

THE BURNABY REFINERY'S

# Neighbourhood News

A NEWSLETTER FOR OUR NEIGHBOURS  
SUMMER 2019 - ISSUE 58



PARKLAND



## Leading Edge Clean Energy Ideas

### Showcasing leading-edge clean energy ideas to a global forum

Clean energy market leaders from around the world gathered in Vancouver in late May for the tenth Clean Energy Ministerial (CEM), hosted this year by the Government of Canada. This unique conference of the world's key economies working together to accelerate a global transition to clean energy presented a valuable opportunity to demonstrate the work Parkland is doing to become a global leader in green refining.

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### Mission Innovation

A major part of the CEM was its Innovation Showcase. Here Parkland and Metro Vancouver presented a demonstration project nicknamed Wastewater to Wheels and Wings. Using hydrothermal liquefaction, the goal of the project is to take wastewater biomass and convert it into biocrude for co-processing through Parkland's existing refinery infrastructure. The end product? Renewable fuel with a lower carbon intensity for our customers to use in their vehicles.

"There was a high level of interest in the project during the conference including from federal Natural Resources Minister Amarjeet Sohi," said Kel Coulson, Parkland's policy and external relations

manager. "There was lots of excitement to see how refineries are evolving to produce the fuels of the future."

Converting wastewater biomass to produce a biocrude and processing it through a refinery's processing system will be a global first. The refinery and Metro Vancouver have been conceptualizing on the project since 2016, with the refinery supporting the idea and now working with the regional district as a biofuel partner on a technical basis. The project is in its preliminary design stage with detailed design to follow. Parkland hopes to be commissioning wastewater biocrude as another of its biofeedstock sources by 2022.

### The Scoop on Poop

Wastewater biomass is high in biogenic carbon which becomes similar to crude oil once it has gone through the heat and pressure of the hydrothermal liquefaction process. As such, it is a natural choice as one of the renewable feedstocks that Parkland is looking to co-process along with products already tested such as tallow (which we're currently processing) and canola. The refinery will use the same equipment it is investing in for its other greener fuels to convert wastewater biomass into biofuel.

"We're linking two industries-the wastewater industry and the petroleum industry-that have equipment already at scale and collaborating on creating lower carbon transportation fuels," added Kel. "The refinery would be converting a true waste into a valuable resource and contributing to the low carbon circular economy."

Many of the Innovation Showcase presenters were young startups. Kel sees the biofuel partnership between Parkland and Metro Vancouver as having the advantage of being two established groups with infrastructure already in place.

"We'll be able to operationalize our project within the next few years," she said. "Using the talent and the equipment we have on site means change can occur at a much quicker pace. And it reinforces that we're on the right track to make a difference. It shows that refineries can be part of the energy solution for the future."



The Honourable Amarjeet Sohi, Canada's Minister of Natural Resources, visits the Parkland booth at the Clean Energy Ministerial's Mission Innovation Showcase

# Manager's Message

## Alex Coles, General Manager

It's hard to believe we're more than halfway through 2019; we've enjoyed a lot of successes in the first six months of the year and are looking ahead to even more in the coming months.

We were particularly proud to participate in the Clean Energy Ministerial in May (see our cover story). We showcased our transition to green refining and our renewable feedstock co-processing successes. Metro Vancouver joined us at the Mission Innovation Showcase to highlight its hydrothermal liquefaction project in which wastewater biomass is transformed into biocrude that can potentially be used as a refinery feedstock. The overall conference was a great opportunity for Parkland to connect with ministers and government representatives, clean energy companies, and corporate leaders about transitioning to a low-carbon economy.

The refinery was also pleased to host a SCAT refresher course recently (for more on this, read our Safety Matters article). SCAT, or Shoreline Cleanup Assessment Technique, is a component of our emergency response procedures and it's important that we practice these techniques in order to be prepared in the unlikely event of an emergency. The course was also an opportunity to connect with other stakeholders as well as Indigenous communities to share our knowledge and to ensure we can complete shoreline cleanup assessment as effectively as possible.

We're gearing up already for our 2020 turnaround, which will be on a similar scale as the one done in 2018. Preparations are underway for this maintenance event and there will be more workers on site beginning in September. We will be implementing a traffic management plan to help mitigate the effects of our larger workforce on local traffic. As always, we thank you for your patience as we prepare to complete this turnaround safely and efficiently.

We have added three more members to our Community Advisory Panel this year and some members have resigned. We would appreciate having a couple more neighbours volunteer to round out the group. This is a constructive forum through which Parkland receives feedback on behalf of the local community and where we share important information. Please consider joining (see the Community Corner for details).

We hope you enjoy a safe and enjoyable summer with your family and friends.



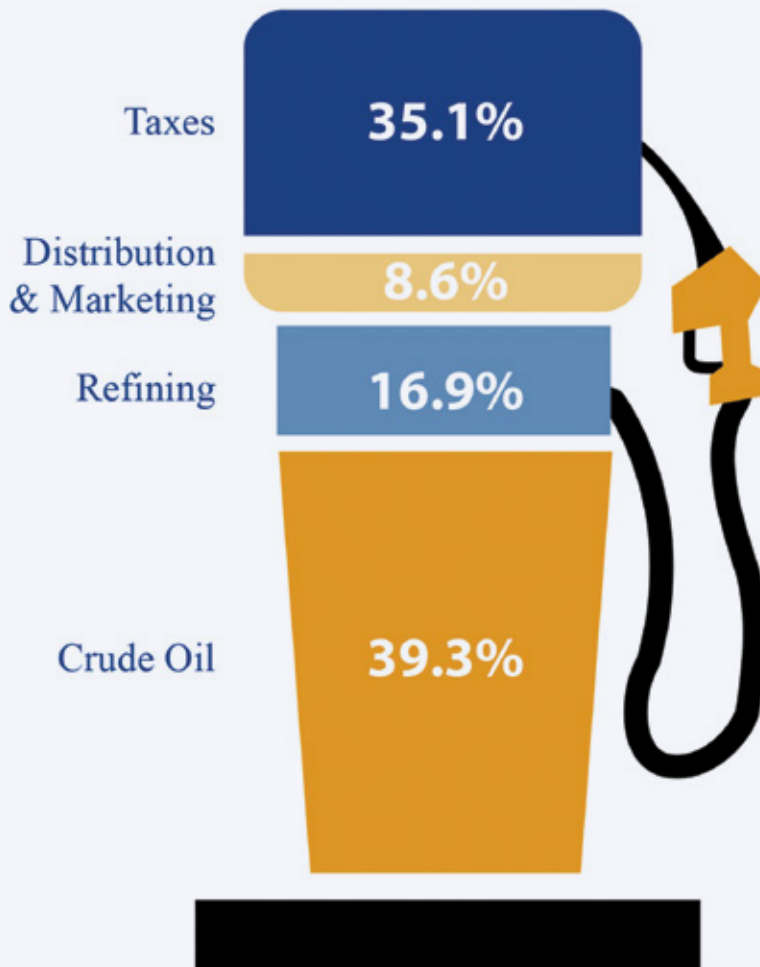
**We showcased  
our transition  
to green  
refining and  
our renewable  
feedstock  
co-processing  
successes**

The price we pay to fill up our tanks with gas is a combination of many factors. These include the cost of crude oil, the cost to make the oil into gas, the cost of getting the gas to the stations to sell to customers, and the cost of these retail operations. A large part of what we pay is taxes: federal, provincial and regional. Taxes are higher in B.C. than just about anywhere in North

America by design, so as to reduce fuel consumption and greenhouse gas emissions. Unplanned refinery shutdowns can also affect the prices of gasoline, which is in part why Parkland Burnaby Refinery is committed to operating safely and reliably to ensure consistent supply to customers.

Check out this graphic to understand better where your money is going:

### PUMP PRICE COMPONENTS



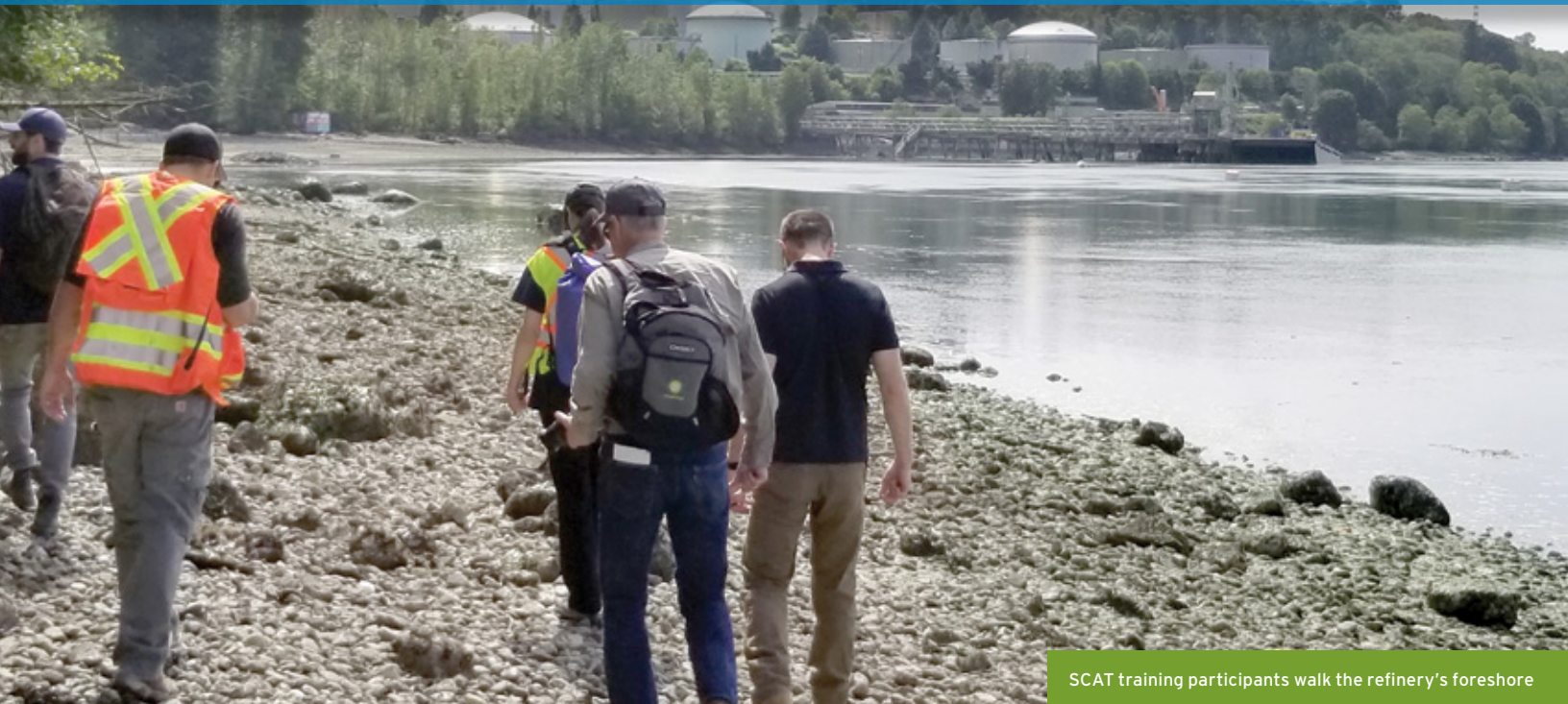
Source: The Kent Group  
January 1 to 31, 2017,, Regular Gasoline Canada  
Volume Weighted Average

For more information about gas prices, please visit [www.canadianfuels.ca](http://www.canadianfuels.ca).



# Safety Matters

## Understanding the Challenges & Unique Features of Burrard Inlet



SCAT training participants walk the refinery's foreshore

The Parkland Refinery operates on the shores and waters of Burrard Inlet and we take many steps to ensure this important environmental zone is protected. Five refinery staff have taken an in-depth Shoreline Cleanup Assessment Technique (SCAT) training course offered by Polaris Applied Sciences. Its trainers are internationally recognized leaders in shoreline treatment operations, shoreline geomorphology, pre-spill planning, technical training of spill responders, and environmental assessment.

Parkland recently offered staff and other partners a SCAT refresher course that was customized for our location. Six refinery staff were joined by representatives of the Ministry of Environment, the City of Burnaby, and Tsleil-Waututh Nation for the full-day workshop.

### What is SCAT?

Shoreline Cleanup Assessment Technique is a systematic way of surveying an affected shoreline after an oil spill; the practice originated during the response to the Exxon Valdez incident. It uses standardized terminology to document shoreline conditions and its approach is designed to support decision making for shoreline cleanup. A spill management team uses field data to determine the appropriate response priorities.

### The Refresher Course

"The refresher workshop was tailored to our specific site," said the refinery's Senior Environmental Specialist Chris Boys. "The day began with classroom talks and presentations on a variety of topics including Burrard Inlet environmental stewardship, a review of the shoreline's geomorphology and sensitive areas, the Burrard Inlet

Geographic Response Plan, as well as the Burnaby Inlet SCAT segment system."

Course participants spent the afternoon on the foreshore going over shoreline treatment techniques and SCAT data management and discussing issues such as the protection of archaeological artifacts and Parkland's foreshore remediation project.

"One of the primary objectives of offering this course was to get the local SCAT teams together," added Chris. "We have developed a working relationship and have started to understand some of the challenges that we would face in the unlikely event an oil spill happens in these waters. The feedback from our partners was positive and they clearly appreciated the presentations as well as the chance to meet and build connections."

# Across the Fence



## Planning underway for next turnaround

For close to a year, a team has been meeting regularly to plan the refinery's next turnaround. This shutdown of operations is scheduled to begin in Q1 2020 and will last from six to nine weeks.

"Turnarounds are conducted to optimize the refinery's performance and to ensure that we continue to operate safely and reliably," explained Travis Hess, the project's team leader. "It's a time for us to perform scheduled maintenance as well as to replace end-of-life equipment."

Next year's turnaround will focus on three of the refinery's major units: one of its crude units, which separate lighter and heavier products using heat; the fluid catalytic cracker, which helps break down hydrocarbon chains into smaller, more usable products; and the sulphur recovery unit, which removes excess sulphur from products.

"We'll also take advantage of those units being down to do some focussed preventative work on the other units," added Travis. "As well, we'll be making some proactive upgrades to our safety systems and doing some project work to continue on our journey to becoming a green refinery."

The impact of a turnaround on our neighbours is foremost on our minds as soon as its planning begins. Fence line noise and odour monitoring will remain in place to ensure the facility continues operating within its regulated limits. Noisier work is always scheduled for daytime and plans are developed to mitigate the impact of the increased traffic volumes that come with having additional workers and contractors on site. Parkland anticipates having roughly the same amount of workers onsite as the 2018 turnaround, peaking at approximately 550 workers per shift.

"Neighbours will notice an increase to our current vehicle counts in preparation for the turnaround, likely beginning in September 2019, as well as during the turnaround, including those bringing in new equipment," said Travis. "We do everything we can to minimize our impact on the community. We are reviewing lessons learned from past turnarounds-particularly about logistics and traffic management-to improve for 2020. Our goal is to complete the work in a safe and predictable manner, as this will allow us to be back up and running normally as soon as possible."



# Community Corner



People gather to watch the Pop Junkies perform at Hats Off Day

## Recapping Hats Off Day

It was great to meet so many of our neighbours at this year's Hats Off Day. The Chevron station at Willingdon and Hastings was a happening place with the Pop Junkies, face painters, and caricaturists providing non-stop entertainment. Parkland staff also had a great time handing out sweet treats and superhero capes to match this year's theme. Some of us were even able to get glimpses of our prime minister, with Justin Trudeau joining in the fun briefly at the Hastings and Carlton firehall.

Parkland is proud to support this great community event and we look forward to participating again next year!



## Supporting Union Gospel Mission

Union Gospel Mission has been transforming lives across Metro Vancouver since 1940. The non-profit organization helps our most vulnerable citizens overcome poverty, homelessness, and addiction by providing a variety of services. One of its programs is a daily lunch service

for low-income people living on Vancouver's Downtown Eastside.

Parkland's Value Chain Optimization staff volunteered for one of these lunch shifts this past March as a team-building experience. Their time was so rewarding they have inspired our Administrative Services team to volunteer for a shift in the fall.



## Burnaby Blues + Roots Festival

Mark Saturday, August 10 on your calendar for some great music at picturesque Deer Lake Park. Parkland is once again sponsoring the family-friendly event, which, this year, celebrates its 20th anniversary. The 2019 festival will feature performances by Feist, Lord Huron, Dan Mangan, The War and Treaty, William Prince, and Southern Avenue.

Tickets are on sale now. Visit the festival's website for details: [www.burnabybluesfestival.com](http://www.burnabybluesfestival.com).

# CAP

**Make a difference to  
your community:**

## **Volunteer to be a CAP member**

The Parkland/North Burnaby Community Advisory Panel (CAP) is seeking new members. CAP meets quarterly to discuss Burnaby Refinery operations and other topics of mutual importance to refinery neighbours and staff. Meetings are led by a third-party facilitator and meeting minutes and presentations are posted online for the public.

CAP members collaborate to address community concerns, brainstorm engagement methods, and share ideas to foster dialogue and understanding between the refinery and its North Burnaby neighbours.

If you are interested in joining CAP, please contact [prbcrefineryinfo@parkland.ca](mailto:prbcrefineryinfo@parkland.ca). For more information, please visit [www.parklandcap.ca](http://www.parklandcap.ca).

# Community Corner



Stars were the headlining act at the City of Burnaby's Canada Day event at Swangard stadium

## Celebrating Canada

Parkland was proud to be the presenting sponsor for this year's Canada Day celebration at Swangard stadium. The fun-filled event had a family fun zone with acrobats, face painting and other activities, plus a concert with headliners Stars and a fireworks show to top off the evening. We're thankful for the opportunity to participate and look forward to watching this event continue to grow.

## Metro Vancouver

Metro Vancouver is preparing to construct one of the final phases for the Douglas Road Water Main Project which will replace an existing water main that runs through the community. This section, known as the Vancouver Heights Section, will include construction activities along McGill Street, Madison Avenue, Eton Street, North Rosser Avenue and Albert Street in the City of Burnaby. Construction is expected to begin in summer 2019 and completed in Fall 2020.

For more information, please contact Metro Vancouver at 604-432-6200 (weekdays between 8 a.m. and 4:30 p.m.), 604-451-6610 (after-hours emergency), or visit [www.metrovancouver.org](http://www.metrovancouver.org) and search "Douglas Road Water Main."

## Contact Us

We welcome your questions and feedback. Please don't hesitate to call or e-mail our **Community Contact Line:**

T **604-257-4040**  
E [prbcrefineryinfo@parkland.ca](mailto:prbcrefineryinfo@parkland.ca)

Our phone line is monitored during regular business hours. After-hours paging instructions are available to report unusual odours, activities or noise. The public may also report odours directly to Metro Vancouver Air Quality at **604-436-6777**.

For more information about the Parkland Burnaby Refinery, visit [www.parklandcap.ca](http://www.parklandcap.ca)

**Neighbourhood News** is produced by Parkland Refining (B.C.) Ltd. for residents of the Heights, Capitol Hill and surrounding areas of North Burnaby.

We invite your comments, questions or suggestions for future articles.

Please contact us at Neighbourhood News, Parkland Burnaby Refinery, 355 North Willingdon Avenue, Burnaby, B.C., V5C 1X4.

Shannon Urquhart, COMMUNITY AFFAIRS LEAD,  
**604-257-5030**  
Kel Coulson, MANAGER - POLICY & EXTERNAL  
RELATIONS, **604-296-3856**