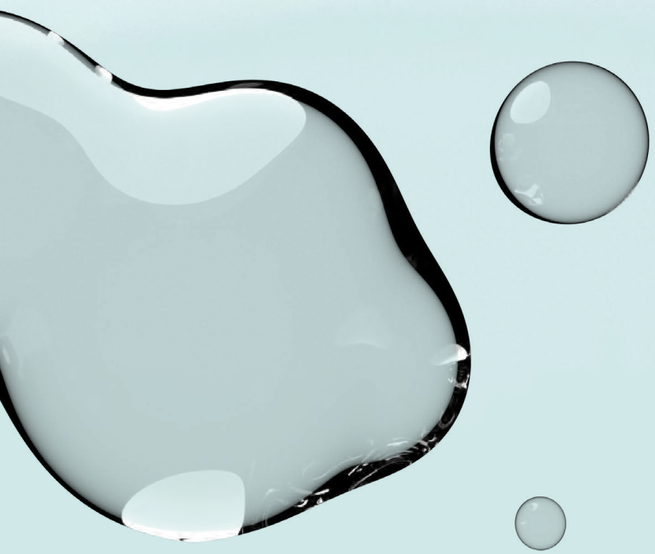
IMAGINE
H2O

TRANSFORMING THE FUTURE OF WATER

Impact Report 2022

IMAGINE H2O



Annual Impact Summary

In 2022, climate-induced water events dominated the headlines, highlighting the urgent need for water innovation. In Pakistan, devastating floods displaced more than 8m people and had enormous implications on drinking water supplies and farmland. Similarly, droughts brought major river systems to a trickle -- creating system shocks in agriculture, energy generation, shipping, and disrupting the cities that depend on these freshwater resources.

No longer relegated to the sidelines as a climate adaptation play for future consideration, the recognition of water as a critical medium through which people experience climate change has grown, leading to increased policy and public sector commitments in the water innovation market.

In the U.S., both the Inflation Reduction Act and EPA's draft PFAS limits have generated a sense of momentum and urgency in addressing water challenges. Elsewhere, commitments like Singapore PUB's Carbon Zero are inspiring new approaches to how cities manage water in the face of a changing climate. In response to these pressing challenges, innovators are decarbonizing the water sector and championing new ways to help communities and businesses adapt to changing climate.

Imagine H2O continued to play a central role in supporting and scaling these innovative solutions throughout the year. Since 2018, we have provided $1.9M in award funding to 70 pilots in 20 countries. This funding has been made possible through partnerships with our philanthropic partners and new collaborations with development banks. Our work accelerates a solution's path to market adoption and directly addresses issues ranging from arsenic testing, PFAS destruction, leak detection, and a host of other challenges at a local level.

In late 2022, we forged a new partnership with the Coca-Cola Foundation leading to the establishment of the Sustainable Access Solution Fund. Through this new partnership, IH2O will double its pilot funding capabilities and expand its impact on global access issues.

Entrepreneurs have been rising to the challenge, developing innovative solutions to address global water challenges, and Imagine H2O continues to play a central role in supporting these innovators in scaling the solutions and creating meaningful impact.

- The IH2O Team

IMAGINE
H2O

WE ENVISION AND BUILD WATER SOLUTIONS WITH THE WORLD'S BEST ENTREPRENEURS

As the leading water innovation accelerator, we are guided by our four impact pillars

TACKLING
CLIMATE CHANGE

EXPANDING
EQUITY

IMPROVING
HEALTH

ADVANCING
RESOURCE CIRCULARITY & EFFICIENCY

IMAGINE H2O

OUR STARTUPS IN 2022

17
Entrepreneurs Supported

$205M+
Raised by Imagine H2O solutions in 2022

10
Pilot Projects Funded

2
Imagine H2O startups acquired

For water startups around the world with transformative ideas, Imagine H2O is the go-to partner for developing, piloting, and scaling their solutions. We're laser-focused on helping our entrepreneurs and their ideas succeed.

240+
Startups Applied to our 2022 Programs

35
Countries represented in our applicant field

IMAGINE H2O

OUR STARTUPS IN 2022

Aclarity

BlueConduit

change:WATER

Digital Paani

CLEANEDGE WATER

EFPOLYMER Private Limited

evove

GWT GROSS-WEN TECHNOLOGIES

Hydroleap

Hydroquo+

INDRA EVERYTHING WATER.

PURE ACTIVE WATER

SewerAI

tracwater robotic water data systems

TYPHON TREATMENT SYSTEMS Ltd.

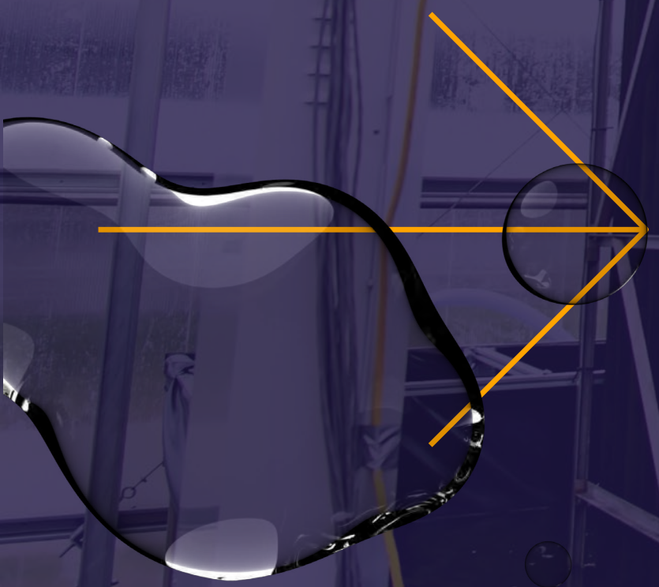
WEGOT

WI.Plat

2022 Pilots

We fund pilot projects to help tech adopters and entrepreneurs get to “yes” faster. Alongside our global ecosystem, we provide in-country support and increased visibility to help entrepreneurs broadcast their success around the world. These early proof points are vital to incentivizing wider adoption.

Over the past 5 years, Imagine H2O has deployed $1.9M in awards across 20 countries



- **Gross Wen Technologies**
  Chicago
- **AquAffirm**
  Pakistan
- **Envirosens**
  Vietnam
- **Blue Conduit**
  New Orleans
- **DigitalPaani**
  India
- **Sewer AI**
  Los Angeles
- **Aclarity**
  Detroit
- **SmartTerra**
  Philippines & Singapore
- **Change:Water Labs**
  Panama

In 2022, Imagine H2O Expanded its Pilot Capabilities Partnerships

→ Through the Water Technology Access Partnership (WTAP), Imagine H2O’s World Bank-supported pilot funding initiative, we launched the programs first two pilots in the Philippines and Pakistan

→ In 2022, we secured a new partnership with the Coca-Cola Foundation enabling us to double our pilot activities through the launch of the Sustainable Access Solution Fund in 2023

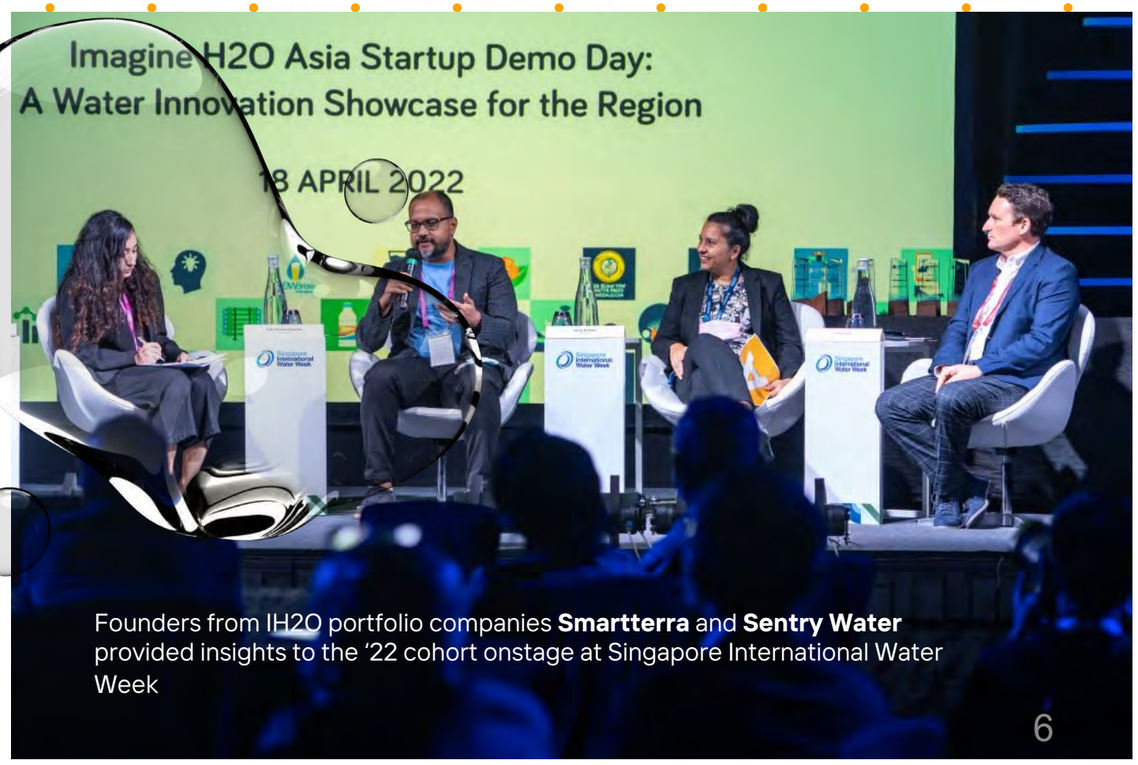
STARTUP ALUMNI

PORTFOLIO

Grow, Connect, Empower

In 2022, Imagine H2O enhanced the support provided to our alumni portfolio through key initiatives designed to elevate the portfolio's success and impact. A staff member was dedicated to lead these efforts, ensuring focused attention in nurturing the portfolio. We launched the Water Tech Jobs Board, facilitating job postings from more than 125 startup alumni. Over 200 job opportunities were posted, connecting talented individuals with innovative companies and fostering growth within the industry. Many alumni engaged with the current program cohorts by serving as mentors and advisors, leveraging their experience to guide and support the next generation of water technology entrepreneurs.

Building on the success of these initiatives, Imagine H2O plans to continue investing in this strategy in 2023 in an effort to grow, connect, and empower our expanding portfolio of solutions and entrepreneurs.



Founders from IH2O portfolio companies **Smartterra** and **Sentry Water** provided insights to the '22 cohort onstage at Singapore International Water Week

OUR STARTUP ALUMNI

PORTFOLIO

2022 HIGHLIGHTS

Epic Cleantech named to TIME's '22 Best Inventions list

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Aquacycl's pilot with Pepsico mitigated up to 90% of greenhouse gas (GHG) emissions at facility in Fresno, CA.

Imagine H2O solutions successfully raised over **$205M** in capital from investors in 2022 including:

FarmX | $18M
Citylitics | $5M
Satsure | $5M
SewerAI | $6M
Plutoshift AI | $3M
Aclarity | $3M
Swan Systems | $2M
Bevi | $70M
Arable | $40M
ZwitterCo | $33M
Createch 360 | $4M
120Water | $3M
LAIIER | $2M
Floodbase | $12M

Aquarius Spectrum | acquired by Aliaxis
Zilper Trenchless | acquired by Petra

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THE IMPACT

Imagine H2O entrepreneurs have reached over 1.2 billion people and counting...

We're at a tipping point

When it comes to the global water crisis, the time to act is now

Our entrepreneurs are helping solve critical water issues by increasing efficiency, expanding equity, tackling climate change, and improving health. We do everything we can to help our entrepreneurs and their ideas succeed, making innovation more accessible to those who need it.

TACKLING CLIMATE CHANGE

Water utilities account for roughly 4% of global greenhouse gas (GHG) emissions, and this number is set to double by 2040 due to increased demand for water collection, treatment, and distribution. With an exponential increase in GHGs over the past decade, climate change is disrupting the water cycle, and extreme weather has become more frequent and severe. As a result, storms, floods, fires, and droughts are threatening our communities, economies, and environment. Water innovation helps us adapt to these new conditions while also mitigating future risks by decarbonizing water and wastewater management.

4%

Top: The **Hydroleap** team

Right: Gross-Wen's algae based system at Chicago's MWR facility.

Decarbonize and Adapt

SINGAPORE

Gross Wen Technologies (GWT) and Xylem have joined forces and emerged as winners of Singapore PUB's Carbon Zero Grand Challenge. Their collaborative research and development proposal aims to tackle this critical issue. The project focuses on GWT's revolutionary algal biofilm (RAB®) technology, which utilizes algae to treat wastewater. Not only does this innovative solution promote nutrient recovery, but it also significantly reduces the carbon footprint of water utilities

Hydroleap has introduced a new wastewater treatment system that employs electrochemical and electrocoagulation processes. The standout feature of this chemical-free technology is its smart automation, actively mitigating passivation and corrosion while consuming 70% less energy. These efficient systems are already in use within Singapore's industrial water sector, making a tangible impact on sustainable water management.

LOS ANGELES

Sewer AI is a cutting-edge cloud-based software solution revolutionizing wastewater and stormwater management in Los Angeles, California. Their innovative solution is set to transform the way critical conveyance pipes are assessed, offering enhanced accuracy, boosted productivity, and reduced maintenance costs for aging collection systems near one of the world's largest wastewater treatment facilities.

With limited visibility into sewer pipe conditions and aging infrastructure under strain, unexpected collapses and overflow events are likely, posing risks to both residential neighborhoods and marine life. SewerAI's software empowers municipalities to assess the condition of buried wastewater assets, predict potential failures, and effectively prioritize rehabilitation or replacement efforts. By leveraging this advanced technology, we can safeguard our vital sewer systems, ensuring a sustainable and resilient future for our communities and the environment.

ADVANCING RESOURCE CIRCULARITY AND EFFICIENCY

By 2050, nearly six billion people will suffer from water scarcity. This is a result of population and economic growth, rapid urbanization, and increasingly uncertain water supplies due to climate change. Water innovation can increase resource efficiency and circularity by improving water use, monitoring water distribution and treatment systems, and promoting wastewater reuse and resource recovery.

2050

Top: EF Polymer's CEO Narayan Lal Gurjar, COO Puran Singh Rajput

Right: WeGot's sensor

Circularity & Efficiency

Putting food waste to work

RAJASTHAN, INDIA AND OKINAWA, JAPAN

EF Polymer has harnessed the power of fruit waste to create a biodegradable polymer that has the remarkable ability to absorb up to 150 times its weight, acting as a slow-release agent to maintain soil moisture and serving as a natural fertilizer. Currently utilized by 12,000 farms across five countries, EF's absorbent product has not only demonstrated its effectiveness but has also upcycled an impressive estimated 1,000 tons of crop residues during manufacturing. This sustainable solution is revolutionizing agricultural practices, promoting resource efficiency, and contributing to a greener future.

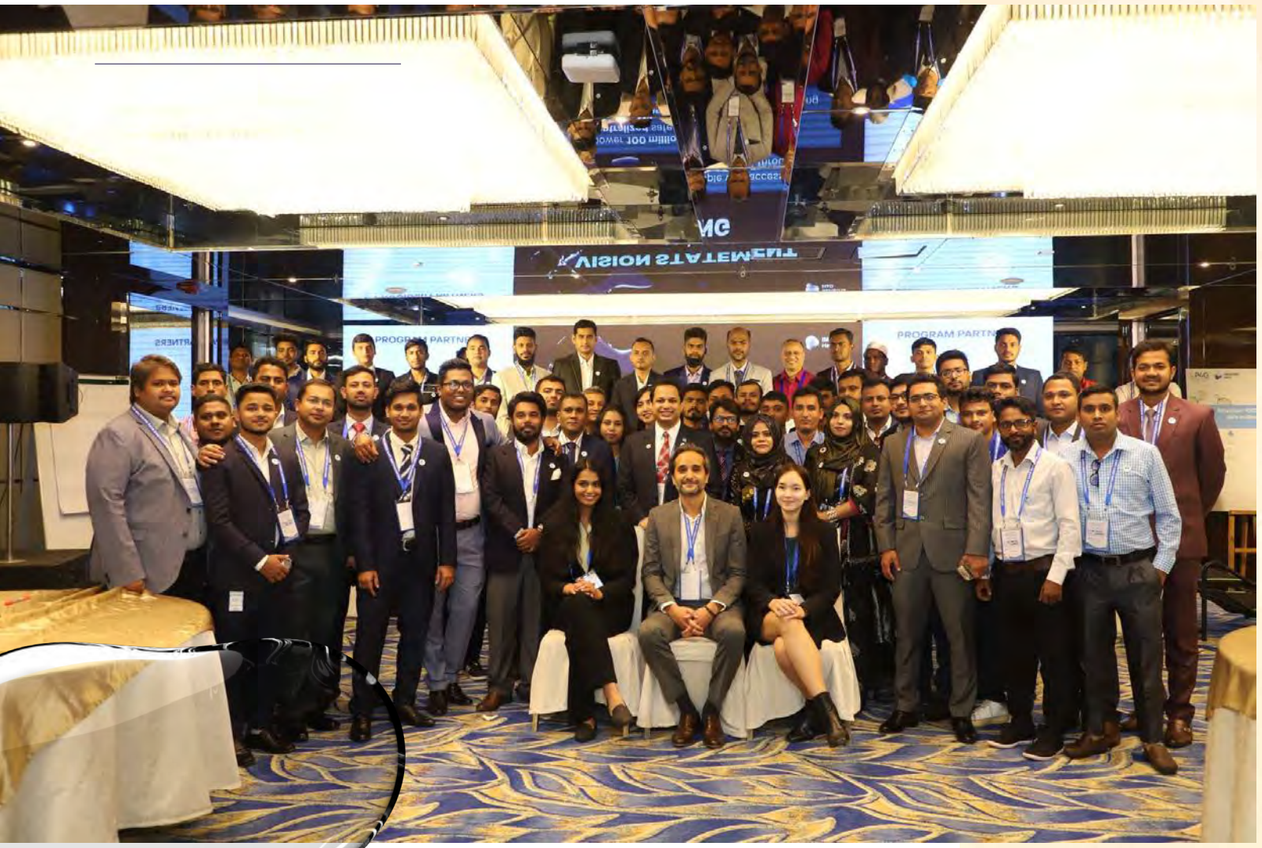
Monitoring Water Leaks

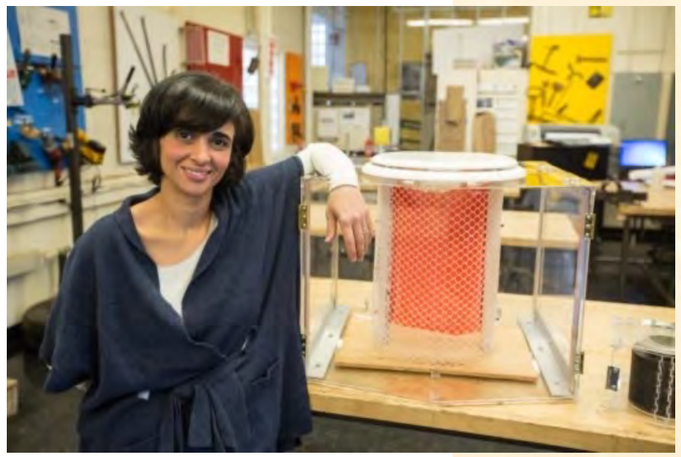
CHENNAI, INDIA

WeGot's ultrasonic smart meter and online water management platform tracks consumption and identifies leaks in India's largest cities. To-date, WeGot's meters have saved 5 billion liters of water in 7 major cities.

EXPANDING EQUITY

Large-scale water and wastewater utilities are struggling to meet the needs of fast-growing populations around the world. Globally, one in three people live without access to safe drinking water, and one in four live without basic sanitation. Additionally, one in nine people get their drinking water from unsafe sources, and marginalized communities are disproportionately exposed to higher levels of contamination.6 Water innovation can reduce water inequities by making technologies more cost effective and accessible, and regulatory tailwinds can help expand these opportunities.





Above: Imagine H2O staff and participants at our Decentralized Safe Water for Asia Workshop

Right: Diana Yousef, CEO & Founder of change:WATER Labs

Solving for those living beyond the pipe

KUNA NEGA, PANAMA

Millions of people across the developing world live beyond the pipe — without access to basic drinking water and sanitation services. The reality is that conventional centralized systems for water and sewage are often unsustainable, impractical, and financially burdensome.

change:WATER Labs has engineered a decentralized sanitation solution that hygienically contains waste to reduce disease and prevents sewage runoff into nearby water bodies.

Their innovative approach utilizes a low-cost, compact, waterless toilet for non-sewered households in Greater Panama City, Panama. Teaming up with a prominent construction company, change:WATER Labs is embarking on a pilot project to replace pit latrines and uncontained informal sanitation with their state-of-the-art toilets. Their project will bring improved sanitation and hygiene to low-income and indigenous homes. This initiative is set to transform lives and make a lasting impact on communities in Greater Panama City.

DHAKA, BANGLADESH

Our Decentralized Safe Water for Asia Workshop in Dhaka, Bangladesh was a great success this year. Through collaborative efforts with **P4G Partnerships**, the **World Bank**, **Dhaka Water Supply & Sewerage Authority** (WASA), and **Drinkwell**, we secured a commitment from utility and city leaders to empower 100 million people through decentralized water solutions.

Bringing together 100 utility leaders, the participants actively engaged in roundtable discussions focused on the challenges and opportunities surrounding the implementation of water ATM's in cities across Bangladesh. By the end of the workshop, eight WASAs and City Corporations made firm commitments to embrace decentralized solutions in Bangladesh. Notably, Chittagong WASA and Rajshahi City Corporation signed MOUs, solidifying their dedication to utilizing decentralized solutions. This groundbreaking workshop marked a crucial step forward in ensuring safe and reliable water sources access for millions of people in Bangladesh.

IMPROVING HEALTH

Preserving the quality of our water is crucial for both public and ecosystem health. In the United States, 1.2 trillion gallons of untreated sewage, stormwater, and industrial waste are dumped into waterways, polluting rivers, lakes, and coasts. Globally, an estimated 2.2 billion people drank water from unsafe systems. Water technology can play a pivotal role in improving health by not only identifying and understanding water pollution, but also preventing or safely treating contamination.

Large Photo Courtesy of Dyrland Productions

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Destroying PFAS...Forever

DETROIT, MI

Aclarity's novel electrochemical on-site water treatment goes beyond conventional methods to completely annihilate contaminants in wastewater. Funded by Imagine H2O, Aclarity successfully installed their commercial solution in Detroit, Michigan, targeting the destruction of PFAS in leachate at two landfill sites Their unique system treats the water draining from landfills, ensuring that harmful PFAS compounds are eliminated before they can enter the environment.. The pilot operated continuously for weeks, achieving PFAS levels below 10 nanograms per liter while consuming minimal energy. Aclarity's cutting-edge technology is revolutionizing water treatment, safeguarding our ecosystems, and mitigating the impact of harmful contaminants

Aclarity Wins the 2022 Urban Water Challenge With Their PFAS Destroying Technology

PARTNERING FOR ACTION

Mobile Arsenic Testing

PUNJAB PROVINCE, PAKISTAN

A joint initiative between Imagine H2O Asia and The World Bank, the Water Technology Access Partnership (WTAP) launched its inaugural project in Pakistan with **Aquaffirm** in 2022. Aquaffirm's revolutionary sensor, compatible with smartphones, offers portable and user-friendly functionality while enabling real-time data upload online. Partnering with the Pakistan Council of Research in Water Resources (PCRWR), Aquaffirm aims to validate its patented digital sensor for arsenic testing in over 200 wells across the Punjab province.

During Stockholm World Water Week 2022, Imagine H2O convened the WTAP partners and sector leaders at workshop focused on deploying solutions and developing best practices.

IMPACT

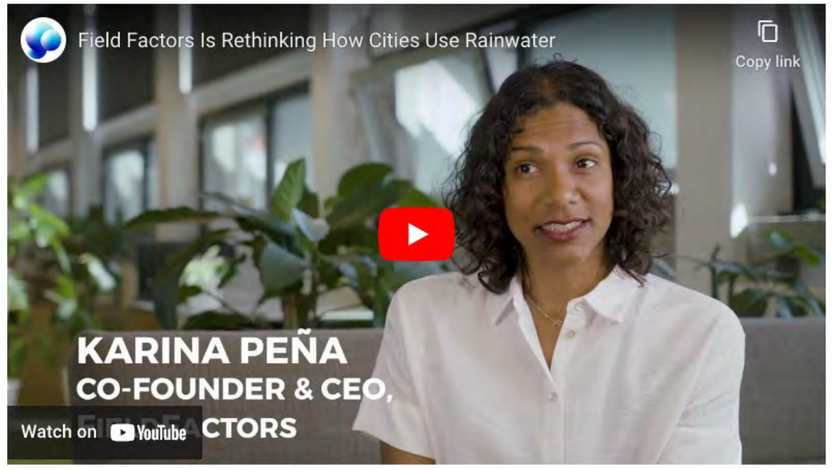
Post a job, Find a Job!
Explore Imagine H2O's WaterTech Job Board

Meet our entrepreneurs and solutions on YouTube

Register or nominate an entrepreneur

Join us in 2023!
UN Water Conference (March)
Singapore International Water Week (June)
Virtual Demo Day (July)
Stockholm World Water Week (August)
Weftec '23 (October)
Sign up for our virtual deep dives on other online programs

Support our work



OUR ECOSYSTEM

In 2022, the UCLA Pritzker Emerging Environmental Genius Award honored IH2O's **Kelly Trott** as a finalist

The Water Environment Federation selected IH2O's **Nidhi Menon** from a national field of emerging professionals to participate in its 2022 Water Leadership Institute

Our Team

Annamarie Martin
Program Associate, IH2O Asia

John Curry
Director of Finance & Operations

Kelly Trott
Senior Vice President

Nidhi Menon
Program Manager, Accelerator

Nimesh Modak
Managing Director, IH2O Asia

Mayci Hicks
Associate

Simarpreet Khanijou
Senior Program Manager, IH2O Asia

Scott Bryan
President

Sonora Hill
Portfolio Innovation Manager

Taylor Evans
Senior Manager, Innovation & Financing


Singapore
International
Water Week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11th Hour Racing
1% for the Planet
Aqualateral
Matthew Zell Family Foundation
National Philanthropic Trust
OceanKind
RBC Tech for Nature
Silicon Valley Community Foundation
The Coca-Cola Foundation

Corporate

Ferguson Waterworks
Kurita
Kubota
Tetra Tech
Veolia
Xylem

Public Sector

ADB Ventures
Enterprise Singapore
World Bank Group

Industry Partners

BlueTech Research
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Water Environment Federation

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Rebecca Hwang
Rivet Ventures,

Tamin Pechet
Upwell

Evaluators & Advisors

This is a select list of our judges and evaluators that help us identify the world's best water entrepreneurs. In addition to selection, many of these experts are part of our broader mentor and advisor network. There are many names that contribute to our annual programming who are not on this list. You know who you are, and thank you.

Aaron Zell—Equity Group Investments
Adam Tank—Transcend H2O
Allegra Gordon—Oceankind
Anders Jacobson—Blue Foundry
Betsy Otto—Independent **Biju George**—Ampcus Inc
Caroline Delaire—Aquaya Institute
Chaarvi Badani—American Family Insurance Institute for Corporate and Social Impact
Chloe Oliver Viola—World Bank
Choon Jin Yeoh—Enterprise Singapore
Chris Morrison—MorrisonWater
Christine Boyle—Xylem
Cindy Ko—Toniic
Debra Coy—XPV Water Partners
Dirk Brusis—SKion Water
Emily Skeehan—11th Hour Racing
Gabriel Gábor Kicsi—Veolia
Henrik Laursen—AMI Global
Hugh Chapman—Aqua Analytics
Ifetayo Venner—Arcadis
Irwan Dinata—Moya Holdings Asia Ltd
Jason Thompson —Oceankind

Jennifer Sara—World Bank
Jill Hudkins—Tetra Tech
Jiten Manglani—Aqualateral
John Grant—Lemnos Advisory
Josh Haacker—OGCI Climate Investments **Katie Velasco**—Rare, Center for Behavior and the Environment
Kunal Shah—Anaergia
Lloyd Lee – Oceankind
Margaret Bowman—Independent **Mia Javier**—AWS
Mark Lambert -- Aquamark
Michael Froud—Pittwater Capita
Michael Reed— independent
Michael Sesko—Frontier Farmland
Michael Toh—PUB
Mitchell Presser—Morrison & Foerster
Narain Madhavan - Xylem
Neil Jeffrey— independent
Ng Wun Jern—Nanyang Technological University**Nicholas Dyner**—Moleaer
Nicole Neeman Brady—Renewable Resources Group

Paul Gagliardo—Independent
Peter Williams—Pivot Projects
Pierre Cote—COTE Membrane Separation
Prashant Pundrik—Athena Cleantech
Rainoo Raj Ganeindran—Kurita
Ralph Exton—Suez
Reinhard Huebner—SKion Water
Rina Zell—Independent
Rodney Chapin—Ardurra International
Ramon Alikpala —FutureWater Asia
Ronnie Lim—TechWater Solutions Inc
Sivan Zamir—Xylem
Snehal Desai—Evoqua Water Technologies
Stephanie Wear—The Nature Conservancy
Steve Kloos—True North Venture Partners
Stuthi Vijayaraghavan—Urban Venture Labs
Timothy Male—Environmental Policy Innovation Center
Tom Ferguson—Burnt Island Ventures
Tuck Wai Lee—Upconverge
Vinod Ramachandran—Apstech Environmental Limited
Will Sarni—Water Foundry