



Recovering  
**Stronger**



## Imagination Challenge: Utility GHG Reductions Cohort Project Description

The latest Intergovernmental Panel on Climate Change (IPCC) report demonstrates we are already locked into a changed climate. However, it is not too late to prevent further impacts and secure a safe, viable future for our communities, if we act now. By 2030, we must reduce global greenhouse gas (GHG) emissions by 45 percent or more to keep the planet below a critical warming threshold of 1.5°C.<sup>1</sup>

Until now, big bets on GHG reductions have focused on the energy grid, transportation sector, and buildings. Yet, most US states are currently falling short of city and regional targets to close emissions gaps.<sup>2</sup> Meanwhile, climate solutions in the water sector have centered on adaptation and resilience measures. The water sector is also improving water quality through ecosystem restoration and protection, as well as increasing financial and operational resilience by optimizing treatment processes, reducing energy use, and increasing onsite energy generation. Few of these efforts, however, have been driven by—or fully accounted for in—GHG emissions reductions.

The next eight years are essential for accelerating climate mitigation efforts across all sectors, including water. Recent studies estimate that at least 10 percent of global GHG emissions are water-related, with water/wastewater utilities responsible for over three percent of global GHG emissions, equivalent to emissions from the global shipping industry.<sup>3</sup> There are ample opportunities in the water sector to reduce GHG emissions, invest in carbon sinks, and deliver positive climate feedback loops while providing multiple benefits to the sector and surrounding communities.

### Overview

In March 2022, the US Water Alliance released [\*Water's Net Zero Plus: A Call to Action for Climate Mitigation\*](#). The report set a sector-wide goal to achieve Net Zero GHG emissions in equitable ways that benefit all peoples and the planet by 2050. Reaching for this goal means that many utilities in the US—particularly those in large urban areas and those with more resources—need to achieve Net Zero in the next decade and go beyond in the years following. The report further described seven elements to help transform utilities and the sector to a decarbonized and equitable water future, including taking steps to act now, direct investments to mitigation efforts, and ensure holistic approaches for watersheds and communities along the way. A second publication, *Water's Net Zero Plus: Strategic Pathways for GHG Reductions*, is expected in mid-2022, detailing relevant actions for drinking water, wastewater, small systems, and across watersheds.

The Alliance's 12-month Utility GHG Reductions Cohort will advance climate mitigation efforts and contribute to city or regional goals for emissions targets. While climate policies remain a hotly charged issue on the national stage, the water sector can help reduce emissions and deliver many benefits back to utilities and their surrounding communities. The initiative will align resources and peer expertise to tailor strategic mitigation pathways for implementation at the local level.

The Alliance will convene member utilities in 10 cities well positioned to accelerate climate leadership in the water sector for this Cohort. Together, utilities from each city will collaboratively identify key areas for GHG reductions within existing operations and processes, as well as assess technologies and new opportunities for emissions reductions, carbon sequestration, offsets, and more. This range of strategies will create or enhance tailored actions for climate mitigation at each utility. Teams will be supported in their development of robust GHG reductions plans that enhance utility and financial resilience, help meet critical priorities for water management in a changing world, and deliver on water equity goals along the way.

## Project Components

**Develop localized strategies for Net Zero Water implementation.** Building off the *Water's Net Zero Plus* publications, the US Water Alliance and Cohort participants will unearth strategies and produce local GHG reductions plans at water and wastewater utilities. These may include watershed and ecosystem protection; partnerships with agriculture or forestry sectors; urban green infrastructure; water conservation; fit-for-purpose water use; water recycling; decentralized energy and water systems; energy efficiency and reduction; renewable energy generation; and more.

**Support strategy adoption at 10 participating utilities.** The US Water Alliance will work with water and wastewater agencies in 10 cities to demonstrate that local climate mitigation actions through water can enhance water management and utility operations, while delivering benefits back to the community and sector at large. This will include staff support and guidance for: refining existing or setting new Net Zero Water goals; developing a comprehensive strategy to meet GHG reductions targets; working through cost, regulatory, and management barriers; enhancing multiple benefits of GHG reductions; generating public support; and working with communities to mitigate unintended consequences and maximize community benefits to ensure an equitable climate action plan. Each utility will establish a team of 3-5 representatives for participation in the Cohort.

**Promote knowledge building and peer exchange.** The Alliance will convene these 10 teams through peer exchanges, expert sessions, coaching, and other mechanisms to support learning and knowledge transfer across cities, as well as to apply insights from the global water community within the US context. Teams will provide feedback on ideas and local strategies in real-time. Convenings will explore topics such as GHG inventories and accounting frameworks, Net Zero Water goals, developing utility culture and leadership to support climate mitigation, GHG reductions strategies, climate communications, and embedding climate justice and water equity into climate responses at utilities. This will grow a community of practice for implementing GHG reductions throughout utility management and operations and to serve broader climate goals in cities and regions. Experts from relevant fields and agencies will discuss the latest research and technology developments, while utilities in the US and internationally will share their stories and insights during peer exchanges.

**Guide a Climate Institute at One Water Summit.** The 10 teams will inform the development of and participate in a three-hour learning Institute at the One Water Summit 2022 in Milwaukee, WI. The Institute will dive into what a holistic climate response through water looks like, how to reach a collective Net Zero Water goal for the US water sector, address action among stakeholders with varying resources and capacities, and explore strategies to ensure equitable processes and outcomes while creating the culture necessary to advance climate mitigation through water.

**Explore climate mitigation in action with the Denmark Delegation.** The US Water Alliance has partnered with the Danish Embassy in the United States to further enhance cross-cultural learning among the Cohort. As one of the first countries with a federal regulation and a sector-wide Net Zero Water goal, Cohort participants will engage with Danish utility staff and technology experts deploying GHG reductions solutions throughout the initiative. Representatives from the GHG Reductions Cohort will travel together to Denmark in Fall 2022 to see GHG reductions projects in action and learn from their counterparts overseas.

**Inspire possibilities and action across the US water sector.** The Alliance will synthesize insights from the Cohort's experience for a national audience. This will include real-life examples from the 10 participating teams and feature GHG reductions goals, key strategies being undertaken, how to overcome financial or regulatory barriers, and next steps for equitable climate mitigation.

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 Phase II of one of five pilots to drive innovation at water agencies. To read more about the climate mitigation pilot, please visit <http://uswateralliance.org/initiatives/climate-action/net-zero-plus>. 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).

## Notes

- 1 International Governmental Panel on Climate Change, *Climate Change 2022: Impacts, Adaptation and Vulnerability—Summary for Policymakers*, (IPCC, 2022), [https://report.ipcc.ch/ar6wg2/pdf/IPCC\\_AR6\\_WGII\\_FinalDraft\\_FullReport.pdf](https://report.ipcc.ch/ar6wg2/pdf/IPCC_AR6_WGII_FinalDraft_FullReport.pdf).
- 2 Drew Stilson, Pam Kiely, and Rama Zakaria, *Turning Climate Commitments into Results: Progress on State-led Climate Action*, (Environmental Defense Fund, 2020), [https://www.edf.org/sites/default/files/documents/FINAL\\_State%20Emission%20Gap%20Analysis.pdf](https://www.edf.org/sites/default/files/documents/FINAL_State%20Emission%20Gap%20Analysis.pdf).
- 3 Martin Kerres et al., *Stop Floating, Start Swimming: Water and Climate Change—Interlinkages and Prospects for Future Action*, (GIZ, 2020), <https://www.everydrop-counts.org/imglib/pdf/Water%20Climate%20Report%202020.pdf>.