

# Parkland's Approach to Climate Change

## Overview

Climate change presents significant risks and challenges to our business as well as to communities and economies globally. Parkland recognizes the importance of taking action on climate change by reducing greenhouse gas (GHG) emissions, as outlined in Intergovernmental Panel on Climate Change (IPCC) assessments and the United Nations Paris Agreement. Climate change requires collective action from industry, government and consumers in order to lower our global environmental impact. We must work together to balance the world's growing need for energy with the need to lower our shared impact on the environment.

As the energy transition accelerates, we need to ensure a safe, reliable supply of energy today, while making strategic decisions and innovative, value-added investments that contribute to a lower carbon future. Parkland is committed to collaborating with governments where we operate to help them achieve their emissions reductions goals. To learn more, please see our Climate Change Policy.

Parkland is committed to being a responsible provider of the energy that the world needs. Liquid transportation fuels will remain essential to keeping the economy moving for the foreseeable future; according to the U.S. Energy Information Administration (EIA), world energy consumption will grow by nearly 50% over the next three decades. Low-carbon fuels play a key role in the energy transition, particularly for sectors where electrification is more challenging and on a much longer timeline, such as marine, aviation, rail, long-haul trucking.

Our operations are subject to numerous stringent federal, provincial/state and regional regulations designed to reduce GHGs, all of which we support, comply with and strive to exceed. We are making investments to help contribute to our low-carbon future while continually supporting our customers, employees, shareholders and communities.

Parkland's energy transition strategy is multi-faceted and includes plans to develop, diversify, and decarbonize our business and stay one step ahead of our customers' needs. The complexity of the energy transition requires a range of decarbonization options from electrifying transportation to reducing the carbon intensity of liquid fuels as well as reducing the emissions associated with our operations.

As part of our commitment to transparency and climate-related disclosure, and to safeguard the resilience of our business, we have adopted Environment, Social and Governance (ESG) reporting frameworks including the Task Force on Climate-related Disclosures (TCFD), the Global Reporting Initiative (GRI) and the Sustainability Accounting Standards Board (SASB). We participate in the Carbon Disclosure Project (CDP), are a signatory to the United Nations Global Compact and the UN Sustainable Development Goals (SDGs) help inform our sustainability strategy.

## Parkland's GHG Emissions Profile

As a producer and supplier of transportation fuel, Parkland's GHG emissions are the result of manufacturing fuels at the Burnaby Refinery, delivering fuel across the Parkland network and supplying customers with energy at retail and commercial sites in 26 countries. Please refer to Parkland's latest [sustainability report](#) for further details about Parkland's GHG emissions profile.

## Parkland's GHG Emissions Inventory

Parkland has been completing a GHG inventory since 2019 as part of the annual Sustainability Report. Our GHG emissions inventory is completed in accordance with the World Resources Institute's (WRI) GHG Protocol Corporate Accounting and Reporting Standard (GHG Protocol), with processes put in place to align with its five accounting principles: relevance, completeness, consistency, transparency, and accuracy.

Parkland has adopted the Operational Control consolidation approach and the following gases are included in the calculations: CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs. Emission factors were sourced from the Canadian National Inventory Report (NIR), the International Energy Agency (IEA) and the United States Environmental Protection Agency (EPA). Global Warming Potential (GWP) rates were sourced from the United Nations Intergovernmental Panel on Climate Change (IPCC) reports based on a 100-year timeframe.

**Scope 1 GHG emissions** are direct emissions that occur from sources that are controlled or owned by an organization (e.g., emissions associated with fuel combustion in boilers, furnaces, vehicles). Emissions sources for Parkland include stationary combustion from natural gas heating, mobile combustion from our fleet, process emissions from the Burnaby Refinery, and refrigerants from leaks. Biogenic

**Scope 2 GHG emissions** are indirect emissions associated with the purchase of electricity, steam, heat, or cooling. The majority of Parkland's Scope 2 GHG emissions are from purchased electricity.

To collect this information, Parkland collects data from a variety of internal sources from across the organization (e.g., utility bills, monitoring systems). Data is aggregated and reviewed with the support of technology and external consultants, and finally undergoes assurance (internal or external) to ensure accuracy and completeness.

In addition, **Scope 3 GHG emissions** are all indirect emissions that occur in a company's value chain (both upstream and downstream), excluding Scope 2 GHG emissions. Parkland has begun assessing its Scope 3 emissions in alignment with the 15 categories identified GHG Protocol and reported on its first material category in 2023, Category 11: Use of Sold Products. This category was calculated using two methodologies, using throughput at the Burnaby Refinery and fuel sold through our marketing and supply businesses. We look forward to continuing to assess and report material GHG emissions across our value chain.

## Co-Processed Fuels at Burnaby Refinery

Parkland uses Life Cycle Analysis (LCAs) to calculate the amount of GHGs generated from the time a fuel is extracted or grown to the time that it is combusted in a motive energy vehicle to produce power. LCAs consider things like fertilizer manufacturing and use, farming and land use emissions, transportation of feedstocks, refining inputs like hydrogen and natural gas, any electricity used along the way, as well as the combustion of the fuel itself. Parkland provides all the inputs required for our LCAs based on real refinery operating data and product yields.

Parkland generates renewable fuel credits through co-processing through two different regimes: provincially, through BC's Low Carbon Fuel Requirement (LCFS), and federally through Canada's Clean Fuel Regulation (CFR). Under the BC LCFS program Parkland completes LCAs of the renewable fuels we produce using the provincially designated analysis tool 'GHGenius'. These LCA calculations and inputs are reviewed and approved by the Ministry of Energy, Mines and Low Carbon Innovation (EMLI). Similarly, under the Canadian CFR program Parkland completes LCAs using the federally designated openLCA tool. These LCA calculations and inputs are reviewed and approved by the ministry of Environment and Climate Change Canada (ECCC). Each feedstock Parkland uses for co-processing and technology pathway used through the refinery has its own distinct LCA and therefore carbon intensity. Using these standardized LCA calculations, Parkland has determined that its co-processed fuels have, on average, approximately one eighth of the carbon intensity compared to conventional fuels.

Parkland follows the data collection and product sampling requirements laid out in the LCFS and CFR programs to ensure that the renewable fuels we are producing are accurately tracked and credited under both programs. Daily operating data and mass balances, as well as weekly and monthly product samples are taken and shared with EMLI and ECCC in compliance with their Quantification Methodologies.

## Climate Risks and Opportunities

Climate change is a material issue for Parkland and presents specific risks. The most significant of these is a shift in demand away from traditional hydrocarbon fuels, and an acceleration in the pace of change to government policy and technological innovation. At the same time, adapting to fires, floods and other climate-related disasters will become increasingly relevant to ensure the safety and integrity of our assets.

Parkland considers risk management critical to successful operations. Climate risks and opportunities are embedded in Parkland's established planning and risk management processes and considered in our organizational structure, executive compensation and business strategy. Transparent corporate governance is critical to resilience, long-term shareholder value and progress to our overall sustainability strategy and our approach to climate change. Parkland's sustainability governance structure includes our Board of Directors and the Environment, Safety and Sustainability committee, our Senior Leadership Team, our Senior Vice President, People & Culture, Health, Safety, Environment, and Sustainability, our Vice President, Health, Safety and Environment, and our Sustainability Task Force.

As part of our ongoing and evolving approach to climate change, Parkland regularly reviews the material risks posed by climate change and will provide updates to help us better prepare for the energy transition, climate risk and opportunities.

<b>Climate-related risks</b>	<b>Climate-related opportunities</b>
Climate Change Regulation (e.g. Regulation of existing products and services, exposure to litigation)	Energy Sources (e.g. Increased demand for decentralized, clean energy with lower investment costs)
Technological Developments (e.g. Substitution of products and services such as rapid shifts to EVs, energy transition costs)	Efficiency (e.g. Cost savings through lower resource use for customers and companies)
Reputation (e.g. Brand and sector stigmatization, shift in consumer preferences)	Resilience (e.g. Better able to adapt to extreme events by building systems and processes to manage the expected risks of climate change, including more frequent and severe storms, floods and wildfires)
Extreme Weather Risks (e.g. Wildfires, floods, storms)	Products and Services (e.g. Competitive advantage through innovation and new low-carbon products and services)

## Our Climate Priorities and Targets

Our approach to climate involves helping our customers lower their emissions while taking steps to tackle our own Scope 1 and 2 emissions across the organization. As part of our enterprise Sustainability Strategy, we have identified priorities and targets to reduce the carbon impact of our business as outlined below:

### Priority: Support customers through the energy transition

Target: Provide customers with products and services that help reduce emissions compared to conventional alternatives<sup>1</sup>

Target: Reduce customer CO<sub>2</sub>e emissions by at least 1 million tonnes<sup>2</sup>

### Priority: Reduce our operational climate impact

Target: Reduce Scope 1 and 2 GHG emissions from marketing facilities by 40% per site by 2030, compared to a 2019 baseline year

Target: Burnaby Refinery to align with the British Columbia (BC) Government's Output-Based Pricing System's climate ambitions<sup>3</sup>

<sup>1</sup> Helping customers to reduce their emissions includes providing retail customers with EV charging opportunities to reduce their Scope 1 emissions, co-processing and blending of low-carbon fuels at the Burnaby Refinery to provide opportunities for commercial customers to reduce their Scope 1 emissions, and installing solar projects for customers as part of Sol Ecolution business based in the Caribbean to provide opportunities for customers to reduce their Scope 2 emissions.

<sup>2</sup> This target aims to provide a greater volume of low-carbon intensity fuels from blending and co-processing to commercial customers of the Burnaby Refinery for them to reduce their Scope 1 GHG emissions. The customer reduction is calculated using the methodology outlined in the BC LCFS, where one compliance unit is equal to one tonne of CO<sub>2</sub>e. For a sample calculation, please see page 12 of this guidance from the BC government: [https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/electricity-alternative-energy/transportation/renewable-low-carbon-fuels/lcfs\\_info\\_sessions\\_nov2023\\_final.pdf](https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/electricity-alternative-energy/transportation/renewable-low-carbon-fuels/lcfs_info_sessions_nov2023_final.pdf). The target carbon intensity and energy content is provided in the regulation, the energy effectiveness ratio is 1 for our fuel classes, and the recorded carbon intensities for blended biofuels are provided by the suppliers and approved by the BC Ministry of Energy, Mines, and Low Carbon Innovation.

<sup>3</sup> More information on the BC Output-Based Pricing System can be found here: <https://www2.gov.bc.ca/gov/content/environment/climate-change/industry/bc-output-based-pricing-system>

## Our Next Steps on Climate



We recognize the need to decarbonize our society using a balanced approach that leverages our existing business to pursue low-carbon opportunities. Parkland provides a range of choices to help customers lower their environmental impacts compared to conventional alternatives, including carbon and renewables trading, solar power energy solutions, low-carbon fuels and ultra-fast Electric Vehicle (EV) charging stations, while at the same time deploying technology and approaches to reduce our own emissions.

Working with our partners and suppliers is an important part of our approach to climate change and sustainability more generally. We have started to engage suppliers to better understand our indirect (Scope 3) emissions.

Parkland is committed to expanding the low carbon leadership we have demonstrated in Canada across all our jurisdictions. Our Decarbonization Pathway (see image above) includes a range of efforts, including the deployment of new technology and processes. These initiatives include:

### Energy Efficiency

To help reduce Scope 1 and 2 emissions at our marketing facilities, we are employing energy efficiency initiatives including LED lighting upgrades, asset upgrades, and energy management systems.

### Renewables

Using renewable electricity across the organization, from onsite solar photovoltaic systems (PV) to supporting efforts to decarbonize and make use of a cleaner electricity grid through electrification of

systems, is an important way to reducing Scope 2 emissions. In the Caribbean, the Sol Ecolution<sup>4</sup> team is helping decarbonize and expand the region's energy system and supply through retail, commercial and utility-scale solar projects. In 2023 alone, over 2,266 megawatt-hours (MWh) of energy was produced<sup>5</sup>, and over 1,400 tonnes of CO<sub>2</sub>e was reduced for customers<sup>6</sup>.

### **Low-Carbon Fuels**

Liquid fuels play a critical role in the energy transition. Parkland is the largest manufacturer of co-processed fuels in Canada, and we also blend and source renewable fuels across our operations. We have co-processed canola oil, tallow, yellow grease (a blend of used cooking oil and other animal fats), and tall oil (a forestry industry residual) as feedstocks at the Burnaby Refinery. Parkland's co-processed fuels have approximately one eighth of the carbon intensity<sup>7</sup> of conventional fuels and can be used in existing vehicles without modification. Additionally, Parkland has produced small quantities of Sustainable Aviation Fuel (SAF) at the Burnaby Refinery to test processes and production capabilities.

### **Electric Vehicles**

EV users require public charging infrastructure to ensure they can charge on the go. We continue to grow our EV fast-charging network in Canada, targeting provinces with higher demand and adoption rates.

### **Electrification and Decarbonization**

We continue identifying opportunities to electrify aspects of our operations and apply more efficient heating and cooling equipment to reduce our Scope 1 and 2 emissions.

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<sup>4</sup> Parkland's interest in Sol Ecolution is included in Investments in associates and joint ventures within the consolidated financial statements at December 31, 2023 and for the year then ended, and is accounted for using equity method

<sup>5</sup> Calculated using data from country-specific inverter platforms for the solar PV systems at 56 retail sites.

<sup>6</sup> Calculated by converting MWh produced to carbon dioxide equivalent using International Energy Agency (IEA) emission factors.

<sup>7</sup> Please see above section "Parkland's GHG Emissions Inventory" for a more detailed explanation on how Parkland uses Life Cycle Analysis to calculate the amount of GHGs generated from extraction to combustion.