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Shell and Freshii team up to bring healthier food options

Freshii bistro boxes, green juices, healthy meals & snacks will be available at select Shell locations in the Greater Toronto Area later this year.

PETRONAS
Petronas to join LNG CANADA project

GHG EMISSIONS
Tightening the Valve on GHG Emissions at Shell Canada’s Groundbirch

SKY SCENARIO
Meeting the goals of the Paris agreement

SHELL AND HTEC LAUNCH
CANADA’S FIRST RETAIL HYDROGEN VEHICLE REFUELLING STATION

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Shell and Hydrogen Technology & Energy Corporation (HTEC), launched Canada’s first retail hydrogen refuelling station for hydrogen fuel cell electric vehicles, located at 8686 Granville Street.

This is the first retail hydrogen vehicle refuelling station in Canada open to the public, and the first of three sites that Shell and HTEC plan to open in Vancouver.

“After bringing hydrogen refuelling sites to other markets globally, we are excited to work with Vancouver-based technology provider, HTEC, to add even more locations to our growing network,” said Oliver Bishop, GM of Hydrogen for Shell.

“Working with HTEC to bring hydrogen refuelling to Vancouver is one of many exciting ways we are advancing cleaner energy solutions and evolving to meet the changing expectations of customers,” said Michael Crothers, Shell Canada President and Country Chair. “Canada is well suited to capitalize on the energy transition thanks to the ingenuity of Canadians and our willingness to work together. We’re grateful for the collaboration between industry and government that was instrumental in making this station a reality.”

Critical investment in the station comes from LGM Financial Services, along with funding from both the Provincial and Federal governments, through the BC Ministry of Energy, Mines and Petroleum Resources and Western Economic Diversification Canada’s WINN initiative respectively.

Vancouver and Victoria,” said Colin Armstrong, CEO of HTEC. “Refuelling infrastructure must be in place to support hydrogen fuel cell electric vehicle rollouts and it’s exciting to see Canada’s first wave of retail hydrogen refuelling stations being built here in BC.”

Shell is investing in the development of new fuels. We believe that all fuel and vehicle options will be required over the coming decades to meet growing demand for transport, reduce CO2 emissions, improve air quality and respond to changing customer needs.
Shell and Freshii Team Up to Bring Healthier Food Options to Customers on the Move

Freshii bistro boxes, green juices, healthy meals and snacks will be available at select Shell locations in the Greater Toronto Area later this year.

Shell Canada has partnered with Freshii to offer Canadians healthy and convenient meal, snack and juice options at select Shell locations across the Greater Toronto Area (GTA), effective June 2018. The partnership’s first phase will place Freshii at 25 GTA Shell sites each selling over 20 Freshii on-the-go menu items. This phase will also see three flagship locations in the GTA providing Shell customers with a full Freshii restaurant experience. To tap into other nearby fresh food seekers, all locations will offer mobile ordering and fast delivery to any home or office.

“Shell has more than 43,000 retail sites in close to 80 countries, and serves 30 million customers every day. In Canada, there are just over 1,300 Shell branded retail sites across the country. To see which sites will be energized with Freshii, customers can use Shell’s location finder at Shell.ca.”

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“We know from our 100+ years serving Canadians that convenience and choice is critical. Partnering with Freshii allows us to provide healthy and convenient choices to customers on the go that may not otherwise have time in their day to fit in a healthy meal.”

“It’s our mission to help make our customers’ journey better – whether that’s offering the best fuels to get them where they need to go or offering fresh food options to keep them on the move,” said Andrea Brecka, Shell Canada Retail General Manager.

“Freshii is a health and wellness brand that serves fresh food designed to energize people on the go. The brand’s global mission is to help citizens of the world live better by making healthy food convenient and affordable. After all, what’s more convenient than your neighbourhood Shell convenience store? Since Freshii was founded in 2005, the company has opened hundreds of restaurants in cities and countries around the world.”

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Click on above image to play video
Meat Freshii: Superfoods x Super Entrepreneurs.
PETRONAS TO JOIN LNG CANADA PROJECT

London – Shell Canada Energy, PetroChina Kitimat LNG Partnership, Diamond LNG Canada Ltd. and Kogas Canada LNG Ltd.

...Announced on May 31, 2018 that Petroliam Nasional Berhad ("PETRONAS") will take an equity position in LNG Canada, located in Kitimat, British Columbia on the west coast of Canada, through its wholly owned entity the North Montney LNG Limited Partnership ("NMLLP"), subject to regulatory approvals and closing conditions. As a result of this transaction, if approved and upon closing, ownership interests in LNG Canada would be Shell Canada Energy, a subsidiary of Royal Dutch Shell plc ("Shell"), (40%); PETRONAS (through NMLLP), (25%); PetroChina Kitimat LNG Partnership, a subsidiary of PetroChina Canada Ltd., (15%); Diamond LNG Canada Ltd., a subsidiary of Mitsubishi Corporation, (15%); and Kogas Canada LNG Ltd. (5%).

British Columbia (B.C.) is home to one of the largest and most accessible sources of natural gas in the world. If constructed, LNG Canada participants will ship natural gas, including from B.C.’s vast reserves, to various countries where the imported gas could displace more carbon intensive energy sources, helping to reduce greenhouse gas emissions.

LNG Canada recently selected the joint venture of JGC Corporation ("JGC") and Fluor Corporation ("Fluor") as the Engineering, Procurement and Construction (EPC) contractor for the project and is currently finalising materials in preparation for a final investment decision (FID) by joint venture participants.

The transaction announced today does not amount to an FID which remains pending. The timing and outcome of an FID will be decided by joint venture participants based on global energy markets, and the overall competitiveness and affordability of the project.

SHELL CANADA AND THE ERA CONTINUING TO DONATE

Shell Canada and the ERA were out in full force this April continuing to donate $1 million worth of technology to indigenous communities.

The Electronic Recycling Association and Shell Canada to grant surplus computer equipment to deserving communities.

The Electronic Recycling Association (ERA) and its long-time donor Shell Canada announced that they will be gifting more than 200 recent model computers, laptops and monitors to nine indigenous organizations across Alberta and Saskatchewan. This donation is part of Shell Canada’s pledge to contribute $1 million worth of computer equipment to organizations across Canada, which it announced back in November 2017. To date, more than 600 computers, laptops and monitors have been donated to 30 organizations across Canada as part of the company’s million-dollar pledge.

The latest recipients are Indigenous organizations and schools in Alberta and Saskatchewan. This supports Shell’s commitment to work in collaboration with Indigenous communities in the areas of community engagement, business development, community investment and employment.

“We are delighted to work with Shell Canada to help donate so many devices to deserving indigenous communities,” said Bojan Paduh, Founder and President of the Electronic Recycling Association.

“We pride ourselves in giving back to the community and are thankful that corporations like Shell give technology a second life. We urge more companies follow in their footsteps and donate equipment.”

“Access to information can open up a world of possibility,” said Michael Crothers, President and Country Chair, Shell Canada.

“We are pleased to team up with an organization that brings technology to the fingertips of learning communities across Canada.”
SHELL CANADA LAUNCHES FUELLING KINDNESS

Fuelling Kindness is a grassroots Shell Canada initiative led by our employees to give back to the communities where we live and work.

Fuelling Kindness can be a group of employees or retirees getting together to serve lunch at a homeless shelter, paying for someone’s groceries, bringing donuts to the blood donation clinic, or writing inspirational messages for school children on the sidewalk.

Anyone can organize a Fuelling Kindness event. You just need the passion, dedication and willingness to organize something in your community.

Small acts can have big impacts!

If you are a retiree from Shell and you are interested in organizing an event, please email SCAN-Fuelling.Kindness@shell.com.
FUTURE OF TRANSPORTATION:
SHELL ECO-MARATHON EVENT AT SONOMA RACEWAY

1,200 students from across the Americas competed for energy-efficiency crown during Shell Eco-marathon event at Sonoma Raceway.

Under blue skies on the sun-drenched track of Sonoma Raceway, Brigham Young University of Provo, Utah earned top honors in their category at the 12th edition of the Shell Eco-marathon Americas competition, recording 1,985.4 miles per gallon with its ultra-energy-efficient “BYU SMV” internal combustion Prototype vehicle. Among the 98 student teams, half were powered by renewable energy sources.

MORE THAN 1,200 STUDENTS FROM ARGENTINA, BRAZIL, CANADA, COLOMBIA, ECUADOR, GUATEMALA, MEXICO, PERU, PUERTO RICO AND THE UNITED STATES PARTICIPATED IN THE 2018 EVENT.

They were joined by thousands of visitors who packed Sonoma Raceway to enjoy numerous activities focused on the future of energy and mobility. Visitors included nearly 600 students from many nearby California Public Schools Community Districts.

Make the Future California featuring Shell Eco-marathon Americas brought together government officials, businesses, entrepreneurs, students and local communities for collaboration and conversation around global energy challenges. Eleven strategic global and local partners helped Shell stage the increasingly popular, awards-laden event, which added new visitor elements for 2018. Shell’s Festival and Technical partners, many of whom actively used the event as a recruitment ground, included: Agility, Altair, Delta, Honda, HP, Linde, O’Reilly, Sonoma Raceway, Southwest Research Institute (SwRI), Toyota, and United Airlines.

Competitors worked diligently from Thursday through Sunday fine-tuning their custom-built vehicles. Students were required to pass strenuous technical inspections before testing their vehicles on the Sonoma Raceway track to ensure they were ready for the competition. In order to record a successful run, each team’s car was required to make 7 laps for a total distance of 6.4 miles within 25 minutes around the iconic Sonoma Raceway.

DRIVERS’ WORLD CHAMPIONSHIP
Regional Final

Returning to the Americas for the third year is the Drivers’ World Championship – a competition of the top performing UrbanConcept Americas teams who earned the right to compete on Sunday, April 22, in the Shell Drivers’ World Championship Regional Final. The top three finishers of the Americas regional run locked up a chance to compete amongst winning teams from Asia and Europe, July 5-8, 2018, in London.

First Place – Saint Thomas Academy Experimental Vehicle Team Alpha, Saint Thomas Academy
Second Place – Sask Eco UC, Saskatchewan Polytechnic
Third Place – Mater Dei Supermileage, Mater Dei High School
These teams will now prepare to compete for the Drivers’ World Championship Grand Final Title and earn the exclusive opportunity for a once-in-a-lifetime experience at the home of Scuderia Ferrari in Italy.

Shell Eco-marathon General Manager Norman Koch noted, “The Drivers’ World Championship demands the best in vehicular innovation and automotive technology to push the boundaries of energy efficiency. Sharp skills and a sound strategy in handling the vehicle and managing fuel efficiency are imperative in helping the winning team cross the finish line first. We saw amazing action and excitement today and my congratulations goes to all the teams.”

### Shell Eco-marathon AMERICAS 2018

#### 2018 Winning Teams

Student teams compete in two vehicle classes at the event. The Prototype class invites students to enter futuristic, streamlined vehicles. The UrbanConcept class focuses on more “roadworthy” vehicles aimed at meeting the real-life needs of drivers. Entries are divided into three energy categories:

- **Internal combustion:** gasoline, diesel, and ethanol
- **Hydrogen fuel cell**
- **Battery electric**

The Americas winners in each class follow, based on vehicle class and energy category:

- **Prototype internal combustion:** “BYU SMV,” [Brigham Young University](https://www.byu.edu/), 1985.4 mpg
- **Prototype battery electric** sponsored by Honda: “Experimental Vehicle Team Alpha,” [Saint Thomas Academy](https://www.saintthomasacademy.org/), 63.2 m/kWh
- **Prototype hydrogen fuel cell** sponsored by Linde: “CNS Performance Engineering,” [Cicero North Syracuse High School](https://www.ciceroschooldistrict.org/), 38.2 m/m³
- **UrbanConcept internal combustion:** “Mater Dei Supermileage,” [Mater Dei High School](https://materdeihs.org/), 841.3 mpg
- **UrbanConcept battery electric** sponsored by Honda: “Experimental Vehicle Team Alpha,” [Saint Thomas Academy](https://www.saintthomasacademy.org/), 63.2 m/kWh
- **UrbanConcept hydrogen fuel cell** sponsored by Linde: “CNS Performance Engineering,” [Cicero North Syracuse High School](https://www.ciceroschooldistrict.org/), 38.2 m/m³

Teams also won prizes for their work off-track, in the following categories:

- **Travel Safety Stipend:** [Alden-Conger High School](https://www.alden-conger.hs.org/)
- **Most Innovative Hydrogen Newcomer Award** sponsored by Linde: [Warren Tech Central High School](https://www.warrentechcentralhs.org/)
- **Communications Award** sponsored by Edelman: [University of Ottawa](https://www.uottawa.ca/)
- **Vehicle Design Award UrbanConcept:** [Louisiana Tech University](https://www.louisianatech.edu/)
- **Vehicle Design Award Prototype:** [San Antonio College](https://www.sanantoniocollege.edu/)
- **Technical Innovation** sponsored by Southwest Research Institute: [Duke University](https://www.duke.edu/)
- **Safety Award:** [James Madison University](https://www.jmu.edu/)
- **Perseverance and Spirit of the Event Award:** [Universidad del Valle de Guatemala](https://www.univalle.edu.gt/)

To learn more, please visit the [Make the Future California website](https://makethefuture.shell.com/).
TIGHTENING THE VALVE ON GHG EMISSIONS

Shell Canada’s Groundbirch asset is making positive change in northeast British Columbia, Canada.

As part of Shell Canada’s commitment to responsible operations, a project team is finding ways to reduce our greenhouse gas footprint in the field while working to optimize operations and increase production capacity.

THE TEAM

Jason McGillivray came to Shell with a forest products background and has held roles in both the project management and the health, safety and environment (HSE) disciplines. In his current role as a project delivery and construction specialist with the Groundbirch asset, he focuses on well pad and pipeline project delivery with a diverse team representing disciplines ranging from construction to regulatory. Together, this team works to improve the way Shell develops its natural gas resources.

THE CHALLENGE

One opportunity lies in further reducing methane emissions. Methane is a greenhouse gas (GHG) that traps more heat and has a more powerful short-term impact on climate change than carbon dioxide. Methane emissions associated with oil and natural gas production may occur from: combustion, flaring, venting or as unintended fugitive emissions.

Shell is working to detect and lower methane emissions to minimize our impact on the environment and enhance the overall climate benefit of natural gas for power generation and other industrial and commercial uses.

“We have many initiatives already in place to reduce methane emissions,” says McGillivray listing out leak detection and repair, preventative maintenance, energy efficiency measures as well as flare and venting reduction programs. “Some of the valves used in typical industry processes are designed to vent small amounts of methane, and the emissions released from these valves in the Groundbirch field are an opportunity for improvement.”

THE PLAN

McGillivray and his Groundbirch project team weighed the benefits and decided to move to a new multi well pad design with a zero-bleed philosophy (whereby methane is not “bled” or vented to the atmosphere).

“Our team is lucky to be part of an organization with a strong culture of continuous improvement and we’re always looking to do things better,” says McGillivray.

“Even though it goes above and beyond regulatory requirements, we collectively agreed that it is the right thing to do in this situation in terms of our role in providing cleaner energy to Canada and the world.”

THE TECHNOLOGY

In 2017 McGillivray and his project team introduced the first Gen 4 Multi-Well Pad (Gen 4 MWP) – a new, and better, well pad designed to include electric valve actuators instead of pneumatic ones to reduce methane emissions from the wellsite.

The new design is also expected to increase production capacity by 40% and decrease costs by 15%.

McGillivray explains an actuator is the mechanism that works to open and close a valve. The pneumatic version uses process gas from the well (methane) as a power source and as the actuator cycles; the compressed gas used to do the work is vented to the atmosphere. The electric actuator is driven by electric power, thus eliminating the methane emission source.

THE PATH FORWARD

Changing the actuators to reduce methane emissions came at no sacrifice to production. The first new well pad came on stream mid-January in 2018 and ranked number one in the province for top gas rates for initial well production in January according to a report by Alta Corp Capital. “Based on its success, electric actuators will be used on new well pads in Groundbirch going forward, and we’ll share our knowledge with other Shell assets for potential replication,” says McGillivray, who is already looking towards the next challenge.

The project team will follow the Groundbirch GHG asset management plan to drive further methane emissions reduction in 2018 through a trial that uses fresh air from a compressor (like the ones used to fill the air in car tires) instead of methane from the well to run actuators on existing well pads in the Groundbirch field.

“To be a part of positive change is incredibly motivating, with Shell reinforcing the responsible development taking place in Canada’s upstream and our role as an industry leader when it comes to environmental improvement,” says McGillivray.

Celebrating 10 years of operations in 2008, Shell’s Groundbirch asset is located in northeast British Columbia near Fort St. John and consists of four natural gas processing plants and more than 500 producing wells. In managing this asset, Shell adheres to operating principles that focus on safety, engagement with nearby communities, and environmental safeguards, including a commitment.
The Sky Scenario illustrates a technically possible, but challenging pathway for society to achieve the goals of the Paris Agreement.

Sky builds on previous Shell scenarios publications and is our most optimistic scenario in terms of climate outcomes.

A new energy system is emerging. The Paris Agreement has sent a signal around the world: climate change is a serious issue that governments are determined to address.

By 2070 there is the potential for a very different energy system to emerge.

The Sky Scenario outlines what we believe to be a technologically, industrially, and economically possible route forward, consistent with limiting the global average temperature rise to well below 2°C from pre-industrial levels. It reveals the potential for an energy system to emerge that brings modern energy to all in the world, without delivering a climate legacy that society cannot readily adapt to.

Sky shows a transformation to a lower-carbon energy system, with the world achieving the temperature goal of the Paris Agreement. Consumers, companies and governments will face tough choices and the paths towards lower-carbon energy will vary by country and sector.

Over the course of 50 years, it transforms the way society uses and produces energy.

But while encouraging news, success towards the Paris Agreement aim is not guaranteed. The Sky Scenario relies on a complex combination of mutually reinforcing actions by society, markets and governments. It recognizes that the necessary changes will unfold at different paces in different places, and must ultimately transform all sectors of economic activity. The changes are economy-wide, sector-specific, and amount to re-wiring the global economy in just 50 years.

MEETING THE GOALS OF THE PARIS AGREEMENT

By 2070 there is the possibility for a very different energy system to emerge. Download Shell’s latest energy scenario, Sky.

Legal Disclaimer found here.

SHELL SCENARIOS

Sky

MEETING THE GOALS OF THE PARIS AGREEMENT
DO YOU FOLLOW SHELL CANADA ON TWITTER?
Here are some of the things we have been posting lately on social media. Follow us at our official twitter page [here](https://twitter.com/ShellyCanada) for the latest on energy use, news and views.
MORE INFORMATION

Retiree associations
For the most current updates please visit https://www.shell.ca/en_ca/about-us/who-we-are/alumni.html.

2017 PENSION PLAN UPDATE

The Pension Administration Committee (PAC) is responsible for establishing investment policies and principles for the Shell Canada Pension Plan (the Plan) as well as establishing and monitoring the investment options offered to members with a DC account balance.

The Pension Plan Update, an annual publication for active and retired members of the Plan, provides information to members on investment performance, funding, membership and governance of the Plan.

You can access the 2017 Pension Plan Update on the Shell Benefits Centre.

To read the full report, visit www.mybenefitscentre.com/Shell then select 2017 Pension Plan Update.