

- 1 Q. **Reference: Application, Schedule 6, Replace Light- and Heavy-Duty Vehicles (2024-2026)**
- 2 a) How many vehicles will be replaced with electric vehicles (EVs)?
- 3 b) How many EVs does Hydro currently own?
- 4 c) What are the prospects for electric heavy-duty vehicles?
- 5 d) How do the lifetime costs of Hydro-owned EVs compare to Hydro-owned gasoline/diesel
- 6 powered vehicles?
- 7 e) What is the current lead time for purchasing gasoline/diesel light-duty vehicles relative
- 8 to purchasing comparable EVs?
- 9 f) What is the current capital cost of a gasoline/diesel light-duty vehicle and a comparable
- 10 EV?
- 11 g) Do current supply chain issues and high levels of inflation impact the purchase of light
- 12 duty vehicles relative to gasoline/diesel vehicles?
- 13 h) Table 3 (page 7) shows program budget estimates of \$1,479.1 thousand in 2024 and
- 14 \$4,148.8 thousand in 2024 and 2025, respectively. However, Chart 6 (page 8) shows
- 15 spending in excess of \$6,000 thousand in each of those years. Please explain the
- 16 difference.
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- 19 A. a) In its “2021 Capital Budget Application,”¹ Newfoundland and Labrador Hydro (“Hydro”) set a
- 20 minimum target of purchasing three new fleet electric vehicles (“EV”) in 2024.² Since that
- 21 time, Hydro has continued to evaluate opportunities to integrate EVs into its fleet and the
- 22 potential operating savings associated with this transition.
- 23 Hydro anticipates that its EV purchases in 2024 may be significantly higher than the three
- 24 units originally proposed in 2021. This is due to the improving availability of EVs, increased

¹ “2021 Capital Budget Application,” Newfoundland and Labrador Hydro, rev. November 2, 2020 (originally filed August 4, 2020).

² Hydro’s response to PUB-NLH-020 of the 2021 Capital Budget Application proceeding.

1 opportunities to operate EVs within Hydro’s fleet, and high fuel prices, which increase the
2 operating savings associated with EVs. Proposed federal regulations announced in late 2022
3 are also expected to result in more rapid development of EV supply in the future.³

4 Until orders are placed in 2024 and vehicle availability is known, an exact allocation
5 between gasoline and EV fleet vehicles cannot be specified. Hydro is committed to the
6 continued growth of its EV fleet in pursuit of its mandate to provide service at the lowest
7 possible cost, in an environmentally responsible manner, consistent with reliable service.

8 **b)** Hydro currently owns and operates five electric vehicles.

9 **c)** Heavy-duty truck chassis EVs are an emerging segment; several brands currently
10 represented in Hydro’s fleet have yet to bring EV versions of their vehicles to market. Hydro
11 will continue to monitor industry advancements and seek to integrate heavy-duty EVs into
12 its fleet where feasible and economical to do so.

13 **d)** Hydro most recently purchased two all-wheel-drive EVs in 2022. When compared to an
14 equivalent gasoline-powered vehicle, Hydro forecasts lifetime savings of \$6,200 per vehicle,
15 on a net present value basis.⁴ This analysis is based on the total cost of ownership⁵ over
16 seven years and 175,000 kilometres of driving.

17 Hydro expects that savings associated with 2024 EV fleet vehicle purchases will be even
18 greater, due to recent increases in gasoline prices.

19 **e)** Light-duty vehicle lead times have continued to improve throughout 2023 and now range
20 from 3 to 12 months for both EVs and gasoline/diesel vehicles. Lead times are expected to
21 further improve in 2024 for most light-duty vehicle types.

22 **f)** With increasing competition in the EV sector, the capital cost premium for EVs is generally
23 decreasing; however, there is no consistent differential across manufacturers or classes of
24 vehicles. The Ford F-150, one of the most-represented vehicles in Hydro’s fleet, has seen

³ The Government of Canada has introduced proposed regulations, which will require that 20% of all passenger car and light truck vehicles sold in Canada be zero emission vehicles by 2026, increasing to 60% by 2030, and finally 100% by 2035.

⁴ Forecast nominal savings of approximately \$12,500 per vehicle.

⁵ Includes purchase price and forecast operating costs.

1 several significant price drops this year. As a result, the retail price of a base model Lightning
 2 Pro EV (with standard range battery) and its closest F-150 gasoline-powered equivalent are
 3 very similar.

4 Hydro considers both capital and operating costs before selecting an EV for fleet use, in
 5 consideration of its mandate to provide service at the lowest possible cost, in an
 6 environmentally responsible manner, consistent with reliable service.

7 **g)** Please refer to part f) of this response.

8 **h)** Table 3 of the Replace Light- and Heavy-Duty Vehicles (2024-2026) program proposal
 9 (Program 1) includes the estimates for the work proposed under the 2024–2026 iteration of
 10 the Replace Light- and Heavy-Duty Vehicles program. Chart 6 of the Program 1 proposal
 11 provides the total yearly program estimate, which includes expenditures from all iterations
 12 of the Replace Light- and Heavy-Duty Vehicles program that are forecast to have
 13 expenditures in a specific year. Information from Hydro’s Five-Year Capital Plan (2024–2028)
 14 can be found in Table 1.

Table 1: 2024 and 2025 Expenditures (\$000)

Program	2024 Spend	2025 Spend
Replace Light- and Heavy-Duty Vehicles (2022-2024)	2,319.6	0
Replace Light- and Heavy-Duty Vehicles (2023-2025)	2,584.6	473.3
Replace Light- and Heavy-Duty Vehicles (2024-2026)	1,479.1	4,148.8
Replace Light- and Heavy-Duty Vehicles (2025-2026)	0	2,000.0
Total	6,383.3	6,622.1