



# Fleet Decarbonization Planning

As organizations around the globe look for ways to reduce their carbon emissions, fleet decarbonization represents an excellent opportunity to quickly lower operational emissions. Recent and ongoing advances in alternative fuel vehicle technology (including electric vehicles), electric vehicle (EV) charging infrastructure, and alternative fueling infrastructure are making it easier than ever for organizations to make the switch with little or no operational impact. Navigating the technical and change management aspects of transitioning to lower carbon fleet operations takes careful planning and assessment.

Prism has a diverse and experienced team of climate action specialists, electrical designers, and engineers who can support your organization on its fleet decarbonization journey.

We can conduct a full assessment of your organization's existing fleet to help you understand the different ways in which you can reduce emissions through proactive operations and maintenance practices, vehicle replacements, fueling or charging infrastructure improvements, and driver training.

Prism can also support your organization through the implementation phase by providing detailed electrical and EV charging station design, staff training, and change management so that your organization can get the most out of its **Fleet Decarbonization Plan**.

## Our Services Include

- Alternative fuel vehicle suitability assessment
- Fleet decarbonization plan development (including EV Ready Fleet Plan development)
- EV charging infrastructure assessments and EV charging strategy development
- Zero-emission vehicle fleet implementation support
- Zero-emission vehicle fleet and EV charging infrastructure training

# Recent Projects



## Nanaimo School District

### EV Ready Fleet Plan Development 2022-2023

Prism analyzed the District's maintenance and bus fleets to identify vehicles suitable for replacement with electric vehicles. We also assessed its maintenance yard's electrical infrastructure and existing EV charging stations. Prism then developed a multi-year EV Ready Fleet Plan that included a vehicle replacement schedule with identified EV replacement options, an electrical and EV charging infrastructure upgrade strategy, and a summary of the Plan's operational costs, capital costs, and GHG emissions impacts. Prism designed the assessment and final plan to comply with the CleanBC Go Electric Fleets program, enabling the District to take advantage of available funding.



## Skeena Resources Ltd

### EV Ready Fleet Plan Development 2023-2024

Skeena Resources Ltd. wanted to assess the feasibility of purchasing and using electric trucks and minibuses for its Eskay Creek open-pit mining operation. It also wanted to develop an Electric Vehicle Ready Fleet Plan that met the criteria for BC Hydro's EV Ready Fleet Plan and Electrical Infrastructure incentive funding programs. While Skeena did not have a fleet at the time of this project, it planned to purchase vehicles in the future as Eskay Creek mining operations ramped up. Prism used input from Skeena Resources regarding anticipated vehicle use, operating conditions, and vehicle purchase cycles to identify feasible EV options and model the comparative operational cost, capital cost and GHG emissions impacts of purchasing an internal combustion engine vehicle fleet versus a mostly electric vehicle fleet. Prism also designed an EV Charging Strategy and recommended the type and size of electrical infrastructure upgrades required to accommodate an electrified fleet. This assessment and plan will help Skeena managers and investors make informed choices about fleet decarbonization opportunities at the mine and will qualify the organization for BC Hydro incentive funding for fleet-related electrical infrastructure upgrades.



## Agriculture and Agri-Food Canada (AAFC)

### Electric Vehicle Supply Equipment Assessment 2024

To help AAFC prepare its facilities for anticipated future fleet electrification initiatives, Prism completed an electric vehicle charging infrastructure assessment for four AAFC sites in two provinces. This included collecting information and analyzing each site's existing electrical infrastructure, including considerations such as age, location, condition, and current electrical loads. Prism then estimated the number and type of chargers it would be possible to install within the existing capacity, provided single line diagram layouts for charger locations, and recommended electrical infrastructure upgrades with class D costing estimates where required. AAFC plans to use the results of this assessment to budget for and implement the recommended charging strategy to facilitate future fleet electrification efforts.