

CLIMATE ACTION PATHWAY

WATER

Action Table

November 2019

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ADOPTION OF RISK-BASED WATER MANAGEMENT TOOLS AND APPROACHES ARE ACCELERATED AT LOCAL, NATIONAL AND TRANSBOUNDARY LEVELS

MITIGATION



Policies (national, subnational and local)	By 2020	By 2030	By 2050
		<ul style="list-style-type: none"> Promote and incorporate tools and methodologies for resilient water management into national climate plans and policies such as NDCs, NAPs and other national planning documents. At the local level, help raise awareness about these methodologies including their climate rationale (i.e.: increasing variability in the water cycle as a result of climate change necessitates solutions that are both sufficiently flexible to adjust as conditions change while robust enough to withstand degrees of change). 	<ul style="list-style-type: none"> Support the development of regional resilient water management training centers. Implement policies to improve the cross-sectoral management and accounting of water to ensure sufficient supply for climate mitigation and adaptation activities, while maintaining supply for basic services, the economy, and ecosystems.



<h2>Finance and Investment</h2>	<ul style="list-style-type: none"> Scale up and diversify funding for training and capacity building among national adaptation focal points and climate change managers / professionals. Support the training of 100 national adaptation focal points through the UNFCCC CGE's regional adaptation training programmes. Develop an independent fund to support continued capacity building at all levels.
<h2>Technology and Innovation</h2>	<ul style="list-style-type: none"> Work with civil society to help mainstream these tools and approaches Assist in the creation of a global community of practice utilizing these methodologies, disseminating best practices
<h2>Business and Services</h2>	<ul style="list-style-type: none"> Develop curriculum for UNFCCC CGE's regional adaptation training programme at 3 universities covering APAC, EU-Africa, and LAC. Develop an international community of practice around resilient water management methodologies. Expand the number of regional training for technical water professionals / engineers. Support the development and design of new / retrofitted water infrastructure to help lower carbon emissions from the water sector and improve performance over time. Support the "resilient basins" initiative of the Global Commission on Adaptation's Water Action Track Create a formal community of practitioners that works to learn, teach and revise best practices for resilient water management for agriculture, cities, energy generation, ecosystem health, and human supply and sanitation.
<h2>Civil Society</h2>	<ul style="list-style-type: none"> Promote the expanded use of these methods within the climate community through conference events, technical workshops, and papers. Build a database of resilient water management case studies. Continue to expand the adoption of resilient water management tools and methods at the local level and engage in additional university partnerships to "train the trainers." Build capacity of implementers through partnerships and organisations by sharing of best practice and knowledge, notably through collaborative initiatives registered on the Global Climate Action Portal (NAZCA) and by the Least Developed Countries Expert Group (LEG) and the Nairobi work programme (NWP)

EXISTING INITIATIVES


<p><u>UNFCCC Consultative Group of Experts (CGE) Professional Short-Term Training Course</u></p>	<p>Provides policy options and impact analyses for decision making.</p>
<p><u>Climate Risk Informed Decision Analysis</u></p>	<p>Provides policy options and impact analyses for decision making.</p>
<p><u>World Bank Decision Tree Framework</u></p>	<p>A “bottom-up” methodology developed by the World Bank for demonstrating the robustness of a given project to climate change.</p>
<p><u>Adaptation Pathways</u></p>	<p>This approach aims to support development planning that is able to deal with conditions of deep uncertainty, specifying actions to be taken immediately in order to prepare for both the near -and long-term.</p>
<p><u>Marrakech Partnership – Water Action</u></p>	<p>The action under the Water thematic area of the Marrakech Partnership seeks to manage water better in order to boost the resilience of cities, agriculture, and nature.</p>

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VALUE OF GREEN AND BLUE BONDS FOR WATER ISSUED BY 2050 ARE TRIPLED

ADAPTATION



NEXUS



	By 2020	By 2030	By 2050
Policies (national, subnational and local)	<ul style="list-style-type: none"> Promote the expanded use of labeled green bonds for financing climate aligned water projects and assets. Help create demand of green bonds by implementing "green bond mandates" for domestic funds 	<ul style="list-style-type: none"> Support the continued expansion of labelled sovereign green bond issuance. Use capital steerage methods to enable climate finance instruments such as green bonds in order to channel greater private capital towards climate water bonds. Enable the development of new bonds markets, particularly in lower and middle income countries, as well as for use by local governments. 	<ul style="list-style-type: none"> Facilitate the adoption of green water bonds at the speed and scale necessary by promoting regulatory policies and governance mechanisms that allow for and promote a green bond market. Put in place policies to reduce perceived risk of green investments that currently prevents access to bond markets.
Finance and Investment	<ul style="list-style-type: none"> Continue to develop sector criteria for water-related investments, including hydropower 	<ul style="list-style-type: none"> Review business case and investment financing criteria for green bonds to facilitate delivery of climate-resilient water infrastructure 	<ul style="list-style-type: none"> Continue to identify and demonstrate green infrastructure investment opportunities around the world, particularly in low and middle income countries.

	<ul style="list-style-type: none"> Work with policy makers and the finance community to develop innovative new financial instruments for climate-related water projects. 	<ul style="list-style-type: none"> In low to middle income countries, development banks help mature pipelines of projects that can be financed using green water bonds 	
Technology and Innovation	<ul style="list-style-type: none"> Facilitate information exchange, share evolving best practice and feedback into industry guidelines and standards 		
Business and Services	<ul style="list-style-type: none"> Continue to develop sector criteria for water-related investments, including hydropower Demonstrate relevant green bond opportunities available to investors 	<ul style="list-style-type: none"> Grow the percentage of sustainability, SDG and social bonds being issued. Work with local and national governments, financial institutions, and the private sector to build new bond markets in low to middle income countries 	<ul style="list-style-type: none"> Continue to define and refine a common taxonomy for green bond issuers, investors, governments and municipalities to help ensure that projects and assets labelled as green will actually deliver a low carbon, climate resilient economy.
Civil Society	<ul style="list-style-type: none"> Facilitate information exchange, share evolving good practice and feedback into industry guidelines and standards 	<ul style="list-style-type: none"> Build local capacity through education programmes, providing cities with tools, support by connecting them with organisations who can prepare them for green bonds issuance, and a platform for knowledge and best practice sharing between cities. 	<ul style="list-style-type: none"> Continue to rapidly expand the role of private capital in the green water bond market.

EXISTING INITIATIVES

<p><u>Climate Bonds Initiative</u> www.climatebonds.net</p>	<p>CBI is an international initiative promoting investment in projects and assets necessary for a rapid transition to a low carbon and climate resilient economy.</p>	
<p><u>International Capital Market Association</u></p>	<p>ICMA's Green Bond Principles (GBP), updated June 2018, are voluntary process guidelines that recommend transparency and disclosure and promote integrity in the development of the Green Bond market by clarifying the approach for issuance of a Green Bond.</p>	



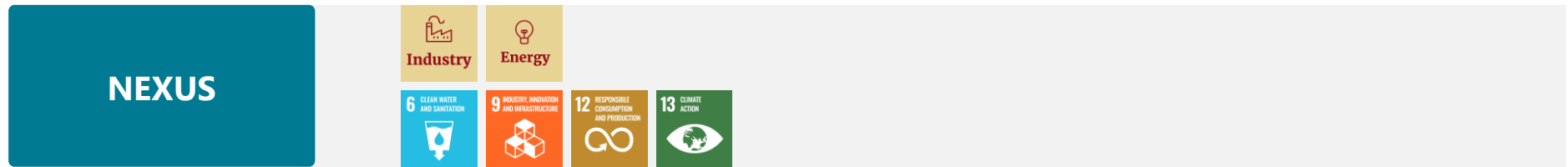
FURTHER REFERENCES

CBI Green bonds market summary H1 2019:
[www.climatebonds.net/files/files/H1%202019%20Highlights final.pdf](http://www.climatebonds.net/files/files/H1%202019%20Highlights%20final.pdf)

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CORPORATE WATER AND CLIMATE VULNERABILITY ASSESSMENTS ARE STANDARD PRACTICE BY 2050

MITIGATION





	By 2020	By 2030	By 2050
Policies (national, subnational and local)	<ul style="list-style-type: none"> Incentivize the private sector to undertake regular and comprehensive water vulnerability assessment and to disclose water risks. Take steps to reduce policy uncertainty to help companies plan and account for rules, incentives, and regulatory changes. 	<ul style="list-style-type: none"> Ensure a conducive policy environment for globally standardized water and climate-related disclosure. Set a price on carbon that is consistent with achieving the Paris Agreement's goals. 	<ul style="list-style-type: none"> Create supportive institutional, legal and regulatory frameworks to promote and incentivize corporate water vulnerability assessment. Build city-business climate and water alliances.
Finance and Investment	<ul style="list-style-type: none"> Call on companies to take immediate steps to strategically assess and address their water risks. Assist corporations in undertaking vulnerability assessment, monitoring, and risk reduction. Promote opportunities associated with pursuing a water secure future into 	<ul style="list-style-type: none"> Increase funding and financial incentives for corporate vulnerability assessment and risk reduction activities Reduce/curtail investment in companies or industries who do not routinely and comprehensively undertake vulnerability assessment for water and climate 	<ul style="list-style-type: none"> Create investment standards related to water and climate risk assessment.



	business, financial and policy decision making.		
Technology and Innovation	<ul style="list-style-type: none"> Support the creation and implementation of vulnerability assessment tools and methodologies targeted towards the private sector. 	<ul style="list-style-type: none"> Develop new water risk assessment products specifically tailored to each sector (biotech, manufacturing, apparel, retail, etc.). Develop tools that can assist companies in regularly monitoring and managing water across facilities throughout the whole value chain. 	<ul style="list-style-type: none"> Create online disclosure repositories for information regarding what companies are doing to address and reduce their water and climate risks. Develop and promote new business opportunities around reducing water risks and increasing water security.
Business and Services	<ul style="list-style-type: none"> Launch corporate leadership campaigns for companies committed to systematically, routinely assessing and disclosing their water risks. Educate businesses about the potential value and opportunities associated with water risk vulnerability assessment and disclosure. 	<ul style="list-style-type: none"> Encourage the integration of corporate water vulnerability assessment by making the economic case that it is in companies' direct business interest to act now on identifying and addressing their water risks. 	<ul style="list-style-type: none"> Work with companies to integrate water directly into governance and strategy mechanisms and to set targets or goals at all levels of the business.
Civil Society	<ul style="list-style-type: none"> Mobilize campaigns around corporate water responsibility. 	<ul style="list-style-type: none"> Partner with companies to showcase best practices and knowledge sharing in water governance, risk assessment, and risk reduction. 	<ul style="list-style-type: none"> Build collaborative networks of public-private partnerships to share knowledge, information, risk reduction strategies, and risk assessment methodologies.

EXISTING INITIATIVES

<u>CDP</u>	CDP's work with water security motivates companies to disclose and reduce their environmental impacts by using the power of investors and customers. 
<u>Business Alliance for Water and Climate</u>	BAFWAC asks companies to commit to: Analyzing and sharing water related risks to implement collaborative response strategies; measuring and reporting water use data; and reducing impacts on water in operations and throughout the value chain. 

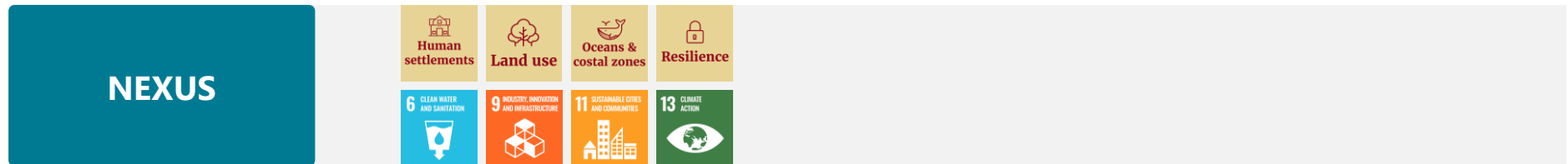


<p><u>CEO Water Mandate</u></p>	<p>CEO Water Mandate is a UN Global Compact initiative that mobilizes business leaders on water, sanitation, and the SDGs. Endorsers of the CEO Water Mandate commit to continuous progress against six core elements of stewardship and in so doing understand and manage their own water risks.</p>
<p><u>Alliance for Water Stewardship</u></p>	<p>AWS is a global membership collaboration of businesses, NGOs, and public sector actors. Members contribute to sustainability of local water resources through the adoption and promotion of a universal framework for the sustainable use of water.</p>

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USE OF NATURE-BASED/HYBRID SOLUTIONS FOR WATER INFRASTRUCTURE ARE EXPANDED

MITIGATION



	By 2020	By 2030	By 2050
Policies (national, subnational and local)	<ul style="list-style-type: none"> Where feasible, promote the expanded adoption of nature-based water infrastructure. fully incorporate NbS for water infrastructure into the 2020 NDCs. 	<ul style="list-style-type: none"> Support regulatory changes that allow greater flexibility in infrastructure planning and construction. Incentivize NbS for water infrastructure. 	<ul style="list-style-type: none"> Encourage sustainable urban mobility planning and development at all levels along with increased public transport supply and demand measures. Create supportive institutional, legal and regulatory frameworks to promote sustainable urban transport.
Finance and Investment	<ul style="list-style-type: none"> Scaled up and diversified funding for NbS in the water sector. Increase funding for sound scientific research into quantifying the benefits of NbS for water. 	<ul style="list-style-type: none"> Incentivize NbS for water infrastructure, particularly in areas likely to be hit hardest by climate change including coastal zones, arid regions and small island developing states. Work with insurance sector to quantify and standardize the value of NbS for water infrastructure. 	<ul style="list-style-type: none"> Develop financial instruments and novel business models in support of NbS implementation.



<h2>Technology and Innovation</h2>	<ul style="list-style-type: none"> Accelerate development of innovative approaches to NbS for water infrastructure that are replicable and scalable. Work with civil society, policy makers and experts to mainstream NbS within national infrastructure planning and implementation. Develop tools to track and assess the utility of NbS over time. Create an international database of case studies showcasing NbS projects from around the world.
<h2>Business and Services</h2>	<ul style="list-style-type: none"> Develop and refine concrete NbS approaches to water infrastructure. Work with civil society, policy makers, financial institutions to integrate NbS centrally within infrastructure and climate planning tools and approaches. Develop curriculum aimed at training engineers and other technical professionals on how to evaluate and integrate NbS within their infrastructure projects. Create global standards for NbS evaluation, implementation, and monitoring.
<h2>Civil Society</h2>	<ul style="list-style-type: none"> Assist in promotion and development of NbS knowledge and capacity development. Contribute to academic knowledge on NbS planning, increase the capacity of policy decision makers to integrate NbS in development planning and contribute to the general awareness of the need of NbS and socio-economic opportunities arising with their implementation at local, national and regional levels Build capacity of implementers through partnerships and organisations by sharing best practices and knowledge.

EXISTING INITIATIVES

<p><u>Nature Insurance Value: Assessment and Demonstration (NAIAD)</u></p>	<p>NAIAD is a Horizon2020 project aiming to operationalize “natural assurance schemes”, defined as a range of schemes to internalize the insurance value of river systems.</p>
<p><u>Eco-Engineering Decision Scaling</u></p>	<p>EEDS is a strategy for sustainable water management that integrates engineering and ecological approaches to climate resilience.</p>



IUCN: Green Infrastructure Guide for water resources management

This guide contains several illustrative case studies providing examples of green infrastructure options that address water management challenges, while delivering a number of significant co-benefits – particularly for climate change adaptation.



WWF Flood Green Guide

World Wildlife Fund (WWF), in partnership with USAID Office of U.S. Foreign Disaster Assistance (OFDA), developed this guide to support using natural and nature-based methods for flood risk management.

