

# The IWA Climate Smart Utilities Vision

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IWA is calling for champions of the journey to *Climate Smart Utilities*

With urgent action needed on mitigation and adaptation, the International Water Association is calling on utilities around the world, regardless of their size or location, to endorse a shared vision to build momentum for greater progress.

The 2015 Paris Agreement on Climate Change aimed to limit global warming to well below 2, preferably 1.5, degrees Celsius compared to pre-industrial times. But we are not on track. The estimates are that there is a 20% chance that global warming will reach 1.5 degrees already in the next five years. At the end of the century, warming might reach 4 degrees or even more. **We need urgent action.**

Urban water management is one of the urban services most affected by the impacts of climate change, which threatens the capacity of service providers to deliver safe water, protect rivers and oceans, as well as protect people and assets from flooding, in alignment with the SDGs. **Utilities need to increase their resilience** to the impacts of climate change to improve or maintain service levels. While water, sanitation and urban drainage utilities are the cornerstone of cities' climate adaptation strategies, they can also contribute up to 15% to their cities' greenhouse gas (GHG) emissions. **Utilities can take action towards global decarbonisation.**

Utilities, however, are often cautious in embracing change due to a variety of factors, including: the complexity of their operations, institutional culture, existing and planned long term investments with 20-to-50-year time horizons, and exact yet restrictive regulations or local governance that do not easily allow integration of new activities related to adaptation or mitigation.

IWA invites you, as a Utility Leader, to endorse its vision of the transition towards Climate Smart Utilities, as a means to build a community of leaders who inspire all utilities, their governance structures, their regulators and urban planners to become increasingly Climate Smart, and as a means to guide innovation, tools and knowledge exchange to support this transition. **By endorsing this vision, you act as a champion, providing inspiration and momentum** for all utilities to achieve the **cultural shift** needed **on three interconnected pillars:**

1. **GHG:** reducing their GHG emissions, by, among other things, transitioning to being resource producers
2. **Adaptation:** planning for resilient adaptive infrastructure that combines centralized and decentralised approaches, as well as natural and built infrastructure, and
3. **Leadership:** engaging citizens, industries, and planning stakeholders to embrace the change needed for resilient and low-carbon water and wastewater utilities; engaging regulators and inspiring other utilities at national and international level.

## Endorse the Climate Smart Utilities transition

Climate Smart Utilities, regardless of their size and location, provide water, sanitation, and urban drainage services in line with SDG6, improve their climate resilience by adapting to a changing climate, and contribute to significant and sustainable reduction of carbon emissions globally. The transition to Climate Smart Utilities can be accelerated by champions inspiring others on the journey.

**As an IWA Climate Smart Utilities Champion, I confirm that my utility, or group of utilities, is pursuing a transition to becoming a Climate Smart Utility, and endorse the following three pillars as a route to this transition:**

### 1. Reduce GHG emissions

Climate Smart Utilities plan ahead to reduce GHG emissions, both within the utility's operational area and through their contribution to regional decarbonisation. This translates into:

1. Monitoring and reducing GHG emissions related to the utility's activities, including energy consumption, wastewater and biosolids management (e.g., N<sub>2</sub>O or CH<sub>4</sub> emissions, chemicals usage), as well as building new assets;
2. Investing in resource recovery to maximise offsets, by reusing resources in our own operations and making heat, renewable energies, and products available to local stakeholders replacing their use of fossil fuel-based resources; and
3. Increasing the efficiency of systems to reduce the energy demand for the mandated level of service, including investing in low-energy and low-carbon solutions for new assets.

### 2. Increase resilience in the face of climate change

Climate Smart Utilities plan ahead to anticipate future threats from climate change impacts. Investments to increase resilience contribute to reducing GHG emissions when possible. This translates into:

1. Planning an array of measures, including nature-based solutions when appropriate, reducing water use in relation to local scarcity trends, and diversifying water sources, in order to achieve a positive water balance under the impacts of climate change;
2. Adapting sanitation strategies, collection and treatment to respond to lower low flows and higher high flows, and to an increased sensitivity of aquatic ecosystems, which demand enhanced discharge requirements;
3. Providing adequate urban rainwater management through a combination of built and natural infrastructure, in collaboration with urban planning, basin management and land development planning, to reduce flooding risks as well as protect water bodies and public health; and
4. Promoting an asset management and maintenance programme that delivers robust and adaptive infrastructure, where redundancy, by-pass systems, the integrity of equipment and intelligent controls enable the agile responses needed to face the impacts of climate change.

### 3. Be a leader at local, national and international level

Climate Smart Utilities are champions making the transition happen through knowledge sharing and innovative solutions to GHG emissions reduction and climate adaptation. This translates into a strong learning and sharing culture at local, national and international scale:

1. Promoting water literacy of citizens and urban professionals, through outreach programmes and participation in local governance, with the goal to empower citizens as actors, and urban planners as partners of the climate smart utility;
2. Developing a learning culture by taking part in research with the local and international scientific community, developing multi-disciplinary skills and knowledge in fields related to water (for example, landscape and ecology, social and urban design, architecture, climate information), striving to be better partners to local stakeholders, and
3. Sharing knowledge with other utilities at national and international level seeking to inspire and learn more on achieving and improving the climate smart water agenda.

Endorse at <https://www.surveymonkey.co.uk/r/ClimateSmartVision> OR complete below and email to [kambiri.cox@iwahq.org](mailto:kambiri.cox@iwahq.org).

Name, Position, Date:

Additional statement:

*As an endorsing utility you will be part of the IWA Climate Smart Community, where you will share your challenges with other leaders and exchange best practice between technical staff. IWA will leverage the experiences shared to inspire the wider water professional community on this transition.*