

CITY OF ABBOTSFORD:

REDUCING FLEET EMISSIONS WITH A SIMPLE SWITCH

THE BACKGROUND

Procurement in the public sector is complex. It requires a careful balancing act of goals, costs, long-term value and the common good of everyone in a community – which, increasingly, includes sustainability.

It's also a process that Pardeep Agnihotri takes to heart. As the Director of Roads and Facilities for the City of Abbotsford, Pardeep knows his decisions have a wide-reaching effect. It's why he dove headfirst into the research when he spearheaded Abbotsford's Green Fleet Strategy to support the city's community-wide greenhouse gas (GHG) emission reduction targets: 20% per capita by 2025 and 40% per capita by 2040, against 2007 emission levels.

As part of the Green Fleet Strategy, the city had to consider a range of options, including alternate fuel technology and more sustainable practices. Most of all, the plan had to be practical and affordable.

THE CHALLENGE

Pardeep began by analyzing his fleet's current and projected GHG emissions, accounting for new equipment and city growth over the next several years.

It didn't take long for the challenges to surface.

"We looked at different technologies that were available, and the future technologies that are coming, and there were issues," said Pardeep. "For electric vehicles, the marketing department is a few years ahead of their manufacturing. It was very hard to get our hands on fully electric vehicles.

"The prices were also astronomically higher than the regular, fossil fuel vehicles," he continued. "Our Council is very fiscally responsible. They want green initiatives; they want to help the environment. But, at the same time, they can't just jack up the tax rate.

"The other challenge is for heavy duty vehicles. We would need more electric vehicles for storm events, because when snow and ice hit, we are running 24/7. And we can't be down for charging. So we wanted a solution that didn't impact our ability to deliver services.



"We had also looked at hydrogen and natural gas, but the problem was that we would've had to spend a lot of money to upgrade our facility. We weren't set up for maintenance or fuelling for a natural gas vehicle."



THE SOLUTION

Enter Petro-Canada EcoDiesel™.

When Pardeep first learned about hydrotreated renewable diesel (HRD), he was intrigued by its ease of use as a drop-in fuel but was not sure about the availability in Canada. Then he learned that the City of Vancouver was partnering with Petro-Canada™ to trial Petro-Canada EcoDiesel, an HRD, in their vehicles. He immediately took the initiative and reached out to his local sales manager to learn more. With supportive data and the right information, he was then convinced why Petro-Canada EcoDiesel would fit well into Abbotsford's Green Fleet Strategy.

With Petro-Canada offering the alternative fuel, he felt confident in the reliability of HRD supply and quality assurance. "The fact that Petro-Canada is a Canadian company gave me a little bit more assurance," he says. "I was super happy with having a big organization that's willing to partner with us."

By 2021, Pardeep's team adopted Petro-Canada EcoDiesel into a portion of their vehicles.



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"[Petro-Canada EcoDiesel™]
allowed us to switch from biodiesel
without impacting our service
levels, causing stress for our staff or
having to add additional vehicles.
And we don't have to break our
bank to actually achieve our
[GHG emission reduction] targets."



PARDEEP AGNIHOTRI
Director of Roads and Facilities |
City of Abbotsford

THE ROLLOUT

At the beginning of product adoption, Pardeep was excited about Petro-Canada EcoDiesel but also cautious. "I never want to promise anybody anything that I can't deliver," he says. "So, in the back of the mind, there was still the possibility of having issues with the engines. I was monitoring everything carefully."

His background in engineering steered the process. Pardeep teamed up with the Fuels Quality team from Petro-Canada to collect and analyze real-time data on the vehicle performance and general wear.

"The data has been very positive," says Pardeep. "We have had no change in how the trucks operate. We see no additional wear. It seems to be the same as petroleum diesel, but cleaner burning. And we're reducing GHG emissions, which is what we wanted to achieve."

'A CLEAR WIN'

A year after the adoption, Pardeep is very pleased with the performance of Petro-Canada EcoDiesel. "When we look at the payback and long-term sustainability, it's a clear win."

With Petro-Canada EcoDiesel, Pardeep said it not only enabled them to meet all the criteria set by the City Council; it also allowed them to make a positive change in their environment for future generations. "Even if we do a small part, I think it adds up," he says. In addition to the environmental impact this product makes, Pardeep finds the ease of adoption is also something worth highlighting. "With this fuel, you don't have to change your infrastructure. You don't have to go completely out of norm to actually adapt and make a difference. It's something that's within our power to change."

