



A Timeline of Innovation

in Durham Region



**Here in Durham Region,
we're not just innovating;
we're innovating to solve
big problems.**



We're focused on solving some of the world's biggest challenges, and building a robust innovation ecosystem that translates research and development assets into jobs and investment.

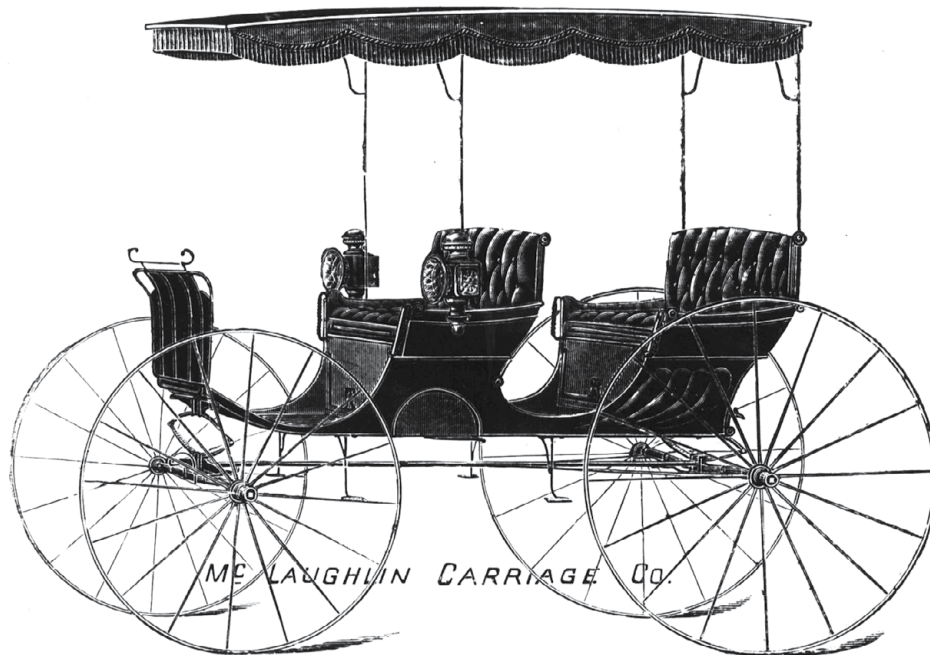
The world needs products, services and business models that will create value in new ways, while reducing social and environmental impacts. This change won't be driven by a few heroic entrepreneurs or innovative geniuses, nor will it be driven solely by investors. It will take all of these players, and more, working together.

Durham Region's foundation of solving important challenges began with early settlement, as immigrants founded local businesses that would grow to be some of the largest and most successful.

Since 1864, when Robert McLaughlin started his journey to transform human mobility, businesses in Durham have committed to improve lives—not just for local residents—but also for the world.

Today, by supporting innovators in everything from artificial intelligence to electric and autonomous mobility, and from clean tech to agri-tech, life sciences, health, and creative industries, our business ecosystem is evolving so that Durham's innovators continue to lead global solutions.

We're confident our innovation community will continue to change the world.

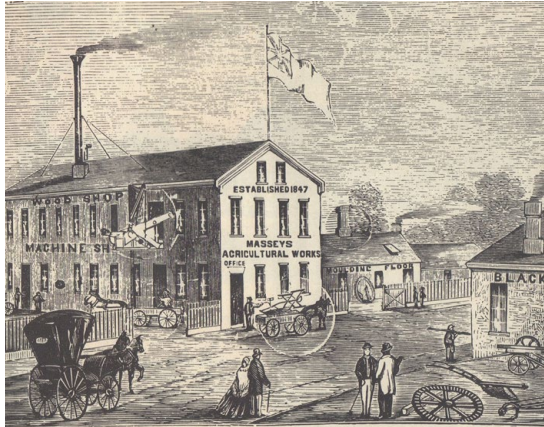


McLaughlin Carriage Co.

Colonel Robert Samuel McLaughlin settles in Darlington Township (now known as Clarington), and launches a business manufacturing horse-drawn sleighs and carriages. By the turn of the century, his Oshawa facility is one of the largest carriage factories in the world.

Image courtesy of Oshawa Public Libraries, Local History Collection.

1866



Newcastle Foundry and Machine Manufactory

Daniel Massey establishes the Newcastle Foundry and Machine Manufactory, and in 1866, Hart Massey appears at the International Exposition in Paris, France, where he wins first place honours for the Massey Self Binder—which cut a section of oats in 55 minutes. The company went on to become the largest manufacturer of agricultural implements in the British Empire, now known as Massey Ferguson.

Image courtesy of the Newcastle Village and District Historical Society Archives.

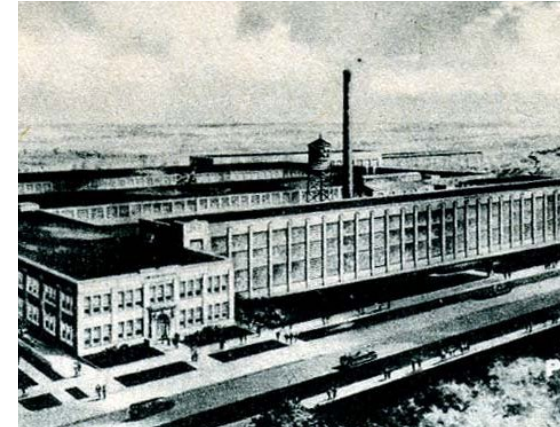
1884



The Holstein Association of Canada

The Holstein Association of Canada is founded locally. Members include legendary operations such as Roybrook in Whitby and Hannover Hill in Scugog; farms that have made a lasting impact on dairy farming around the globe.

1892

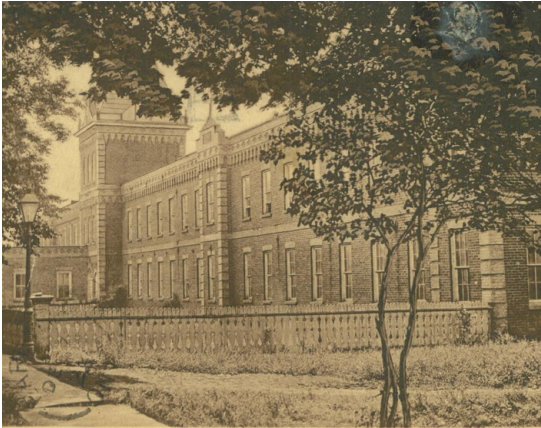


Pedlar Metal Roofing Company

George Pedlar expands his father's hardware and metal stamping business to become the Pedlar Metal Roofing Company, based in Oshawa. The operation became the largest sheet metal factory in the British Empire, with warehouses in Montreal, Winnipeg and Calgary, Sydney, Australia, Auckland, New Zealand and Cape Town, South Africa.

Image courtesy of Oshawa Public Libraries, Local History Collection.

1892



Schofield Woolen Mills

Schofield Woolen Mills is established in Oshawa. Nationally recognized for exceptional quality, Schofield innovative woolen products were found in nearly every town and city in Canada for the next 50 years.

Image courtesy of The Thomas Bouckley Collection, The Robert McLaughlin Gallery, Oshawa.

1894



The Oshawa Railway

Construction begins on the Oshawa Railway to connect the Grand Trunk line at Oshawa's northern end with the port. By 1911, the railway offered passenger, express and freight service to every part of town, and was a primary feature in promoting the businesses and "natural advantages and resources of Oshawa" to prospective investors.

Image courtesy of Oshawa Public Libraries, Local History Collection.

1904



Canada Dry Pale Ginger Ale

Robert McLaughlin's eldest son, John J. McLaughlin of Enniskillen, creates Canada Dry Pale Ginger Ale. The company quickly expanded to become worldwide by the 1930s. Canada Dry is still popular today and produced in countries around the globe.

1907



McLaughlin Motor Car Company

Robert McLaughlin & Sons rebrands as McLaughlin Motor Car Company, eventually selling the carriage business to make way for automobile production at their Oshawa plant.

Image courtesy of The Thomas Bouckley Collection, The Robert McLaughlin Gallery, Oshawa.

1918

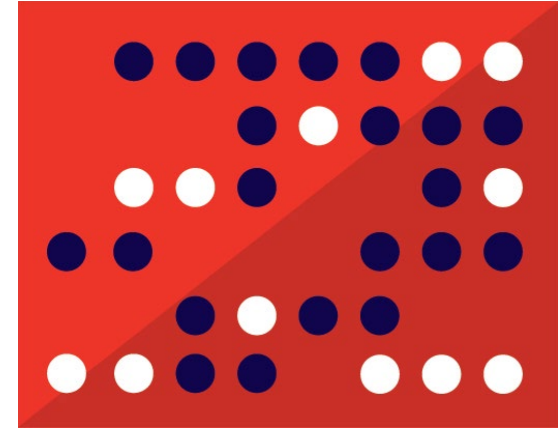


General Motors of Canada

Sam and George McLaughlin become the first executives of General Motors of Canada, after the merging of their company McLaughlin Motor Car Company with Chevrolet and General Motors. General Motors of Canada built their first offices on Richmond street in Oshawa.

Image courtesy of The Thomas Bouckley Collection, The Robert McLaughlin Gallery, Oshawa.

1940s



The Rockex

Professor and electrical engineer, Benjamin deForest “Pat” Bayly, invents an offline one-time tape cipher machine called the Rockex at the secret military intelligence base Camp X, located between Whitby and Oshawa. The Rockex was a solution to slower existing equipment, and handled transatlantic communications quickly and securely during World War II.

1941



Defence Industries Limited

The largest shell-filling plant in the British Commonwealth, Defence Industries Limited, is established in Ajax to provide supplies for the Allies in World War II. More than 2,300 women from across Canada worked in the munition factory. The contributions of women at this Ajax facility later inspired the award-winning television series “Bomb Girls”.

Image courtesy of The Town of Ajax
– Ajax Archives.

1960

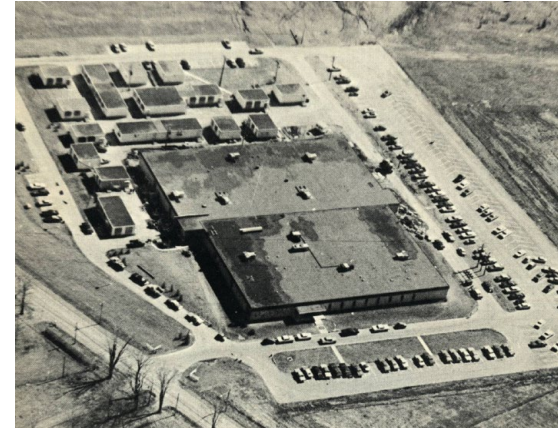


The Oshawa Harbour Commission is Formed

The port is the only seaway-depth harbour on Lake Ontario between Toronto and Montreal. On average, Oshawa’s port handles \$23 million dollars worth of cargo annually, from salt and steel products to asphalt and grain.

Image courtesy of The Thomas Bouckley Collection, The Robert McLaughlin Gallery, Oshawa.

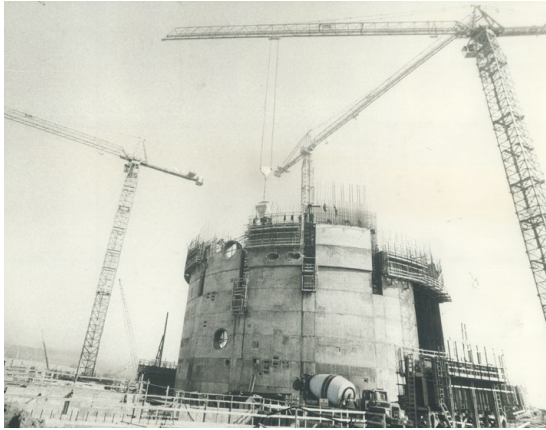
1967



Durham College is Founded

Durham College has become known as a leading post-secondary destination and was named one of Canada’s Top 50 Research Colleges for six straight years, from 2012 to 2018. Today, Durham College enrolls more than 13,000 full-time students, including 1,900 international students from 75 countries.

1971

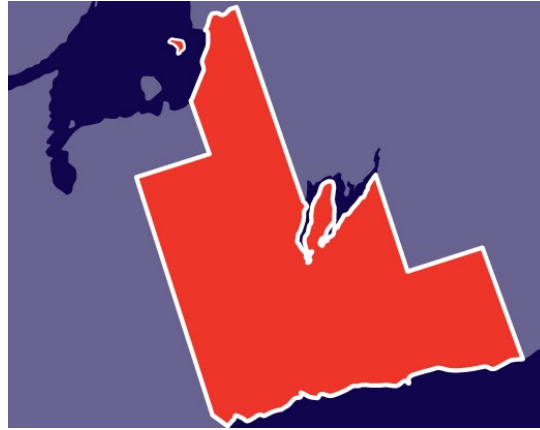


Pickering Nuclear Generating Station

The Nuclear Generating Station in Pickering begins operations, starting the facility’s run as one of the largest and safest nuclear stations in the world.

Image courtesy of Keith Beaty/Toronto Star via Getty Images.

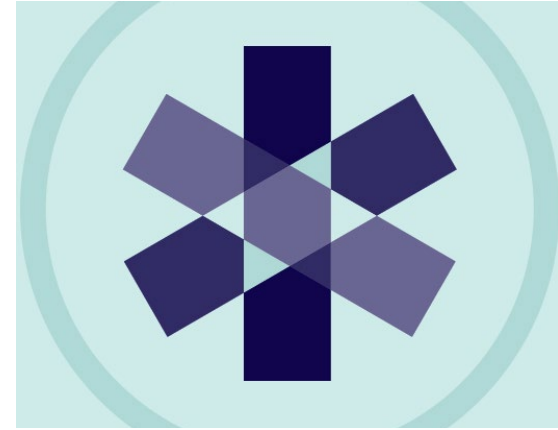
1974



The Region of Durham

The Region of Durham is established. It is one of several new regional governments in the Province of Ontario, and includes the cities of Oshawa and Pickering, towns of Ajax and Whitby, the municipality of Clarington, and townships of Brock, Scugog and Uxbridge.

1978



Pre-hospital Cardiac Care Services in Oshawa

Oshawa becomes the first city in Ontario to provide pre-hospital cardiac care services. The program allowed paramedics to obtain faster diagnoses in the field, and prepared emergency staff at the hospital to respond—ultimately saving more patients and reducing the impacts of heart attacks.

1980s

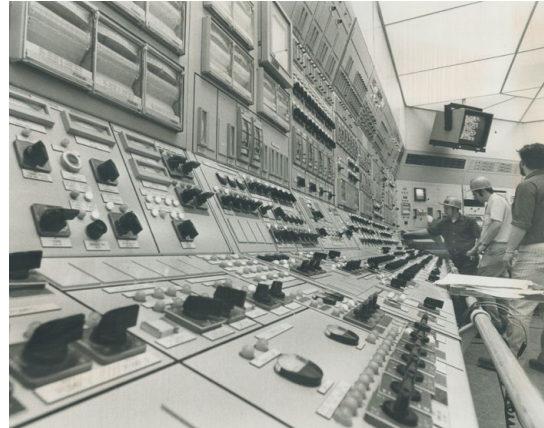


Northern Dancer

Edward Plunket Taylor, a businessman, philanthropist and race horse breeder, produces Northern Dancer at Windfields Farm in Oshawa. By the 1980s, Northern Dancer was the first Canadian bred horse to win the Kentucky Derby, the first animal to be inducted into the Canadian Sports Hall of Fame, and was the most sought-after sire in the world. Today, nearly every horse competing in the Kentucky Derby is a descendant of Northern Dancer.

Image courtesy of Tony Leonard, Canadian Museum of History.

1986



CANDU Reactor

The CANDU reactor proven at Ontario Power Generation's Pickering and Darlington Nuclear Generating Stations is listed as one of Canada's top ten engineering achievements of the previous 100 years by a jury of Canadian engineering professionals.

Image courtesy of Frank Lennon/Toronto Star via Getty Images.

1988



Colpitts Design Inc.

Colpitts Design Inc. is founded by Peter Colpitts in Uxbridge. The company specializes in rapid prototype design and manufacturing; building products for the medical, garden, automotive and film industries. Today Colpitts Design works with Ontario Tech University's automotive program and creates props for Hollywood blockbusters. Credits include work for films such as X-Men, Robocop, Batman vs Superman and Suicide Squad.

1988



Fly Away Home

William "Bill" Lishman, an award-winning sculptor, filmmaker, inventor, naturalist and public speaker, pioneers ultra-light aviation in Canada, becoming the first person to lead the flight of geese with an aircraft, eventually conducting the first aircraft-led migration of birds from his home in rural Scugog in 1993. He made a short film about the migration for PBS Television Network that was eventually optioned for the 1996 Academy Award winning film, *Fly Away Home*.

Image courtesy of the Lishman family.

1998



Omachron Group of Companies

Wayne Conrad, a scientist based in rural Clarington, founds Omachron Group of Companies. Today, Conrad holds close to 600 patents, including a space-age water treatment system that NASA adopted for the International Space Station.

Image courtesy of NASA/Roscosmo.

1998



Lakeridge Health

Lakeridge Health is formed when Durham-area hospitals are merged to create a leading health system focused on improving the overall wellness of one of fastest growing areas of Ontario. Today, Lakeridge Health has five hospitals, four Emergency Departments, and more than twenty community healthcare locations, a dedicated team of more than 5,400 employees, 760 physicians and 1,500 volunteers.

2003



Ontario Tech University

Led by Gary Polonsky as its founding president, Ontario Tech University opens its doors as Ontario's first laptop-based university, and has continued to evolve into a tech-focused institution that embeds the latest technology into its teaching and learning practices, administrative processes and innovative research projects. Today, Ontario Tech is ranked first in Canada in cross-sector research among undergraduate universities, and draws in more than 10,000 full-time students, including more than 1000 international students from 65 countries.

Image courtesy of Ontario Tech University.

2006



Search Engine People (SEP)

After launching in 2001 with a focus on Search Engine Optimization, in 2006 the Search Engine People (SEP) became a full-service agency and are named the first-ever Canadian Partner in the Google Partner Program. Today SEP is recognized as one of the best SEO and digital marketing companies in Canada. Founder Jeff Quipp eventually became a founding board member of the Spark Angel Network, an angel investing group focused on tech start-ups in Durham Region.

Image courtesy of Search Engine People.

2010



The Clean Energy Research Laboratory (CERL)

The Clean Energy Research Laboratory (CERL) opens at Ontario Tech University. CERL houses the first lab-scale demonstration of a copper-chlorine cycle for thermochemical water splitting and nuclear hydrogen production. Hydrogen is a clean energy carrier of the future and potentially a major solution to the problem of climate change.

2010



Trent University Durham GTA

Trent University opens a campus on Thornton Road in Oshawa, building upon forty years of Trent education programs available in Durham Region. Today, Trent University Durham GTA offers undergraduate degrees, masters degrees and post-graduate programs to nearly 2,000 students.

2010



Spark Centre

The Spark Centre is founded in 2010, and in 2012, Durham's Regional Innovation Centre locates in downtown Oshawa. Spark Centre supports start-ups by providing commercialization and services to innovative and technology-based entrepreneurs. By 2019, Spark grows into a 9000-square foot innovation space and begins graduating clients to the new 1855 tech accelerator in Whitby.

Image courtesy of Spark Centre.

2011



ACE Climatic Wind Tunnel

The state-of-the-art ACE Climatic Wind Tunnel is operational. The world-class facility, which can simulate weather from a blizzard to a hot day in Arizona, is used by big automakers to test vehicles. With its moving ground plane, it is one of the most technologically advanced facilities of its kind in the world. ACE is also able to simulate a broad range of environments, and testing has included housing, bridges, product packaging and even athletes.

Image courtesy of ACE Climatic Wind Tunnel
ace.ontariotechu.ca

2013



W. Galen Weston Centre for Food (CFF)

Durham College opens the W. Galen Weston Centre for Food (CFF) in Whitby, one of Canada's first culinary education facilities to bring the concept of "Field to Fork" to life. CFF is focused on local food, regionalism, sustainability and wellness, and it plays a leading role in providing students with hands-on experience of the full cycle of production: farming, preparing, serving and celebrating food.

2013



ByBlacks.com

ByBlacks.com, the top-ranked Black Canadian online magazine is founded by Roger and Camille Dundas, and in 2020, they receive a Heritage Canada grant to grow their business. The website promotes Black Canadian entrepreneurs and serves as a hub where viewers can stay educated about topics surrounding the Black community.

2016



Darlington Nuclear Generating Station

The World Association of Nuclear Operators names Darlington Nuclear Generating Station in Clarington one of the safest and top performing nuclear stations in the world—for the third time in a row.

2017



Durham College AI/Hub

Durham College launches the AI/Hub, a first-of-its-kind applied research centre focused on how “narrow AI”—such as machine learning, decision support, natural language processing and automation to recommend strategic options—can make decisions autonomously.

Image courtesy of Durham College.

2017

2017

2018



360insights

Founded by Durham resident Jason Atkins, 360insights is named one of the Best Places to Work in Canada by the Great Place To Work Institute. Proudly located in Whitby, 360insights has innovated a software platform for large manufacturers to launch and execute flexible incentive programs. By 2020, 360insights is one of the largest global Channel Incentives Management (CIM) providers in the world.



Autonomous Vehicle Innovation Network (AVIN) at ACE

Ontario Tech University's ACE Climatic Wind Tunnel is named a key hub within the Ontario Autonomous Vehicle Innovation Network (AVIN). ACE provides accurate sensing technologies and reliable machine learning techniques to improve urban traffic management, design and connectivity.

Image courtesy of ACE Climatic Wind Tunnel ace.ontariotechu.ca



smartARM

Ontario Tech University student Hamayal Choudhry and his teammate, Samin Khan, from the University of Toronto win the Imagine Cup—Microsoft's annual innovation competition—for their invention, the smartARM, a prosthetic robotic hand. The competition saw more than 40,000 student competitors register and 49 teams from 33 countries qualify for the Imagine Cup World Finals.

Image courtesy of smartARM.



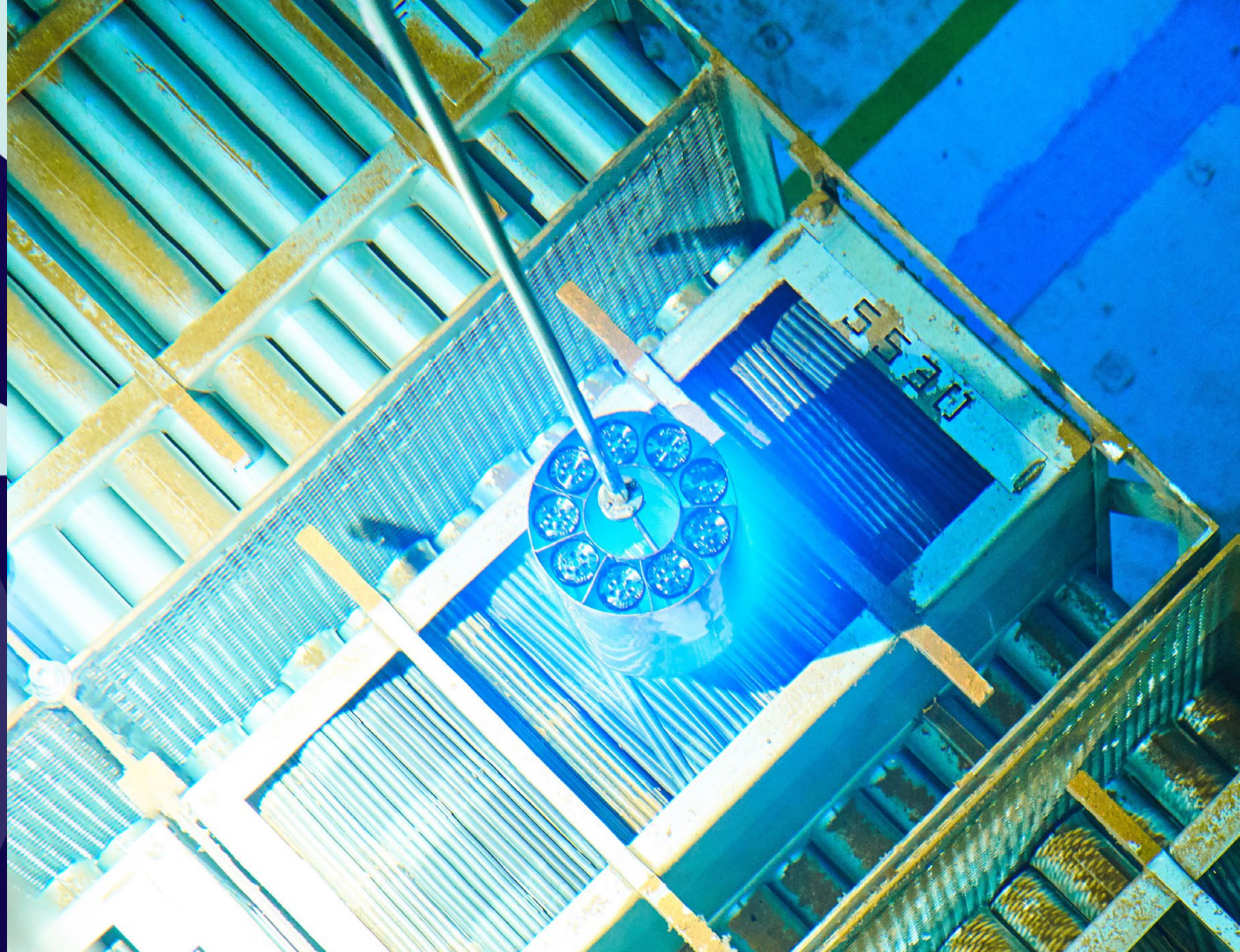
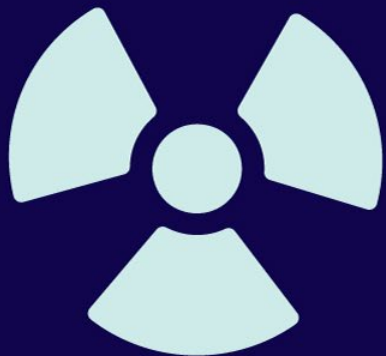
2018



Building Youth Capacity (BYC)

Brock Youth Centre rebrands their organization as Building Youth Capacity (BYC) to reflect services in Durham's three northern municipalities. The organization provides innovative programs and services to improve the social and economic well-being of youth, and encourage entrepreneurship. Success stories include a virtual hackathon that resulted in the outcome of a youth mental health app going into development.

2019

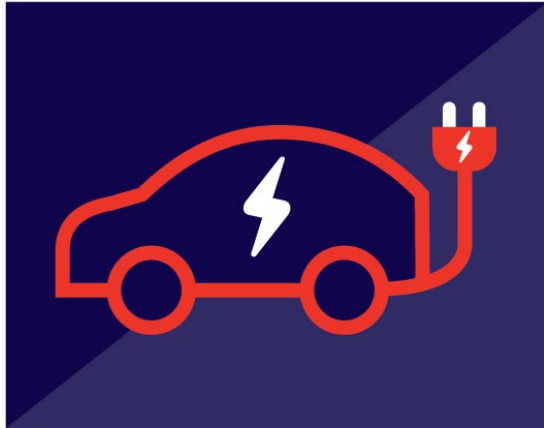


Life-Saving Medical Isotope

Darlington Nuclear announces planned production of the life-saving medical isotope molybdenum-99 (Mo-99)—used for patients who need skeletal, brain and organ imaging to detect and diagnose harmful diseases—continuing OPG’s decades long commitment to supply the world with valuable radioactive isotopes.

Image courtesy of Ontario Power Generation.

2019



Electric Vehicle Strategy

Trent University Durham GTA campus students in the Communications and Critical Thinking program begin work on an Electric Vehicle strategy with the Municipality of Clarington. The project looks at best practices for the adoption, use and maintenance of electric vehicles and electric vehicle charging stations.

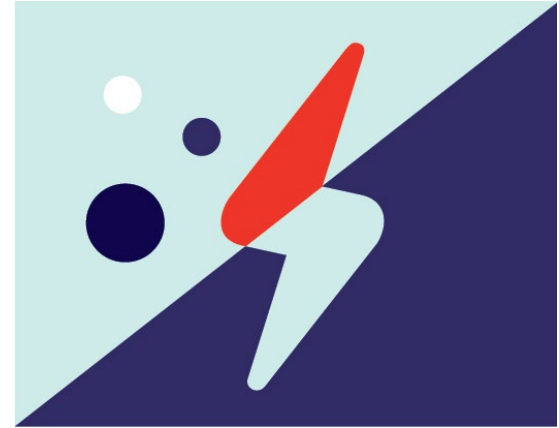
2019



Innovation in Cancer Care in Ontario

The R.S. McLaughlin Durham Regional Cancer Centre at Lakeridge Health wins a Cancer Quality Council of Ontario 2019 Quality and Innovation Award for significant contributions to quality and innovation in the delivery of cancer care in Ontario.

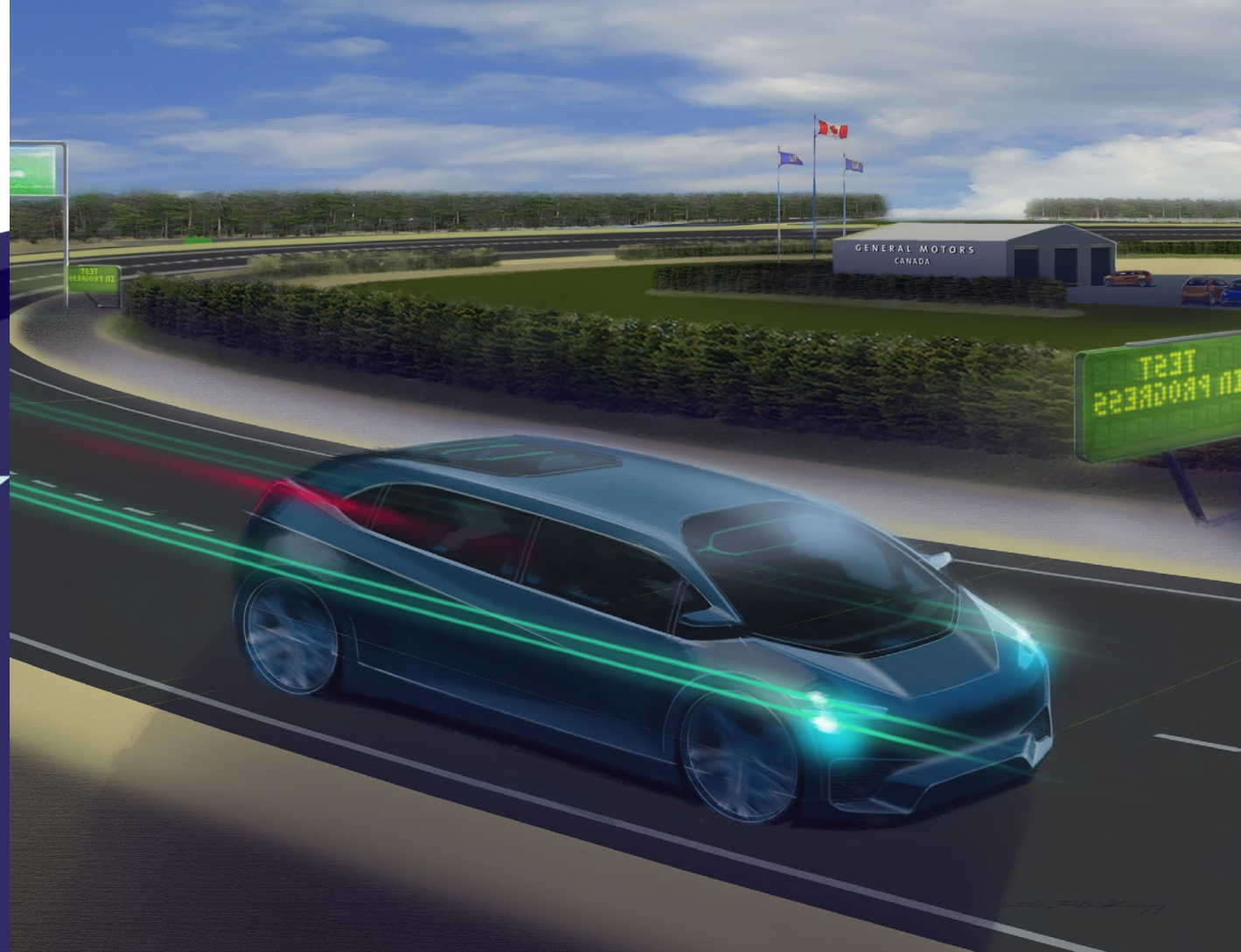
2019



Canada's First Biogas Plant

Oshawa Power and Utilities Corporation (OPUC) partners with ZooShare—an energy co-operative with more than 600 members—and begins building Canada's first biogas plant at the Toronto Zoo to convert organic waste to renewable energy and fertilizer.

2019



Canadian Technical Centre (CTC) McLaughlin Advanced Technology Track

Construction begins on GM's McLaughlin Advanced Technology Track, named after GM Canada's founder and visionary Colonel Sam McLaughlin. Situated on 55 acres, south of GM's Oshawa operations, the track will be used to support the testing of advanced GM vehicle software and technologies that will enable a future vision that is self-driven, all-electric, and highly connected.

Image courtesy of General Motors Canada.

2019

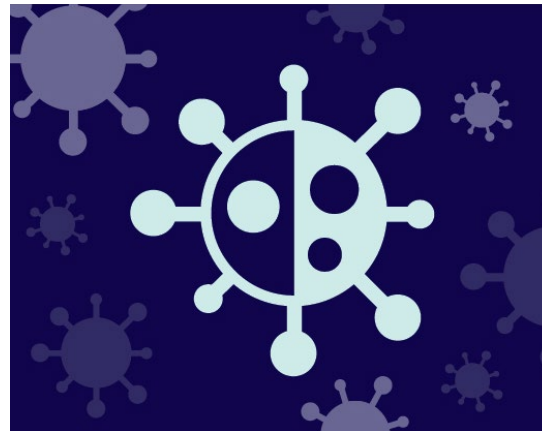


1855 Whitby

1855, Durham Region’s innovation accelerator is founded in downtown Whitby. The vision of the Town of Whitby’s former Director of Economic Development, Peter LeBel, and 360insight’s Jason Aktins, 1855’s goal is to accelerate the growth, and scale-up potential tech companies. Founding members include Spark Centre graduates MobileXCo, a quickly accelerating marketing technology (MarTech) company.

Image courtesy of 1855.

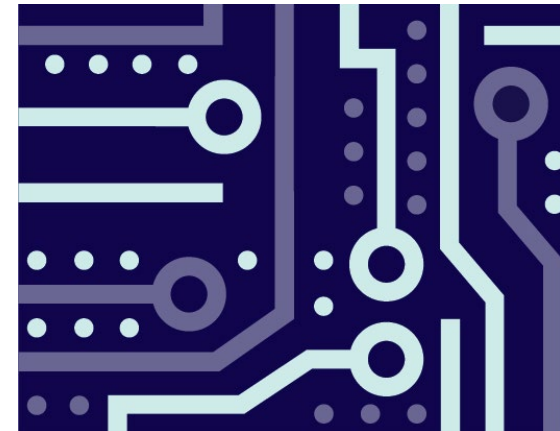
2020



Pivoting During COVID-19

Manufacturers across Durham Region retool to join the fight against COVID-19. From face shields produced in collaboration between Ontario Power Generation and Ontario Tech University, to local sun porch manufacturer Sun Space creating retail protective equipment, companies large and small innovate solutions. Of note, a General Motors production facility in Oshawa is retooled to manufacture face masks for Health Canada.

2020



Centre for Cybersecurity Innovation

Durham College launches its fourth applied research centre, the Centre for Cybersecurity Innovation, which offers current and aspiring cybersecurity professionals, as well as public and private-sector organizations, access to applied research services and leading-edge education in cybersecurity to prepare for the ever-changing and complex threat landscape.

2020



Kendal Hills Farm

In response to the COVID-19 pandemic, local farm Kendal Hills launches a virtual farmers' market, collaborating with more than 30 other farms to deliver local goods and produce direct to consumers. Modelled on a typical farmers' market, the project collates orders and ships to homes across the Greater Toronto Area.

2020



Axcessiom Technologies

Axcessiom Technologies, founded by Shanjay Kailayanatha at Ontario Tech's Brilliant Incubator, receives federal funding to continue to develop their facial landmark recognition technology that makes driving more accessible for those using adaptive technology.

2021



Intelligent Community

The Intelligent Community Forum (ICF), names the Region of Durham as one of the Smart21 Communities of the Year. The ICF recognizes communities around the world for successfully developing innovative solutions that create inclusive and prosperous communities.

We're confident our innovators will solve the world's next big challenge.

Invest Durham is committed to working with others who share our vision of building a modern innovation economy in Durham. Collaboration between industry, post-secondary institutions, government and innovation centres, alongside a robust talent pipeline, positions Durham Region to be at the forefront of innovation in Canada—and the world.

An opportunity to join this innovation community awaits your business in Durham Region.

Durham Region is the eastern anchor of the Greater Toronto Area's (GTA) tech ecosystem. Durham Region is made up of eight local area municipalities, including the cities of Oshawa and Pickering; the towns of Ajax and Whitby; the Municipality of Clarington; and the townships of Brock, Scugog and Uxbridge.

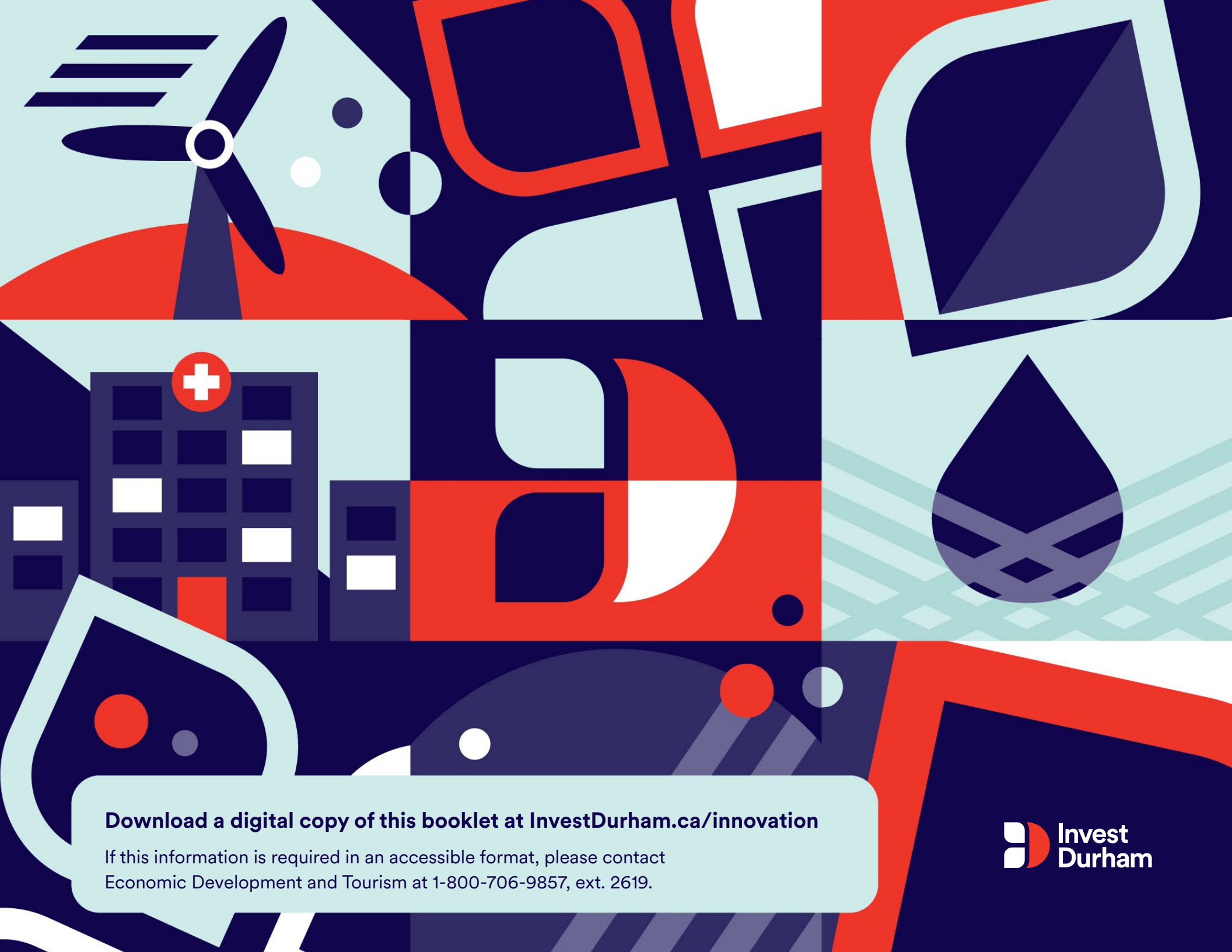
We're confident our team will be able to help you.



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