

The Climate Cost: Challenges for the Water Industry

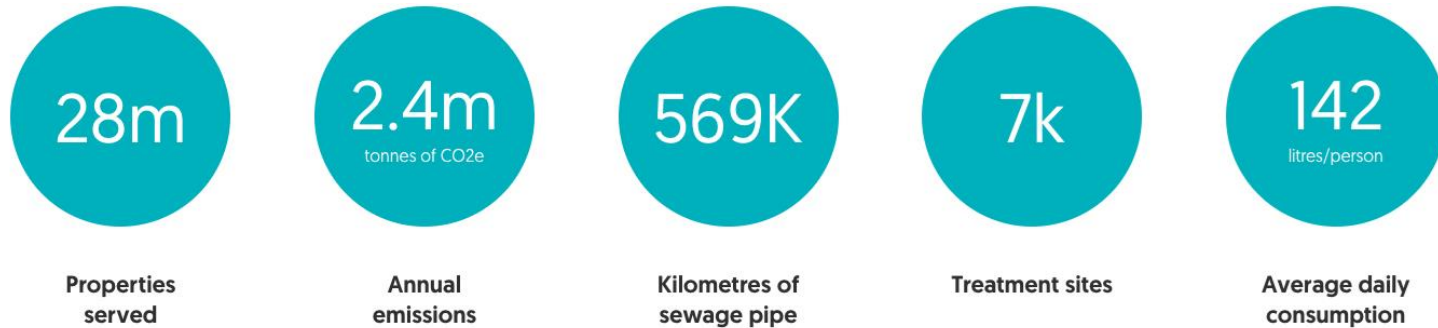
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“Stepping up to becoming net zero by 2030 is a big challenge for one of the most energy-demanding services that society demands from our natural environment. The water industry will demonstrate not only how it will meet this challenge, but deliver multiple benefits for all users of this precious natural resource” – Darren Moorcroft, CEO, Woodland Trust

HAUC(UK) Convention 2023
Climate: Change or Bust

Challenges - Background



“The ambitious plans set out by water companies are in the Vanguard of climate action. The Pursuit of low carbon outcomes, combined with the recovery of the natural environment, set a powerful example of the kind of integrated Solutions we need to adopt in Rising to the twin challenges of global heating and nature decline”

~ Tony Juniper, Chair of Natural England

- The water industry = Vital **public service** + **infrastructure** + large **landowner**
- Critical relationship between **climate change** and **water resource management**



Challenges - Physical impacts

Water supply
decrease by 7%

Restrictions due to
drought x2 as
likely

Supply restrictions
1-in-4 – 1-in-7
chance

- A sector deeply rooted in the built and natural **environment**
- Significant increase in **drought risk**
- Water sector in the **media**



Challenges for the sector

1. Navigating the **physical impacts** of climate change
2. **Decarbonising operations** and supply chain
3. **Increasing demand** - upward pressure on emissions
4. Increasing scale and pace of demands for **new infrastructure**
5. **Repairing** and maintaining current infrastructure
6. Meeting customer expectations for **improved services**
7. **Reducing costs** and providing value-for-money
8. Reversing decline in **biodiversity**



Net Zero 2030 Routemap

1. A ground-breaking plan to deliver a **net zero water supply** for customers **by 2030** in the **world's first sector-wide commitment** of its kind.
2. We've estimated we could save the emission of **10 million tonnes** of greenhouse gas by reaching net zero **two decades ahead** of the UK Government's legally binding target of 2050.
3. Our ambition is that this will set the bar for other infrastructure, utility and energy-intensive industries in the UK and around the world.

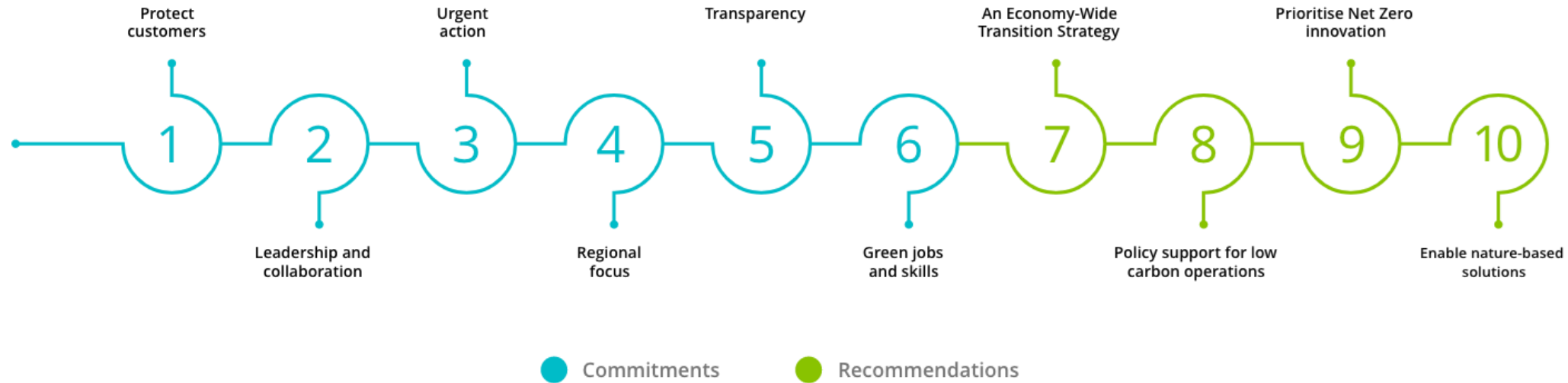


NET ZERO 2030 Routemap





Net Zero 2030 Routemap



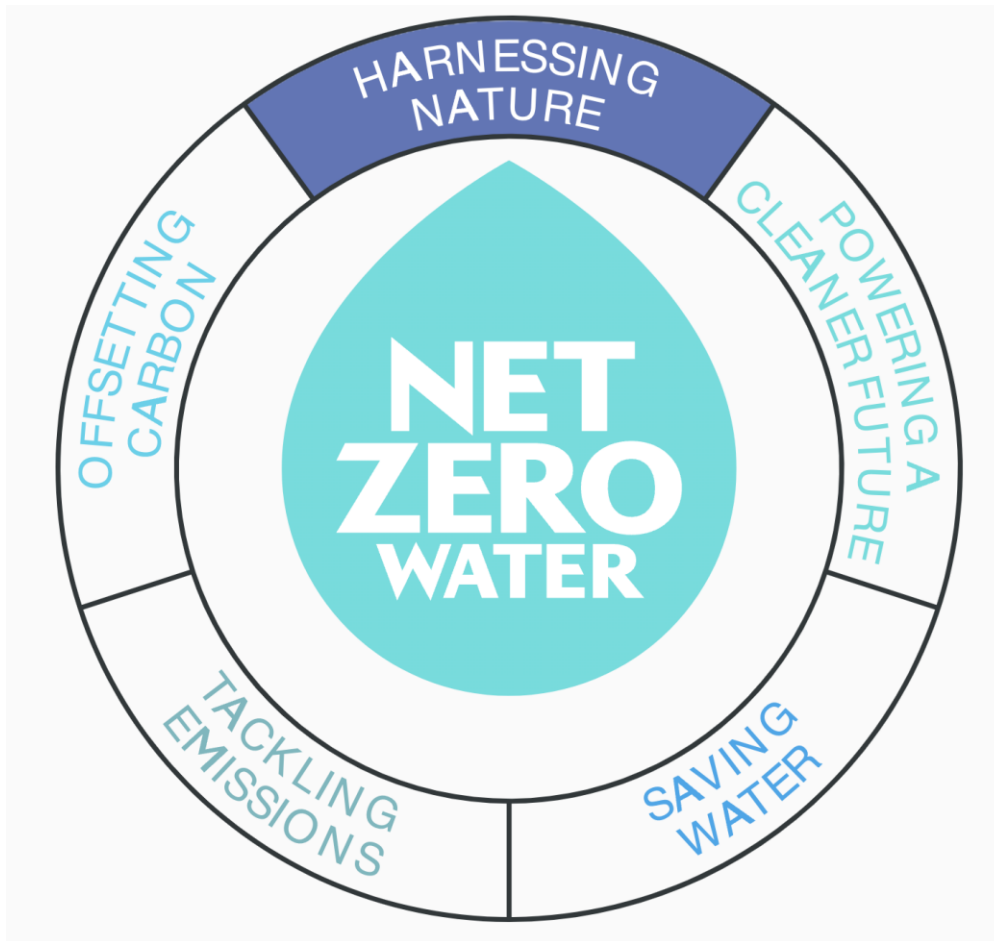
2030 Imagined

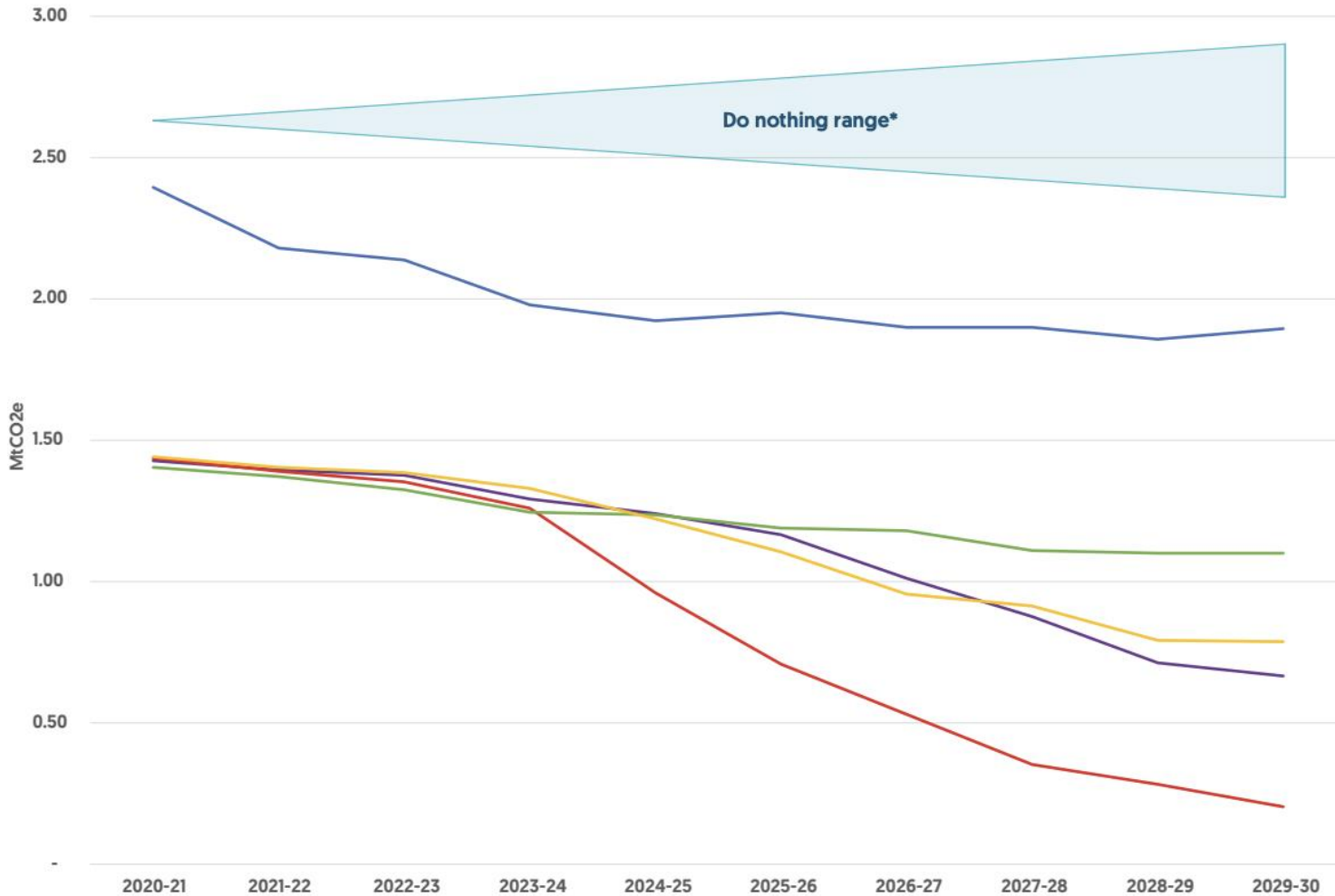
1. Low emission vehicles
 2. Water & energy saving
 3. Process emissions
 4. Renewable power
 5. Green Gas
- + Restoring natural habitats
 - + Targeting innovation
 - + Offsetting residual emissions





2030 Imagined





Business as usual 2030 trajectory

Total 2030 demand pathway

Total 2030 technology pathway

Total 2030 removal pathway

Total 2030 combined pathway

* 'Do nothing' begins above 'current' as some ongoing renewable energy activities would cease

1. Demand led pathway
2. Technology led pathway
3. Removal led pathway

A look ahead: Critical decade and beyond

Critical decade

- **Upward pressure** on emissions - population, climate change, future policy and infrastructure choices.
- Protecting **customers** and bills
- Influencing **behaviour change**

2030s and beyond

- A focus on **innovation**
- Identifying **emerging opportunities**



“Setting ambitious goals is a crucial part of how we take successful climate action, and Water UK is proving this with the target to reach Net Zero two decades ahead of the Paris Agreement.

~ Nigel Topping, UK High-level Climate Champion for COP26

Headwinds & Tailwinds

What will make it easier and harder to:

- Meet our **Net Zero 2030** targets
- Contribute to UK Government's **2050**
- Deliver high-quality **public services**
- Meet **increasing demand**
- Be **resilient** to climate change impacts
- **Decarbonise** at scale and pace



"Our waterways are the lifeblood of our environment, and effective water supply is essential for human health"

~ Beccy Speight, CEO, RSPB

What does this mean for Street works?

Impacts



What does this mean for Street works?

Opportunities



Headwinds & Tailwinds

- Headwind
- Tailwind

Energy-intensive

Renewable energy

Collaboration + Partnerships

Aging Infrastructure

Renewable energy

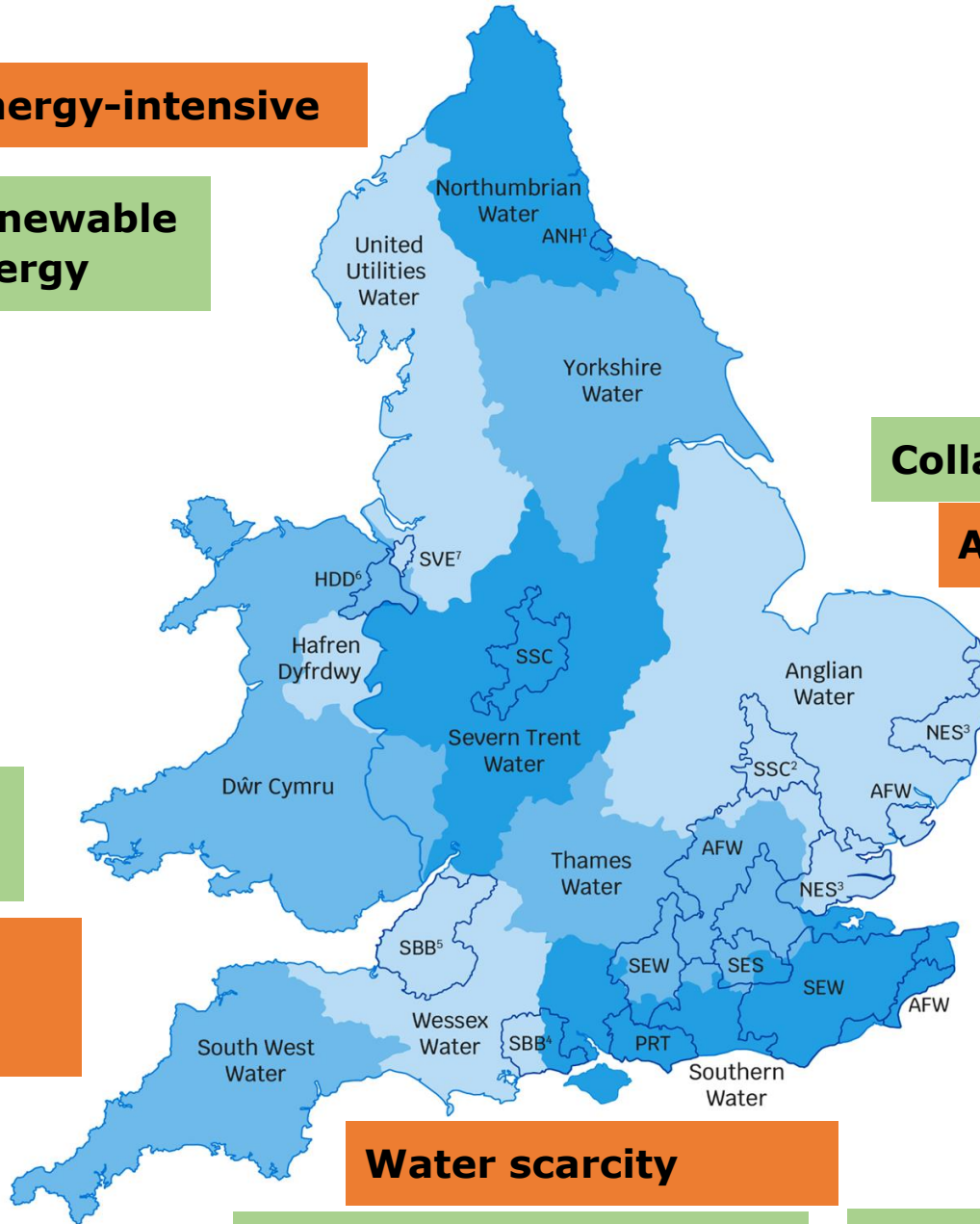
Consumer behaviour

Regulatory environment

Water scarcity

Public engagement

Technology innovation



Reflections

1. The **challenge** ahead and setting ambitions
2. Utilising network **expertise** and **sponsorship** - Net Zero Expert Panel
3. **Leadership** and **collaboration** - Working in collaboration with government, our regulators, workforce, suppliers and others, we will deliver this plan decisively, openly, and quickly
4. **Policy** and **legislative frameworks** - to enable and incentivise the transition
5. **Economy-wide transition** - cross-sector delivery
6. **Urgent action**



“With the right support in place, we could be one of the most cost-effective sectors to decarbonise, serving as an important demonstration of the art of the possible as the UK pursues its wider ambitions to achieve net zero in 2050.”

~ Christine McGourty, former CEO, Water UK

Thank you

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