

# Partnerships for Cleantech Adoption in the Water Sector

National Water & Wastewater Conference  
November 4, 2024

FORESIGHT

xylem

 AQUA  
ACTION

waterNEXT 

**We connect the  
public and private  
sector with the  
world's best clean  
technologies.**



**F O R E S I G H T**  
**C A N A D A**

# Canada's Largest

# Water Technology Network

We bring together stakeholders from across the water innovation ecosystem to increase the adoption of market-ready solutions for the world's most pressing water challenges.

**F**  **RESIGHT**

**water**  **NEXT**

# Our Goal: Achieve less than 10% municipal and industrial **water** loss by 2033.

**A Canadian average of 20% of municipal water and energy is wasted due to leaks in underground infrastructure.**

waterNEXT works with major utilities and tech company partners to demonstrate how Canadian water systems can deploy Canadian innovation to improve their operating efficiency, significantly reduce losses, and cut needless energy waste.

**It's our 'Under 10 in 10' promise.**







## **BC Water Cluster:**

**Our adoption-focused working groups develop research, projects, networks, and cost-sharing opportunities.**



WORKING GROUPS

### **Drought Water Technology**

Supporting drought management and water conservation in BC through recommending policy changes, and projects in water management, infrastructure, and behaviour.

### **Decarbonizing Water Infrastructure**

Municipal and industrial water and wastewater infrastructure managers and planners mapping water-related emissions sources, defining and advancing net zero pathways, and exploring low-emission water technologies.

# Our key activities efficiently overcome capital, technology, and policy hurdles.



Innovation  
Scouting, Curated  
Connections



Pilot Project  
Development  
Support



Technology  
Evaluation, Investor  
Readiness Support



Research, Grant  
Writing, Finding  
Funding Pathway



Project  
De-Risking,  
Cost Mitigation



# Partnership Successes & Case Studies

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## QuadReal: Leak Detection & Prevention

### **Challenge Objective:**

Solutions to reduce severity and mitigate costs from flood incidents in multi-unit residential buildings.

In partnership with New Westminster, Vancouver, FortisBC, and TransLink.

## City of Vancouver: Smart GRI Monitoring

**Challenge Objective:** Manage rainwater runoff for 40% of impervious areas by 2050 through smart monitoring solutions.

**Outcomes:** Challenge winner Novion gained an annual contract overseeing 300 assets citywide.

## Smart Building Water Management

**Findings:** Municipal water systems are the top energy consumers, using around 38% of total energy. Smart water tech in residential buildings offers a high ROI by reducing water losses.





# Looking to the Future of Partnerships



# Let's work together to Accelerate Canada's Cleantech Market Growth & Capitalize on **\$150 Trillion Opportunity**

The right platform with the right combination of tools  
and supports with **results in 12 months.**

Cleantech SMEs	Industry	Municipalities	Investors
Scale in Canada and Export Globally	Invest in Tech and Projects that Evolve Supply Chains	Adopt Made-In- Canada Solutions Today	Allocate More Funding in Canada

# Cleantech Adoption Platform (CAP)

This market-driven program will accelerate connecting supply and demand with supports that bridge the **adoption gap**.

- 1 World-class database and marketplace** to profile pilots, solutions, and services.
- 2 Technology pathways and business cases** to remove capacity barriers.
- 3 Opportunities** for coordinated bulk purchasing to reduce cost barriers.
- 4 Grants and guidance on leveraging capital** to accelerate adoption.
- 5 Network and training** for knowledge sharing across decision makers.
- 6 Sustainability metrics** and best practices on reporting results.

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**CAP is all about action and execution – the hardest part!**

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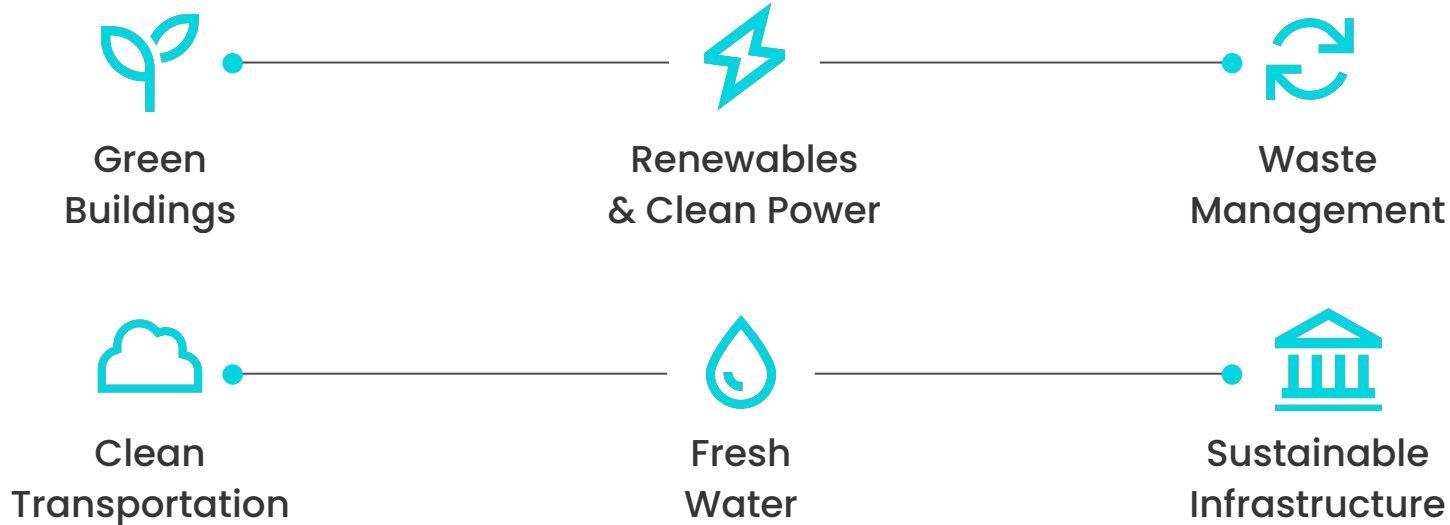
# We need systems thinking.

Evolving procurement and supply chain standards **needs to be comprehensive.**  
These are sample strategic tools that will help and we have already started.

<b>Venture to Value Chains Reports</b>	<b>Policy and Technical Frameworks</b>	<b>Financial and Business Case Studies</b>
<b>Mapping existing solutions that decarbonize sectors and value chains gives buying groups the full picture.</b>	<b>Creating transparent financial and business modelling case studies gives confidence where to invest first.</b>	<b>Sharing best policy and technical specification tools can get all 3,600 communities aligned and moving faster.</b>

# There are obvious places to start.

We can prioritize execution in the areas already identified by industry and municipalities. They have the same infrastructure and solutions needs.





# A national partner network ready to collaborate and execute.



Interested in partnering with us to support cleantech innovation across the country?  
Get in touch with us at [partnerships@foresightcac.com](mailto:partnerships@foresightcac.com)





Let's reduce  
water loss,  
**together!**



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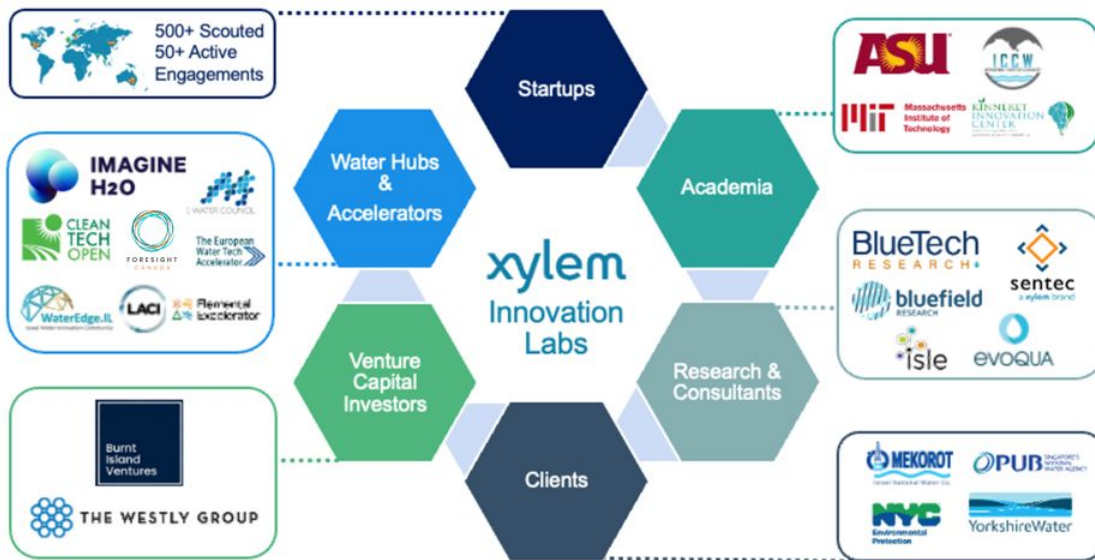
# Xylem Innovation Labs

**Xylem Innovation Labs (XIL)** is Xylem's innovation partnership program that scales solutions addressing our clients most pressing challenges.



## How We Work

- ✓ **Discovery process** to understand client challenges and needs
- ✓ **Identify the best solutions** leveraging our world-class **open innovation partner network**
- ✓ **Evaluate 500+ technologies** each year
- ✓ **Accelerate commercialization** of 10+ companies per year via annual partnerships program
- ✓ **Proof of Value** project to evaluate solutions with customers
- ✓ **Fast-track technology development** with universities and startups







# Harnessing Innovation for WATER

Healing the waters that sustain us

Établie par / Established by



Fondation  
de Gaspé Beaubien  
Foundation

Propulsée par / Powered by



RBC  
Tech for  
Nature<sup>®</sup>

Accélérée par / Accelerated by



Worldwide Experts in Water Treatment  
Experts mondiaux en traitement de l'eau



 **Aqua  
Hacking** **Aqua  
Entrepreneur**

**Open Innovation  
Tech Challenge**  
(since 2015)

**Coaching & Tech  
Validation**  
(since 2022)

**Engaging** Young Innovators,  
**Enabling** Solutions,  
**Launching** Water-tech Start-ups

**Enabling** Pilots  
**Securing** 1st customers  
**Generating** Impact (Enviro &  
Economic)



# Ecosystem of partners

GREAT LAKES AND ST. LAWRENCE CITIES INITIATIVE  
 COASTAL ACTION  
 Clean  
 WWF  
 FLOW  
 INRS  
 RIVERKEEPER  
 IISD  
 UMQ  
 CIEAU  
 OUR LIVING WATERS  
 great lakes observing system  
 Natural Resources Canada

McGill  
 Concordia  
 UNIVERSITY OF TORONTO  
 UNIVERSITY OF MICHIGAN  
 GRAND VALLEY STATE UNIVERSITY  
 UBC  
 UNIVERSITÉ DE SHERBROOKE  
 DALHOUSIE UNIVERSITY  
 McMaster University  
 UNIVERSITÉ LAVAL  
 Saint Mary's University  
 UNIVERSITÉ BISHOP'S UNIVERSITY

Talent, skills & passion

Open innovation Challenge

Engaging Young Innovators,  
Enabling Solutions,  
Launching Water-tech Start-ups

Aqua Hacking

Solutions & Water tech start-ups

Coaching & Mentoring

Coaching & Tech Validation

Enabling Pilots  
Securing 1st customers  
Generating Impact (Enviro & Economic)

Aqua Entrepreneur

Operational testing partners ~ Municipal Private Sector

Measured Impact & 1st customer

VEO RBC  
 hackworks  
 TKN  
 OSLER  
 CentEau  
 FOUNDATION  
 Lavery  
 RESIGHT  
 NORDKEAU  
 Stantec  
 purpl  
 Mitacs  
 Maskoutains

McGill  
 2degrés  
 Cycle Momentum  
 esplanade  
 waterNEXT  
 Novarium  
 CEN TECH  
 LE CAMP  
 NORTH FORCE  
 Cteau



# ISSUE: Excess road salt run-off

# SOLUTION: Optimizing salt application using AI



Claudia Patisé-Fortin, Patricia Gomez & Anne Carabin



NGO partner – Highlight the issues

Aqua Hacking

**SEPT 2019**  
Won second place in the Great Lakes Challenge; received \$15,000 in seed funding

**JAN 2020**  
Secured a spot in the Spektrum Incubator

**WINTER 2020**  
Connections facilitated with City of Montreal to discuss potential pilot projects

**JUNE 2020**  
Won the WWF-Canada Generation Water Tech Challenge

**DEC 2020**  
Co-founder Anne Carabin wins the Relève Eau André-Perrault Award

**SEPT 2022**  
Selected as part of the first-ever cohort of companies



Municipal Partner - test technology on roads

Water tech Peers & Partners – Water monitoring technology



# ISSUE: Storm water overflow

## SOLUTION: Rainwater capture



Timothé Roy-Bouchard & Eddy Dureuil



NGO partner  
—  
Highlight the water issue



SEPT 2021

Won second place in the Rivière des Mille Îles Challenge; received \$15,000 in funding



SPRING 2021

Secured a spot in the Esplanade incubator program



AUG 2021

Participated in the Montreal 2021 cohort



MAY 2022

President and co-founder  
Timothé Roy-Bouchard awarded the André-Perrault Water Succession Award by the Centre d'interprétation de l'Eau



OCT 2022

Won the Quebec Circular Economy Prize



Built-Environment  
Partners - test  
technology in  
buildings

Water tech Peers &  
Partners –  
One stop shop for  
integrated water tech  
in smart buildings







The future of water depends on solutions developed today.



**Let's talk partnerships for cleantech adoption in the water sector.**



# Discussion Topics

- What do successful partnerships look like?
- Where do we see challenges and opportunities in building future-proof, effective alliances in Canadian water and water technology?
- Outside the box partnerships
- What role do educational institutions play in building the capacity of municipalities and the private sector to adopt new technologies?
- What successful partnership models have emerged between Xylem and municipalities, academia, or the private sector in the water sector? Can you provide specific examples?

