Blue Horizon Initiative

Advanced Dutch Water Solutions Alliance Mexico

Netherlands

What is the PIB and the Blue Horizon Initiative?

The Partners for International Business (PIB) programme is an initiative of the Government of the Netherlands that supports the strategic internationalisation of Dutch consortia in key markets. In the case of Mexico, this collaboration takes shape through the Blue Horizon Initiative (BHI): a public-private partnership that brings together Dutch companies, planning firms, and knowledge institutions with the aim of co-creating integrated solutions to the country's water challenges.

The BHI proposes a holistic approach to water management in urban and industrial settings, combining innovative technologies, territorial design, and nature-based strategies. The solutions are organised into four key areas:

- Integrated Urban Water Solutions
- Resilient Green-Blue Corridors
- Circular Water Systems
- An Academy for Water Resilience

Coordination and Liaison

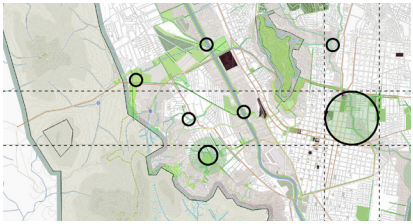
Adrián Puentes, architect and urban planner, serves as the general coordinator of the Blue Horizon cluster. Based in the Netherlands and with experience in Latin America, he leads the articulation between Dutch and Mexican partners, as well as the development of a shared agenda aimed at territorial, ecological, and social impact.

The Embassy of the Kingdom of the Netherlands in Mexico supports and facilitates high-level relations and the strategic processes of the initiative, promoting connections between cluster companies and key Mexican institutions.

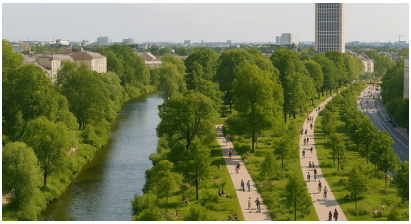
José Tello, a specialist in Mexico's water context, acts as the local liaison for the initiative with institutions, businesses, and key stakeholders. His role is essential in supporting territorial dialogue, strengthening coordination with the public sector, and connecting concrete collaboration opportunities.

Products

1. Integrated Urban Water Solution



2. Resilient Blue-Green Corridors



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3. Circular Water Systems

4. Water Resilience Academy & Innovation Lab

Partners

BD+P Beccan Davila Puentes Architects and Planners

Urban planning office that designs and implements integrated strategies for territory, water, and public space. Its work addresses complex urban and environmental challenges through locally rooted solutions, combining deep contextual analysis with participatory an interdisciplinary methods.

COLUBRIS

Developer of sustainable wastewater treatment systems, solid waste separation, and biorecovery solutions. Colubris designs tailor-made systems that minimize chemical use, reduce sludge production, and lower operational costs. Their technologies can even generate energy or fuel, enabling near-zero operating costs and maximum circularity.

dutch clean tech

A company dedicated to the development and financing of sustainable water projects. They enable investment in innovative water treatment technologies through an impact bond model, allowing municipalities and industries to access efficient solutions without high upfront costs.

FieldFactors

Designers of green infrastructure systems for urban and industrial stormwater management. Their solutions enable aquifer recharge and increase water resilience in cities by integrating nature-based strategies into the built environment.

KWR

Centre of excellence “Bridging Science to Practice”, fostering knowledge-driven decision-making into practical, applicable solutions for governments, utilities, and industries, with a focus on sustainable water management, circular economy strategies, climate resilience, and digital water innovations.

nx filtration

A leading provider of direct nanofiltration membrane technology. Their solutions remove emerging contaminants and optimize water use in industrial processes, offering a compact, sustainable, and chemical-free approach to filtration.

OCEANUS INTERNATIONAL

Experts in coastal protection, erosion control, and climate adaptation using Nature-based Solutions (NbS). Their strategies integrate sustainable engineering with innovative financing models such as carbon credits and eco-tourism to ensure long-term economic viability.

SOLAQ

Solaq creates clean water from air! Anywhere. Its modular, containerized systems use thermal energy to produce 2000 or 5000 liters of water each day. Independent of climatological conditions, Solaq offers a safe, sustainable, and affordable alternative to water trucking, ensuring reliable water access in remote, arid, or underserved regions.

UArchitects

Architecture firm focused on sustainability and regenerative design. UArchitects promotes the integration of Nature-based Solutions into industrial and urban infrastructure, contributing to resilient, inclusive, and future-proof environments.

vanEssen Instruments

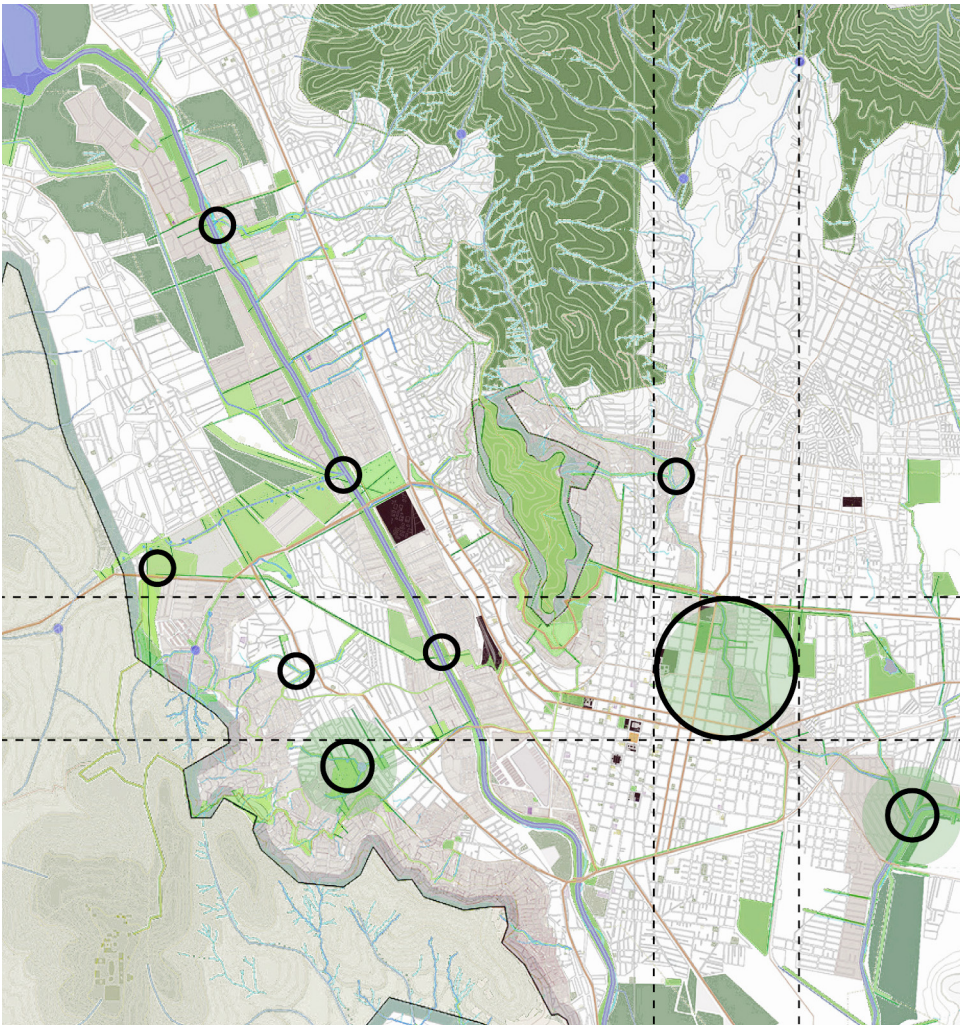
Van Essen Instruments is a company specialized in high-precision water monitoring. Their Diver® dataloggers measure groundwater levels, temperature, and conductivity, supporting applications in hydrology, mining, and water management.

wavin
An Orbia business.

Orbia's Building & Infrastructure business Wavin is an innovative solutions provider for the global building and infrastructure industry. Orbia Wavin is advancing life around the world by building healthy, sustainable environments for global citizens.

Integrated Urban Water Solutions

Integrated planning brings coherence, scale, and long-term impact to all water-related interventions. Rather than treating each component of the water cycle in isolation, the Blue Horizon Initiative offers a holistic framework that aligns technical, spatial, and financial solutions from source to reuse. This strategic integration helps municipalities design and implement climate-resilient and socially inclusive water systems.



Strategic vision for Oaxaca de Juárez. Image by BD+P - 2021

Areas of Action

1.a – Water Sources & Pre-Treatment

- Design services for rainwater harvesting, aquifer protection, and surface water management.
- Compact pre-treatment solutions, advanced purification, and innovative systems.

1.b – Smart Distribution and Monitoring

- Solutions for leakage prevention, pressure and quality monitoring, and smart consumption systems.
- Design of intelligent infrastructure tailored to vulnerable urban areas.

1.c – Urban Use & Nature-Based Retention

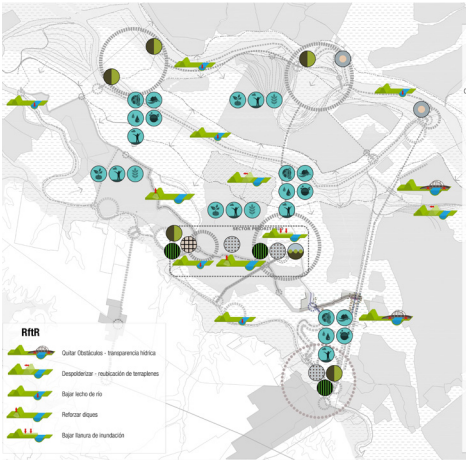
- Public space as hydrological infrastructure: permeable plazas, sponge parks, and retention landscapes.
- Integration of vegetation, shade, and micro-drainage into urban form.

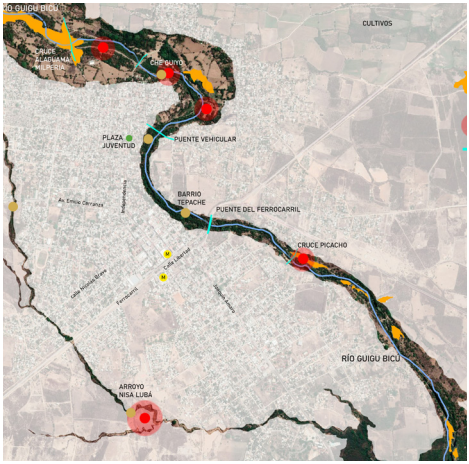
1.d – Post-Use: Treatment & Recovery

- Centralized and decentralized treatment systems with nutrient and biogas recovery.
- Modular solutions for neighborhoods, campuses, or peri-urban areas.

1.e – Circularity & Recharge

- Treated water reuse, aquifer recharge, and reintegration into urban/natural systems.
- Pilot system design with scalability and measurable indicators.





Resilient Blue-Green Corridors

Our approach to resilient corridors focuses on designing and implementing multifunctional green-blue infrastructure systems. BHI delivers technical services for the hydrological and ecological rehabilitation of river systems, nature-based street retrofits, and linear parks that integrate water regulation functions. Our teams conduct hydraulic modeling, ecological assessments, and material strategies for scalable, cost-effective interventions adaptable to different urban or peri-urban contexts.

Multifunctional ecological infrastructures that enhance water connectivity, urban biodiversity, and social cohesion through strategic integration of rivers, streets, and parks.

Design for a river restoration. Image by BD+P - 2025

Areas of Action

2.a – River Systems and Watershed Regeneration

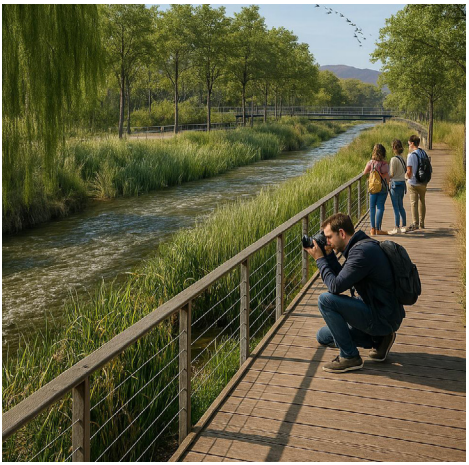
- River rehabilitation and floodplain restoration using nature-based solutions.
- Reconnecting communities with rivers through ecological public space.

2.b – Green Streets and Mobility Corridors

- Street redesign with sustainable drainage, shade, and active mobility.
- Climate comfort and inclusive accessibility in high-exposure zones.

2.c – Linear Parks and Ecological Connectivity

- Public park systems with hydrological, recreational, and educational functions.
- Integration of vegetation, signage, and low-maintenance green infrastructure.



Circular Water Systems

BHI develops site-specific circular water strategies that include greywater reuse, advanced filtration systems, and sludge valorization in industrial, touristic, and recreational settings. We provide engineering and implementation services for low-footprint water treatment, smart distribution networks, and resource recovery hubs. Our circular systems reduce operational costs and environmental loads while improving water security in high-demand areas.

Modular and scalable circular systems for water reuse, treatment, and symbiotic resource management in diverse sectors and settings.

Concept design for an Industrial Park. Image by BD+P - 2025

Areas of Action

3.a – Industrial Eco-Parks

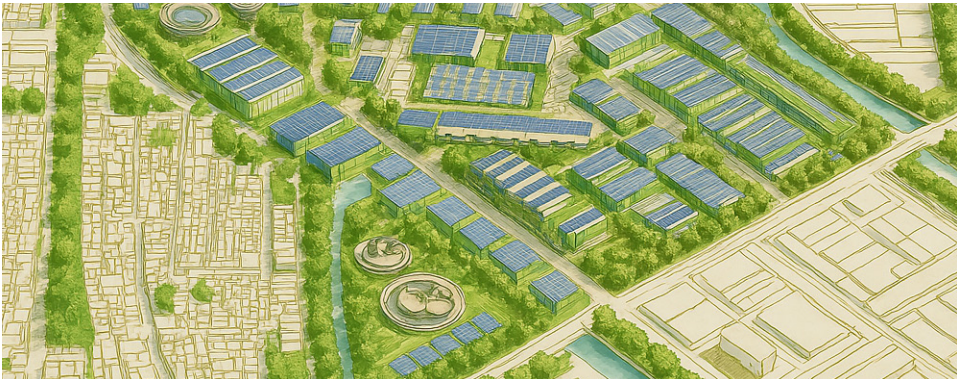
- Water reuse, sludge valorization, and green infrastructure in industrial areas.
- Circular synergies between production, energy, and water services.

3.b – Hotel and Eco-Tourism Parks

- Integrated water-energy-landscape systems tailored to sensitive tourist regions.
- Smart reuse of greywater, aquifer recharge, and natural treatment.

3.c – Sports and Theme Parks

- Recreational park design with embedded circular water and energy strategies.
- Public education and resilience awareness through landscape infrastructure.



Water Resilience Academy & Innovation Lab

This platform is designed to strengthen institutional capacities and foster innovation in integrated water management. BHI offers training modules, tailored workshops, and technical support to municipal teams and utilities on planning, design, monitoring, and maintenance of water infrastructure. Innovation labs enable pilot testing of solutions co-developed with local actors, ensuring long-term uptake and adaptability.

An interdisciplinary platform to foster knowledge exchange, capacity building, and innovation. Supports local governments and partners in co-creating water resilience pathways.

Project SUMP Izmir. Image by BD+P - 2024

Includes

- Modular training programs for municipal teams and utilities.
- Pilot labs to test solutions with stakeholders in real environments.
- Peer learning, toolkits, and cross-sectoral collaboration frameworks.

Curious to learn more? Get in touch!

BD+P is an urban planning practice that designs and implements integrated strategies for land use, water management, and public space. Its work tackles complex urban and environmental challenges through locally rooted solutions, combining in-depth contextual analysis with participatory and interdisciplinary methods.

www.beccandavilapuentes.nl

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Centro

Building a sustainable water future together

Netherlands