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HARNESSING PRIVATE SECTOR SUPPORT FOR TRANSBOUNDARY WATER

Harnessing Private Sector Support for Transboundary Water

Big Corporations in Transboundary Waters

The manner in which legal, policy and regulatory frameworks intersect in the governance of transboundary water basins, places big businesses at the epicenter of administrative complexity. It is important to develop regulatory frameworks that can evolve past the 'silo-style' management of transboundary water resources that characterized national policies and cross-sectoral regulation in previous decades. Instead, evolved frameworks in transboundary water governance, must aim to increase synergies between the efforts of diverse stakeholders. Responses across all levels of governance must extend beyond the operational procedures of respective companies and countries when considering transboundary resources. Without collective action toward a systems approach that can initiate change at a systemic level, more challenges will arise in achieving the sustainable development goals (SDGs).

This briefing is particularly interested in the position of big businesses in the transboundary water developments, governance and water resilience. Actionable responses that big businesses have been taking to mitigate and adapt to climate change impacts will be considered. By unpacking the involvement of big corporations in different transboundary water settings, the practices used by corporations to address climate change commitments can be better understood and analyzed. Bringing form and function together in terms of best practices lets policymakers and practitioners consider ways in which business innovation can be leveraged toward greater climate and water resilience.

When considering the transboundary water landscape, there are a myriad of hydrological interdependencies that link riparian states together. At present, coordination between riparian nations is considered weak globally with only one-third of multilateral river basins being covered by treaty provisions that regulate water use and cooperation.

Shared Corporate Engagement:

This briefing looks at contemporary shared frameworks, policies, processes and standards of corporate engagement in transboundary water settings with reference to case studies to consider where we are and where we might want to go.

The entry of large businesses into these interdependent spaces for development projects, further reinforces the importance of effective, sustainable and resilient water governance.

There is no one-size-fits-all regulatory framework for governing the participation of big corporations into transboundary water resource development. There are, however, evolving standards and practices that can be added to water governance frameworks that demands wider mobilization of stakeholders working toward collective action. The complex environmental impact of climate change has and will continue to affect ecosystems, societies and businesses. For businesses to remain competitive, implementing best practices in managing climate-related costs is a minimum requirement.

Practical Summary

Developing critical business strategies that comprehensively address climate change and sustainability remains a challenge. The context to this challenge is a changing environment of evolving global regulatory frameworks, integrated value chains and capital market investment and reporting decisions. Operations, operating costs, and reputational impacts embedded in these decisions require businesses to have reliable evidence and tools to refer to as means to align sustainable practices that with commitments. While corporations such as Costco and Netflix have pledged to sustainable change, no clear emission reduction targets or operational changes have been made publicly available by them. Meanwhile, Google has committed to powering all its operations by clean energy sources by 2030 and large investment firms such as BlackRock, have refused to invest into businesses that have not committed to be at zero-carbon emissions by 2050.

These commitments and actions that big businesses make toward sustainable operations do not take place in isolation. Public policy and regulation addressing climate change is evolving rapidly but unevenly across the globe. The decisions made by national governments shape what is required of companies and industries, and what action or inaction is possible across ecosystems. There have been promising signs at a global leadership level with China setting the target to be net-zero in emissions by 2060, the US planning on reaching net-zero by 2050 and Japan demanding at the institutional level that companies adopt science-based targets. Climate change mitigation and adaptation efforts need to be adopted across sectors, supply chains, national and international governance, making it imperative that commitments are matched with operative deeds.

Shared Frameworks, Policies, Processes and Standards

Efforts to address climate change and water-related challenges have seen the emergence of key climate policy planning processes, including long-term strategies, nationally determined contributions (NDCs) and National Adaptation Plans (NAPs). The Paris Agreement of 2015 has stood out as a significant reference framework in guiding the strategy and planning processes on a national level. An example of how the Paris Agreement has informed processes toward decarbonization is the Race to Zero Coalition, under the UN Framework Convention on Climate Change. The Race to Zero Coalition was launched in 2020 and aims to reach net-zero by 2050 by rallying leadership and support from a wide array of stakeholders, including businesses, cities, regions and investors. As of July 2021, 708 cities, 24 regions, 2,360 businesses, 163 of the biggest investors and 624 Higher Education Institutions have pledged commitment to the membership criteria of the Race to Zero Coalition [1]. The strong mobilization behind the Race to Zero campaign in the past year alone, with over 4,500 non-state actors across the global economy making pledges to its criteria, highlights how shared processes toward collective targets hold the potential to reach across value chains and manage greenhouse gas (GHG) emissions and address water-related challenges. Despite the strong momentum toward shared international targets, better-defined NDCs and different stakeholder commitments, a recent climate change risk assessment report painted a grim image of the cascading climate impacts by 2040 if NDCs aren't dramatically increased and policy and delivery mechanisms aren't revised.

Given the overlaps between water and climate-related SDGs, there remains space for stronger integration of policies, processes and standards that are planned or implemented toward achieving the 2030 Agenda and the Paris Agreement targets. The complex interdependencies that exist at the transboundary water landscape, where the overlaps between water and climate-related SDGs are particularly stark, have led to a growing focus on integrated water resource management (IWRM). IWRM sets out operational practices that depend on context, is cross-sectoral and aims to bring all the stakeholders together. IWRM as a framework for managing transboundary waters stems from the Dublin Principles.

Principle 1: Water is a finite and vulnerable resource
Freshwater is a finite and vulnerable resource, essential to sustain life, development, and the environment.

Principle 2: Participatory approach
Water development and management should be based on a participatory approach, involving users, planners, and policy-makers at all levels.

Principle 3: Role of women
Women play a central part in the provision, management and safeguarding of water.

Principle 4: Social and economic value of water
Water is a public good and has a social and economic value in all its competing uses.

The Dublin Principles

IWRM presents a sound framework to direct coordination in ways that optimize economic and social well-being without compromising the sustainability of ecosystems. Unfortunately, however, it is often hindered in operational effectivity and efficiency by failure in responsibilities being met, authority transfer and accountability, and overall capacity for action.

Nature-based solution (NBS) frameworks offer strong adaptation approaches for corporations toward mainstreaming climate and water resilience. NBS as a framework for greater climate and water governance and resilience is relatively novel and encompasses other approaches such as ecosystem-based adaptation (EbA). NBS integration into business strategy and operations presents a multiple-benefit solution because it demands that pressure be reduced on scarce natural resources across all operational activities. As an umbrella term for a range of approaches and activities that include source water protection, watershed management, water harvesting, agricultural best practices, afforestation, sustainable drainage systems and wetlands restoration. Climate change is increasingly challenging the resilience of grey infrastructure with investments into NBS by governments, water utilities and companies rising from 8.2 billion USD in 2011 to 24.6 billion USD in 2015. Despite the acknowledged benefits of NBS and investment increase in it, during 2013 and 2015 global private firms invested around 3 billion US in predominantly grey infrastructure, showcasing that there remains space for dialogue, capacity building and uptake of NBS. Consider, for instance, how Brazil's Itaipu Dam has had its lifespan increased by implementing landscape management practices upstream informed by NBS approaches. The NBS approaches applied to the Itaipu Dam improved the quality and quantity of water feeding into it which in-turn reduced the amount of sediment that entered the dam's reservoir, increased its storage capacity and reduced maintenance and electricity generation costs [2]. Combining grey infrastructure with NBS approaches recognizes that the infrastructure lifespan depends on healthy ecosystems and it allows for gradual and functional transition toward scaling-up NBS approaches and systems-wide thinking on resources management.

Source: Shutterstock

The CEO Water Mandate - an initiative by the UN Secretary-General and the UN Global Compact in partnership with the Pacific Institute – stands as an example of how business leaders have been mobilized to advance water stewardship. Water stewardship is the use of water in ways that are socially equitable and environmentally sustainable whilst being economically beneficial. The CEO Water Mandate encourages companies to consider their water stewardship in their direct operations, their supply chain, their collective action through multi-stakeholder collaboration, integration with public policy, community engagement and transparency [3]. Although clear standards are outlined for companies to adhere to when joining the CEO Water Mandate, compliance to these standards are at the discretion of the companies. The most significant criterion that holds companies accountable to these standards as part of the CEO Water Mandate is the expectation that annual reporting be done to show the progress companies are making toward the standards. As of September 2021, a total of 202 global companies have endorsed the standard outlined by the CEO Water Mandate.

As a means of furthering the standards outlined in the CEO Water Mandate into operational procedures, the Water Resilience Coalition (WRC) was formed in 2020. As an industry-led alliance in partnership with NGOs, the WRC invests in strengthening the water resilience of shared freshwater basins at the community, industry and environmental level. In joining the WRC, leaders pledge to achieve quantifiable, collectively aligned and time-bound targets that aim to rapidly scale-up cross-sectoral partnerships and solutions that build water-resilience.

In similar effort to hold business operations accountable to environmental commitments, the Climate Disclosure Standards Board (CDSB) has established an evolving framework that guides businesses in reporting environmental information in their annual mainstream reports for corporate compliance checks. By supporting businesses with standards for reporting, the CDSB normalizes the participation in public and open reporting of environmental information with similar rigor that is placed on financial reporting. At present, over 300 companies have incorporated the CDSB framework into their mainstream reports. According to Francesca Rencanati, a senior technical manager at CDSB, there has been a gradual improvement in reporting of environmental information with 72% of water-related business risk being reported in mainstream reports [4]. Notably, however, no clear outlines have been made within mainstream reports by businesses that outline the organizational strategy for furthering water-related resilience.

In 2017 the Alliance for Water Stewardship (AWS) emerged as a global collaboration of businesses, public sectors and NGOs who adopt and promote the International Stewardship Standard (AWS Standard) as a means of achieving positive water stewardship. At the crux of the AWS Standard are five action steps, each of which have a series of criteria and indicators to operationalize the standards [5]. These standardized action steps and operational indicators are reflected in Figure 1. As a means of assessing whether these standards were adhered to, external audits are conducted on the water stewardship processes that AWS Standard members implement into their operations. As of September 2021, AWS Standard has 148 members registered to its standards for water stewardship.

Source: Shutterstock

Source: International Water Stewardship Standard

Within the frameworks of such water stewardship initiatives, such as the Alliance for Water Stewardship, the CDSB and the International Water Stewardship Programme (IWaSP), several risk-assessment tools have been developed. The development of tools such as the Water Risk Filter, which is free to access and can be used by investors and companies from all sectors to assess and quantify water-related risks, highlights how the mainstreaming of water resilience in business practices is gaining traction.

Much of the initiatives that corporate actors have embraced in recent years toward better climate mitigation and adaptation have been informed by science-based targets (SBTs). SBTs demand that targets are set in accordance with contextual resources available. Through focusing on selected locations across the value chain, three categories of targets are identified when using SBTs: process-oriented targets, quantitative targets and moonshot targets. In using SBTs, corporations set proportional responsibility toward desired climate mitigation and adaptation goals. Businesses seeking financial compliance are increasingly being held to science-based targets. In October 2020, a group of 137 global financial institutions, holding nearly US20 trillion in assets, called on companies to set 1.5o Celsius aligned science-based targets and achieve net-zero emissions by 2050 at the latest [6].

Similarly, the Net Zero Asset Managers investor-led initiative called for science-based target-setting. Setting targets is a fundamental part of work flow in business strategy and operation. The idea of SBTs is that their integration enables corporations to align their targets with public policy, institutional entities beyond them and outline pathways toward reduced greenhouse gas emissions. Nestlé's integration of AWS standards into its operations by certifying 20 of its over 400 (5%) factories globally with current best water stewardship practices to meet process requirements. In addition, Anglo American's goal to operate waterless mines in water-scarce areas showcase site-based SBT initiatives. It is worth noting, however that corporate net-zero targets are being approached inconsistently which makes it difficult to assess the contributions that science-based targets make toward the net-zero goal.

Corporations stand as powerful actors in efforts toward better water resilience, mitigation and adaptation approaches. Estimates place agriculture at about 70% of global water withdrawals, mostly for irrigation. Another 20% of global water withdrawals can be accounted to industrial water use which includes large private sector shares. The heightened awareness of water risks among private sector stakeholders is evident in the Water Stewardship approach that many multinational corporations have adopted.

The Water Stewardship approach, as a collaborative and multi-stakeholder approach, aims to achieve social, environmental and economic benefits and doing so have helped to codify best practices with regards to water resilience.

The rising commitment of global companies toward best practices is particularly important when considering transboundary water resources and water resilience. Companies operate within broader societal contexts, and the manner in which they engage in those contexts deeply impact the role of the private sector in integrated water resource management. Taking a closer look at the involvement of private corporations in transboundary development projects gives a practical outlook on how corporate commitments toward water resilience are or aren't being met.

Source: Shutterstock

Case Study: Corporate Involvement in the Blue Nile

As a crucial source of water to Ethiopia, Sudan and Egypt, the Blue Nile has become increasingly contentious over the past decade with Ethiopia taking unilateral decisions to build and fill the Grand Ethiopian Renaissance Dam (GERD). The GERD is a 5-billion-dollar project which is nearing completion. With the capacity to be filled with 74 billion cubic meters of water, there may be devastating effects in water supply felt downstream.

Although Ethiopia and Egypt are not parties to the United Nations Convention on the Law of Navigational Uses of International Watercourses (UNWC), there are principles outlined within the UNWC that apply to the GERD dispute as the UNWC principles codifies the basis for negotiations around transboundary waterways. Regionally, the Nile Basin Initiative (NBI) functions as a cooperative water resource management mechanism, however, it does not hold the institutional traction that a permanent river basin organization (RBO) holds. The Cooperative Framework Agreement (CFA), signed by some of the member countries in 2010, aims to improve institutional traction by formalizing the NBI into a permanent Commission by replacing earlier bilateral treaties such as the 1959 Egypt-Sudan agreement. Until present, Egypt and Sudan have not signed or ratified the CFA because of the hydrological change and risks it may present to them that was secured under the 1959 bilateral agreement.

Against this backdrop, a company with a long-standing presence in infrastructure-building in Ethiopia, Salini Impregilo (now Webuild Group following a merger in 2014), was awarded the contract to construct the main dam in a public-private project with Ethiopian Electric Power. The unilateral decision that was taken by Ethiopia to construct the GERD has included Webuild as a corporate entity into the political dialogue and overall transboundary water resources management discussion. In a statement on April 23, 2021, Sudan's Irrigation Minister, Yasser Abbas, said "in the event the second stage of selling the GERD was completed without reaching a legally binding agreement, our legal teams, with the help of international law firms, will file a lawsuit against the Italian company that executed the dam's project and against the Ethiopian government." Abbas continued by saying that the "environmental and social impacts resulting from the dam's construction were not considered [7]. With similar sentiments of discontent, Egypt's Deputy Foreign Minister for African Affairs, Hamdi Sanad Loza, stressed in a meeting with the Italian ambassador that Webuild had not conducted sufficient studies on the economic, social and environmental impact on riparian nations, which he also stated stood in "violation of Ethiopia's obligations under the Declaration of Principles and the rules of international law."

Recognized as one of the top construction contractors in the environment sector, Webuild has received a number of recognitions from the Engineering NewsRecord for its sustainability in works. Yet, looking into the publicly disseminated information

from Webuild on the GERD project, it does not appear that the range of current best practices for water resilience are engaged with. For instance, Webuild does not endorse the CEO Water Mandate at present nor is it a member of the Alliance of Water Stewardship (AWS). Even though Webuild is not at present a member of these global coalitions that work toward best corporate practices, their activities in the GERD show a consideration of contextual factors in their target setting. For example, in its 2021 Sustainability Report, Webuild outlined that it uses tailor-made concrete mix designs. In addition, training programs were provided on different production-processes to ensure quality and sustainability [8]. When the GERD project began in 2011, the concrete that was available locally was not sufficient in accordance with the project's technical specifications. As a means of addressing this, Webuild used a combination of what could be locally sourced in Ethiopia with imported goods to tailor-make a cement mix whilst delivering training courses to build local capacity in producing better quality cement. This contextually-informed approach led to local workforce branching out to develop businesses that would supply better quality concrete. By 2015 Webuild (then Salini Impregilo) was getting 53% of its materials from local suppliers as opposed to 40% in 2011. [9]

The GERD has resulted in multiple voices being added to the discussion based on foreign policy alongside conflicting national interests. Soft-power advances include Egypt extending its radio broadcasting scope across Africa to communicate its concerns over the GERD. In addition, clear iterations were made by China's Foreign Minister Wang Yi that China would expend every effort to support peaceful negotiations. Five Chinese companies, including the state-backed China Gezhouba Group (CGGC) and Voith Hydro Shanghai, operate on the GERD project [10]. The different interests that state and non-state actors hold in the GERD development are incompatible. Compromise is not cultivated under impactful institutional frameworks that are needed for comprehensive agreement. The case of Webuild's corporate activities in the GERD project also showcases how corporate best practices cannot be carried out in isolation without considering the wider context in which activities take place.

The large-scale developments along the Blue Nile illustrate the importance of clear and legally binding agreements on water allocation and processes of transboundary water resources management. The influence that corporations such as Webuild hold on these developments also highlights how, without binding accountability checks-and-balances in place, targets that demand 100% compliance to particular water resilience metrics, may not be attained.

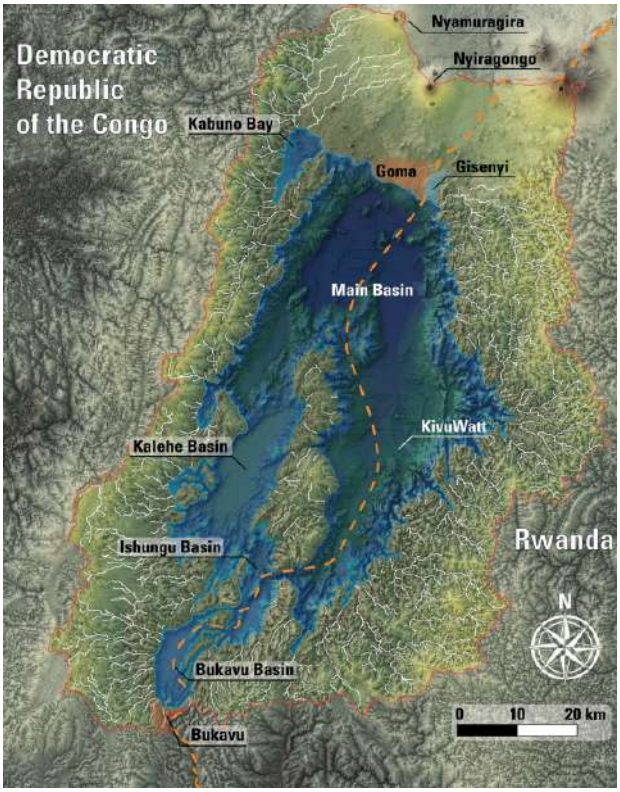
Case Study: Corporate involvement in Lake Kivu

Lake Kivu is shared by the DRC and Rwanda. As part of the Great Lakes Region and with an outflow into the Rusizi River in Burundi, developments on Lake Kivu also stand to affect freshwater flows in Burundi. As a result of unsustainable practices in agriculture, forestry, land use and catchment management Lake Kivu and the Rusizi River face a number of threats. Although steps have been taken within each involved nation state to set-up institutions directed at the NRM of Lake Kivu in particular, there is little resilient and effective transboundary cooperation frameworks that have been established. The ongoing donor interests in the region have expanded to include private companies such as ContourGlobal and Gasmeth Energy.

In August 2011, ContourGlobal started on the KivuWatt project to install an integrated methane gas extraction facility and an independent power plant. Across two phases, the KivuWatt project would extract methane from a depth of 350 meters to generate electricity that gets sold to the Rwanda electricity utility, Rwanda Electricity Corporation (RECO) under a PPA. The first phase of the project was completed in 2015 and has proven to meet its expected output of 25MW of sustainable power generation to the national grid. The PPA is set to expire in 2040 and complete ownership of the facilities will be transferred to the Republic of Rwanda [11].

The KivuWatt Ltd concession is located within Rwandan territory; however, Rwanda and the DRC bisects Lake Kivu. Since 1975, the DRC and Rwanda have engaged in dialogue over how to engage in joint exploitation of the lake's methane reserves.

Out of this bilateral dialogue SOCIGAZ (Societe Commercial et Industrielle pour la M du Gaz Methane) was formed as an entity responsible for governing such exploitation. In 1999, explicit reforms within SOCIGAZ enabled both the DRC and Rwanda to have the right to assign concessions for their territory. This bilateral agreement makes transboundary basin developments less contentious of a subject for Rwanda and the DRC but it does not incorporate all stakeholders. Burundi, as well as several community groups are not included within the SOCIGAZ agreement, yet developments that are commissioned affects waterflows into the Rusizi River basin. At a wider basin level, ABAKIR stands as an authority with legal status but poor operational and institutional capacity to manage basin resources.



Source: EAWAG, 2021

In terms of water resilience and corporate engagement, ContourGlobal attests in its 2019 sustainability report that three experts in biochemistry and limnology (the study of inland freshwater) with prior experience with Lake Kivu developed the gas extraction process [12]. The Management Prescriptions that had been developed by Rwanda and the DRC in 2009 as part of a bilateral agreement were also adhered to. In its 2015 sustainability report, ContourGlobal notes that extensive baseline assessments were conducted prior to commencing operations on the project. Leading experts were chosen by the governments of Rwanda and the DRC to form an Independent Expert Advisory Group (IEAG) as a means of monitoring key identified indicators including:

- Water flow measurements
- Gas sampling
- Temperature reading
- Water density assessment
- Turbidity testing
- Stratification review

The KivuWatt Ltd Project Team is responsible for the ongoing implementation of the Environmental Management and Monitoring Plan (EMMP) which includes impacts on air, water, lake stability, fisheries, waste and noise. Under this responsibility the KivuWatt Ltd Project Team has to ensure that all contractors adhere to environmental health and safety (EHS) requirements that align with the EMMP. In practicality this oversight took the form of weekly on-site inspections, periodic audits of operations and mandatory EHS reports by contractors.

In addition to maintaining institutional oversight of environmental impact, ContourGlobal also took a proactive approach in establishing community engagement prior to operations. In association with the Rwandan Environment Management Authority (REMA) and the Rwandan Development Bank public meetings are arranged with local community groups to discuss community health, safety and concerns related to the project. ContourGlobal also established a grievance mechanism through which it receives comments of concern from community groups can be received and addressed. To ensure compliance and ethics in monitoring and reporting, the roles and responsibilities for monitoring the project is shared between the Project team, the Bilateral Regulatory Authority (BRA) and the Rwandan government authorities. It is worth noting that as a corporate entity, ContourGlobal must comply with a 2005 regulation issued by the Government of Rwanda that requires stakeholder consultation. In terms of community engagement clear integration between private sector involvement and public policy.

With its first phase of operation completed in 2015, the KivuWatt project reduces Rwanda's use of diesel by adding a more sustainable source of power

Source: Shutterstock

generation to the mix. The KivuWatt project also lowers electricity costs and allows Rwanda to move a step closer to the national target of 563MW of installed power capacity by 2017. The lowered costs have also enabled local industry and tourism to expand as wider development becomes facilitated [13]. Moreover, the project has helped to prevent saturation of the lake in 50 to 200 years from the high levels of CH4 and CO2 which places at risk more than two million inhabitants of the Lake Kivu area [14].

Although ContourGlobal is not an endorsing company of the CEO Water Mandate, nor a member of the AWS Standards, its publicly reported program activities and sustainability reports indicate that its disclosures align well with the CDSB framework. The KivuWatt project is reflective of an NBS-informed policy approach as its design aims to cultivate ecological capital from Lake Kivu whilst factoring in social and economic engagement. The internal and external contextual factors that ContourGlobal factored into its project design, implementation and monitoring positioned it so that reputational risks acted as a means of enabling accountability whilst data logging of the cumulative impacts took place. In modifying the existing ecosystem to address societal challenges of poor power generation and high environmental risks, the disseminated policies, processes and standards of the KivuWatt project align with an NBS framework.

It needs to be noted, however, that the novelty of NBS leaves much room for developing more refined understanding and effective application of NBS approaches as currently little of a knowledge base or exchange has been cultivated. As a pilot program in methane gas extraction from natural ecosystems for sustainable power, the KivuWatt project raises concern over the reliability and replicability of it.

When regarding the practical risks of the KivuWatt project, even within what appears nature-based in its policy and processes, there are a number of pollution-generating concerns including:

- Unmanageable flaring and gas emissions, particularly during the process start-up and shut-down or during upset conditions.
- Potential oxygen depletion and acidification of the lower biozone.
- Disruption of fisheries as a result of direct impact to the fish or through primary food sources.
- Generation of fugitive dust, emissions and noise pollution from the construction and operation processes.
- Potential soil erosion.
- Expected surface runoff and discharge of wastewater and hazardous material spills from concrete mixing, equipment washing, dust suppression, oily water and sanitation.

For the anticipated release of pollutants from construction, ContourGlobal is expected to comply to the World Bank Group EHS Guidelines for emissions and the Organic Law on Environmental Protection, Conservation and Management (2005). The other standards for compliance are internally developed and monitored.

The process of extracting methane gas from Lake Kivu as a source for power appears to be a long-term commitment for the Government of Rwanda. In February 2019 the Government of Rwanda signed a deal for seven years and worth 400 million USD with Gasmeth Energy Limited to extract and process methane gas from Lake Kivu. A notable concern to these corporate engagements, given the context of ABAKIR's poor institutional and operational capacity, is that these developments have had to rely on funds by external donors for fixed project periods. For the KivuWatt project, public and private financing came from the Emerging Africa Infrastructure Fund, the Netherlands Development Finance Company, the African Development Bank, and the Belgian Investment Company for Developing Countries. Although the project has seen success in meeting its outcomes, the dependence on external funding raises concerns of continuity in climate and water resilience and the prospect of more resilient transboundary cooperation frameworks. For the more recent Gasmeth project funding has been pooled from Gasmeth Engery Limited directly.

Changing With the Times: Corporate Engagement in Transboundary Water

The corporate engagement of large corporations in different transboundary water development contexts, highlights a few relevant themes for policymakers and practitioners in the field to pay attention to. One key theme that emerged is that further integration needs to be cultivated across national and international regulatory frameworks. In cultivating stronger integration so that greater regulatory harmonization can take place. Preferably the first point of establishing this integration is at the national level where national governments cultivate an enabling environment for water resource management by:

- Establishing adaptive institutions and participation schemes.
- Institutionalize appropriate management tools.
- Ascertain sustainable financing.

These components at the national level allow for effective IWRM systems to be established, which subsequently permits for stronger multi-stakeholder action plans to be made toward actionable climate and water resilience. These components may appear deductive in writing but in reality, only 54% of the world's water resources have IWRM systems implemented.

The case studies regarded demonstrate that many aspects of the current corporate best practices toward greater water governance and resilience are not necessarily transposed into action. The greater actionable success that the KivuWatt project has had in comparison to the GERD project from a corporate engagement point of view, highlights the benefits of an enabling environment for water resource management. The bilateral agreement between Rwanda and the DRC, and the 2005 Government of Rwanda regulation of stakeholder involvement stood out as significant to enabling multi-stakeholder involvement. In contrast to the environment that ContourGlobal engaged in, Webuild has been engaging in a transboundary water space where no impactful IWRM exists to move policy into practice.

Specifically looking at corporate policy and practice as illustrated through the case studies, there appears to be a gap in the understanding of the risks and opportunities associated with the changing landscape of water. There also appears to be a need for businesses to develop an understanding of political, social, economic and ecological context of water issues beyond policy outlines so that they can productively position themselves within collaborative water frameworks and move toward actionable impact.

The practicality of some of the current best practice approaches also appear lacking based on the case studies regards. Much of the current use of SBTs in best practices outlooks, for instance, have narrowly focused on corporate-level performance targets as means to transformational change. This raises concerns about their practical implications. At present the form of best corporate practices does not allow for function to follow in all contexts, which makes it challenging to use as accountability measures toward collective action. Similarly, new frameworks such as NBS have such a vast scope of application that enforcing NBS effectively becomes challenging. It has been suggested that a global standard for nature-based solutions needs to be developed for transformable change to be achievable through it. Moreover, practical incentives need to be used to prompt businesses to engage in best practices because as the case studies have shown, not all of the current best practices, processes, policies and standards are actively applied.

The cases considered alongside current best practices and standards allow us to draw on what has proven effective and ineffective in terms of corporate engagement in transboundary water developments. May progress continue and may future projects be better informed.

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Sources for Further Learning

Nature-based solutions (NBS):

https://www.iucn.org/sites/dev/files/content/documents/nbs_workshop-bridge_gbm_report_3-june2018.pdf
https://www.eesi.org/papers/view/fact-sheet-nature-as-resilient-infrastructure-an-overview-of-nature-based-solutions

Grey-Green Infrastructure:

https://www.conservation.org/projects/green-gray-infrastructure

Science Based Targets Network:

https://sciencebasedtargets.org/companies-taking-action

CEO Water Mandate:

https://ceowatermandate.org/about/endorsing-companies

Open Source Tools for Estimating Dependencies and Impacts on Water Resources Value Chains:

GeoFootprint (Quantis 2020). https://geofootprint.com/
WaterStat (Water Footprint Network 2019a). https://waterfootprint.org/en/resources/waterstat/
Water Footprint Assessment Tool (Water Footprint Network 2019b).
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Briefs in the Series

Developed for water industry practitioners and government officials at the request of MEDRC's member countries, MEDRC's Practitioner Briefing series serve as a guide to trends in transboundary environmental cooperation. The initiative is intended to bridge the academic-practitioner gap in the sector by providing short, accessible and practical overviews, each focusing on a different theme.

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