INVEST V/NCOUVER

Water Tech:

The Metro Vancouver Region's Untapped Clean Tech Opportunity

Report Summary

July 2022













The Metro Vancouver water tech sector is an often overlooked asset that, if supported, could become an economic driver for the region while providing services and solutions to intensifying global water-related risks, such as droughts, flooding, and other extreme weather events.

Overview

Why Water Tech?

Methods, Findings & Recommendations

Acknowledgements

With support from Metro Vancouver's Sustainability Innovation Fund, Invest Vancouver has partnered with Foresight Canada's waterNEXT network to strengthen the water tech sector in the region. This report is the first project milestone and will inform future phases of the work. Foresight contributed to the success of this report by drawing on waterNEXT's expertise as Canada's water technology network. BlueTech Research, in collaboration with Foresight, contributed to this report by providing an analysis of global water markets, identification of global themes driving water sector investment, and their insights on Metro Vancouver water tech firms.



Why Water Tech?



Risk is a helpful lens to understand the problems that water tech solutions are addressing.

The lack of water (or quantity of water) driven by climate change is just one water-related risk. Other potential problems impacting people, business and governments include:

- √ Water quality
- ✓ Inefficiencies
- √ Regulatory compliance
- Environmental damage
- ✓ Property damage
- √ Financial loss

Classes of affected actors:

Who is affected by water-related risks?



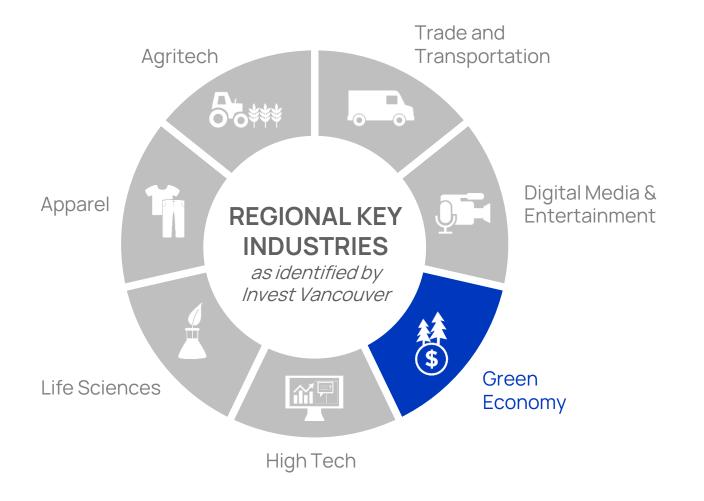




Water Tech Sector Definition



Water tech is a subset of the broader clean technology ("clean tech") sector





Water Tech Sector

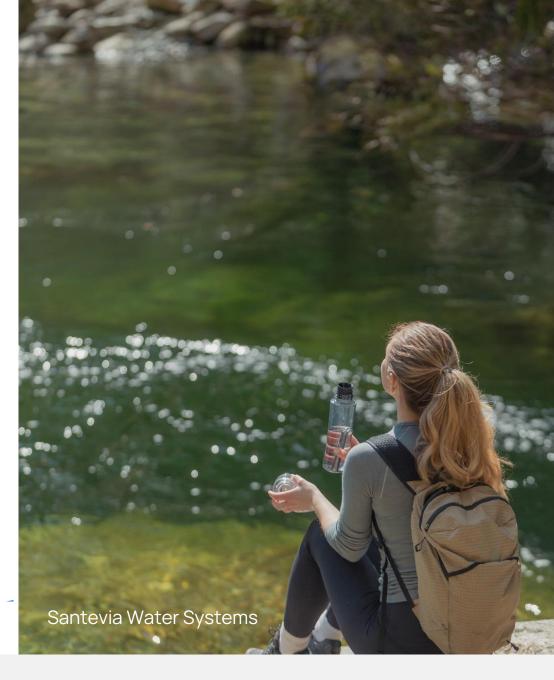
Water tech firms are developing solutions applicable to:

Water Treatment

Water Management

Industrial Water Users

Household Water Users



Global Investment Growth Drivers in the Water Sector

Stormwater management

Components

Brine management

Drinking water treatment

Agricultural water

Decentralized treatment

Digital solutions

Sensors and analyzers

Resource recovery

Industrial wastewater treatment

Red boxes: Area of specialization in the Metro Vancouver region

The report aims to understand the water tech value proposition: What actions can policy-makers take to build capacity in the water tech sector?



- What competitive advantages (if any) do firms in the industry enjoy by locating here?
- What challenges or barriers (if any) keep the region from being a more attractive place for water tech firms?

Research Approach

Primary, qualitative research through interviews with CEOs, founders, senior executives of water tech firms in the region, supplemented by secondary research

Water Tech firms in Metro Vancouver



Stormwater management **Decentralized treatment** Sensors and analyzers BI Pure Water AquaCoustic Remote Technologies Layfield Canada Canadian Dew Technologies Fathom Scientific Flowlink Environmental Demizine Technology Resource recovery **ECOfluid Systems** Novion Andion North America Ocion Water Sciences Quadlogic Meters Canada ATD Manure Systems Orka Water SewerVUE Technology **Boost Environmental Systems** Viridis Research Eagle Ridge Innovation Components emew Corporation Biomaxx Kiko Water Systems Can-Am Chains Mangrove Lithium FilterPro Services Canada **NPower** MLM Conveying Systems Ostara Nutrient Recovery Technologies SCG Process Prongineer Research and Development SHARC Energy Systems Tersa Industrial wastewater treatment Aqua-Guard Spill Response Brine management Avantu Saltworks Technologies **Axine Water BQE** Water CarboNet Nanotechnologies **David Bromley Engineering** Drinking water treatment Ionomr Innovations Acuva Technologies Ivev International International Water Guard KAM Biotechnology Industries (IWG) McCue Engineering Contractors **Digital solutions Quest Water Solutions** McKay Creek Technologies **Above Atlantis** Santevia Water Systems Muddy River Technologies Agua Intelligent Technology NOAH Water Technologies Aquatic Informatics NORAM Engineering and BujiBui Constructors Agricultural water Carl Data Solutions waterStrider Treatment Verdi Expeditions FuseForward Solutions Group Xogen Technologies

Key characteristics of Water Tech Firms in the Metro Vancouver Region





Extremely varied



Drawing on engineering, tech, and data talent pools



Origins in BC's resourcebased economy



Also able to tap into traditional financing



Growing out of the region's clean tech ecosystem



Regulations drive ideas and demand



Specific Challenges faced by the water tech sector in the Metro Vancouver region



- Fragmented sector lacks a strong identity
- Minimal interest/ recognition/ understanding
- Few demonstration opportunities in the region
- Smaller tech needs to be integrated into larger systems
- No accountable government ministry

Familiar regional challenges impact water tech's growth in Metro Vancouver

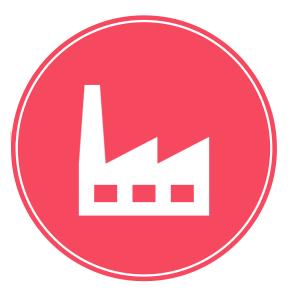




High Cost of Living and Talent Attraction



Transportation and congestion



Physical spaces



Procurement

Invest Vancouver's research found three key recommendations to unlock the water tech sector's potential:



Support water tech industry clustering



Create a BC Clean Tech Concierge program



Develop a program to showcase best practices in water technology adoption





Support water tech industry clustering





- Deepen connections between players in the water tech ecosystem
- Explore opportunities for collaborative research
- Maximize and expand existing assets
- Promote the regional water tech industry

Create a BC Clean Tech Concierge program

 Create an office to act as a champion, conduit, and primary point of contact for clean tech firms and the supporting ecosystem







Develop a program to showcase best practices in water technology adoption



- Public utilities could use assistance in learning about available technological options
- Develop a program, delivered by a neutral third part, to inform decision making on water technologies
- Could pave the way to deeper explorations of potential solutions



Read the full report:

investvancouver.ca



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