT.

Bidder commercially sensitive data will remain confidential and only available to the BBAT. Where appropriate Anglian Water and/or the Applicant (bidder and or third party) can request that a Non-Disclosure Agreement (NDA) is signed as part of the process.

The BBAT may call on experts either from (i) other teams within Anglian Water or (ii) independent external organisations, as necessary and appropriate to answer specific questions or obtain evaluation of specific aspects of a bidder's solution. Where others from outside the BBAT are asked to assist, they will be required to agree any NDA in place to ensure that the details of the solution remain confidential.

In addition to the BBAT we have established a Bioresources Bid Assessment Scrutiny Group (BBASG). This is comprised of senior members from procurement, regulation and commercial performance functions. The group will be independent of the BBAT and will have two roles. Firstly, it will scrutinize each bid or (when grouped) each set of bids, in terms of the process and proposed decision; this will be undertaken prior to communicating a final decision to the bidder.

Secondly, it will meet once per year to review audit findings (see Section 3.11) and the annual review of market activity (Section 3.12).

3.10 Governance and Appeals

In order to prevent, identify and remedy any conflicts of interest arising from the bid assessment process, and to avoid distortion of competition and ensure equal treatment of all applicants, we have established an Bioresources Bid Assessment Team (BBAT) as described in Section 3.9.

If an applicant considers that their solution has not been evaluated in accordance with this Bid Assessment Framework, they should contact Anglian Water's BBAT in the first instance, to discuss the decision in light of the evidence provided. The BBAT will provide further explanation as far as possible.

If the applicant still believes a decision has not been evaluated in accordance with this Bid Assessment Framework, they may make a formal request for the decision to be reviewed by Anglian Water's internal escalation team, who are independent of the BBAT, and who will review the decision. The escalation team will provide a response to the applicant within 30 days of making an appeal.

If the escalation team upholds the BBAT decision, the applicant may submit a formal appeal to the Water Regulator, Ofwat. Ofwat will attempt to work with the applicant and Anglian Water to resolve the dispute. If resolution is not possible, Ofwat may be invited to exercise its concurrent powers as competition authority for the water industry.

3.11 Audit

We will conduct annual internal audits of compliance with this Bid Assessment Framework (unless there has been no bidding activity in year) and occasional external audit and benchmarking. This will include lessons learnt from the bidding process and recommendations for improvement where appropriate. A summary of audit will be provided in the published review of market activity (see Section 3.12).

3.12 Review of Market Activity

We have published an annual review of market activity.⁴ This includes a summary of third-party activity, a high-level view of bids (e.g., number and type accepted or rejected), evaluation summary (e.g. reasons for rejection) and an audit summary. This should help other potential third-party applicants to understand why solutions have failed, or how they have successfully passed, and to encourage more third parties to enter the market.

Appendix A.

Pre-Qualification Form questions

Third parties should complete the pre-qualification stage questionnaire via Microsoft Forms. Access to the Microsoft Form can be arranged by contacting BBAT@anglianwater.co.uk

No.	Question	Answer option (where predefined answers)
Section 1 - General		
1	Name of organisation submitting proposal	
2	Contact name and title	
3	Company name	
4	Company address	
5	Telephone no.	
6	Mobile phone no.	
7	Email address	
8	Internet website	
9	Company registration number (if your organisation is a company)	
10	Is your organisation part of a Business Partnership with AWS involving use of intermediaries, joint ventures or consortia?	Yes No Other: <input type="text"/>
11	Has your organisation been issued with any Bribery Act, fraud or money laundering related convictions, prosecutions or investigations or received any Deferred Prosecution Agreements?	Yes No Other
12	Please give details of any judgements on record, or pending, against the company or organisation submitting this proposal in respect of: any financial matter, corporate, or management malpractice or non-compliance with any legal requirement	
Section 2 - Solution overview		
13	Solution name	
14	Option summary description	
15	Any factors, dependencies or constraints specific to the solution	
16	How long would it take to deliver your solution?	
17	Would you need to vary the scale of your solution?	

18	Proposed fee mechanisms (one-off lump sum for access to/ ownership of assets, fixed annual fee, fee variable with volumes)	
19	Please describe how your offering supports Anglian Water’s bioresources strategy and any wider goals and objectives (including biodiversity net gain and net zero strategies)?	
20	Please outline any general assumptions you have made in completing your response	
Section 3 - Solution details		
21	Which service area does your service/ solution cover? (tick all that apply)	<p>Sludge transport & logistics</p> <p>Sludge treatment & associated products</p> <p>Energy recovery & generation</p> <p>End product recycling</p> <p>Sludge pre-treatment & conditioning</p> <p>Other:</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>
22	Which geographical area or sites are of interest? (More information on Anglian Water’s STCs is available on Ofwat’s bioresources market web page)	<p>All areas</p> <p>Basildon</p> <p>Cambridge</p> <p>Chelmsford</p> <p>Colchester</p> <p>Grimsby (Pyewipe)</p> <p>Ipswich (Cliff Quay)</p> <p>Kings Lynn</p> <p>Milton Keynes (Cotton Valley)</p> <p>Northampton (Great Billing)</p> <p>Norwich (Whitlingham)</p>
23	Sludge Treatment Stream - treatment steps, products & recycling	<p>Select up to 4 of the following</p> <p>Pasteurisation</p> <p>Advanced AD (e.g. hydrolysis)</p> <p>Mesophilic Digestion (MAD)</p> <p>Thermophilic Digestion (TAD)</p> <p>Lime stabilisation</p> <p>Composting</p> <p>Thermal Drying</p> <p>Incineration</p> <p>Advanced thermal conversion (gasification, pyrolysis etc)</p> <p>Other:</p> <div style="border: 1px solid black; height: 20px; width: 100%;"></div>
24	If answered other in question 23, please describe the process steps involved below	
25	Sludge treatment stream - product target markets	<p>Agriculture as soil conditioner</p> <p>Agriculture as quality assured (BAS or equivalent)</p> <p>soil conditioner</p> <p>Horticulture</p> <p>Land Reclamation</p> <p>Additive ingredient material for other product</p> <p>Other</p>

26	Do you envision the opening of emerging markets over time?	
27	Describe product produced for recycling or onward treatment? (include nature of product, cake, pellet, char, ash etc..)	
28	List relevant regulations, quality standards or codes of practice that your product conforms?	
29	Liquor stream (e.g. dewatering centrate etc.)	No treatment or recovery, assume is returned to host water recycling centre or others for treatment Liquor treatment to reduce ammonia and other containments to acceptable level for discharge to sewer or to a host water recycling centre Nutrient recovery - Ammonia Nutrient recovery - Phosphate Nutrient Recovery - other Other
30	Please describe your process and solution for liquors and any products produced. Please include relevant information on markets these products are placed.	
31	Gas / energy streams (where applicable)	Raw biogas Upgraded biomethane for grid injection Upgraded biomethane for compression for transport Upgraded biomethane for liquification Heat & electricity from CHP Heat & electricity from other (e.g. turbines) Recovered CO2 Syn-gas Not applicable Other
32	Please describe any energy generation & recovery processes, and the benefits that have been achieved on previous solutions offered?	
33	Energy, carbon or other incentives you assume this product stream	Renewable Obligations Order (ROC)
Section 4 - Risks		
34	When considering operational risks, how have these been identified on the solutions and how these will be mitigated?	
35	Please describe any risks, issues or barriers you believe could hinder the market developing or could cause unintended consequences. Please also provide an indication of their significance	
36	How would you mitigate these risks?	
37	Have you carried out any environment risk assessments of your solution?	