

BlueGreen Water Technologies

Category:

Best EcoHealth Solution

Organization/Company Name:

Provide the official name of your company or organization.

BlueGreen Water Technologies

Overview:

Provide key information about the company, including its origins, mission, and core philosophy. Describe the solution, impact, and sector focus (e.g., water management, renewable energy, circular economy, waste management, sustainable agriculture, net-zero initiatives, etc.).

The global water crisis is among the most pressing planetary health threats, impacting humans, animals, and entire ecosystems. Two billion people lack clean water access, a number projected to rise with climate change and population growth. Cities like Kabul, Tehran, Bangalore, and Mexico City are on the verge of running dry. This crisis is particularly acute in Least Developed Countries (LDCs), where a lack of clean water exacerbates poverty, gender inequality, and essential economic activities.

Though lakes cover just 0.1% of Earth's surface, they emit a staggering 16-20% of global greenhouse gases (GHGs). Critically, water is not officially a category in global climate policy at the UNFCCC level.

A major symptom and dangerous accelerator of this crisis is the proliferation of harmful algal blooms (HABs), a global pandemic infecting millions of freshwater lakes and 10s of millions of sq km of ocean. Fueled by nutrient pollution, a warming climate, and increased carbon, these blooms are an ignored part of the global climate equation, actively turning water bodies into significant sources of potent GHGs-methane and nitrous oxide.

Beyond climate impact, HABs are a severe planetary and human health threat, contaminating drinking water, creating aquatic "dead zones," and releasing airborne toxins. Direct contact with can cause skin irritation, paralysis from contaminated seafood, and has been linked to severe liver damage, liver cancer, ALS, Parkinson's, Alzheimer's, and issues with female fertility and the nervous system. HABs are a direct threat to the survival of ecosystems, biodiversity, and human health, demanding urgent

global action.

BlueGreen Water Technologies addresses this multilayered crisis with a proven, scalable solution that rapidly transforms HAB-infected waters into safe and accessible resources. Unlike traditional algaecides, this regulatory-approved technology is not harmful. It harnesses a natural process called Programmed Cell Death (PCD) to selectively eliminate only the toxic cyanobacteria. The product, uniquely designed to float for optimal dispersion, coupled with remote sensing systems, ensures HABs collapse surgically and selectively, enabling ecosystem recovery. Approved by multiple global regulators and certified internationally by the NSF 60 mark, BlueGreen's products meet the highest standards for use in drinking water sources. Its ability to improve water quality increases water availability, a key solution for high-water-stress areas and a vital climate resilience measure.

BlueGreen's first-of-its-kind technology is a new hybrid Nature-Climate Solution with Carbon Dioxide Removal (NCS-CDR) properties. Its patented approach simultaneously sinks the algae's carbon-rich biomass to the lakebed, providing permanent, verifiable carbon sequestration, while also removing methane and nitrous oxide emissions directly attributed to HABs and avoiding future emissions. This directly links water restoration to global climate action.

BlueGreen's impact also extends to socioeconomic development and climate finance. By restoring water quality, BlueGreen helps revitalize communities through renewed access to safe drinking water, tourism, and fishing. The climate impact of HAB remediation also generates high-quality carbon credits, creating a new, sustainable financial pathway to fund water restoration projects for communities that couldn't otherwise afford them. This holistic approach ensures operational growth and sustained environmental and social value creation, aligned with global sustainability efforts.

Climate Health & Alignment with UN SDGs / National Policy Guidelines:

Please explain how your innovation mitigates or adapts to climate-related health risks and aligns with the United Nations Sustainable Development Goals (SDGs) and national climate policies.

BlueGreen Water Technologies delivers a transformative environmental solution that integrates water quality, food security, emissions reduction, and biodiversity. Its approach directly mitigates climate-related health risks by suppressing HABs, a leading driver of waterborne toxins, biodiversity collapse, and potent greenhouse gas (GHG) emissions. By targeting HABs, BlueGreen restores water bodies to safe, usable condition, while providing durable climate mitigation and community benefits.

The unchecked spread of HABs endangers human and ecosystem health. Beyond the aforementioned health risks, for communities, the consequences are immediate: restricted drinking water access, compromised fisheries, reduced agricultural productivity and collapse of local food webs.

BlueGreen prevents these outcomes with its science-based treatment that selectively eliminates harmful cyanobacteria, restoring safe water and stabilizing ecosystems. The treatment triggers a biological chain reaction unique to the toxic species, causing them to collapse. This halts harmful emissions, restores oxygen levels essential for aquatic survival, and rebalances food webs that support biodiversity and fisheries. Moreover, by preventing HAB-related methane and nitrous oxide emissions, it achieves durable climate mitigation.

To ensure accountability, BlueGreen integrates a Monitoring, Reporting, and Verification (MRV) framework that measures ecological gains and quantifies avoided emissions in real time. This standardized approach provides transparent, science-based evidence that differentiates the company's work in both climate finance and public health delivery. A recent strategic agreement signed with Winrock International allows BlueGreen to address climate resilience more holistically, addressing aspects associated with pollution and education as well.

Its impact advances multiple UN Sustainable Development Goals (SDGs):

SDG 3 (Good Health and Well-being): By eliminating cyanotoxins, interventions reduce disease burden and safeguard community health. At South Africa's Setumo Dam, restored drinking water improved the health of more than 500,000 residents and reduced their exposure to dangerous toxins.

SDG 6 (Clean Water and Sanitation): Communities regain reliable access to clean tap water. In Mahikeng, treatment lowered water production costs by more than 85% (water loss, chemicals and energy).

SDG 11 (Sustainable Cities and Communities): Restored urban reservoirs in China and Florida strengthened safe and reliable water supplies for growing populations and strengthened local socio-economic parameters impaired by contaminated water.

SDG 13 (Climate Action): By halting methane and nitrous oxide emissions, the solution mitigates high-GWP gases while building climate resilience through ecosystem rehabilitation. Its validated carbon methodology created a new climate finance asset class bridging Nature-Based Solutions (NCS) and Carbon Dioxide Removal (CDR).

SDGs 14 & 15 (Life Below Water and Life on Land): Monitoring shows fish stocks rebounding and aquatic vegetation returning in once-collapsed ecosystems, supporting the entire foodweb from the microorganism level.

SDG 17 (Partnerships for the Goals): BlueGreen collaborates with regulators, NGOs, and communities. Its partnership with Winrock International ensures environmental safeguards, inclusive engagement, and equitable co-benefit distribution, with a focus on building local capacity and community participation.

BlueGreen's innovation aligns with national and global climate policy, including the Paris Agreement and local water frameworks. By transforming contaminated water into safe water, community resilience, and durable climate impact, it provides a replicable pathway for nations to meet both public health and climate goals.

Measurable Impact:

Explain how you benchmark success and impact using scientific validation and quantifiable metrics where possible (e.g., peer-reviewed publications, Life Cycle Assessment (LCA) data, partnerships, net-zero targets, CO₂ reduction, resource efficiency, waste diversion rates, improved health outcomes, etc).

BlueGreen Water Technologies benchmarks success through measurable climate, health, and ecosystem outcomes, validated by scientific monitoring and independent verification. At the core of its approach is a Monitoring, Reporting, and Verification (MRV) protocol (SCM0007), developed and regularly updated with SOCIALCARBON and under review by leading global registries. This standardized framework quantifies greenhouse gas reductions from HAB interventions.

To date, BlueGreen has restored more than 200 km² of freshwater bodies, using satellite analysis, in-situ monitoring, and water quality datasets to assess climate impacts. Operating in a hyper-regulated environment - water - BlueGreen's work is highly scrutinized by local water authorities, stakeholders and regulators, and its results are independently audited, ensuring credibility and transparency.

Health outcomes are measured through cyanotoxin monitoring aligned with WHO thresholds. Following intervention, water bodies consistently meet WHO-compliant toxin levels (<6 ppb), enabling the removal of public health advisories and the restoration of safe water for drinking, recreational, and agricultural use. In Utah's Mantua Reservoir and South Africa's Roodeplaat Dam and Setumo Dam, communities once barred access to local water bodies could resume using these vital resources, improving quality of life for more than one million people to date.

Ecosystem recovery is tracked through core water quality indicators including microbial biodiversity, pH, dissolved oxygen, turbidity, and nutrient balance, which serve as reliable proxies for ecological resilience and overall habitat health. Monitoring has shown the return of stable aquatic ecosystems and fisheries that had previously collapsed under harmful bloom conditions.

Operational benefits further validate impact. By reducing toxin loads and stabilizing water quality at the source, interventions extend the lifespan of treatment plants, lower maintenance costs, and secure a consistent supply of clean water for surrounding communities.

These outcomes demonstrate how BlueGreen's innovation transforms water remediation into a scalable model for climate mitigation, public health protection, and ecosystem rehabilitation.

Current Stage & Market Potential:

Describe the current stage and potential for scaling your solution to new markets, industries, or geographies. If any, include details on market demand, regulatory considerations, barriers to scale, adoption strategy and long-term sustainability.

BlueGreen Water Technologies is a growth-stage company offering a de-risked solution to two critical global challenges: water scarcity and climate change. The company leverages its patented technology for the restoration of freshwater, brackish, and limited marine bodies, capitalizing on two rapidly expanding, high-value market opportunities.

Since 2018, BlueGreen has advanced far beyond the pilot phase, treating over 1,000 water bodies across three continents. This extensive real-world deployment, coupled with 23 patents across 15 countries and multiple regulatory approvals and certifications (including US EPA and NSF60 for drinking water), demonstrates high technological maturity and market readiness. Key metrics, such as a 95% reduction in HABs and the verified removal of 12,900 tonnes of CO₂ from a single 2 km² lake, highlight its potential to impact both water availability and climate change when scaled globally.

The integrated delivery model combines AI-driven satellite analysis and in-situ monitoring with targeted application of its proprietary solutions, ensuring scalability, precision and efficacy. Unlike conventional methods, which are often too costly or require a long-term timescale, BlueGreen's superior approach is rapid, making an impact within days to weeks. By preventing HAB-driven methane and nitrous oxide emissions and permanently removing carbon through sedimentation, the technology provides complete carbon removal and reduction pathways that are highly sought after in the carbon market.

The market potential for BlueGreen's dual solution is immense, driven by urgent global and local needs. While governments and communities are often unwilling or unable to pay for clean water solutions, carbon finance presents a compelling alternative. The

carbon market, projected by sources like BloombergNEF and Morgan Stanley to reach \$250 billion by 2050, is seeking high-volume, high-quality carbon credits to address a predicted shortfall. In a market historically plagued by integrity issues, BlueGreen's credits offer a new standard, created via verifiable carbon removal and carbon reduction.

Furthermore, the Paris Agreement's Article 6 provides a crucial, internationally recognized rulebook for carbon trading. It allows for two key mechanisms: Article 6.2, which enables bilateral trading between countries, and Article 6.4, which establishes a new UN-supervised market. Since water-based credits are not included in countries' Nationally Determined Contributions (NDCs) by default, they can be traded in this new international market without countries having to compromise on their NDC targets. This is key for industries such as aviation, under regulations like CORSIA, that face tight deadlines to meet emissions levels amid very short supply.

BlueGreen's multi-faceted adoption strategy encompasses: Direct Water Treatment Contracts (targeting governments and industries), Carbon Credit Sales, Corporate CSR Partnerships, and Water Intelligence Platform Subscriptions (via its BGI AI-powered analytics). While its technology is de-risked, potential scaling barriers include raising awareness about HAB-driven carbon sequestration and managing the operational complexities of deploying in multiple, diverse, large water bodies.

BlueGreen's long-term sustainability is underpinned by its diversified revenue streams and alignment with global sustainability efforts, positioning it as a critical player in fostering continued demand and policy support. This holistic approach ensures both operational growth alongside sustained environmental and social value creation.

Staff and Advisors:

Describe your team's expertise (e.g., academic standing, intellectual property contributions, research collaborations, and professional communications). Highlight the team's role in innovation, policy influence, and industry leadership.

BlueGreen Water Technologies is led by a multidisciplinary team of scientists, engineers, and policy experts, united by a mission to eliminate harmful algal blooms (HABs) and restore aquatic ecosystems. This leadership stands as an evolving benchmark for science-driven water resilience, bringing together technical innovation, policy insight, and on-the-ground experience to deliver scalable, science-based solutions with global impact.

The company's core innovations were developed by Co-founder and Chief Scientific Officer Dr. Moshe Harel, who oversees methodological integrity from diagnostics to

deployment. He prioritizes scientific transparency and global knowledge-sharing through peer-reviewed publications and open-access protocols, underpinning the company's scientific foundation.

Co-founder and CEO Eyal Harel has guided the company from concept to global implementation across three continents, shaping partnerships and integrating the solution into regional water policies.

Prof. Aaron Kaplan, Co-founder and IP Director, brings expertise in aquatic microbiology and limnology. He led the development and protection of BlueGreen's patented Lake Guard® technology and its proprietary MRV system. Building on this foundation, he was a key architect of a groundbreaking methodology for HAB mitigation and carbon accounting, codified as SCM0007, an entirely new natural climate solution-carbon dioxide removal (NCS-CDR) asset class. The methodology was validated by Social Carbon as the first open-access carbon removal methodology for HAB remediation, and is now under review by Gold Standard, enabling water restoration projects to access climate and carbon finance for the first time.

Dr. Oori Weisshaus, Chief Innovation & Climate, holds a Ph.D. in chemistry and leads product development, bridging lab formulation and scalable deployment while directing global climate collaborations. Yair Regev leverages nearly three decades of software leadership to drive innovation, having spearheaded the development of the satellite-linked BGi platform that powers the company's water intelligence solutions.

BlueGreen's operational core includes Oleg Tsvibel, Chief Operating Officer, who oversees global operations; Dr. Gad Weiss, Scientific Director; and Dr. Jessica Frost, Scientific Director, US. They jointly manage large-scale production, project management, field diagnostics, logistics, and regional strategy. Jan Spin, President of the Americas, leads regional deployment strategy and partnerships across North and Latin America. This leadership enables rapid response to HAB emergencies and successful operations throughout the U.S., South Africa, China and beyond.

For policy and government affairs, Saima Qadir, Advisory Board Member for Carbon and Climate Finance, is a pioneer in water and carbon markets with country operations experience in over 50 nations. Iqra Bachu, Senior Manager of Government Affairs, brings a deep background in public affairs and policy strategy, helping the company navigate complex regulatory landscapes. Kerry Duggan, a former Obama-Biden White House energy advisor, leads government engagement and regulatory strategies, supporting the implementation of BlueGreen's mission-driven initiatives that prioritize clean water access for marginalized communities.

BlueGreen's leadership is advancing public-private collaboration and informing nature-based climate strategies, bridging ecosystem rehabilitation, biodiversity protection, and global carbon markets, and positioning BlueGreen as a first mover in linking water quality with climate solutions.

Financial Structure:

Describe how your innovation is funded and sustained (e.g., key investors, funding sources, financial stakeholders, royalties, grants, revenue-sharing agreements, strategic partnerships such as academic institutions, equity groups, corporate alliances, and angel investors, etc.).

BlueGreen Water Technologies' innovation is financed through a robust and diversified financial structure that supports both current operations and future growth.

The growth-stage company is backed by \$32M from marquee investors. Its latest funding rounds were led by TAU Capital and OurCrowd, an equity crowdfunding platform. These strategic investments were critical in accelerating market penetration and scaling the company's water-based carbon credits business.

BlueGreen's business model is designed for long-term sustainability through multiple, synergistic revenue streams. These include:

Direct Water Treatment Contracts: Revenue from governments, municipalities, and industries (e.g., water utilities, aquaculture) that hire BlueGreen for direct remediation services, providing a steady, project-based income stream.

Carbon Credit Sales: The sale of high-quality carbon removal credits provides an economic incentive for water restoration. These credits' value is enhanced for addressing methane and nitrous oxide—far more potent than CO₂—commanding a premium in carbon markets. BlueGreen has already successfully issued and sold Social Carbon Verified credits and is targeting additional, highly-regarded certifications such as the Gold Standard, crucial for market credibility and premium pricing. The Paris Agreement's Article 6 provides an internationally recognized rulebook that opens up a massive opportunity for BlueGreen to partner with governments. This framework allows countries to sell credits not included within their Nationally Determined Contributions (NDCs), turning HAB-infected waters—today's liability—into a valuable asset. This creates a powerful public-private partnership and a new incentive for HAB remediation efforts, as governments can now directly finance water restoration without compromising on climate goals.

Corporate Partnerships: Engaging leading global corporations in Corporate Social Responsibility (CSR) partnerships, helping them meet water sustainability and ESG targets. This aligns with the emerging global market for 'water resilience,' evidenced by the EU's immediate €15 billion commitment and a future plan to invest €2 trillion until 2035.

Technology Licensing (BGi API): Offering its BGi AI-powered analytics platform as an API that can be integrated into existing monitoring systems. This usage-based model creates recurring revenue for continuous water body monitoring and management while positioning BGi as a foundational data layer rather than a standalone platform.

Strategic partnerships are a cornerstone of BlueGreen's financial and operational strategy. The company has a significant partnership with Winrock International, a mission-driven global organization with expertise in integrated water resource management and stakeholder engagement, significantly enhancing BlueGreen's ability to deliver trusted, long-term solutions, particularly in projects with climate finance components. This collaboration provides a strong model for sustainable water stewardship and helps unlock funding from global development and CSR-driven environmental initiatives.

The company's commercial traction is further demonstrated by key commitments. BlueGreen is strategically pursuing partnerships with the aviation industry, a sector under global regulatory pressure from CORSIA to offset emissions. This is the direction of future agreements, such as the Letter of Intent (LOI) with Pegasus Airlines for two million carbon removal credits, which validates the market's demand for BlueGreen's verifiable credits and secures future revenue streams. This multi-faceted approach ensures a robust, resilient financial model that is less reliant on a single source and aligns with global sustainability efforts.

Regulatory Compliance & Certifications (Optional Uploads):

If appropriate, provide any regulatory approvals, environmental certifications, or compliance documents demonstrating adherence to sustainability standards (e.g., ISO 14001, B Corp Certification, LEED, WELL, SBTi commitments, REACH, USDA, etc.).

[**BlueGreen Water Technologies_EPA Approval.pdf**](#)

[**BlueGreen Water Technologies US EPA Pesticide Product Label Lake Guard Blue.pdf**](#)

[**BlueGreen Water Technologies _ NSF International Certification.pdf**](#)

Community & Social Impact:

Explain how your innovation benefits local communities, underserved populations, or public health (e.g., job creation, social equity, environmental justice, improved quality of life, tourism, etc.).

BlueGreen Water Technologies delivers measurable community and public health benefits by restoring degraded aquatic ecosystems, protecting vulnerable populations,

and enabling long-term environmental and economic resilience. Its innovation addresses a widespread but often overlooked environmental injustice: the disproportionate burden of HABs on underserved and rural communities, where access to safe, reliable water is scarce and households often lack alternative sources.

HABs severely restrict clean water availability, damage local economies, and create public health hazards through airborne and waterborne cyanotoxins linked to respiratory and neurological illnesses. In Mantua, Utah, and Roodeplaat Dam, South Africa, BlueGreen's interventions lifted health advisories for the first time in years, restoring public access to recreational waters and dramatically improving quality of life. At Setumo Dam, South Africa, the innovation reduced operating expenses at the municipal water plant by 87%, doubled clean water output, and saved more than ZAR 11 million (\$613K) annually. For the first time in decades, thousands of households regained access to safe tap water, while cost savings were redirected toward local infrastructure.

BlueGreen also supports economic development through job creation and capacity building. Across South Africa, China, Germany, and the U.S., it has generated 250-300 jobs in manufacturing, field deployment, and monitoring. In South Africa, employment prioritized women and youth in local communities, supported by training programs that equipped them with transferable STEM and environmental management skills. This focus advances gender equity, strengthens local stewardship, and lays the foundation for long-term environmental resilience.

Restoring water bodies revitalizes local economies as well. In Setumo, fishermen safely resumed harvesting, restoring both food security and livelihoods. In previously restricted U.S. lakes, community and sporting events returned, boosting regional tourism and small businesses. These examples demonstrate how environmental restoration directly translates into socioeconomic co-benefits, expanding inclusive participation in local economies.

BlueGreen's model is anchored in equity-focused public-private partnerships. The company works closely with water authorities, governments, and residents to ensure transparent planning and shared benefits. By leveraging its recognized methodology for quantifying emissions reductions from HAB mitigation, BlueGreen enables carbon finance to underwrite large-scale water restoration projects in underserved regions, ensuring equitable access to clean water at no cost to taxpayers. This approach democratizes access to high-impact environmental recovery, bridging gaps between developed and developing nations.

The company's work also advances climate justice and long-term water security. By suppressing HAB-driven methane and nitrous oxide emissions, BlueGreen mitigates climate change while protecting biodiversity. By embedding ongoing monitoring into every project, BlueGreen ensures that community gains are not short-lived but

sustained, securing intergenerational access to safe water. Restored lakes and reservoirs provide communities with safe drinking water, irrigation capacity, and recreational opportunities for the long term. Continuous monitoring systems ensure rapid detection of HAB resurgence, sustaining resilience and safeguarding health, ecosystems, and livelihoods.

By combining innovation, equity, and measurable outcomes, BlueGreen transforms water remediation into a replicable global model. Its work strengthens communities, reduces inequalities, and creates a more sustainable and just relationship between people and the water resources they depend on.

Document Uploads: Supporting Data & Evidence and References:

Include letters of support, endorsements, or formal commitments from third parties, such as pilot partners, policymakers, academic institutions, news articles, or industry leaders, validating your approach and impact. Provide quantifiable metrics, case studies, third-party assessments, or regulatory approvals to support your application. Please label all files with your company name and asset name.

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[BlueGreen Water Technologies Setumo Dam South Africa 2021 Treatment Report.pdf](#)

[BlueGreen Water Technologies Roodeplaat Dam South Africa 2020 Treatment Report.pdf](#)

[BlueGreen Water Technologies_Letter of Support_Mote Marine.pdf](#)

[BlueGreen Water Technologies_Wall Street Journal_Water Treatment Startup Sees Carbon Benefit in Harmful Algal Blooms.pdf](#)

[BlueGreen Water Technologies_Smithsonian Magazine_How Cleaning Up Harmful Algal Blooms Could Help Fight Climate Change.pdf](#)

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