

THE UK WATER PARTNERSHIP

Water First

UK Water Partnership

The Journey to Net Zero

A reminder of our approach -

- To set out a simple but compelling explanation of the critical importance of achieving Net Zero.
- Ensure our examples are not just the water sector but the wider business community in particular food and agriculture.
- Establish links with other organizations to create a route map.

Some facts -

- UK water companies cannot act alone, value chain action and support from other sectors is needed.
- UK Water companies must produce Net Zero plans by July 2021. Their Net Zero PR24 business plans are being prepared.
- DIT in discussions have highlighted the difficulty in understanding the UK supply chain solutions that contribute to Net Zero, is this an opportunity to have a dialogue with all UK water utilities?

Why Net Zero matters?

- Net Zero will be a key driver of global economic development in the 21st century.
- Countries, sectors, cities, value chains and businesses need to out in place Net zero goals to drive policy, regulation and financial flows.
- Investors and insurers are already pulling out of projects that are not consistent with Net Zero ambitions.

In the Net Zero meetings we have discussed-

- The need for Net Zero infrastructure
- Components of Net Zero
- The operating environment
- Identifying the types of carbon emissions in capital and operational emissions
- Shown that research and experience also shows that reducing carbon reduces costs

At our meeting on 12 July 2021, we want to -

- Review our approach and progress to date
- Discuss in this crowded market what is the USP of the UKWP approach?
- Learn from other organizations
- Review next steps and joint working through a series of workshops
- See how Net Zero might link into our early thoughts on the Circular Economy?

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Making a commitment to go beyond net zero – The UK Water Partnership

Note by Jon Rathjen, Scottish Gov & member of UKWP Net Zero Steering Group

On 12th December 2020 Antonio Guterres the UN Secretary General said we find ourselves in a dramatic situation and he made the call for drastic action and put water at the heart of that call. There are of course no shortage of leaders calling for action on climate change both mitigation and adaptation and we are well past the point of questioning the need to tackle climate change, but how can we put water into the vanguard of that action.

The UK Water Partnership acts as a leader to promote positive change and collaboration in the water industry and the journey to net zero and beyond is one of the Partnerships priority areas. The need to respond to the climate emergency is undeniable and every UK water company and many of their supply chain partners have responded and begun the journey to net zero.

The Journey to net zero means change in how the water industry thinks as well as how it delivers. To meet both the climate change mitigation and adaptation challenges the industry will need to meet the service needs of customers and the needs of the environment today and into the future. It needs to be done for a price to customers that is affordable. It needs to be done in a way that stimulates jobs for the emerging low carbon economy. It needs to deliver great places to live in. It needs to support biodiversity not simply mitigate impact upon it. Climate adaptation in particular is often tough to quantify and indeed even imagine let alone deliver. It requires decisions right now based on limited information to take forward unfamiliar actions in ways the industry haven't done before; working with new partners to deliver benefits some of which we might not see in our lifetime.

The UK Water Partnership is convening the water industry and other stakeholders to share ideas, gain inspiration and build partnership to deliver real change, on the net zero journey. That journey will support the new low carbon economy in the UK, deliver new skills and jobs in a critical long term industry, enhance the environment and play a major role in tackling climate change.

In setting out on that journey to net zero, and indeed beyond net zero, it is important to understand what the commitment means and why it is so important. Here are some definitions and case studies to help guide those looking to communicate their net zero journey. All of the definitions describe important concepts and help to clarify which actions are being committed to, with some more far reaching than others. Whatever stage of the net zero journey you are at it is essential to define what you mean and explain the scale of change you are aiming at to avoid confusion or over or under setting expectations. It is also important to be clear that going beyond net zero means a transformation in the company culture, to shift radically the nature of investment in order to deliver excellent services to customers and to the environment. No longer just a service provider but putting water first in everything as a steward of that resource.

Definitions

- "Net zero" means that greenhouse gases emitted into the earth's atmosphere by human activities are being fully counter-balanced by an equivalent amount of gases being removed from the atmosphere. The United Nations Paris Agreement of 2015 aims to limit global warming, preferably to 1.5° Celsius, compared to pre-industrial levels. To achieve this requires a climate neutral world by mid-century.
- "Zero emissions" or "absolute zero emissions" means no greenhouse gas emissions at all. The Committee on Climate Change (CCC) has advised that in order for the UK to achieve net zero emissions, most sectors will need to reduce emissions to close to zero without offsetting (see below).
- "Direct emissions" are from sources owned or controlled by the company and for which that company is responsible, principally the combustion of fuel on the companies premises and in its owned vehicles and process emissions. These are "Scope 1 emissions" under the international Greenhouse Gas Protocol for measuring emissions.
- "Indirect emissions" are from purchased electricity or heat and all other indirect emissions in the organisation's value chain (e.g. procurement, business travel, staff commuting, water and waste). These are "Scope 2 and 3 emissions" under the Protocol.
- "Offsetting" is where, as an alternative to cutting emissions, organisations invest in sequestration projects that deliver verifiable emissions benefit projects that avoid or reduce emissions, and so achieve a net reduction.

Case Studies

Some of the case studies received to date include but are not limited to:

- Scottish Water beyond net-zero roadmap
- CCm Technologies
 - Severn Trent Water exploring sustainable ways to recycle wastewater
 - Yorkshire Water recovery of Carbon, Ammonia & Phosphorus
- Recirc Energy Borders College Wastewater Heat Recovery System
- Low carbon water Welsh Water's journey to net zero
- Water UK
 - Northumbrian Water Green Gas
 - o Anglian Water Solar
 - Yorkshire Water Sustainable Landscapes
- Anglian Water Tomatoes and the Road to Net Zero
- Costain
 - Greener tunnelling for London's super sewer
 - o Tideway East, decarbonising infrastructure
- Gilbert Gilkes & Gordon Ltd Energy Recovery in Water Industry
- WRc WRc in the Middle East

Case studies are currently being compiled into standardised UKWP format but are available on request.