MaRS

Meaningful nnovation

Impact Report | December 2021

MaRS is North America's largest urban innovation hub.

The anchor of Canada's tech ecosystem, MaRS helps Canada's most promising tech companies grow and succeed. MaRS also convenes all members of the innovation economy to drive breakthrough discoveries, create jobs and make an impact by solving real problems for real people — in Canada and around the world. **Snapshot**

MaRS Today

During the pandemic, Canada's tech sector has proved its mettle — not only shifting its practices to stay productive and developing **products that save lives**, but driving new value that has paved the way for the greatest innovation boom this country has ever seen.

> Canada's innovation economy is growing rapidly on the strength of innovative new technologies: life sciences, A.I., advanced manufacturing, e-commerce and more. Nearly every sector is coming to depend on a vast supply chain of products and services supplied by startup ventures to become more effective, competitive and impactful.

As a result, capital and talent are pouring into these ventures, particularly in the health, cleantech and enterprise sectors. More than 20 Canadian ventures have announced financing of at least \$100 million, thanks in part to a pandemicprompted surge in digital adoption; 10 new firms have hit unicorn status. Domestic venture capitalists and foreign investors alike are backing the ambitions of Canada's innovative entrepreneurs. Meanwhile, our cities are attracting top innovation workers — Toronto, Montreal, Vancouver, Edmonton, Ottawa, Calgary and Quebec City are experiencing faster tech job growth than nearly all their U.S. counterparts.

As North America's largest urban innovation hub and a convening place for Canada's innovation economy, MaRS is at the fulcrum between established companies and startups, old economy and new. We are supporting venture growth, but we are also building an ecosystem that makes Canada's economy cleaner, more productive and more competitive. Many of the technologies that power Canada's next decade and beyond will come from companies and innovations we support — essential products and services in our supply chains and our lives.

Ventures are a critical spoke, to be sure. MaRS fosters the adoption of deep technology and helps more than 1,400 ventures across the country become resilient, nimble and better connected. Our programming, network and insights help produce powerhouse firms that punch well above their weight: in 2020 alone, MaRSsupported ventures raised \$2.4 billion collectively, while generating \$1.5 billion in revenue.

But MaRS is also a key cog in the larger mission of bringing ventures, investors, policymakers and public partners together. This is how Canada can drive impact and economic advantage in climate and health-sciences innovation.

For more than 15 years, MaRS has supplied advice, curated networks and presented opportunities for this collaboration. This approach doesn't just bolster homegrown startups but the broader ecosystem, which aids businesses and governments as they look to build a safer, cleaner, healthier, more prosperous country for all. MaRS expertise and work aren't just vital for startups, but for the country. By bringing stakeholders together, we are accelerating the adoption of Canadian innovation that can lead and transform the world. 3

Editor's Letter

A story worth telling

By Yung Wu, MaRS CEO

The past year offered **unprecedented challenges** and **opportunities** for MaRS and the ventures and stakeholder partners we serve.

In the early days of the COVID-19 pandemic, this country's startup ecosystem teetered on the edge. Job 1 was creating the conditions for survival. MaRS helped innovators advocate for wage subsidies, funding support and a clearer public understanding of the innovation economy's <u>importance</u> for Canada's future prosperity. As the year unfolded and economic conditions improved, the entire innovation economy was better fortified to create jobs, develop life-saving products, lift front-line workers and supply larger companies in every sector. This resilience and entrepreneurial spirit helped Canada maintain and boost its attraction as an international talent magnet. Our ecosystem was already leading the country in job creation and economic growth before the pandemic closed borders and threatened uncertainty. But as the lockdowns unfolded, the <u>Global Talent</u> <u>Stream</u> remained open for business and expatriates began flocking home, enabled by remote work, digital tools and a surge of investment in the maturing Canadian innovation ecosystem.

As COVID-19 pushes governments, institutions and investors to embrace innovation, particularly in biotech, health and climate-friendly infrastructure, the ecosystem is awash in fresh investment capital. Midway through 2021, Canada already had <u>more IPOs</u> than any year since 2010 — and it seems like a new billion-dollar company is being born every other day. Thanks to increased American

MaRS sits at the **fulcrum of this turnaround**, supporting the innovation community with advisory services, connections and forums for **discovery and collaboration**.

investment and the growing impact of Canadian funds and VCs, "it's raining unicorns," as one recent headline read. This is a tremendous shift for a country that long struggled to match its great ideas with investment, scale and talent.

MaRS sits at the fulcrum of this turnaround, supporting the innovation community with advisory services, connections and forums for discovery and collaboration. Never has such work been so crucial — not just for our startups and our scientists, but for everyone. MaRS wants to help startups commercialize and scale, but these are also the companies that will help big manufacturers, banks, retailers and the rest of our economy become more competitive. Our innovation economy — our prosperity — depends on them becoming job creators, wealth drivers and global leaders.

The successes highlighted in this report showcase MaRS as a pillar of Canada's innovation community and an agent of meaningful, measurable social impact. In a year of great challenges, our startups didn't just survive. They thrived. That's a story worth telling.



Our Vision

The flow of ideas has shifted from suburban research parks toward vibrant, diverse downtowns. As **boundaries between economic sectors collapse**, entrepreneurs no longer have to stay in their lane. They borrow concepts from different fields, and repurpose them into something new.

MaRS is a pioneer of the urban-innovation model, and built on the insight that these new innovators require more than labs and offices. They need a platform where they can meet, interact and collaborate with experts. Only the density of an urban centre can bring about these creative collisions at the pace and scale required for today's reality. At MaRS, we support innovators startups, academics, investors, corporate partners, non-profits and policymakers — in their efforts to generate economic growth and make a positive global impact. MaRS does this through advisory services, connections to capital and talent, events and workspace.

Giving 100 percent so companies can **hit \$100 million**

In the past few years, Canadian entrepreneurs have become even more ambitious in their desire to build companies with reach and impact around the globe. MaRS wants to help more companies achieve \$100 million in revenue in the next five years. We know our ecosystem has what it takes. We know how to get there. We have the data, the experience and the know-how to make it happen: it's among the many reasons *Fast Company* just named MaRS one of this year's <u>Best Workplaces for Innovators</u>. And the numbers tell our story. In 2020, the MaRS portfolio of companies generated:





\$1.5 billion in revenue

22,800 new jobs

Despite **COVID-19 challenges** in 2020, MaRS ventures had **significant yearover-year gains** in aggregate funding, revenue and jobs.



Happy customers

Meaningful Innovation

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Client satisfaction in 2020 was also up across the board, with MaRS receiving an industry-leading Net Promoter Score of 65 from its early-, growthand late-stage ventures.

Helping organizations thrive in the innovation economy

Multidisciplinary teams work with corporate, philanthropic, government and not-for-profit partners seeking to drive impact and foster an innovation mindset. Measuring success at key milestones, MaRS strategic advisors unlock value in public and private sector enterprises with the goal of achieving positive social, economic and environmental change.



- We understand local, regional and global trends related to the innovation economy
- We build teams' capacity to create and innovate
- We offer strategic advisory
- We design tools and techniques to generate and monitor impact at scale
- We convene coalitions of stakeholders around bold missions and innovation challenges

Convening all innovators

Startups and scale-ups require corporate, government and non-profit partners to integrate, adopt and amplify their novel products. Ventures are at the core of the innovation economy, but they demand the support of all ecosystem players in order to survive and grow. The new MaRS three-year strategic plan aims to connect all players in the innovation economy by advancing:

Economic impact

Helping ventures, corporations and employers across all sectors scale and create jobs

Environmental impact

Supporting companies and partners tackling climate change, particularly those in the energy, real estate, transportation and smart-cities sectors

Social impact

Fostering individual and community health and well-being

To achieve this **global impact**, MaRS will lean into the **climate** economy, as well as the **health** and **life-sciences sectors**. Key initiatives supporting our strategic plan include:

- The MaRS Hubs expansion, beginning with occupancy at MaRS Waterfront in spring 2022
- Helping more companies reach
 \$100 million in revenue through the <u>Momentum</u> program
- Harnessing the <u>Mission from MaRS:</u> <u>Climate Impact Challenge</u> to support homegrown cleantech companies, **build the climate economy and mitigate** greenhouse-gas emissions
- Deploying capital through the <u>MaRS</u> <u>Investment Accelerator Fund</u>
- Improving our stakeholders' digital experience through <u>education</u> and <u>market-research</u> offerings, as well as the new <u>First Adopter Network</u>
- Improving our capabilities to measure and manage impact in order to quantify the social, environmental and economic impact of MaRS-supported ventures, partners and initiatives

"The global pandemic has exposed inequities in our society and economy that require deep systems change if we are going to build back (or even build forward) better. With our corporate, government and non-profit partners, **MaRS** is accelerating the adoption of innovation to create a better world."

> — Alex Ryan Senior Vice President, Partner Solutions, MaRS

Place still matters

Cities have proven their resilience in 2020. **Toronto is the fastest-growing city** on the continent, with the fastest-growing real estate market. According to the <u>CBRE</u>, Toronto is now North America's fourth-best market for tech talent, thanks in large part to more than 81,000 jobs created and 26,000 degrees completed in the last five years. That's why MaRS is expanding its services — and its footprint.



MaRS is the ideal space to work, attend an event and build relationships

Toronto is the most diverse city in the world, and the MaRS Centre is located in its downtown core, minutes from Canada's top schools, hospitals and financial institutions.

Post-pandemic, MaRS will continue to be the tech ecosystem's go-to spot for research, collaboration and international conferences. We are committed to maintaining the highest standards of health, safety and sustainability. And we remain fully equipped to deliver highquality in-person, virtual and hybrid events.

120+

startups, corporations and non-profits in our curated tenant community

2,000+ events held per year

150,000+ guests and delegates hosted per year

Supporting front-liners

Throughout the pandemic, MaRS tenant Public Health Ontario has remained fully operational, conducting millions of COVID-19 tests. The building has also been operating at reduced capacity for other tenants working on breakthroughs in wet and dry labs. Keeping the MaRS Centre healthy, secure and productive has been our top priority, and we continue to dedicate time and resources — such as enhanced screening at entrances and more cleaning in common areas — to that effort.

UHN COVID-19 vaccination clinic

In January 2021, the MaRS Centre became a high-volume COVID-19 vaccination site. The clinic was run by the University Health Network, one of our key partners and tenants, while MaRS employees ensured the smooth run of operations. "MaRS was pleased to help deliver the COVID-19 vaccine to the people who need it most. The MaRS Centre has been open throughout the pandemic, supporting our tenants, many of whom are actively involved in the fight against COVID-19. The MaRS Auditorium makes an excellent site for a vaccine clinic, and our large Atrium and common spaces enabled vaccine recipients to flow safely through the buildings."

— **Nina Gazzola** SVP, Innovation Hubs

MaRS Waterfront: Toronto's newest innovation hub

MaRS Waterfront is our latest Innovation Hubs expansion, opening spring 2022.

Situated on Lake Ontario's shoreline and close to the downtown core, the workspace was purpose-built for professionals in the tech and creative industries. It is a multi-faceted partnership between MaRS and the University of Toronto, along with developer Menkes and Waterfront Toronto. MaRS Waterfront offers 50,000 square feet for individual and group work, meetings and events.

The Outstanding Building of the Year Award

In 2020, the West Tower was recognized as the best mixed-use building by the Building Owners and Managers Association International. The award is regarded as the commercial-real-estate industry's highest honour, recognizing excellence in tenant satisfaction, accessibility, operations, environmentalism and community outreach. "Being a MaRS tenant means more than just taking up space. It's about **being part of a community** with a mission. And it's been an ideal place to scale our company as we strive to make a positive impact on the world."

> — **Annette Verschuren** CEO, <u>NRStor</u> Chair, MaRS Board of Directors

Meet the **Mission from MaRS** Climate Champions

In early 2021, after an extensive judging process, MaRS announced its first cohort of <u>Mission from MaRS: Climate Impact Challenge</u> Champions: 10 Canadian ventures working to green the carbonintensive industries of energy, real estate and transportation. Projections show that, assuming a market penetration of 0.1 percent, the adoption of the ventures' technology in their respective markets could lead to an annual reduction of close to 42 megatons of CO_2 emissions by the year 2030.

Impact assessment was a key part of the selection process for Mission from MaRS. Of the 74 ventures that applied to the program, 36 shortlisted firms underwent impact modelling conducted by <u>CRANE</u> research fellows. MaRS and a curated coalition of nearly 40 industry advisors are working with the 10 Climate Champions to identify and break down barriers to adoption that have held back their potential.

Measuring impact

MaRS enlisted <u>Rho Al</u>, in partnership with Boston-based company Prime Coalition, to measure the Climate Champions' potential positive impact. Using CRANE software, the team compared two counterfactual worlds — one in which a given company's tech existed and was widely adopted, therefore reducing GHG emissions; and one in which a given company's tech didn't exist. While CRANE can't predict the future, it does provide illustrative emissionsreduction targets for the Climate Champions, and a valid, still emerging projection around which policymakers and corporations may build environmental strategies.

ENERGY

Carbon Engineering

Pulls CO₂ directly from the air, either trapping it forever underground or repurposing it for low-carbon fuels, chemicals and materials.

Extract Energy

Offers a heat engine with memory titanium alloys that captures low-grade waste heat for recycled power generation.

Opus One Solutions

Layers software over utilities' existing equipment to integrate renewable energy from solar and wind power into the grid.

StormFisher

Builds and operates facilities that recycle food, water, energy and waste into renewable natural gases and organic-based fertilizers.

REAL ESTATE

BrainBox Al

Maximizes a building's heating, ventilation, air conditioning (HVAC) system with its deep-learning, cloud-based platform.

Peak Power

Predicts electricity consumption to help clients save money and powers buildings in peak hours with batteries to relieve the grid.

Stash Energy

Builds air-source heat pumps that store energy in off-peak hours and comfortably warm or cool homes without relying on fossil fuels.

TRANSPORTATION

Effenco

Offers hybrid and fully electric solutions for heavy-duty trucks that would typically run on diesel.

Flash Forest

Uses proprietary unmanned aerial-vehicle technology to reforest ecosystems with a method that's 10 times faster than traditional techniques.

Pantonium

Turns public transportation into an on-demand service, increasing ridership, reducing wear and tear on vehicles and roads, taking cars off streets and saving money.

Our **star** companies

MaRS works with Canada's most promising tech ventures: companies that believe in advancing both financial return and positive social impact. That means recruiting and nurturing startups that generate revenue, create new jobs, do right by the planet and lift communities. The startups and scale-ups in our portfolio offer novel products and services that solve real problems and have the potential to scale and, one day, serve millions of customers. We also strive to work with ventures that hire for diversity across their organization. "We're focused on delivering the most powerful network, knowledge and tools for innovators. Throughout the pandemic, we've experienced an enormous demand for our programming as we helped entrepreneurs, researchers and manufacturers pivot their businesses. We want to build a strong community of tech workers, investors and early adopters — players that are needed to **drive solutions to global challenges in health and climate**."

— **Jon Dogterom** Senior Vice President, Venture Services, MaRS



In full force

Scaling startups (scale-ups) are companies **growing by more than 20 percent** in either revenue or talent, year after year — in other words, firms most likely to become unicorns. While these companies make up only five percent of enterprises in Canada, they create more than **half of the country's new jobs**.

The <u>MaRS Momentum</u> program supports scale-ups on their way to reaching \$100 million in revenue in the next five years. It is funded in part by the Government of Canada through the Federal Economic Development Agency for Southern Ontario.

In 2020, many Momentum companies turned pandemic challenges into economic triumph: Toronto's <u>NRStor</u> announced a joint venture with the Six Nations of the Grand River Development Corporation to create the largest battery project of its kind in Canada; Halifax-based <u>CarbonCure</u> was named North American Cleantech Company of the Year by the Cleantech Group for its carbon-sequestering tech; Montreal benefits company <u>Dialogue</u> hit \$60 million in annual recurring revenue and went public; telemedicine pioneer <u>Maple</u> secured a \$75-million investment from Shoppers Drug Mart while doubling in size; and <u>Think Research</u> helped relieve exhausted healthcare workers with its COVID-19specific software.

How **Opus Ones Solutions** went from fledgling startup to global scale-up

Getting a startup off the ground — and into the strata of the world's elite companies requires precision planning and near-flawless execution. When Joshua Wong started his smart-grid firm <u>Opus</u> <u>One Solutions</u> in 2011, he knew he had a global scale-up in waiting. He just needed guidance.

Opus One Solutions decarbonizes the globe's energy systems and maximizes efficiencies. To do so, the scale-up layers software over existing electric-power infrastructure to monitor levels and integrate renewable energy sources. Opus One targets utilities: giant organizations serving literally billions of people.

But 10 years ago, investors weren't that interested in cleantech, and finding likeminded peers was difficult. Wong reached out to MaRS. Immediately, he connected with fellow entrepreneurs, many of them located in the campus or just walking distance away. MaRS advisors also recommended that Opus One apply for the federal <u>Canadian Technology Accelerator</u> program, which paved the way for the company's entry into the U.S. market. These were the sparks Wong needed to propel his venture to the next level. And as the Opus One crew continued to grow, Wong leaned on <u>MaRS Talent Services</u> to improve the firm's organizational structure and benefits packages.

Today, Opus One is one of Canada's banner tech companies, <u>expected to reach</u> <u>\$100 million</u> in revenue by 2025. It has projects in dozens of regions and close to 150 employees. <u>Dennis Ensing</u>, a MaRS Momentum executive in residence, has been Wong's coach for the past two years. "Opus One takes on climate change better than any company I've seen," Ensing says. "Because the crisis is everywhere, and because the tech is so scalable and the clients so giant, Josh and his team can make huge environmental and financial gains. I'm supposed to be a third-party sanity check, and yet I find them always so prepared."

In December 2021, Opus One Solutions was acquired by GE Digital to further the corporation's global energy-transition goals.

Billions raised

2020 was Canada's second-strongest year ever for venture-capital investment, pulling in \$4.4 billion. Here are some of the tech community's biggest wins:

Drug-discovery firm Atomwise raised \$123 million

Vancouver-based agriculture company Semios landed \$100 million in early 2020, followed by an additional \$25 million from CIBC Innovation Banking

Fintech <u>Nest Wealth</u> received a \$50 million investment from NAventures

Prodigy, which has offices in Toronto,
 Oakville and Bengaluru, India, secured
 \$159 million for its educational
 video games

And in February 2021, Georgian Partners **poured \$130 million** into education scale-up **Top Hat** "Every entrepreneur needs peers to relate to. I fell a lot over the course of my journey; **MaRS** and Toronto's innovation community helped pick me up."

> — **Joshua Wong** President and CEO, Opus One Solutions



Setting up **new companies** and **leaders for success**

In addition to helping scaling companies, MaRS offers programs to **support market research**, **corporate-innovation best practices** and **tech adoption**, as well as a recently launched **content studio** to serve ventures' marketing and P.R. needs.

The **unfair MaRS advantage**

MaRS offers bespoke, 1:1 advisory services for hundreds of growth-stage startups. Our 12 staff advisors and executives in residence, along with more than 100 volunteer mentors, work directly with entrepreneurs on topics such as business models, product/market fit, go-to-market strategies, business models, raising capital, sales tactics, managing cash flow, building teams, international expansion strategies, supply chain and manufacturing. That helps entrepreneurs commercialize their technologies more quickly than they could on their own. In 2019, ventures supported by MaRS had average capital raises 45-percent larger than the national average. And average year-over-year revenue growth rates were more than 60 percent. We call this the "unfair MaRS advantage," and we're looking to build upon and extend it in the years to come. "MaRS has helped **build bridges across Canada**, uniting us by using cleantech as a common purpose. The ripple effect of the Women in Cleantech Challenge will be seen in the future."

— Amanda Hall

Founder and CEO, <u>Summit Nanotech</u> Winner, <u>Women in Cleantech Challenge</u>



Knowledge: the ultimate foundation

The MaRS market-research department helps startups shape growth strategies with world-class data, reports and tailored consulting. Standout programs include Entrepreneurship 101, which has trained thousands of new entrepreneurs in business basics; as well as the global expansion series (which helps companies validate international expansion opportunities), in partnership with Export Development Canada (EDC).



The **inside track** on the latest innovations

For the future economy, innovation equals success. And adopting novel products and services can help large organizations become more connected, efficient, profitable and green. But most corporations and institutions don't have the time to develop gamechanging technologies on their own, so they partner with a business that's already developed them. <u>The MaRS First Adopter Network</u> (FAN) helps these organizations by connecting them to the latest Canadian solutions and brilliant minds. FAN Members get:



Venture trackers

Uncovering some of the best and brightest tech firms in the country through tailored monthly reports that highlight solutions to pressing issues

Demo days

Attending exclusive virtual events to explore venture solutions

1:1 meetings

Getting one-on-one access to MaRS venture companies to discuss how they can help your business



"MaRS has been extremely useful for our company. As a portfolio venture, we've received **curated introductions with investors**, **mentorship**, **advice and marketing support** that gets our name out to the right channels and publications and build trust in our brand."

> — **Devesh Bharadwaj** Founder and CEO, <u>Pani</u>

Sharing **Canadian stories** with the world

High-potential companies can't succeed if people aren't paying attention. MaRS crafts and shares stories of Canadian innovation with the world — lifting the branding, marketing, communications and media presence of our venture portfolio. Our team is equipped to provide any manner of creative, write any kind of story, and grab the attention of any media. And 2020 was our most successful year yet...

169 local and international media stories placed

683,000,000 estimated people reached

\$5,600,000 in ad equivalency



Telling the right story

The MaRS Content Studio is a fee-for-service offering within our Marketing and Communications department. With thought-leadership pieces written for company executives, media training and speaking engagements, the MaRS P.R. Accelerator promotes clients in local and international media, from print newspaper features to television profiles. We also provide the MaRS Marketing Accelerator, which helps growth-stage companies establish their brand identities through content ranging from marketing articles and website copy to graphic design, video and social media.

For the **benefit of all**

Our most important challenges cannot be solved by any single organization. That's why our partners — mission-driven executives, policymakers, philanthropists and civic leaders — join the MaRS community to work with startups, peers and unlikely allies to build coalitions that span communities and include stakeholders determined to create positive social, economic and environmental impact at scale.

200+

corporate, government, academic and community partners **SU+** curated introductions with ventures

Conquering systemic challenges

The MaRS team leads various systems-change coalitions with national reach and international influence. Along with providing strategy, resources and a home base, MaRS connects these groups with all members of the tech ecosystem. Opportunity for All Youth, for example, is Canada's only national employer coalition committed to using innovation to improve hiring systems for youth who face barriers to employment, and in 2020, the group supported 11,772 job offers to youth. The <u>Engineering Change Lab</u> advocates for Canada's engineering community to embrace technological stewardship and help address the challenges of our time. "We are excited to be working with MaRS in the area of impact investment. The Pollinator Fund for Good was created to **catalyze and scale the impact new businesses** can have in our communities through groundbreaking technology, new products and services, and community focused entrepreneurs. The challenges we face societally and environmentally are rapidly changing and we look forward to connecting with other industry leaders and changemakers to uncover solutions to these pressing issues."

> — **Blair Miller** Managing Partner, TELUS Pollinator Fund for Good



Crowdsourcing ideas to tackle complex problems

<u>MaRS Innovation Challenges</u> exist for anyone, regardless of sector or background, to provide innovative solutions that can address some of the world's toughest problems. For each of our challenges, we partner with a mix of corporations, government agencies, non-profits and foundations.

MaRS works with these partners to develop a deep understanding of a given problem in order to design inclusive and outcome-based challenges. Unlike traditional challenges centred on monetary gain, our approach focuses on overcoming societal issues and promoting long-term, mutually beneficial relationships among sponsors and challengers.

2020 winners

Brave Coop and Wellington-Dufferin-Guelph (WDG) Public Health were announced as co-winners of the Opioid Data Challenge. The former was selected for its Brave Button (a life-saving device that tracks the information of people who use drugs alone within supportive housing), while the latter was chosen for its FAST Overdose Alert Platform (a solution that collects real-time data about overdoses and incidents). Each earned a grand prize of \$50,000.

WDG also won the <u>Healthy Neighbourhoods Data Challenge</u> for its Built for Health Index (BHI) — an easy-to-use tool that analyzes and ranks neighbourhoods based on their ability to foster health — and received a \$50,000 grand prize.

And <u>The Kite Research Institute</u> was selected as winner of the <u>Spinal Cord Rehab Innovation Challence</u>. The team, which is part of the University Health Network, received a \$100,000 grand prize for its collection of treatments, devices, products and research. **Case study: AOMS and OPG**

How **IoT startup AOMS** partnered with renewableenergy leader OPG

For entrepreneurs, a strong partnership can spell the difference between failure and success. It's why <u>AOMS</u> founder and CEO Hamid Alemohammad applied to the MaRS-run <u>Generate Innovation Challenge</u>, a competition that came with not only a \$25,000 prize, but the chance to work with renewable-energy leader <u>Ontario</u> <u>Power Generation (OPG</u>), which was looking to upgrade its infrastructure and automate tasks.

Founded in 2014, AOMS uses <u>lot</u> to monitor, inspect and assess industrial infrastructure, which allows clients to save energy while also increasing efficiency and safety. The company's winning proposal for OPG was novel: a collection of wireless sensors, instrumentation and digital tools that could gather and analyze information from non-generating assets at OPG's hydro stations. The product has the potential to reduce the time and labour needed to perform routine inspections, as well as improve real-time data assessment.

The partnership has benefited both sides. AOMS reinvested the \$25,000 prize into successful pilots and has learned valuable lessons about budgeting, negotiating contracts and navigating corporations and governments. And OPG got to experiment with a faster, more fluid style of work. Pilot stage complete, AOMS recently signed a three-year contract with OPG to equip 12 hydro stations, with the potential for more down the road.





"Partnering with MaRS Innovation Challenges was the **holy grail of business development**. OPG was clear and honest about the problem at hand. They trusted my instincts as an entrepreneur, and also taught me about corporate processes."

> — **Hamid Alemohammad** Founder and CEO, AOMS Winner, Generate Innovation Challenge



Spinning out the mission

MaRS is an innovation partner of choice because MaRS employees are themselves innovators. We encourage in-house entrepreneurship and growth, so it's not uncommon for our teams and departments to spin out and form their own mission-driven enterprises. During the pandemic, Canada's tech community faced great disruption, and our spinouts stepped up to meet their needs.

Ontario's most active seed-stage investor

Capital deployment is essential for young companies to survive and thrive. And MaRS and our sister investors punch far above their weight when backing socially progressive ventures.

The <u>MaRS Investment Accelerator Fund</u> (IAF) is Ontario's most active seed-stage investor. Since 2010, MaRS IAF has provided more than \$75 million in seed funding to 161 ventures, leading to 31 exits and \$1.37 billion in follow-on funding. The group will soon become an independent company, thanks to an unprecedented run of successful investments in 2020.

Data-driven insights for policymakers

Founded in 2020 by Canada's leading tech hubs and housed at MaRS, the <u>Innovation Economy Council (IEC)</u> publishes timely, data-driven reports to inform policymakers about the state of innovation in Canada. The IEC also hosts live events showcasing the country's foremost thought leaders. Its ultimate goal is to strengthen the Canadian innovation economy by boosting education and collaboration, as well as increasing technology adoption — at home and abroad.

Watch: Canada's Innovation Economy By the Numbers

Key facts from the IEC's reports

1. Magnetic North

The Canadian innovation economy created close to 100,000 STEM jobs throughout the pandemic.

2. Factory forward

Half of the 45,000 factory jobs created in Ontario since 2010 are in advanced manufacturing.

3. Cleantech explosion

The global cleantech market is projected to reach \$2.5 trillion by 2022.

4. Post-viral opportunity

GDP in the software industry has expanded at six times the pace of the overall economy in Ontario.

5. Patent puzzle

Ninety percent of tech companies own trade secrets, 71 percent have registered patent applications pending and 59 percent have trademarks or service marks already registered or pending.

Inclusive innovation: the only way forward

As the Black Lives Matter movement swept across the world in 2020, Canadian tech leaders recognized the immediate need to make Canadian innovation more diverse, fair and inclusive. So, in June, the <u>Coalition of</u> <u>Innovation Leaders Against Racism (CILAR)</u> was born. Its mission: create new pathways and transformational opportunities for Canada's Black community, Indigenous peoples and people of colour. Whether it's a life-changing job opportunity, mentorship or access to revenue, CILAR is focused on creating opportunities for success.

"It's our responsibility as technology leaders to steer Canada's innovation economy toward **equal opportunity for every Canadian**, regardless of race or socioeconomic status. We must include perspectives that reflect our communities in order to ensure that **everyone benefits from technology-driven innovation**. This means spearheading initiatives and programs that will level the playing field and clear pathways to both access and success."

— **Claudette McGowan** MaRS Board of Directors; Global Executive Officer for Cybersecurity, TD Canada; Chair, <u>CILAR</u>



Financials

Our board of directors

The <u>MaRS board of directors</u> is a key contributor to the success of MaRS. It provides sound governance and strategic advice to steer the organization and support fiscal responsibility.

Our <u>senior leaders</u> guide the MaRS vision and are experts in innovation and business.

Making an **impact**

MaRS donors know that creating meaningful social impact sometimes means taking smart, educated risks. They understand that the innovation economy and the ventures MaRS supports are fundamental to securing a better future for our children.

We are a registered charity supported by the Ontario and Canadian governments, and by the generosity of individuals, philanthropic foundations and corporations.

Our supporters share in our drive to develop breakthrough, actionable solutions to humanity's most complex challenges. MaRS donors can give...

Online

Donate safely and securely through CanadaHelps and automatically receive a tax receipt.

Gift of securities

A donation of securities or mutual funds allows donors to give more and avoid paying capital gains taxes.

Donating to **MaRS** means fighting for a fairer economy, healthy communities and a clean planet

Contact the philanthropy office to discuss how you can help MaRS make a positive impact on our world.

Donate now

Our charitable registration number is 876682717-RR0001.

"Silicon Valley is no longer a place in California — it's a global network of innovative people, companies and ideas. MaRS is an essential part of that, **accelerating Canada's economic transformation** by giving talented entrepreneurs and highgrowth startups the support and resources they need to succeed."

— Margaret O'Mara

Professor, University of Washington Keynote Speaker, MaRS Impact Week 2020



Thank you

MaRS

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