

MASTERCLASS FOR FEDERATION OF UGANDA EMPLOYERS

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Embracing Smart Climate Utility Vision: Employers Have a Role to Play



Abstract

Climate change is, increasingly, becoming a real challenge that needs serious multi-sectoral approach. The corporate world (employers) can make a significant role in tackling greenhouse gas (GHG) emissions and adopting resource production technologies. We also find that adapting climate resilient infrastructure and attendant leadership to rally relevant actors is key. It is commonly agreed that the effects of climate change are universal, requiring multi-stakeholder action. In all this, the IWA-sponsored Climate Smart Utility Vision is a move in the right direction. ..

1. Introduction

Climate change is, increasingly, becoming a world-wide challenge that needs serious multi-sectoral approach. It is important that key players find a niche they will execute to create maximum mitigative effect on climate change problematic. The 2015 Paris Agreement on climate change aimed to limit global warming to below 2, but preferably, 1.5 degrees Celsius compared to pre-industrial times. Unfortunately, we are not on track. It is estimated that there is 20 percent chance that global warming will reach 1.5 degrees already in the next five years. By the end of the

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production factor to maximise output. Production in manufacturing sector is one way of looking at it but the other cohort of companies (non-manufacturing) will also be directly affected on the consumption side of things. In urban areas, climate change affects the capacity of urban water utilities to deliver safe water, protect rivers and lakes/oceans, as well as protect people and assets from effects of flooding. It is everyone's role to support water utility companies to increase their resilience to the impacts of climate change to improve or maintain service levels.

century, warming may reach 4 degrees or even above. This calls for urgent action by all stakeholders. The utility sector is one of the most important sectors that should play a role. Water services provision is one of the most affected services by the impacts of climate change, which threatens the capacity of the manufacturing sector where water supply is an important



It is to be noted that while water, sanitation and urban drainage utilities are the cornerstone of urban areas' climate adaptation strategies, they can contribute up to 15 percent of the urban areas' greenhouse gas (GHG) emissions. Consequently, utilities can take action towards global decarbonisation. Other companies in the manufacturing sector are also serious GHG producers in form of diverse forms of pollutants they emit to the environment. Moreover, other activities relating to deforestation, wetland destruction and other forms of ecosystem destruction are other significant constraints to GHG reduction.

.2. Climate Smart Utility Vision

The International Water Association (IWA) has come up with a vision of transition towards Climate Smart Utilities, 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. All categories of corporate companies are called upon to embrace this vision by providing inspiration and momentum for all utilities to achieve cultural shift needed on three interconnected pillars, according to IWA (2021):

- i. **GHG:** utility companies can reduce their GHG emissions, by among other things, transitioning towards being resource producers and reducing pollution
- ii. **Adaptation:** to plan for resilient adaptive infrastructure that combines centralised and decentralised approaches, as well as natural and built infrastructure; and

- iii. **Leadership:** to engage citizens, industries, and planning stakeholders so that they embrace the change needed for resilient and low-carbon water and wastewater utilities; and to engage regulators and inspire other utilities at national and international level.

In this Note, we illustrate, using extracts from (IWA, 2021) how employers (corporate organisations) can make a contribution towards realising Climate Smart Utility Vision (CSUV).



3. The Role of Employers (Utility Companies)

We discuss the role of employers in the context of three areas identified by IWA. These include reduction of GHG emissions; increasing resilience in the face of climate change (adaptation) and being a leader at local, national and international level.

3.1 Reduction of GHG Emissions

Corporate companies can plan ahead to reduce GHG emissions, both within the company's operational area and through their contribution to regional decarbonisation. This task translates into:

- i. Monitoring and reducing GHG emissions related to the company's activities. These include reduction of energy consumption (through energy saving gadgets) wastewater and biosolids management (controlling N₂O, CO₂ and CH₄ emissions, chemical usage etc), as well as building new ecosystem assets. The greening activities by many companies is a good example in this case.
- ii. Investing in resource recovery to maximise offsets, through resource reuse in own operations and making heat, use of renewable energies, and products available to local stakeholders replacing their use of fossil fuel-based resources.
- iii. 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. The Kiira Motors electric car model is a good example in this regard.



3.2 Adaptation: Increasing Resilience in the Face of Climate Change Companies must plan head to anticipate future threats from climate change impacts. Investments to increase resilience contribute to reducing GHG emissions when possible.

- i. Planning sets 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;

- ii. 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;

- iii. 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

- iv. 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.

3.3 Leadership: Be a Leader at Local, National and International Level Climate Smart Companies 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:

- i. 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;

- ii. 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 conservation (for example, landscape and ecology, social and urban design, architecture, climate information), striving to be better partners to local stakeholders, and

- iii. 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.





5. Conclusion

The effects of climate change to sustainable human life, no longer need much explanation. We have seen real-life challenges emanating from climate change effects. Global warming is real, rainfall patterns have changed, raw water sources have unprecedentedly dried, river and lake levels have fallen and risen uncontrollably and water treatment costs have gone up. The IWA-sponsored Climate Smart Utility Vision is a move in the right direction. The corporate world can play a significant role in promulgating climate smart approaches

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