Water Breakthrough Challenge Stage 1 Entry Form

Please note this file is for drafting purposes only. Please ensure you enter all the final details on the online form available on Submittable via the email invitation you received on 28 June 2021.

Welcome to the Water Breakthrough Challenge stage 1 entry form. Please refer to the [Entrant Handbook](http://waterinnovation.challenges.org/wp-content/uploads/sites/72/2021/06/Water-Breakthrough-Challenge-Entrant-Handbook-v2.pdf) when creating your entry, which details the assessment criteria and assessors guidance for each question. The online form will close at 12 noon (BST) on the 3 June 2021.

We will ask some details to contact you and then there are 2 types of entry questions in stage 1:

* General entry information – these questions are not scored but will be used to manage your entry, determine eligibility, and create announcement materials if your entry is successful.
* Stage 1 assessed questions – this section is scored against the assessment criteria.

If you have any questions relating to the form or the Challenge you can email [waterinnovation@nesta.org.uk](mailto:waterinnovation@nesta.org.uk). We will aim to get back to you in 1-2 working days; we recommend emailing with questions as soon as you can and no later than 2 June 2021.

# Your Details

Please provide your personal details to allow us to get in contact with you regarding the progress of your entry. Please view our privacy policy here: <https://waterinnovation.challenges.org/privacy-policy/>.

## What is your name?

First Name

Last Name

## What is your email address?

## **What is the best telephone number to contact you on during working hours?**

# General entry information

These questions are not scored but will be used to manage your entry, determine eligibility, create publications and announcement materials if your entry is successful.

## A. Entry title

Please include a short name to reference your entry.

## B. Lead entrant

Please select the name of the lead entrant organisation. The lead entrant must be one of the 17 licensed regional water only and water and wastewater companies or new entrant water and wastewater companies (NAVs) in England and Wales.

## C. Name(s) of partner(s)

Please provide a list of the legal name(s) of all partner organisations involved in this entry excluding the lead entrant, together with an email address for each organisation.

## D. Total cost of the entry

Please share details of the total cost of the entry.

## For i., ii., and iii, please provide this in nominal (today’s) prices (including inflation assumptions). If possible, please also provide details in 2017-18 Financial Year Average Consumer Prices Index including owner occupiers’ housing costs (FYA CPIH) deflated prices. These figures should include tax.

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£ Amount in Nominal Prices

£ Amount in 2017-18 FYA CPIH deflated prices (Optional)

i. Total budget of the entry (including workstreams and funds not covered by the Breakthrough Challenge).

ii. Total funds requested from the Challenge (excluding mandatory financial contributions by partners)

iii. Total mandatory financial contributions to the entry

## E. Entry budget by partner

Please share an estimated breakdown of how the budget will be split between partners and any other third parties.

Where there are more than 4 partners, please list the partners in order of % budget, with details of the 4 largest partners and then group all other partners into "Other Partners".

Partner Name

Estimated Breakdown of budget (% total budget)

e.g. Water Innovations Inc. e.g. 38%

Other Partners

TOTAL (%) (Calculated) 0

## F. Do the entry partners commit to making a minimum 10% financial contribution to this entry if it is awarded funding?

Yes No

If entering as part of a group or consortium, it is up to entry partners how they wish to divide this 10% contribution.

## G. Source of contribution(s)

Please specify the source(s) of the entry’s mandatory contribution, and any additional financial and/or non-financial contributions.

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## H. Additional contribution(s) from other sources.

Please detail any financial and non-financial contributions above the mandatory 10% from sources other than the entry partners. Please provide cost in GBP, as a percentage of the total budget, and details of any intangible non-financial contributions. Please specify the source(s) of any additional contributions. Do not include details of contributions from entry partners; this is an assessed question set out in 3.1.2. Limit: 100 words

## I. Anticipated start date

Please state the date you anticipate your entry to begin assuming you are successfully awarded funding. We expect entries to the Breakthrough Challenge that are awarded funding to start within 6 months of being notified of the award, but we recognise that especially complex entries may require a longer mobilisation period.

## J. Start date dependencies

Please briefly outline any key dependencies which may affect your anticipated start date such as procurement and arrangement of other funding. Limit: 100 words

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## K. Anticipated end date

Please state the date you anticipate to finish delivering the entry assuming you are successfully awarded funding and you start at your anticipated start date.

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## L. Entry project stage at start of funding

Please select the most relevant project stage that your entry be when it begins delivery using Breakthrough Challenge funding. Details of project stages are available in the [Entrant Handbook](http://waterinnovation.challenges.org/wp-content/uploads/sites/72/2021/06/Water-Breakthrough-Challenge-Entrant-Handbook-v2.pdf) 8.1 Appendix 1.

## M. Entry project stage at end of funding

Please select the most relevant project stage that your entry be when it completes delivery using Breakthrough Challenge funding. Details of project stages are available in the [Entrant Handbook](http://waterinnovation.challenges.org/wp-content/uploads/sites/72/2021/06/Water-Breakthrough-Challenge-Entrant-Handbook-v2.pdf), 8.1 Appendix 1.

## N. Entry description

Please provide a brief, jargon-free description of your entry. This may be used in public-facing communications if the entry is successful. Limit: 250 words

## O. What will the entry achieve?

Please select all that apply.

Development of a novel approach or technology (currently unproven in England or Wales)

Novel application of existing approaches or technology

Development of novel systems and/or processes

Use of experimental approaches

Organisational change

Influencing customer behaviour

Community engagement

Other

## Pi. Have the entry partners worked together before?

Please select the most relevant option.

Yes, it's an existing partnership

Yes, but we're partnering in a different capacity for the entry

No, its a new partnership

## Qi. Does your proposal align with the default position on intellectual property rights (IPR) as set out at section 4 of the terms and conditions?

Yes No

## Ri. Confidentiality of your entry

Please list the questions numbers in this entry form where you consider your responses to contain confidential information. We may ask for further details regarding your assessment of confidentiality at a later date.

Where possible, we ask that you avoid including confidential information in your response to Questions A, B, C, D and N. If you do include confidential information in response to these questions, please clearly identify it.

## Rii. Details of confidentiality of your entry

Please briefly explain why you consider your answers to be confidential in line with your response to Ri.

## S. Areas of entry implementation

Please list all the water supply and/or sewerage service areas where water customers will directly benefit from the successful delivery of this entry.

Where possible, please use the areas in England and Wales as set out in the Entrant Handbook ([http://waterinnovation.challenges.org/wp-content/uploads/sites/72/2021/05/Breakthrough-Entrant- Handbook-v2.pdf](http://waterinnovation.challenges.org/wp-content/uploads/sites/72/2021/05/Breakthrough-Entrant-%20Handbook-v2.pdf))in 8.2 Appendix 2 Water Supply and Sewerage Services Areas. For areas outside of England and Wales, please include the area and country.

# Stage 1 assessed questions

The following questions will be assessed in line with the assessment criteria set out in the Entrant Handbook.

# **Positive impact for water customers, society and the environment**

In the following questions we will be looking to understand the benefits entries seek to deliver to customers, society, and/or the environment.

Strong entries to the Breakthrough Challenge will be seeking to address a well evidenced, important need or opportunity in the water sector in England and Wales for water customers, society and/or the environment that aligns with one or more of Ofwat’s five strategic innovation themes.

In stage 1, these questions account for 40% of the total weighting in assessment.

## **1.1.**1 What is the problem that the proposed entry is seeking to address for the water sector?

Please provide a short narrative summary of the customer, society and/or environmental need this entry aims to address and why it is significant to the water sector. Limit: 150 words

## **1.1.**2 What, if anything, has already been done to address this problem, either by the entry partners or others?

Please provide a summary of any work to date undertaken to address this problem by you or others. Limit: 100 words

## 1.2.1. How will this entry directly deliver better short and long-term outcomes against one (or more) of Ofwat’s 5 strategic innovation themes?

With particular reference to water and wastewater customers in England and Wales please provide a short narrative to set out how the outcomes, benefits and impacts of the entry proposes to directly impact and align with the Ofwat themes. We are interested in the strength of alignment rather than the number of Ofwat themes that are addressed. Limit: 250 words

## **1.**2.2 Select which theme(s) you are directly impacting

Please select the Ofwat theme(s) which are directly benefited through this entry.

For example: A solution using open banking data to enable customers to share when they are having financial challenges directly impacts theme 5 as it explores new opportunities using open data, but also indirectly impacts theme 5 as it provides customers different ways to pay.

1. Responding and adapting to climate change, including how to meet the sector’s ambition of net-zero emissions.
2. Restoring and improving the ecological status of our water environments, protecting current and future customers from the impacts of extreme weather and pollution.
3. Understanding long-term operational resilience and infrastructure risks to customers and the environment, finding solutions to mitigate these in sustainable and efficient ways.
4. Testing new ways of conducting core activities to deliver wider public value.
5. Exploring the opportunities associated with open data, stimulating innovation and collaboration, for example, encouraging new business models and service offerings that benefit customers, including those in vulnerable circumstances.

## 1.2.3 Select which theme(s) you are indirectly impacting

Please select the Ofwat theme(s) which are indirectly benefited through this entry.

For example: A solution using open banking data to enable customers to share when they are having financial challenges directly impacts theme 5 as it explores new opportunities using open data, but also indirectly impacts theme 5 as it provides customers different ways to pay.

1. Responding and adapting to climate change, including how to meet the sector’s ambition of net-zero emissions.
2. Restoring and improving the ecological status of our water environments, protecting current and future customers from the impacts of extreme weather and pollution.
3. Understanding long-term operational resilience and infrastructure risks to customers and the environment, finding solutions to mitigate these in sustainable and efficient ways.
4. Testing new ways of conducting core activities to deliver wider public value.
5. Exploring the opportunities associated with open data, stimulating innovation and collaboration, for example, encouraging new business models and service offerings that benefit customers, including those in vulnerable circumstances.

## 1.3.1. What is your hypothesis on how your entry will address the problem you have identified?

Please provide a short narrative detailing how the entry will address the need identified in response to criteria 1.1 and how it could benefit water company customers, society and/or the environment across England and Wales. Limit: 150 words

## 1.3.2 What are the objectives of the entry? (SMART)

Please provide a list of objectives in bullet point format. These must be set out as SMART objectives (be Specific, Measurable, Achievable, Relevant, and Time-bound) Limit: 150 words

## 1.4.1. What are the most significant inherent uncertainties, risks, and opportunities of your innovative approach/solution?

Please provide a short high-level narrative which sets out the wider risks and uncertainties associated with the entry, as opposed to direct entry delivery risks. We are looking for clarity on what is known and what is unknown/uncertain about achieving your objectives; a clear understanding of key inherent risks; and the identification of opportunities of delivering this entry. This should include the nature of any interaction with ODIs ( Outcome delivery incentives set by Ofwat in price reviews). Limit: 500 words

# **Innovation enablers and innovative solutions**

In the following questions we will be looking to understand what is novel about the proposed approach and solution, and how it could deliver a positive sector-wide innovation legacy.

Strong entries will demonstrate how the proposed entry goes beyond the entrant’s business-as-usual approach to innovation. This is both in terms of: what the entrant proposes to deliver; how they propose to deliver it.

Entries could include testing new ideas; adapting ideas or practices that have established themselves in other sectors; or adopting proven approaches that haven’t been tried at scale.

In stage 1, these questions account for 40% of the total weighting in assessment.

## 2.1.1. What solutions, technologies, methodologies, and insights are you intending to use?

Please provide a high-level summary of the solutions, technologies, methodologies, and insights proposed for this entry. Limit: 100 words

## 2.1.2. Briefly explain how these solutions, technologies, methodologies, and insights are innovative?

Please set out how innovative these solutions, technologies, methodologies, and insights are, including how proven they are. Limit: 150 words

## 2.1.3. How are these solutions, technologies, methodologies and insights better than others that have been developed and/or deployed in the past?

Please provide a summary of how these solutions, technologies, methodologies, and insights are an improvement on others that have been developed and/or deployed previously. Limit: 100 words

## 2.2.1. What approaches, ways of working and other enablers of innovation are you intending to use?

Innovation enablers are the innovative approaches the entry is proposing, which may include how entrants are working internally and externally with collaborators within and outside of the water sector for the benefit of water customers in England and Wales. Please provide a high-level summary of the approaches, ways of working and other enablers which are proposed for this entry. Limit: 150 words

## 2.2.2. Briefly explain how these approaches, ways of working and other enablers of innovation are innovative for you and the wider water sector?

Please set out how innovative you consider your entry’s approach is, including how much research, trialling or similar has been undertaken so far. Limit: 100 words

## 2.2.3. How are these approaches, ways of working and other enabler of innovation better than others that have been developed and/or deployed in the past in the water sector?

Please provide a summary of how this approach is an improvement on others that have been developed and/or deployed previously in the water sector. Limit: 100 words

## 2.3.1. Following the successful delivery of this entry, how can it be implemented at scale across the water sector?

Please provide a summary of how the entry can provide benefits, address water sector wide needs, or be used to improve operations across numerous geographies, businesses, and scenarios. Limit: 150 words

## 2.3.2. What challenges and/or barriers to further implementation have you identified?

Please provide a summary of potential challenges or barriers to applying or implementing the outcomes of the entry at scale. Limit: 100 words

# **Capacity, capability, and commitment to deliver**

In the following questions we will be looking for a clear narrative demonstrating strong evidence that the proposed entry is feasible for the entrant and that appropriate resources and governance will be in place for its delivery.

In stage 1, these questions account for 20% of the total weighting in assessment.

## 3.1.1. Who are the senior sponsors and leaders involved in the entry, from the applying water company and partner organisations, and how are they engaged and invested in it?

Please provide a broad narrative around the engagement and investment of senior staff. In doing so, please reflect executive commitment to continuing the entry if entry personnel were to change, as well as how senior leadership envisions the entry to impact and benefit their organisation’s ambitions beyond technical improvements, for example through internal cultural change. Limit: 100 words

## 3.1.2. What contributions (financial and non-financial) will entry partners be committing to the entry?

Please provide an overview of the contributions each partner will be committing to the entry.

Please detail any financial and non-financial contributions from partners. Please provide cost in GBP, as a percentage of the total budget, and details of any intangible non-financial contributions. y. Non-financial contributions could include access to data, use of facilities, wider resources etc. Please specify the source(s) of any additional contributions.

This will not be assessed in stage 1. A further assessed question follows in stage 2.

Limit: 100 words

## 3.2.1. What are the roles and responsibilities assigned to entry partners?

Please provide a short description of the roles and responsibilities assigned to each of the entry partner organisations. Please identify the external skills or resources the entry will need to support development and delivery, and/or how the entry plans to develop capacity through its partners. Limit: 200 words

## 3.2.2. Please provide details of the team's skills and experience.

Please provide a short description of the key team members involved in the entry, as well as their relevant skills and experience. Limit: 300 words

## 3.3.1. Please set out the major phases, activities and milestones for the entry.

Please detail the phases of delivery of your entry, with details of the activities that will happen within each phase. Set out proposed milestones at the end of each phase and how you will determine if the entry has successfully met these milestones. These milestones should be proportional to the scale and risk of your entry. Please link these to the major entry delivery stages and phases for your entry. Limit: 250 words