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BCEHS' 'Experimental' Electric Ambulance and new Ford Transit Ambulance parked at Burnaby Hospital's Ambulance Bay

2025 PSO Climate Change Accountability Report

British Columbia Emergency Health Services

May 2026

BC Emergency Health Services
Provincial Health Services Authority

British Columbia

Emergency Health Services

2025 PSO Climate Change Accountability Report

Title: 2025 Public Service Organization (PSO) Climate Change Accountability Report

Organization: British Columbia Emergency Health Services

Declaration statement: This PSO Climate Change Accountability Report for the period January 1, 2025 to December 31, 2025 summarizes BC Emergency Health Services' greenhouse gas (GHG) emissions profile, the total offsets to reach net-zero emissions, the actions we have taken in 2025 to minimize our GHG emissions, and our plans to continue reducing emissions in 2026 and beyond.

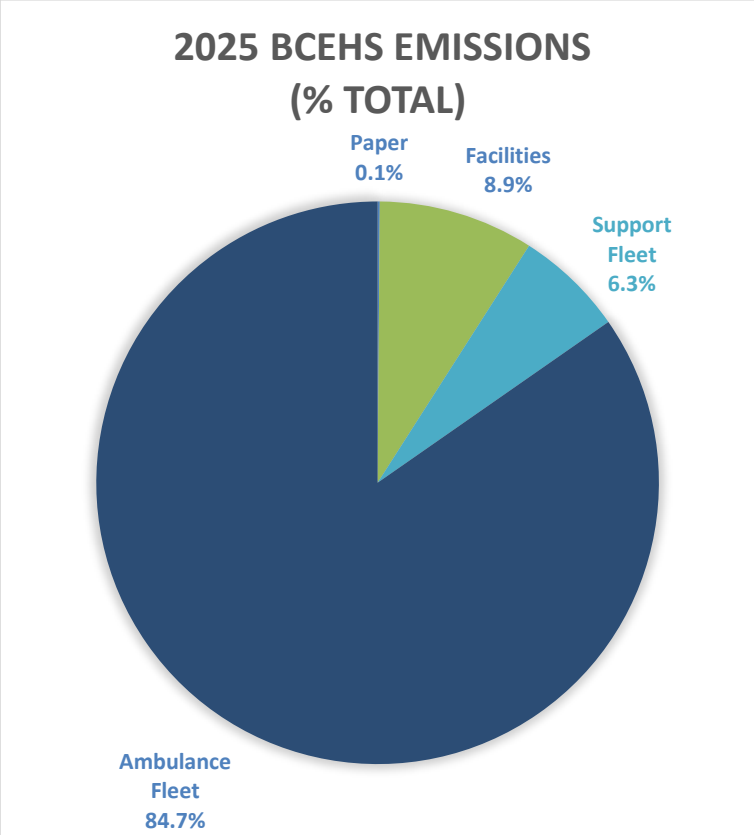
This Climate Change Accountability Report will be available our website at www.bcehs.ca.

Members of Vancouver's BCEHS bike squad

EMISSION REDUCTIONS: ACTIONS & PLANS

BCEHS recognizes that successfully decarbonizing and embedding sustainable practices across the organization requires a significant cultural shift. To support this transformation, BCEHS has developed two key plans: *the Strategic Sustainability & Decarbonization Plan*, which establishes a long-term foundation focused on culture and strategy, and the *Clean Fleet Plan*, which outlines near-term actions to reduce emissions.

BCEHS is one of the most operationally complex and geographically challenging EMS decarbonization environments in Canada. The majority of BCEHS's emissions come from its province-wide fleet, which covered a record of close to *30 million kilometers in 2025.* The fleet includes over 650 active internal-combustion ambulances. Due to limited availability of electric ambulances from Original Equipment Manufacturers (OEMs), our decarbonization efforts have initially targeted over 280 support vehicles—primarily light-duty vehicles (LDVs). While electrifying support vehicles has been a practical first step, and today many of them are either hybrid or electric, their electrification does not deliver the same emissions reductions as decarbonizing the ambulance fleet.

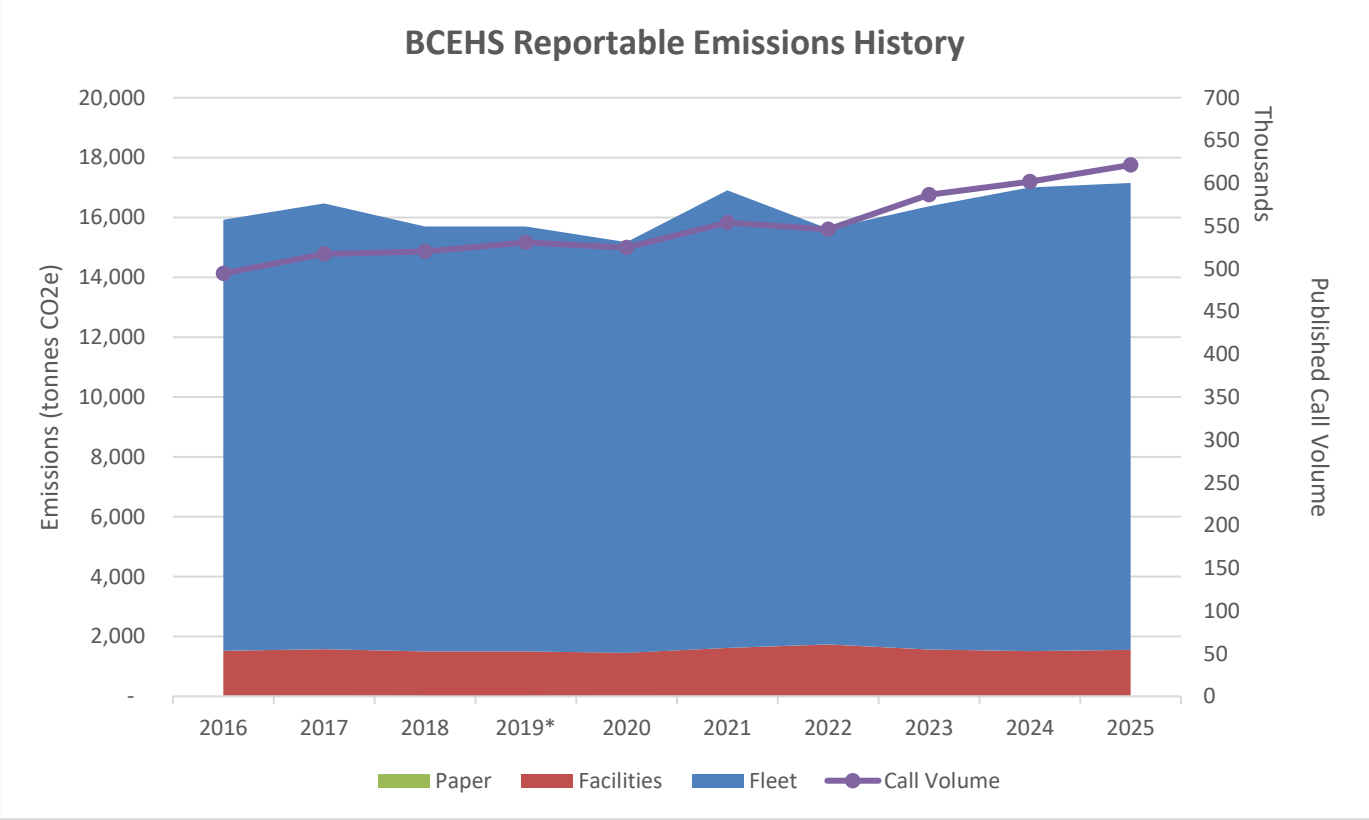


In 2025, BCEHS focused on building on its foundation for long-term decarbonization. A feasibility study was conducted at a Metro Vancouver ambulance station and hospital for future electric vehicle infrastructure. Twenty-four more hybrid-electric (HEV) and three new battery-electric vehicles (BEVs) were procured, including for supervisory roles. Our 'experimental' electric ambulance has been deployed in limited roles and performed the first emergency patient transport in Canada in June 2025. We have also launched a new non-electric Ford Transit ambulance with a specialized lithium-ion battery powered anti-idling system. In service it has demonstrated 20 per cent improved fuel efficiency compared to our traditional ambulances.

As the chart above illustrates, support fleet electrification alone is insufficient to meet the CleanBC mandate and our climate targets. Decarbonizing the ambulance fleet is essential. In 2026, BCEHS will continue to prioritize addressing this challenge while continuing to expand EV use where possible.

Facilities account for approximately 8.9 per cent of BCEHS's total emissions. Efforts are underway to identify opportunities at our many facilities for reducing carbon, energy use, and waste. One initiative in early development involves reducing plastic waste from ambulance stocking processes. As ambulance electrification progresses, we anticipate an increase in facility energy consumption where chargers are installed, offset by a significant reduction in fleet emissions.

Below is a graph showing the history of BCEHS's reportable emissions going back to 2013. BCEHS has consistently seen an increase in call and response volumes as the population has grown significantly over the last decade.



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BCEHS STRATEGIC PLANNING

STRATEGY

BCEHS's strategic decarbonization plan is grounded in the methodology and key objectives outlined below. It aligns with BCEHS's Quintuple Aim approach to care and establishes the core principles guiding our long-term emissions reduction goals. The pathway outlines the organization's approach to decarbonization—prioritizing opportunities to optimize and right size operations while leveraging innovative programs. The strategy is distilled into nine clear, achievable objectives and supported by an actionable framework designed to embed sustainability and decarbonization across the organization.

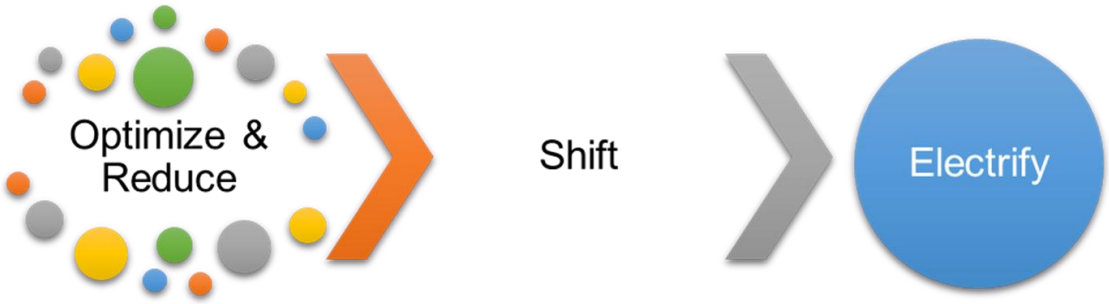
"A good ambulance system minimizes unnecessary transportation."

– Inspired by Lewis Mumford

STRATEGIC METHODOLOGY

- Decarbonization ≠ Electrification
- Every project demonstrates Quintuple Aim + environmental benefits.
- Electrification is the last step, after exploring operational efficiency improvements, and vehicle rightsizing.
- Build circularity into our operations from ambulance modules to batteries.
- Optimize capital, grants, and incentives to maximize decarbonization impact.

OUR PATHWAY TO ZERO EMISSIONS



- Data Centralization
- Reduce & Optimize Conveyances
- Pool Fleet Vehicles

- Rightsize Support Fleet
- Reduce Fleet Energy Intensity
- Expand Clinical Hub
- Urban eBike Squads

- Ambulances
- Remaining Fleet

2025 SUSTAINABILITY & DECARBONIZATION ACTIONS & ACHIEVEMENTS

BCEHS has taken some important steps towards reducing greenhouse gas emissions this year. The focus has been on piloting the 'experimental' electric ambulance in operations, as well as deploying and obtaining feedback on the new, more fuel-efficient, Ford Transit based gasoline-powered ambulance with a lithium-ion battery and anti-idle technology.

Here are some significant highlights and achievements from 2025:

- BCEHS performed Canada's first emergency patient transport in an electric ambulance on June 11, 2025.
- We deployed the first of a new, more fuel-efficient gasoline-powered Ford Transit ambulance with a lithium-ion battery and Crestline's Idle Prevention System (CIPS). The ambulance is proving to be 20 per cent more fuel efficient than our existing fleet in full operational capacity.
- BCEHS commissioned eight new high-power Level 2 Chargers at our Lower Mainland Transfer Fleet Station in Langley.

Additional highlights from 2025:

- BCEHS Fleet deployed two new EVs for use in Logistics roles and is working on a supervisor EV prototype.
- We expanded ambulance electrification simulations from telematics data with the goal of developing the necessary infrastructure and electric ambulance specifications.
- BCEHS expanded Level 2 Charger installation plans for 2026 in preparation for FIFA
- DC Fast Charger planning was conducted for expanding fleet and future ambulance pilot.
- BCEHS networked with local and national fleet decarbonization practitioners in both the public and private sectors, including with CSA Group on electric ambulance standards.
- We continued exploring new electric chassis and lower-emissions technology for future ambulances.
- Our Logistics team continues to explore new methods for plastic waste reduction across our facilities.
- We enhanced relationships with those leading decarbonization programs at other Canadian, and international ambulance services, to share best practices.

- We increased collaboration with PHSA, Health Authorities, and Municipalities.
- BCEHS deployed new, more efficient aircraft in our Air Ambulance fleet.

GROUND FLEET

2025 IN NUMBERS

5M hybrid & 628k electric zero-emission kilometers in-service by 2025 year-end.

1.76M hybrid kilometers

275k emission-free kilometers

36,578 kWh delivered from BCEHS' own EV chargers

340 tonnes CO2e saved annually from the EV and HEV fleet.

2025 EV AND HEV FLEET PROFILE

- **Twenty-one zero-emission BEV** vehicles deployed as manager, supervisor, Paramedic Response Unit (PRU), Planned Events, and Logistics units, using Provincial Carbon Neutral Capital Program (CNCP) funding.
    - 14 Ford Mustang Mach-E's

- One Silverado EV (to be deployed in 2026)
- Three Ford eTransits, including one High Roof
- One Chevrolet Equinox EV
- One Chevrolet Blazer EV
- One Ford F-150 Lightning EV
- 94 hybrid-electric Ford Interceptors acquired for frontline response roles.

VEHICLE CHARGING INFRASTRUCTURE & DEPLOYMENT

- A Level 2 charger installed in the ambulance bay at Surrey Memorial Hospital has seen more use with our supervisors and paramedic response units, and during early testing of our experimental e-ambulance.
- Feasibility study completed for EV Chargers and Battery Energy Storage Systems installation at Delta Hospital and Station 251 – Delta/Ladner in preparation for future electrification.

- Eight new Level 2 chargers installed at the Lower Mainland Transfer Fleet facility – Station 288.
- Upgrading Level 2 chargers at Burnaby Station from 10 kW to 19 kW maximum.
- In preparation for EV support vehicles and future EV ambulance deployment, BCEHS is actively working with the health authorities to install more charging stations at hospitals and is working closer with PHSA Facilities to further install chargers at strategic station locations for future pilots.

2025 DECARBONIZATION PROGRAM HIGHLIGHTS

2025 will set the pace for our decarbonization efforts going forward. The BCEHS Logistics and Transportation Operations team spent a large part of the year on the following projects, all that have emissions reduction impacts, and will provide learnings for future lower or zero-emission vehicle deployment.

'EXPERIMENTAL' ELECTRIC AMBULANCE

Background

- Electric Conversion Type II Ambulance from Lightning eMotors and LEADER Ambulance
- In 2024 this vehicle received its final upfitting and some basic testing was conducted.
- BCEHS has no plans to scale with this ambulance, it is being used to gather feedback from ambulance crews on the overall electric experience.

Vehicle Profile

80 kWh

50-80 kWh/100 km

100 - 150 km

13.3 kW Max AC

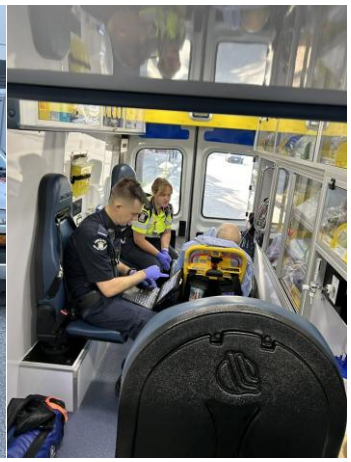
68 kW Max DC

2025 Deployment Highlights

- March 2025 - Public reveal of the vehicle at ***PlugInBC Reconnect*** conference at The Shipyards in North Vancouver.

- First patient transport conducted on June 11, 2025 out of Station 240 – Burnaby.
- 127 patient transports in 2025.
- Primary operations in 2025 in Burnaby, Langley, and Surrey.
- Future pilot deployment at Vancouver (Cordova) station and for FIFA World Cup.



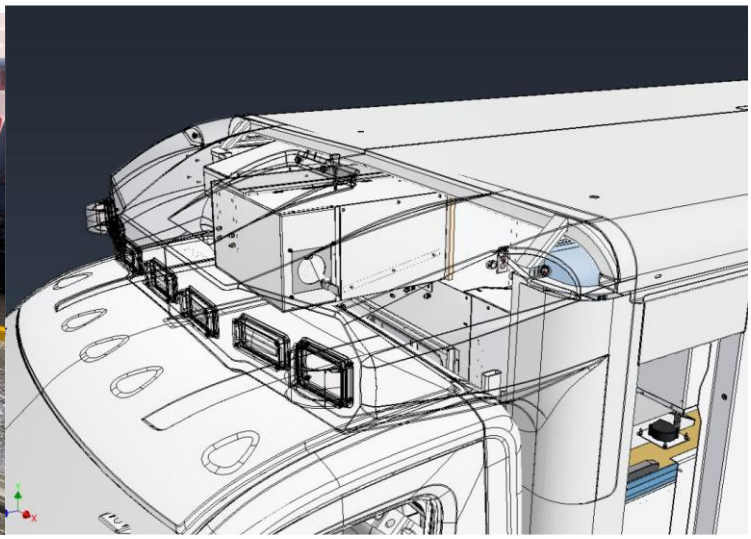


NEXT GENERATION FORD TRANSIT AMBULANCE WITH CIPS SYSTEM

Ford Transit Ambulance Platform during Prototyping Process

Features and benefits of this next generation ambulance:

- Crestline Idle Prevention System (CIPS) system: Lithium-ion battery powered On- and Off-grid HVAC system
  - On-grid: On shore power can maintain patient compartment temperature hot & cold without the engine running.
  - Off-grid: Lithium-ion battery allows for the same capabilities without being plugged-in.
  - Ambulance engine idling is significantly reduced by CIPS system during temperature fluctuations, improving patient comfort and reducing early medication expiration.



- Improved fuel economy with aerodynamics, smaller turbo-V6 engine, and Lithium-Ion battery-powered anti-idling system.
- Lightweight chassis with lightweight ambulance conversion enables an uncompromised functionality at significantly reduced weight.
- Platform is potentially a pre-cursor to electrification through e-Transit
- Modern, global, modular chassis with drivetrain options

2025 Deployment Highlights

- In service July 20, 2025
- Adjustments and changes based on paramedic feedback will be incorporated as more are put into service.
- Expecting 26 in the next year and seeking more in Fiscal 2027/28.

2025 Prototype Statistics

- Over 11,000 in-service kilometres
- 845 emergency transports, 21 transfers
- Primary operation in Burnaby, New Westminster and Vancouver
- The chart below shows the savings from vehicle operation on a similar duty cycle, though operated during different seasons. If the vehicle was compared during the same time of year we expect even greater savings. Further analyses are being conducted on the vehicle:

Station 248 - Vancouver (Cordova) Trial:

Real world savings of 6.54 L/100 km >> 2,616 liters saved annually

Chevrolet Express 3500HD Ambulance	Transit 350HD Ambulance
36.24 L/100 km	**29.70 L/100 km**
2999 km 1040.9 L	*2021 km 594.7 L*
33 days (May 23-Jun 25, 2024)	*19 days (Nov 20-Dec 9, 2025)*
91 km/day - Spring	*106 km/day - Autumn*

HYBRID & ELECTRIC EMERGENCY RESPONSE SUPPORT FLEET

Silverado Electric Vehicle Supervisor Prototype

- Prototype supervisor EV will soon be deployed and tested across Fraser and Vancouver Coastal Clinical Operations.
- The Silverado EV has a large battery capacity for extended deployments and functionality as a mobile power unit when needed.

AVIATION FLEET - CONTRACT OPERATIONS

- BCEHS Aviation emissions are not reportable to CGRT as the aviation fleet is neither owned nor leased by BCEHS.

- If they were to be included, aviation emissions make up more than half of BCEHS overall emissions, which makes it a priority to address avenues towards decarbonization.

Aviation Highlights

- All new AW169 helicopters rolled out in 2025 across the province.
- New more fuel-efficient King Air 360CWH Fixed Wing aircraft have been deployed in six of 12 positions by the end of the 2025. The remaining positions will be deployed in 2026.
- Fixed-wing and rotary-wing contracts require carriers to reduce their carbon impact for BCEHS.
- Suppliers are to quantify emissions, and purchase offsets with preference for BC-based projects with demonstrable social and/or environmental co-benefits.
- Each year suppliers are to provide BCEHS Aviation with an annual report including details on consumption, actions taken to reduce emissions, supporting documentation of offsets purchased.
- The new fixed wing and rotary wing fleet are compatible with the ground ambulance power stretcher systems by incorporating powered stretcher loading systems. This reduces ‘ambulance to aircraft’ loading times, increases patient comfort, and significantly reduces risk of paramedic injuries.

FACILITIES AND INFRASTRUCTURE

A key focus in 2025 has been on both understanding and establishing the processes necessary for both small and large EV charger deployments at our stations. This included conducting our first feasibility study for EV charger deployment at our Delta/Ladner Station. Incorporated into this study is the use of battery energy storage systems and roof-mounted solar systems. While we are not electrifying this station immediately, the learnings have been valuable in planning for DC fast charging systems and BCEHS station electrification in the future.

We have been working with PHSA and the health authorities to further understand their processes for EV charger installations at hospital ambulance bays across the province. As ambulances spend most of their time at either stations or hospitals, there is enormous value having low power AC chargers at hospital ambulance bays to ensure confident deployment of electric ambulances in the future.

Additionally:

- PHSA Facilities and BCEHS have strengthened their relationship in the past year as we continue to install Level 2 chargers were possible across the Lower Mainland and Fraser Valley.
- PHSA and BCEHS are committed to further investigation through a planetary health lens into strategic planning and operations of our facilities.
- This commitment includes reducing facilities energy use intensity by 30 per cent and GHG emissions in 2030 by 50 per cent of 2007 emissions.
- New structures are built to LEED Gold standards, and building retrofits are to BCBC 2024 and conform to Step Code guidelines where applicable.

PAPER CONSUMPTION

- Paper consumption has been an action item at BCEHS over the years, and the organization is continually working towards increased digitalization of paperwork and administrative tasks.
- Exploring, in collaboration with PHSA and our supplier, policies to support a transition to more sustainable paper products.

Feature: BCEHS Planned Events & Bike Squads

Members of BCEHS Victoria's bike squad at the 2025 Victoria Day Parade, Victoria

BCEHS bike squads continue to play an important role in urban responses and planned events. The team responds to calls in the downtown cores of Victoria and Vancouver. Additionally, a bike squad is active at Vancouver International Airport (YVR) supporting both landside and airside emergencies. Bike squads also play a role in large events, including providing emergency support at multiple sporting and entertainment events across the province.

In 2025, a specialized BCEHS Planned Events team supported events from Vaisakhi festivals, various parades, the Whistler Grand Fondo, the Vancouver Marathon and Sun Run, to home games for the Vancouver Goldeneyes, Vancouver Rise FC, Vancouver Whitecaps FC, and Vancouver Canucks. As Metro Vancouver ramps up to host the World Cup, the Planned Events team will be approaching the event with a sustainable lens.

2025 GHG EMISSIONS AND OFFSETS

SUMMARY TABLE:

BC Emergency Health Service 2025 GHG Emissions and Offsets Summary	
GHG emissions for the period January 1 - December 31, 2025	
Total BioCO_2	*716*
Total Emissions (tCO_2e)	*18,407*
Total Offsets (tCO_2e)	*17,691*
Adjustments to Offset Required GHG Emissions Reported in Prior Years	
Total Offsets Adjustment (tCO_2e)	*1.83*
Grand Total Offsets for the 2024 Reporting Year	
Grand Total Offsets to be Retired for 2024 Reporting Year (tCO_2e)	*17,693*
Offset Investment ($)	*$442,325*

RETIREMENT OF OFFSETS:

In accordance with the requirements of the *Climate Change Accountability Act* and the Carbon Neutral Government Regulation, British Columbia Emergency Health Services (**the Organization**) is responsible for arranging for the retirement of the offsets obligation reported above for the 2025 calendar year, together with any adjustments reported for past calendar years (if applicable). The Organization hereby agrees that, in exchange for the Ministry of Environment and Climate Change Strategy (**the Ministry**) ensuring that these offsets are retired on the Organization's behalf, the Organization will pay within 30 days, the associated invoice to be issued by the Ministry in an amount equal to $25 per tonne of offsets retired on its behalf plus GST.

PUBLIC SECTOR CLIMATE LEADERSHIP

Beyond Electrification: Broader Decarbonization Efforts

While electrification remains a key component of BCEHS's sustainability efforts, we recognize that achieving provincial climate targets will require more than just transitioning to electric vehicles. Opportunities also exist in optimizing operations, rightsizing the fleet, and expanding Clinical Hub services—particularly in high-density urban areas—which can collectively contribute to meaningful emissions reductions.

In 2025, BCEHS continued engaging with Canadian ambulance manufacturers to explore reduced- and zero-emission ambulance platforms. As new electric, hybrid, and low-emission technologies become commercially available, BCEHS will continue to evaluate and pilot these options. BCEHS is also in regular attendance at CleanBC, BC Hydro, and PluginBC networking events and panels.

BCEHS actively collaborating with international partners to exchange best practices in decarbonization and ambulance electrification. Notably, BCEHS maintains regular engagement with ambulance services in the United Kingdom and the Netherlands. For example, as the UK's National Health Service (NHS) in London deploys its new electric Transit (eTransit) ambulance and explores additional electrification strategies, BCEHS has continued to learn from their experience through ongoing knowledge-sharing. The collaboration has been invaluable as BCEHS prepares for pilots and future ambulance electrification.

BCEHS receives funding through the Carbon Neutral Capital Program (CNCP), which supports investments in zero-emission vehicles and low-carbon infrastructure. We will provide justification for upcoming funding use in alignment with our Strategic Sustainability & Decarbonization Plan and the regularly updated Clean Fleet Plan. Participation in CNCP enables BCEHS to consider the full system-level requirements—including infrastructure and facilities—for fleet decarbonization, while also modeling projected GHG reductions and operating cost savings.

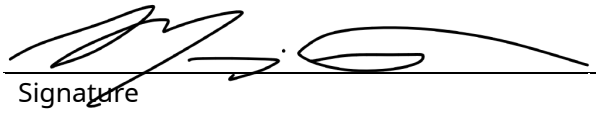
BCEHS is committed to becoming a global leader in the decarbonization of ambulance services and continues to advance efforts to reduce fleet emissions through a comprehensive and forward-looking strategy.

Climate Risk Management

Climate change has put a strain on the BC Emergency Health Services, through increasing heat and extreme weather-related dispatches, flood and wildfire support, evacuations and more. This results in increased operating expenses to support citizens in these events. Fleet decarbonization efforts through optimization, electrification, and vehicle rightsizing will help mitigate not only the environmental impacts of our services but reduce our operations costs as electrification and zero-emission fleet deployment accelerates in the coming years.

BCEHS has a Disaster Risk Reduction and Resilience (DR3) team focused on ensuring the organization is adaptable and can respond to adversity and disruption. Disaster resilience is the capacity of BCEHS to adapt to and recover from hazards, vulnerabilities, or stresses to continue providing pre-hospital care to British Columbians. As the BC Ministry of Environment and Climate Change Strategy (MECCS) recently stated "climate change hazards are impacting health determinants" (2018, p. 1) and that action "will strengthen our health care system and improve the resiliency of our communities" (2018, p.2). BCEHS needs to adapt and be flexible to rapid change and impacts to our organization, staff, and our patients.

Executive Signature:



Signature	Date
	May 28, 2026
Manraj Chohan	Executive Director, Logistics & Transportation Operations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