



Recovering  
**Stronger**



# Imagination Challenge: Water's Role in the Race to Zero

## A Climate Mitigation Pilot

### Project Description

Scientists say we have less than a decade to act on climate before greenhouse gas (GHG) emissions warm the planet more than 2°C, setting off unprecedented, unpredictable, and *irreversible* impacts.<sup>1</sup> The water sector continues to be at the forefront of these impacts, which are already playing out in communities across the nation. This is a crossroads moment in the United States. As the water sector recovers from the current public health and economic crises, we must consider our climate future. **Any efforts to recover stronger must also advance water as a key pathway to address the climate crisis.**

President Biden has pledged the nation will reach net-zero emissions no later than 2050.<sup>2</sup> Many cities have already set more ambitious climate targets. Water infrastructure and services will face increasing climate impacts in the coming decades. How severe those impacts are will depend on the degree to which these targets are met. To date, GHG emissions reduction efforts have focused on big bets through the energy grid, transportation sector, and buildings. Most US states, however, are falling short of city and regional targets to close emissions gaps.<sup>3</sup> Recent studies estimate that freshwater sources and water/wastewater services account for 10% of global GHG emissions.<sup>4</sup>

### Overview

The US water sector must step up to help meet the global water community's bold climate commitments in the "Race to Zero."<sup>5</sup> While there are ample opportunities across the nation for water to take action, there is no clear, unified vision. By imagining a more robust role for the water sector, we can develop a comprehensive path to mitigate climate change. Many water utilities consider themselves leaders in innovation or early adopters of technology innovations for environmental stewardship.<sup>6</sup> From renewable energy generation to investments in carbon sinks, water can help reduce the nation's GHG footprint. Yet the water sector needs a roadmap outlining the know-how and incentives to rapidly scale beyond the low-hanging fruit, including pathways and benefits for smaller and less-resourced utilities. A visionary call-to-action can transform one-off climate innovations into standard practice for strategic planning, capital investments, and new approaches to sustainable and equitable water management.

The US Water Alliance will pilot a **Climate Mitigation Through Water Imagination Challenge** to create the intellectual, creative, and collaborative space that surfaces innovative solutions and an overarching strategy to reduce water's GHG footprint across the nation.

1 [IPCC Global Warming of 1.5°C Special Report](#)

2 [The Biden Plan for a Clean Energy Revolution and Environmental Justice](#)

3 [Turning Climate Commitments into Results: Progress on State-led Climate Action](#)

4 [Stop Floating, Start Swimming. Water and Climate Change—Interlinkages and Prospects for Future Action](#)

5 [UNFCC Race to Zero](#)

6 [Black & Veatch 2021 Strategic Directions: Megatrends Report](#)

## Project Components

**Assemble a Climate Mitigation Imagination Team.** Together with **core partners Black & Veatch, PolicyLink, Stantec, and Xylem**, the US Water Alliance will assemble a sector-wide team with diverse representatives from over 30 organizations to tackle the challenge. The Imagination Team will learn from international water partners aggressively advancing the Race to Zero vision, and—through a series of dialogues—coalesce around a vision and pathway for water’s role in climate mitigation.

**Host an International Water and Climate Mitigation Symposium.** To kick off the challenge, we will co-host a virtual symposium. In the 2020 *Race to Zero Dialogues*, the Stockholm International Water Institute (SIWI) identified nine actions water professionals can take.<sup>7</sup> We will use these as an entry point for the US water sector to think about our role in the Race to Zero. The symposium will be an opportunity for the Imagination Team to learn from Denmark, the UK, Australia, Sweden, Canada, and others on sector-wide GHG targets and how to catalyze water solutions that offer positive climate feedback loops.

**Guide a Series of One Water and GHG Reduction Dialogues.** One Water is emerging as a critical pathway to climate action. We will curate three facilitated dialogues with the Imagination Team around mitigation efforts. Dialogues will explore GHG reduction and carbon sink opportunities through the six arenas of the [One Water approach](#). Specific attention will be given to areas ripe for further exploration (energy planning, water supply diversification, demand management, green infrastructure, and alternatives to carbon-intensive construction and capital improvements); climate financing strategies (impact investments, climate/green bonds, WIFIA, SRFs); and busting barriers to climate action (institutional, governance, regulatory, political, and cultural).

### **Facilitate a Cross-Sector GHG Reduction Roundtable.**

Working across sectors and jurisdictions is challenging but remains essential to unlocking the constraints water faces in pursuing GHG reduction efforts. The Alliance will **partner with The Aspen Institute to co-host** a cross-sector roundtable with leaders from energy, transportation, planning, agriculture, forestry, and economic development agencies. The roundtable will identify avenues for water to align action in support of city-wide and regional GHG reduction targets that achieve multiple climate benefits across sectors.

### **Craft a Vision Statement and Codifying Principles Brief.**

The best and brightest ideas from these Imagination Challenge events will be synthesized into a vision-setting call to action for the US water sector. We will include recommendations for regulatory incentives and support, as well as research priorities to accelerate decarbonization and GHG reduction efforts. Following the vision and brief’s release, the Alliance will work with a cohort of water/wastewater utilities to implement mitigation strategies.

Times of upheaval can lead to moments of radical change. As COVID-19 upends life across America, we can take this moment of disruption and turn it into a source of lasting transformation in how we view, value, and manage our nation’s water systems. At the US Water Alliance, we are dedicated to forging the pathway needed to recover stronger by seeking to reknit a local, state, and federal partnership for water. On the local side of this partnership, much progress can be forged by local water agencies. This project is one of five pilots to drive innovation at water agencies. To read more about the local, state, and federal components of the US Water Alliance’s initiative, [Recovering Stronger](#), visit [www.uswateralliance.org](http://www.uswateralliance.org).

<sup>7</sup> [Water and Climate: Nine Lessons to Help Us Win the Race to Zero](#)