



Research and Innovation Strategy

"Water is the lifeblood of the countryside, of communities, of homes and businesses. Our ambitious research programme will help us make sure water delivers for all that rely on it."

**Hans Jensen,
UKWIR CEO**



OUR RESEARCH CYCLE

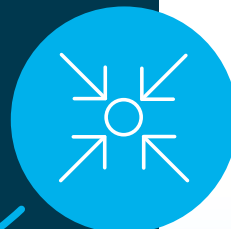
Think & Plan



Gather & Analyse



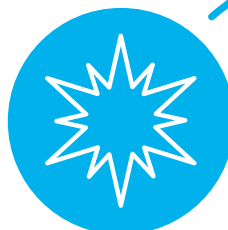
Discover



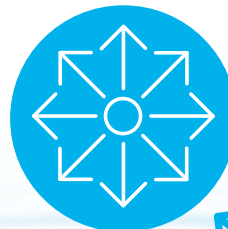
Write & Publish



Deliver Impact & Value



Share



The challenges facing the UK have never been greater

A growing population and a changing climate are placing pressure on the industry at a time of unprecedented market reform and continuously rising customer expectations.

The industry's response to these challenges should be informed by the very best strategic research and investigation, conducted with a global outlook. This is **UKWIR's** mission and it has driven the launch of an ambitious strategic research programme.

UKWIR is a not for profit organisation based in London, carrying out research on behalf of the water industry since 1993. Led by CEO, Hans Jensen, the company's strength lies in the extended family provided by its members; the water and wastewater companies of the UK and Ireland.



What is the strategy?

UKWIR is responsible for facilitating the shaping of the water industry's research agenda, developing the research programme, procuring and managing the research and disseminating the outputs. Delivery of a successful research programme requires input from the membership in defining their needs, managing projects and applying the outputs in order to secure the anticipated benefits.

Members benefit from collaboration on research projects of common interest and elimination of duplication in research, enabling them to get more value for their investment. UKWIR maintains a robust programme of stakeholder engagement to help deliver the optimum programme.

Our Strategy

Positively shape the industry's future by advising, procuring & delivering research

- Research that provides a return on investment
- Research that is unique, independent and adds value
- A strong evidence base to inform and influence
- Research delivered efficiently and effectively

The go to place for research

Strategic ambition that orchestrates the research

An efficient & flexible process

Research that makes a difference

Improving learning and governance

What are our Big Questions?

The focus of our research is captured in 11 Big Questions under the four research themes detailed below. These have been identified through extensive consultation and discussion. These questions cover many areas and activities of the water industry's work and represent the key challenges faced by the industry, now and in the future.

For further information, please refer to 'The Big Questions facing the water industry'



The Four Research Themes are as follows:



1. DRINKING WATER PRODUCTION & DISTRIBUTION 'Drinking water – where will it come from?'

We're facing a future where we'll need to make less water go even further, as the population grows and the climate changes.

- How do we halve our abstractions by 2050?
- How will we achieve zero leakage in a sustainable way by 2050?
- How do we achieve zero interruptions to water supplies by 2050?
- How do we achieve 100% compliance with drinking water standards (at point of use) by 2050?



2. WASTEWATER COLLECTION & RECYCLING 'Recycling and rethinking our future'

Protecting the planet now is the only way to be sure we'll have access to what we need in the future.

- How will we deliver an environmentally sustainable wastewater service that meets customer and regulator expectations by 2050?
- How do we achieve zero uncontrolled discharges from sewers by 2050?



3. CROSS CUTTING 'Putting customers at the heart of a whole new way of working'

Evolving customer needs and priorities have to be accurately reflected in our plans for the future.

- How do we achieve zero customers in water poverty by 2030?
- What is the true cost of maintaining assets and how do we get this better reflected in the regulatory decision making process?
- How do we ensure that the regulatory framework incentivises efficient delivery of the right outcomes for customers and the environment?



4. OPERATING SUSTAINABLY 'Making a positive contribution to the climate challenge'

As an energy-intensive industry, but one that faces serious challenges in the face of a changing climate, it's vital that we explore new ways of reducing our carbon impact.

- How do we become carbon neutral by 2050?
- How do we turn all wastes we receive and generate into products by 2030?

What are the benefits of collaboration?

The water industry understands that it cannot solve these challenges or answer these Big Questions alone. Undertaking research in collaboration with industry regulators, academia, industry stakeholders and other interested parties has always been a feature of UKWIR's work and it will become increasingly more important in the future. Here are some examples:-

- Creating a water quality modelling tool that can accurately apportion sources of pollution in the water environment; in collaboration with the Environment Agency, Scottish Environment Protection Agency, Natural England and Natural Resources Wales.
- Understanding the failure mechanisms of critical water main pipes; in collaboration with Australian water companies and universities and the Water Research Foundation in America.
- Assessing how best to gather and take account of customer and stakeholder views in the development of water companies future business plans; in collaboration with Ofwat and the Consumer Council for Water.

"UKWIR's collaborative research projects consistently deliver bottom line results."

Susan Davy,
South West Water



"The impartial aspects of our collaborative projects with UKWIR result in realistic outcomes to different challenges."

Cathryn Ross,
Ofwat



Who benefits from this research?

Our members, the water and wastewater companies of the UK and Ireland, want to use the highest quality independent scientific and strategic research to address the challenges they face in their everyday operations, now and in the future. The innovations that will come out of the research carried out by UKWIR will help to meet future challenges, such as those arising from population growth and climate change. It is also important that this research helps companies to continue to provide their customers with a secure and high quality service, at the lowest possible cost, whilst minimising any impact their operations have on the environment.

Whilst these Big Questions have been developed by the water industry, many are relevant to challenges being faced by other organisations and industries. Collaboration helps to make everyone's research funding go further and deliver greater value. It also brings other benefits, including building our collective capability and understanding of interdependencies, and driving cross sector innovation and solutions. In so doing we make our systems more resilient and able to deal with longer term strategic challenges.

"We've shaped our research programme around the four most significant and pressing issues that the industry needs to address. If you can contribute to this most critical of debates, please join us."

Hans Jensen,
UKWIR CEO

If you think you can help to answer our Big Questions we will be pleased to hear from you. Please contact us at mail@ukwir.org.uk.
