



Updated Vehicle Purchasing Requirements and Strategic Fleet Greening Plans

CIPMM 2023 – Fleet Management Workshop
November 2nd, 2023

Chris Lindberg, Senior Advisor and Vanessa Weber, Analyst
TBS - Centre for Greening Government

www.canada.ca/greening-government

www.canada.ca/gouvernement-vert

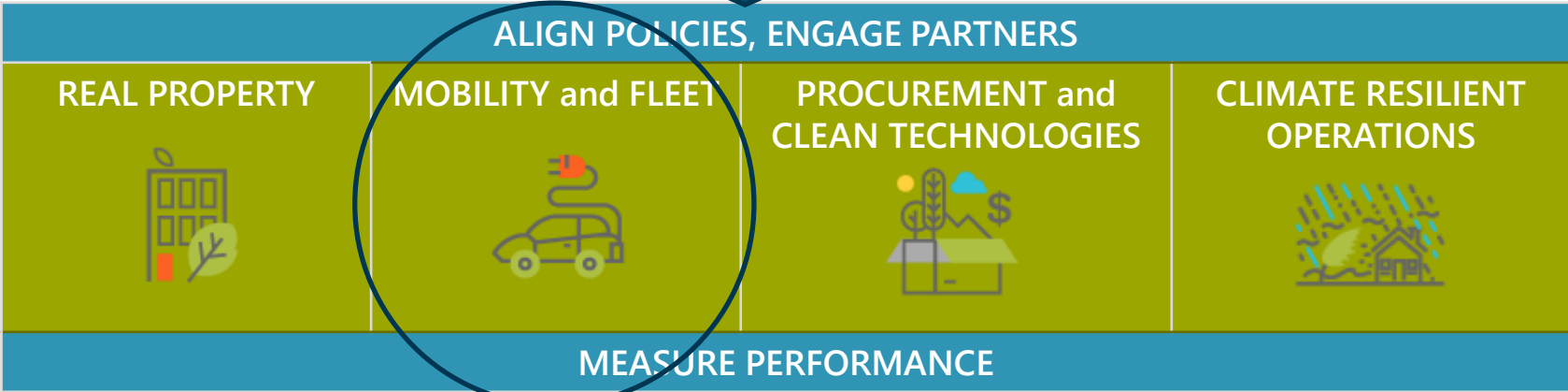
Greening Government Strategy (GGS) overview

Objective:



- ❖ 40% reduction of real property and conventional fleet emissions by 2025
- ❖ Net-zero emissions overall by 2050
- ❖ Overall green & climate resilient government operations

Strategy (GGS) developed to get there:



Implementation:

- TBS providing direction, guidance, Greening Government & Low-Carbon Fuels Funds
- Expert depts. providing support (TBS/NRCan/PSPC/NRC/ECCC)
- **DEPARTMENTS TAKING ACTION**

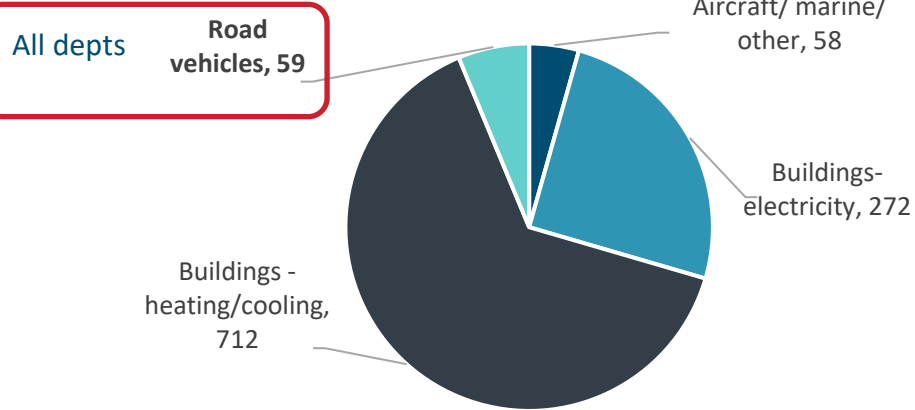
Performance:

38.6% reduction in GHG emissions to March 2022 (real property & conventional fleet)
3.3% increase in emissions from National Safety and Security operations

Land fleet operations contribute ~8% of direct federal emissions (2021-22)

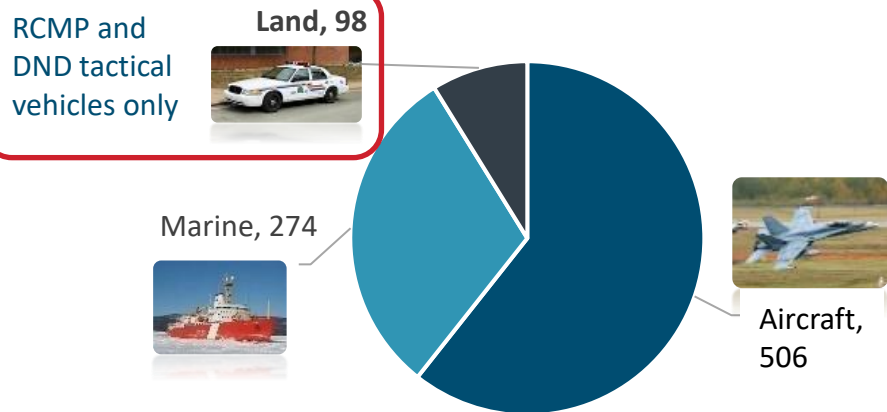
Buildings, Conventional Fleet

1,101 kt (Scope 1-2)



National Safety and Security Fleet

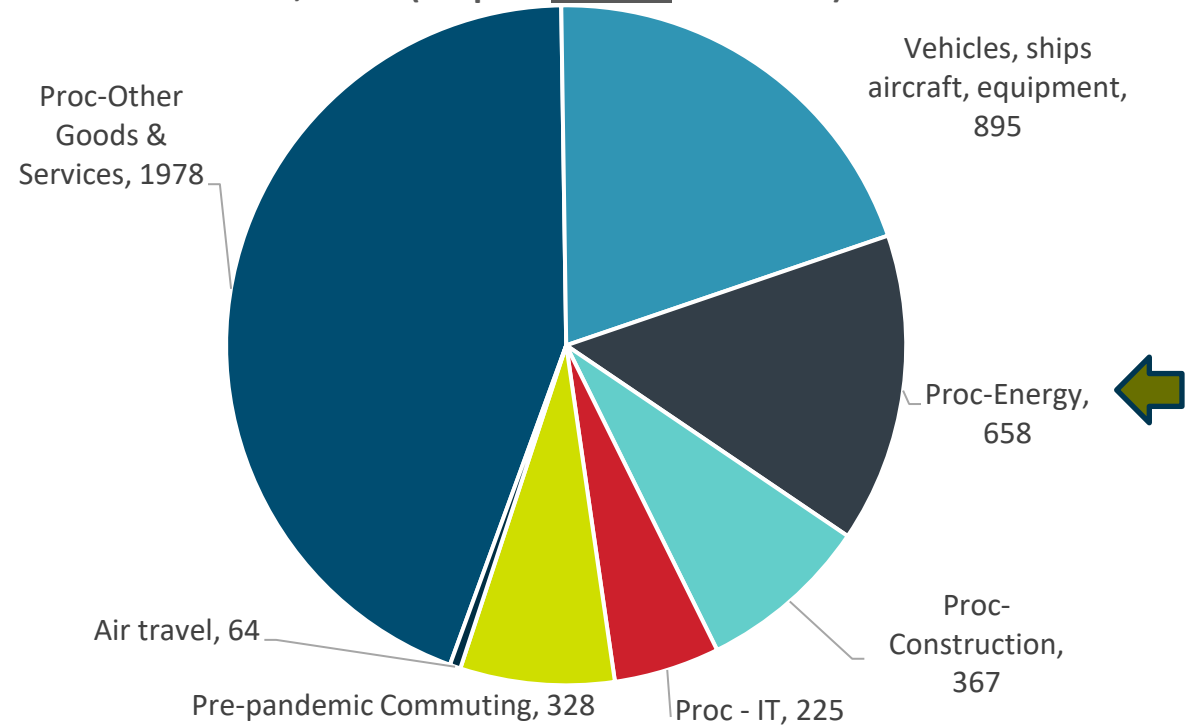
878 kt (Scope 1)



Note: All numbers in kilotonnes (kt) of carbon dioxide equivalent

Estimated Procurement/Air Travel/Commuting

4,516 kt (Scope 3-Indirect emissions)



The GoC owns over 34,000 buildings, 20,000 engineering assets, and over 40,000 fleet vehicles and buys over \$20B/year – largest asset owner and public procurer in Canada.

Presentation Outline

1. Conventional Fleet Greening Targets and 2022-23 performance
2. Green Vehicle Purchasing Requirements for 2023-24 reporting
Strategic Fleet Greening Plans
3. Other updates

A huge THANK YOU to fleet teams and managers
for your leadership in fleet greening!



Fleet Greening 2022-23 Performance

Quick Icebreaker (2 minutes)

1. What is one of your biggest **accomplishments** with fleet greening this year?
2. What is one of your biggest **challenges** with fleet greening this year?

Instructions:

Stand up and find a person you don't know

Each person has 1 minute to discuss

Our job is to help you amplify your successes and address your challenges!

Commitments and performance to date

Commitments: Conventional light duty fleet is 100% zero emission vehicles (ZEVs) by 2030.

- At least 75% of purchases are ZEVs or hybrids (HEVs)
- Targets apply if suitable options are available and operationally feasible
- Separate targets under development for national safety and security fleet (RCMP and DND tactical vehicles)

Performance: 14% of the conventional light-duty fleet is green – 787 ZEVs (4.5%) and 1,661 HEVs (9.6%)*

- **90%** of new purchases were green (ZEV or HEV) when suitable options were available; green vehicles comprised 58.5% of all new purchases*
- **The GoC is adopting green vehicles at a faster pace than the national avg for the Canadian market:** the most recent Statistics Canada data shows only 2.9% of all registered light-duty vehicles were green as of Dec. 2022 (1.4% ZEVs, 1.5% HEVs).
- **The pace of fleet greening has been constrained by global supply chain issues and limited availability of operationally suitable green options.** In 2022-23, only a few ZEV options were available for larger vehicles like vans and pickup trucks which make up the majority of the federal light-duty fleet.



Conventional land fleet

(26,600 vehicles):

- ~17,300 light-duty vehicles,
- ~2,200 commercial vehicles
- ~7,100 other vehicles (off-road, industrial etc.).

National Safety and Security land fleet

(22,800 vehicles):

- ~12,200 light duty vehicles (mostly RCMP)
- ~8,000 standard military pattern vehicles
- ~2,600 commercial and other vehicles

* As of March 31, 2023 (FY 2022-23)

Light Duty Fleet Purchases and Composition (As of March 31, 2023)

1. Conventional Fleet	2022-23 Total New Purchases			2022-23 Total New Purchases Reported for Target (where suitable HEV / ZEV available)		
	Department	Total New Purchases	Total HEV or ZEV	% Total HEV or ZEV	Total New Purchases	Total HEV or ZEV
AAFC	59	37	62.7%	37	37	100.0%
CBSA	220	68	30.9%	84	68	81.0%
CFIA	3	0	0.0%	0	0	
CIRNAC	1	0	0.0%	0	0	
CRA	2	2	100.0%	2	2	100.0%
CSA	0	0		0	0	
CSC	185	140	75.7%	145	140	96.6%
DFO	100	57	57.0%	66	57	86.4%
DND	418	259	62.0%	292	259	88.7%
ECCC	44	37	84.1%	39	37	94.9%
ESDC	1	1	100.0%	1	1	100.0%
HC	10	8	80.0%	8	8	100.0%
IRCC	0	0		0	0	
ISC	28	4	14.3%	4	4	100.0%
ISED	14	14	100.0%	14	14	100.0%
NRC	4	2	50.0%	2	2	100.0%
NRCan	12	7	58.3%	7	7	100.0%
PC	30	16	53.3%	18	16	88.9%
PHAC	6	6	100.0%	6	6	100.0%
PS	0	0		0	0	
PSPC	10	7	70.0%	8	7	87.5%
RCMP	47	27	57.4%	36	27	75.0%
SSC	11	3	27.3%	3	3	100.0%
TC	35	30	85.7%	30	30	100.0%
TOTAL - Conventional Fleet	1240	725	58.5%	802	725	90.4%

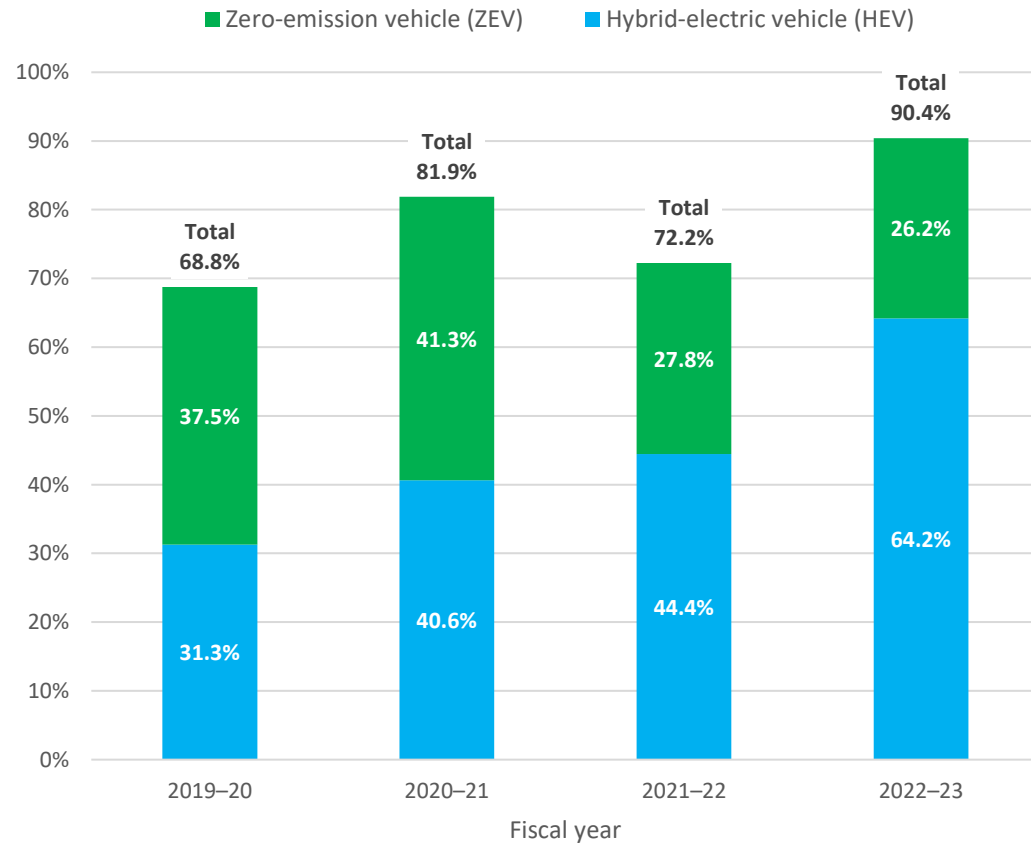
1. National Safety and Security Fleet						
DND - NSS Fleet	9	1	11.1%	Not reported for target		
RCMP - NSS Fleet	1828	187	10.2%			
TOTAL - NSS Fleet	1837	188	10.2%			

Total Light Duty Fleet Size and % HEV and ZEV (as of March 31, 2023)				
Total light duty fleet	Total HEV in light duty fleet	Total ZEV in light duty fleet	% HEV in Light Duty Fleet	% ZEV in Light Duty Fleet
719	81	38	11.3%	5.3%
1197	143	24	11.9%	2.0%
1135	90	1	7.9%	0.1%
40	0	0	0.0%	0.0%
38	4	10	10.5%	26.3%
5	1	2	20.0%	40.0%
1652	322	22	19.5%	1.3%
1381	104	47	7.5%	3.4%
6415	480	293	7.5%	4.6%
676	112	8	16.6%	1.2%
101	32	1	31.7%	1.0%
148	26	20	17.6%	13.5%
9	3	0	33.3%	0.0%
430	32	2	7.4%	0.5%
228	4	26	1.8%	11.4%
112	6	3	5.4%	2.7%
212	9	12	4.2%	5.7%
1651	58	80	3.5%	4.8%
33	2	19	6.1%	57.6%
1	1	0	100.0%	0.0%
213	24	53	11.3%	24.9%
364	57	9	15.7%	2.5%
156	8	2	5.1%	1.3%
391	62	115	15.9%	29.4%
17307	1661	787	9.6%	4.5%

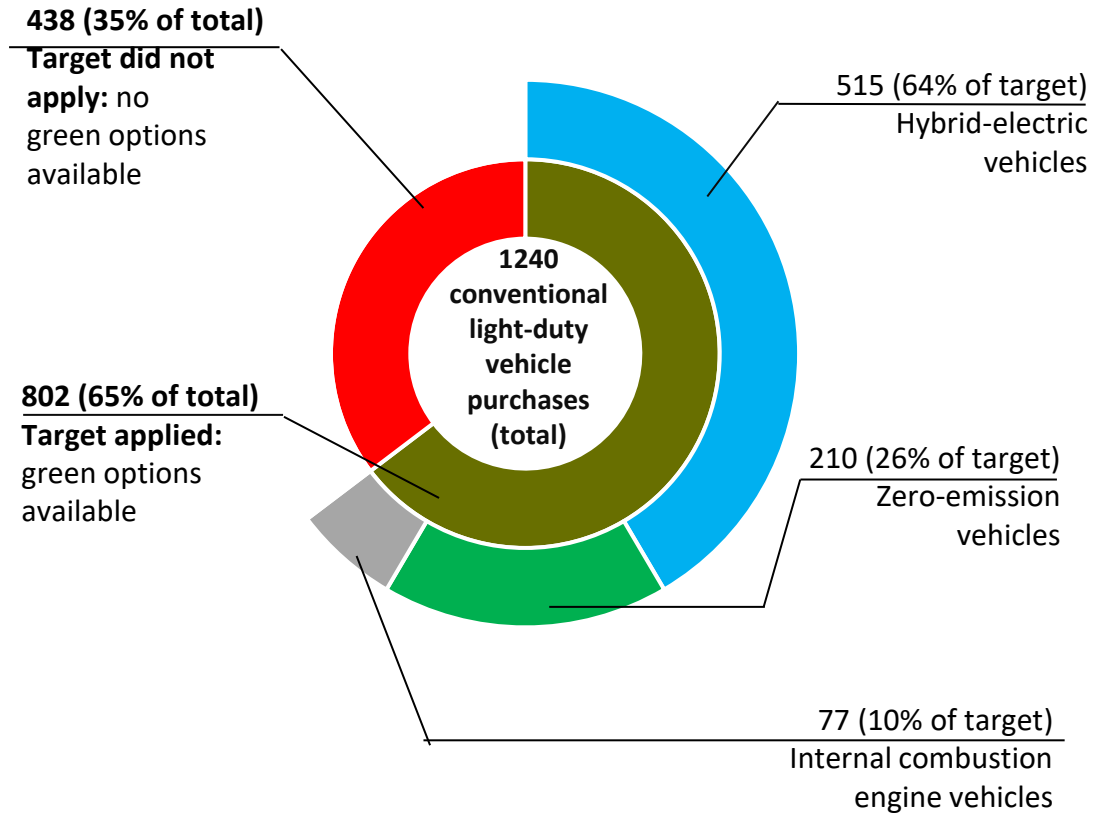
362	19	21	5.2%	5.8%
11850	253	6	2.1%	0.1%
12212	272	27	2.2%	0.2%

Performance on 75% green vehicle purchase target

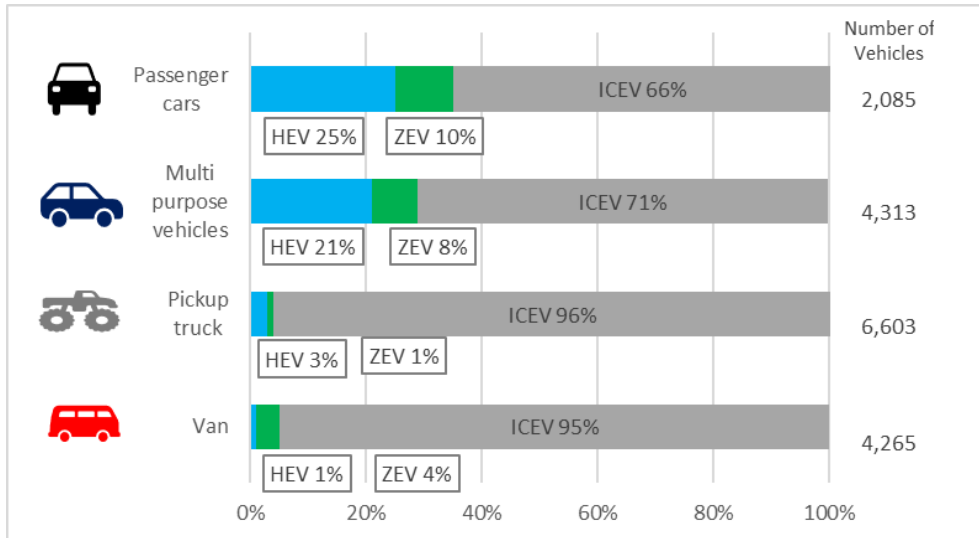
Green vehicles, by type, as a percentage of light-duty vehicles procured by the federal government where the target applied, 2019–20 to 2022–23



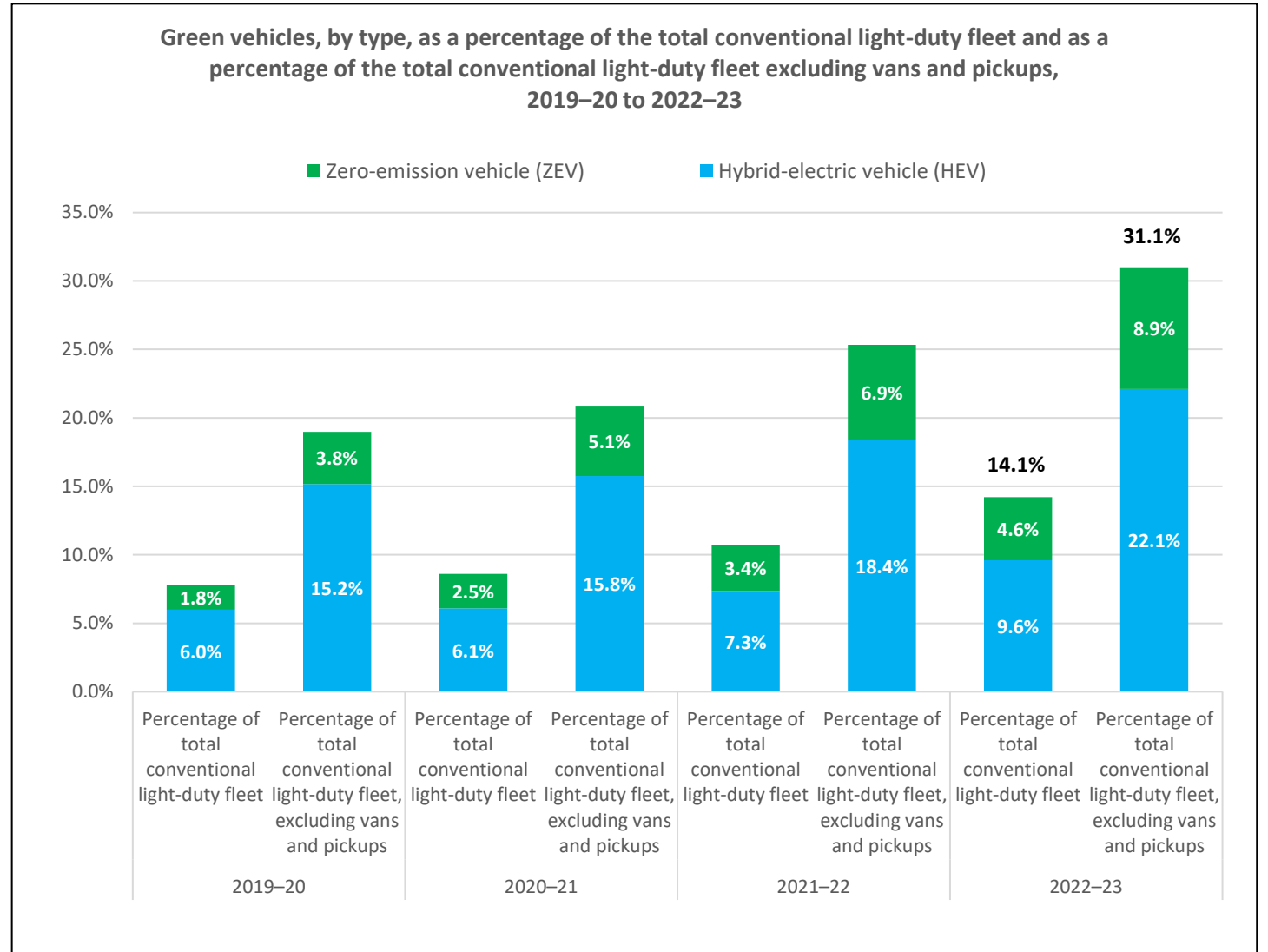
Light duty vehicle purchases by type where suitable options are available and the target applies in fiscal year 2022-23



Progress towards 100% ZEV by 2030: overall and by vehicle type



- Greening rapidly where green options are available: Excluding vans and pickups, green vehicles made up >30% of the fleet as of March 31, 2023
- However, the pace of ZEV adoption must accelerate to achieve the 2030 target





Fleet Green Purchase Requirements for 2023-24

2023-24 Light-Duty Green Vehicle Procurement Requirements

- Each year the TBS CGG determines which federal vehicle purchases will be publicly reported under the 75% target for that fiscal year:
 - This assessment is done with input from NRCan’s GGO for fleets program, TBS’s OCG and PSPC and considers i) current and historical HEV and ZEV bids, ii) initial capital cost and estimated total cost of ownership of the vehicles, iii) vehicle performance and reliability; and iv) the availability of vehicles in the market.
- For FY 2023-24, light duty vehicle purchases (Cat 1, 2, 3 and 4) in 31 vehicle specification codes will be publicly reported for the target.
 - All 31 codes are in Group A: Departments are expected to meet or exceed the 75% target for their total purchases in these codes.
 - ~70% of the orders placed over the past three years were in these codes
 - Includes all passenger cars and MPVs (except for Part V).
 - Includes 12 codes that do not have green bids for which suitable green options are available in other codes. ICEV purchases in these codes count against performance.
- The price premiums for the HEVs and ZEVs in the GMVOG are modest over the lifetime of the vehicle: most have TCOs that are lower than the equivalent ICEV.
- Supply is limited: We need to purchase every green vehicle that PSPC is able to secure in order to stay on track. Priority must be given to purchasing ZEVs.
- More information will be posted on: https://www.gcpeia.gc.ca/wiki/Mobility_and_Fleet

Specification codes reported for the 75% purchase target in FY 2023-24
D00 & D01 – Int. Sedans: 2WD & 4x4/AWD
D30 & D31 – Comp. Sedans: 2WD & 4x4/AWD
H00* & H01 – Int. Station Wagons: 2WD & 4x4/AWD
H50 & H51* – Sm. Station Wagons: 2WD & 4x4/AWD
G21* – Int. Crossovers: 4X4/AWD
G40 & G41 – Sm. Crossovers: 2WD & 4x4/AWD
L01* – Personnel carriers
L40 & L41 – Sm. Utility Trucks: 2WD & 4x4/AWD
L60 & L61 - Utility Trucks: 2WD & 4x4/AWD
L71* - Utility Trucks: 4x4/AWD
M60 & M61 - Mini-vans: 2WD & AWD
S70* – Cutaway van: 2WD
T80 – Cargo van: 2WD
N20* & N21* – Compact pick-up: 2WD & 4X4/AWD
P41 – Crossover truck (Hummer): 4X4
Q00* & Q01* – Ext. cab pick-up truck: 2WD & 4x4/AWD
Q10* & Q11 – Pick-up truck crew cab: 2WD & 4X4/AWD
1L51P– Compact utility truck: 4X4/AWD (RCMP)
Q11P & Q11R* – RCMP Pursuit rated and SSV Pick-up Trucks
* Spec codes that did not receive green bids for which suitable green options are available under other codes.

Green Purchase Requirements are reviewed at the end of fiscal

- At the end of the fiscal year, TBS, PSPC and NRCan will review the purchase requirements and determine whether any codes should be moved from Group A to Group B. Considering purchase orders placed, availability during the year, other operational factors.
- Under exceptional circumstances departments may submit a request to TBS to exclude some of their ICEV purchases from the annual performance calculation. Generally limited to category 1 and 2 purchases where the green vehicles available did not meet specific documented operational requirements. Requests submitted as part of the annual reporting process.

Group for Green Reporting	Vehicle Specification Codes by FY				
	FY 2023-24 ²	FY 2022-2023 ¹	FY 2021-2022	FY 2020-2021	FY 2019-2020
A. Vehicle specification codes where the 75% target must be met.	31 codes total D00, DO1, D30, D31, H00, H01, H50, H51, G21, G40, G41, L40, L41, L51P L60, L61, L01, L71, M60, M61, N20, N21, S70, T80, P41, Q00, Q01, Q10, Q11, Q11P, Q11R	Fifteen codes: D00, D30, D31, H50, G40, G41, 1G41R, L40, L41, 1L41R, L51P, L60, L61, M60, M61	Fourteen codes: D00, D30, D31, H00, H01, H50, H51, 1H50R, G40, L40, L41, L61, M60, Q11	Eight codes: D00, D30, D31, H00, H50, L40, L41, L61	Five codes: D00, D30, H50, L41, L61
B. Vehicle specification codes where ZEV and HEV vehicles must be prioritized and organizations are encouraged to strive for the 75% target.	No codes in B	Six codes: 1H51R, L61R, Q11, P41, T80, T81	Eight codes: D01, G41, L51P, M61, N20, P81, T80, T81	Seven codes: D50, G40, G41, M60, Q11, Q11R, L51P	Four codes: D50, G41, M60, L51P
C. Vehicle specification codes that are not considered under the target because no HEV or ZEV options are available	All other codes	All other codes	All other codes	All other codes	All other codes

¹ At the end of FY2022-23, TBS reviewed this list and moved specification codes Q11 and L61R from group A to group B to based on limited market availability to the Government of Canada. This table shows the final groups used for reporting.

² TBS will review this list at the end of 2023-24 and adjust it as needed based on actual availability.

Tool example: Market and financial analysis for light-duty vehicles

TBS CGG developed purchase cost and TCO comparison by vehicle type using the Dunsky tool and 2024 GMVOG

- TCO = Initial capital cost plus seven years of operations (fuel costs, carbon levy, maintenance costs) minus residual value after depreciation. Comparison is to the lowest-cost ICEV in each vehicle specification code (even if there are multiple ICEV DISOs).
- Overall weighted average estimated TCO was equal or lower for all ZEV powertrains despite significantly higher purchase cost.
- This analysis suggests that fleet capital budgets need to increase in the short term – offset by savings in operations and maintenance.

Vehicle Type	Powertrain Type	Average % Purchase Cost Premium vs Lowest cost ICEV	Average % TCO vs ICEV	Number of green bids / models used in analysis
Passenger Cars	HEV	35%	4%	4
	PHEV	82%	20%	1
	BEV	123%	1%	3
Multi-purpose vehicles	HEV	14%	-4%	4
	PHEV	73%	-5%	4
	BEV	92%	-17%	7
Vans	HEV	-4%	-9%	2
	PHEV	49%	-1%	1
	BEV	49%	-27%	1
Pickup trucks	HEV	38%	10%	1
	PHEV			0
	BEV	31%	-23%	2
Overall (weighted averages)	HEV	21%	-1%	11
	PHEV	71%	0%	6
	BEV	86%	-15%	13

Assumptions:

Seven (7) years of operation at 20,000km/yr. using 2024 GMVOG prices and Dunsky projected costs for electricity, carbon levy, and maintenance costs; and a 70% depreciation after 7 years.

These estimates do not include vehicles listed under Part V – RCMP of the GMVOG and do not include costs for installing charging stations.

New PSPC Process for non-ZEV purchases

New requirement for ADM approval for light-duty vehicle purchases in spec codes with ZEV options

- ICEV & HEV orders received by PSPC in these SPEC codes will require a formal ADM approval by email in order to be processed and sent to the manufacturers.
- This supports the GGS and is in line with the broader emission reduction targets and TBS green vehicle requirements for HEV and ZEV purchases
- As of October 20th, 2023 the 13 spec codes below have ZEV options.

Please contact PSPC for more information at Autos.Cars@tpsgc-pwgsc.gc.ca.

Vehicle Specification Codes with ZEV Options (As of October 20th 2023)	
D00 – Intermediate Sedans – 2WD	L40 – Small Utility Truck – 2WD
D01 – Intermediate Sedans - AWD	L41 – Small Utility Truck - AWD
D30 – Compact Sedans – 2WD	L60 – Utility Trucks – 2WD
G40 – Small Crossovers – 2WD	L61 – Utility Trucks – 2WD
G41 – Small Crossovers - AWD	M60 – Mini-vans – 2WD
H50 – Small Station Wagons – 2WD	Q11 – Pick-up trucks – Crew Cab – 4x4
	T80 – Cargo Vans – 2WD



Accelerating Action: Fleet Green Strategic Plans

Achieving 100% ZEV by 2030 requires an accelerated response

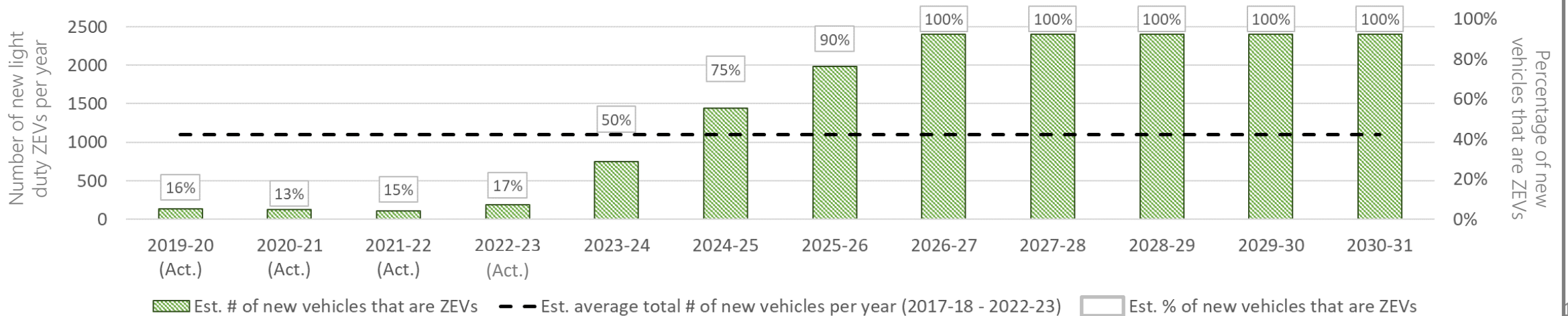
TBS requesting that departments undertake the following in FY2023-24:

- Internal engagement to align real property, fleet, greening and budgeting teams
- Establish internal policies and controls to prioritize the procurement and use of ZEVs
- Develop a long-term **Strategic Fleet Greening Plan** outlining the path to achieve targets
- Develop and maintain rolling two-year purchase projections and budgets for vehicles and EVCS

Formalizing through TBS and PSPC requirements

Illustrative Pathway to 2030: What is needed to get to 100% ZEV?

- Percentage of new conventional light duty vehicles that are ZEVs would need to scale 100% no later than 2025-26 or 2026-27
- Rate of fleet renewal may need to increase from ~1100 vehicles per year (6%) to ~2400 vehicles per year (~14%)
- Impacts may be mitigated through measures such as right-sizing fleet and vehicles; delaying replacement until ZEVs available; leasing; etc.
- Proactive, accelerated installation of EV charging infrastructure needed to support growing ZEV fleet



Forward-Looking Market Analysis (Dunsky Report)

BEV availability Type	BEV availability Subtype	Est % of Conv Fleet	Y2023	Y2024	Y2025	Y2026	Y2027	Y2028	Y2029	Y2030
Sedans	2WD (E.g. D30, D50, D85, D00)	6.6%	Med	High	High	High	High	High	High	High
Sedans	AWD (E.g. D01, D31)	1.1%	Med	Med	High	High	High	High	High	High
Multipurpose	Compact 2WD (E.g. G40, H50)	1.6%	Med	High	High	High	High	High	High	High
Multipurpose	Compact 4x4/AWD (E.g. G41, H51)	0.9%	Med	High	High	High	High	High	High	High
Multipurpose	Int. to Large 2WD (E.g. G20, H00, L40)	3.7%	Med	Med	Med	High	High	High	High	High
Multipurpose	Int. to Large 4x4/AWD (E.g. G21, H01)	14.2%	Med	Med	Med	High	High	High	High	High
Multipurpose	Full-size 4x4/AWD (E.g. L01, L71)	3.3%	Med	Med	Med	High	High	High	High	High
Passenger vans	4-8 Passengers (E.g. M31, M61, M30)	14.0%	No	Low	Low	Med	Med	High	High	High
Passenger vans	12-15 Passengers (E.g. M50, M51)	0.4%	No	No	Low	Low	Med	Med	High	High
Cargo vans	Compact (E.g. T00)	1.1%	No	No	Low	Low	Med	Med	High	High
Cargo vans	Intermediate (E.g. T81, T80)	5.3%	Low	Med	Med	High	High	High	High	High
Cargo vans	Large (E.g. S70)	2.4%	No	Low	Low	Med	Med	High	High	High
Pick-up trucks	Mid-Size to 1/2-Ton 2WD (E.g. N20, N21)	5.0%	No	No	Low	Low	Med	Med	High	High
Pick-up trucks	Mid-Size to 1/2-Ton 4x4 (E.g. N21, N22)	14.7%	Low	Low	Med	High	High	High	High	High
Pick-up trucks	3/4-Ton 2WD (E.g. Q20, Q80)	2.1%	No	No	No	Low	Low	Med	Med	High
Pick-up trucks	3/4-Ton 4x4 (E.g. Q21, Q81)	16.1%	No	No	No	Low	Low	Med	Med	High
Pick-up trucks	1-Ton 2WD (E.g. Q40, Q90)	0.1%	No	No	No	Low	Low	Med	Med	High
Pick-up trucks	1-Ton 4x4 (E.g. Q4, Q91)	5.2%	No	No	No	Low	Low	Med	Med	High
NSS - Special Services	Full-Size SUVs 4x4/AWD (E.g. L81R)	0.8%	No	No	Low	Low	Med	Med	High	High
NSS - Special Services	Pick-Up Trucks 4x4 (E.g. Q11R)	0.0%	Low	Low	Med	High	High	High	High	High
NSS - Police Pursuit	Sedans 2WD (E.g. J00, K00)	0.1%	No	Low	Low	Med	Med	High	High	High
NSS - Police Pursuit	Sedans AWD (E.g. J01, K01)	0.6%	No	Low	Low	Med	Med	High	High	High
NSS - Police Pursuit	Intermediate SUVs AWD (E.g. L51P, L51R)	0.6%	No	No	Low	Low	Med	High	High	High
NSS - Police Pursuit	Full-size SUVs 4x4/AWD (E.g. L81P)	0.1%	No	No	Low	Low	Med	Med	High	High
NSS - Police Pursuit	Pick-Up Trucks 4x4 (E.g. Q11P)	0.0%	No	No	Low	Low	Med	Med	High	High
		% of fleet with low, med or high	51%	69%	77%	100%	100%	100%	100%	100%
		% of fleet with medium or high availability	31%	37%	51%	69%	76%	100%	100%	100%

ZEV transition is achievable based on market projections but some fleet segments may only have 5-6 years to transition.

ZEV options are projected to be available for ~77% of fleet vehicle types by 2025-26 and 100% 2026-27.

Policy Authority for Strategic Fleet Greening Plans

Requirements for developing Strategic Fleet Greening plans come from the July 11, 2023, amendments to the [Directive on the Management of Materiel](#), which are in support of the [Greening Government Strategy](#) and the commitment to electrify the federal conventional fleet of light-duty vehicles by 2030.

The requirement to develop Strategic Fleet Greening Plans applies to conventional light-duty fleets of 10 or more vehicles.

A.2.3.1.5 For departments with a fleet of ten or more vehicles, developing and maintaining a long-term Strategic Fleet Greening Plan approved by the senior designated official that outlines the pathway to achieving the federal government's targets for a green fleet. This plan must present multi-year costed projections for vehicle purchases, consider operational feasibility, and optimize fleet size and relevant supporting measures, policies or infrastructure. Departments must maintain rolling two-year purchase projections and budgets for vehicles;

Key elements of Strategic Fleet Greening Plans

1. **A baseline analysis** that characterizes the current fleet and future fleet needs and trends
2. **One or more Illustrative fleet and EVSE purchase projections to transition to 100% ZEVs by 2030.**
Tools provided can be used to develop these projections and estimate associated purchases, capital and operational costs.
3. **Analysis of challenges, opportunities and tactics to achieve the transition.**
4. **A prioritized action plan for the next 2-5 years of implementation that includes costed 2-year acquisition projections for vehicles and EVSE.**
5. **Governance and performance management mechanisms** that create clear accountability across the organization and bring together key units (e.g. fleet, real property, capital budget teams, green teams).

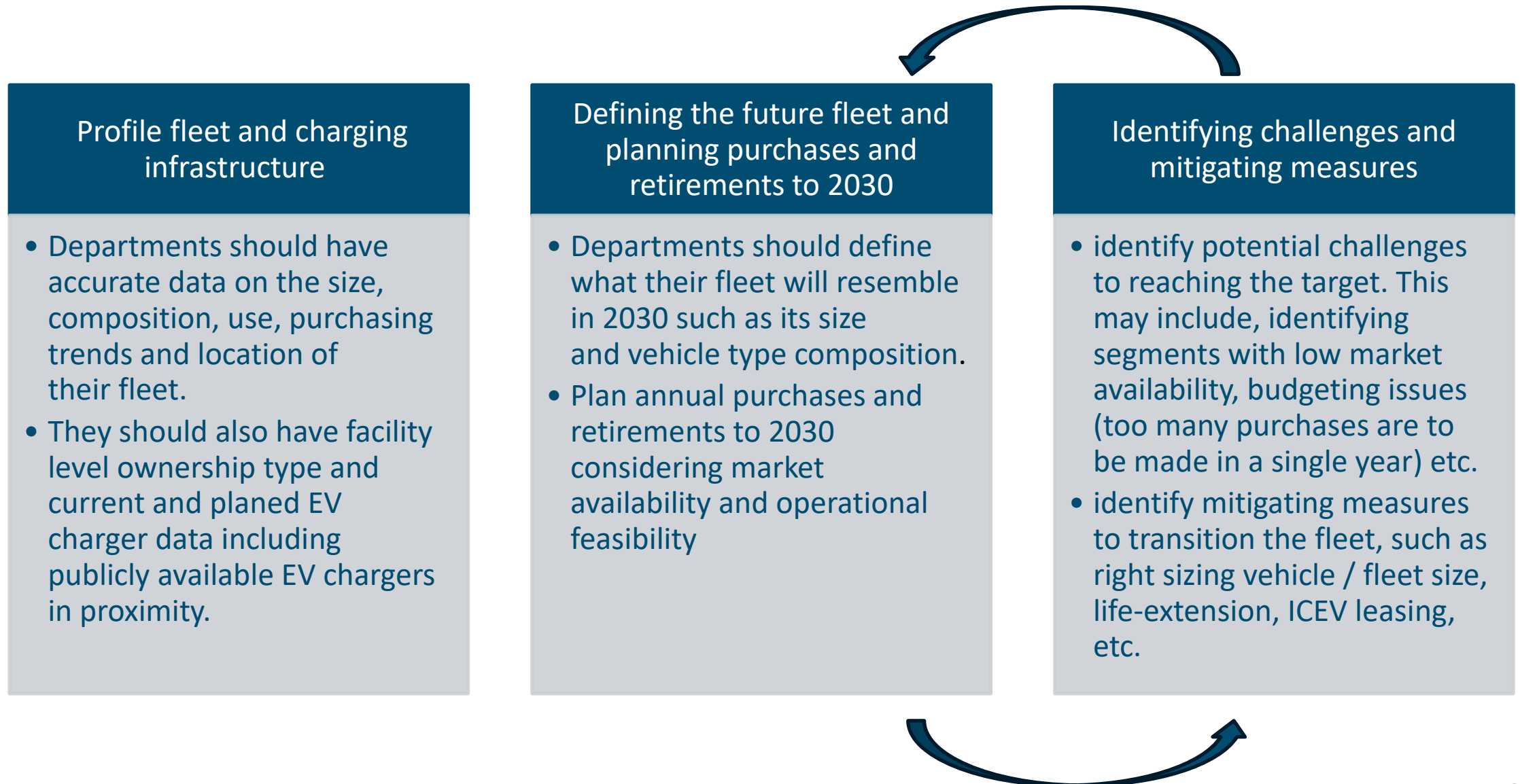
The final plans should:

- Be approved by the SDO of Materiel (First iteration due by end of FY 2023-24)
- Endorsed by fleet, real property, greening and capital budget teams.
- Be renewed every 2-3 years, with annual updates on the rolling two-year purchase projections

Reporting requirements:

- As part of annual inventory, TBS CGG will request a status update and evidence that the SFGP were completed.
- The plans can be shared with TBS and PSPC to inform broader planning for procurement.

Analysis for Informing Strategic Fleet Greening Plans



Tools and Resources for Strategic Fleet Greening Plan Analysis

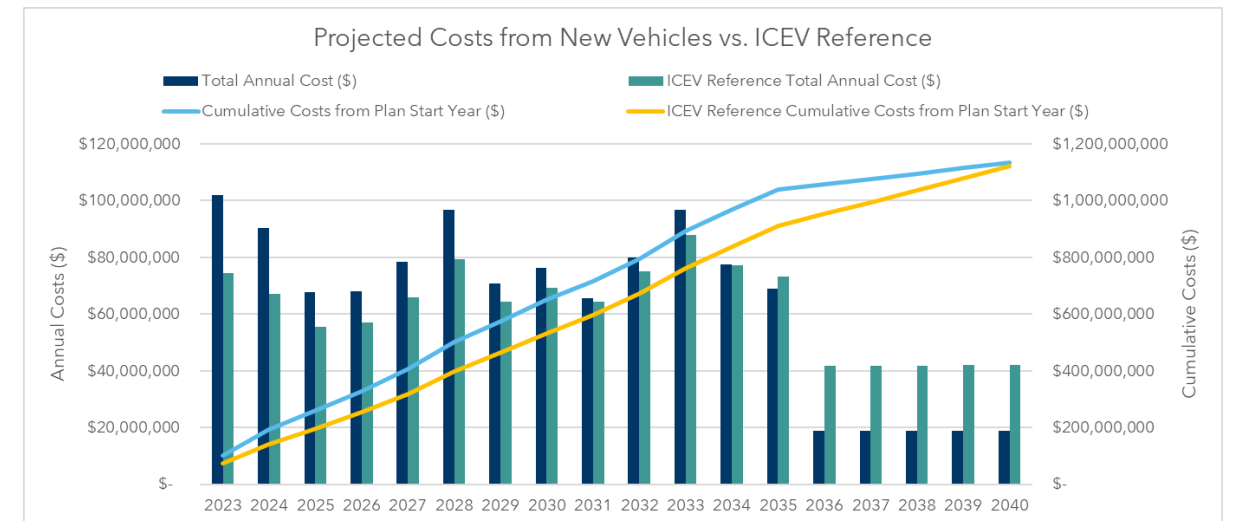
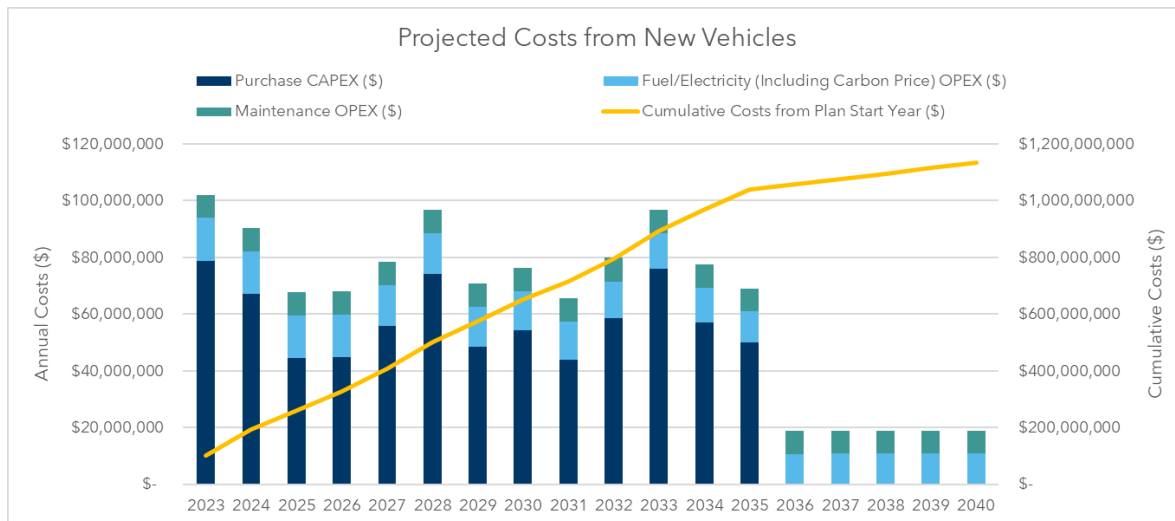
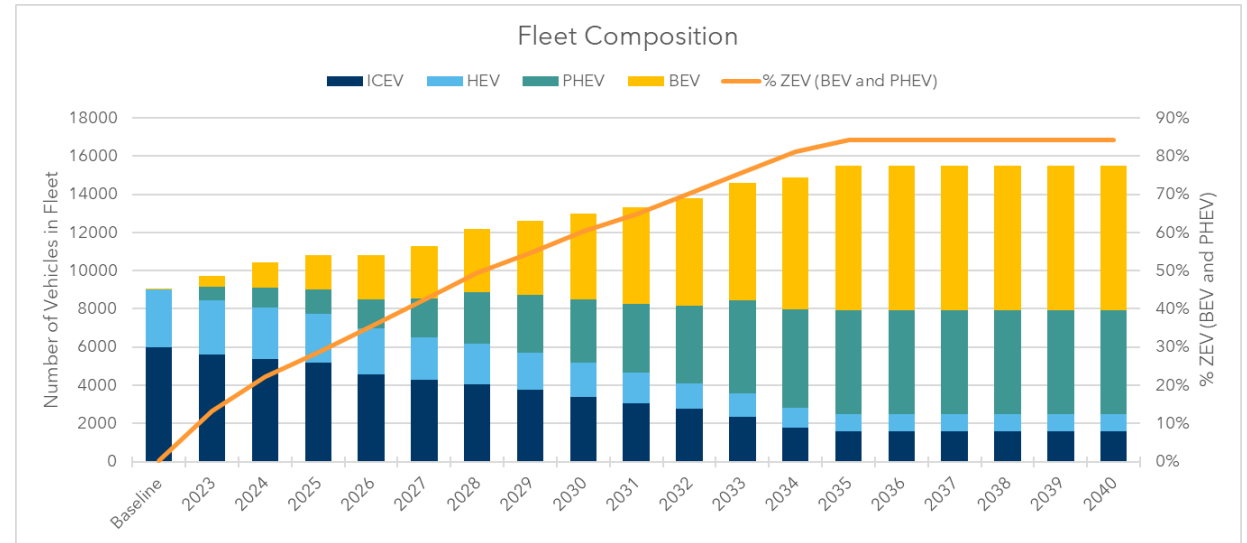
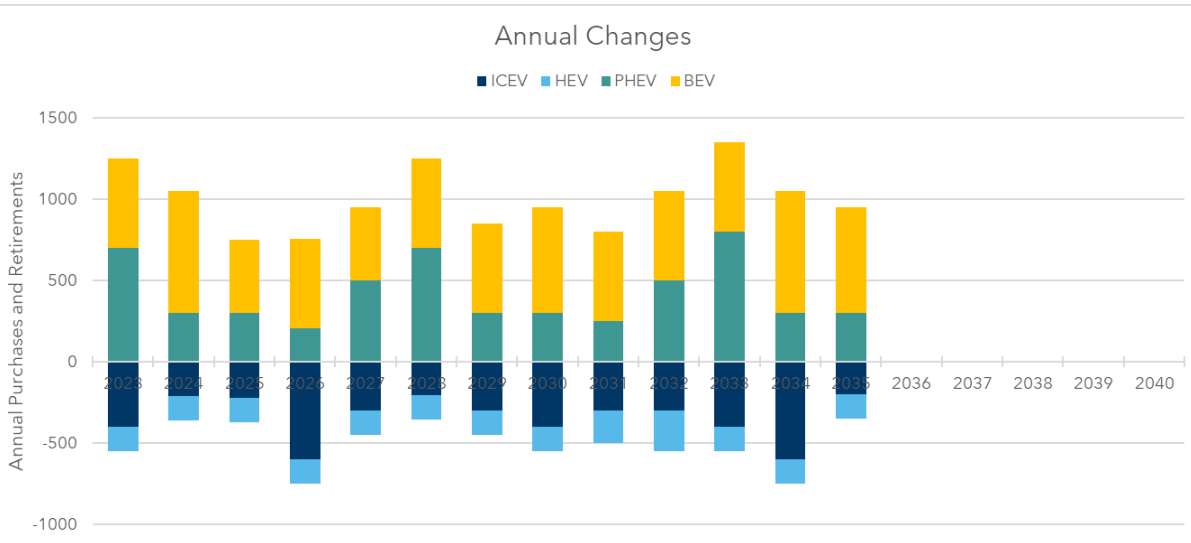
1. ZEV Fleet Planning Tool. The tool enables departments to develop their own specific acquisition projections for fleet planning and forecasting. This tool leverages the insights from the *“Analysis of Potential Zero-Emission Pathways for the Federal Light-Duty Vehicle Fleet”* report and associated Appendix developed by Dunsky Energy + Climate Advisors as part of the 2030 ZEV Pathway Initiative. Accompanying the tool on GCpedia are User Instructions which detail the functionality of the tool and how it works.

2. The Electric Vehicle Charging Infrastructure Needs Guidance Report and Calculator tool. The Report and Tool help fleet managers and real property managers to develop high-level, long-term and short-term electric vehicle charging infrastructure (EVCI) plans to support the transition to ZEVs.

Tools are available on the [Fleet - GCpedia](#)

ZEV Fleet Planning Tool Sample Outputs

Illustrative outputs only – not reflective of actual federal fleet numbers or plans



Discussion

1. What do you see as the benefits and challenges with the new fleet green strategic plan requirement and the enhanced green purchase requirements?
2. What are you looking for in terms of guidance and support from TBS, NRCan and others?

Other Updates

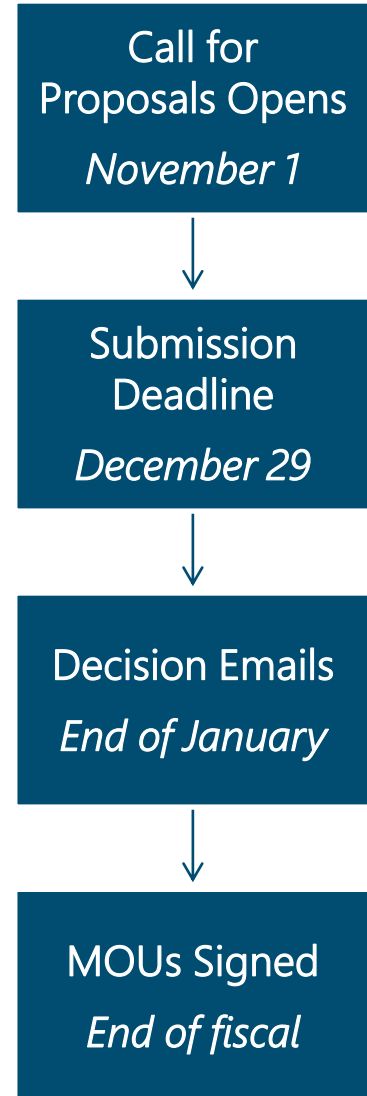
Other Updates and Activities

TBS, NRCan and PSPC collaborating on a whole of government response

- TBS CGG green purchase and reporting requirements and new website with fleet green reporting
- TBS OCG ongoing engagement with SDOs on light duty and exec. fleet
- NRCan ZEV and EV charging tools and services, including GGF projects on i) employee access to EV charging, ii) innovative EV charging solutions and iii) ZEVs for police and security fleets
- PSPC ongoing industry engagement and innovation in ZEV procurement
- PSPC request for information posted on enhancing EV charging services procurement mechanisms
- PSPC moving forward with implementing EV charging infrastructure strategy
- Coming November 7: Report on CESD audit on Departmental Progress in Implementing Sustainable Development Strategies—Zero-Emission Vehicles

Micro-Greening Government Fund (Micro-GGF) opportunities

- **Targeted call to reduce GHGs through green procurement focused on** categories of goods and services with the highest environmental impact (including fleet)
- **Up to \$150k** in funding for projects lasting up to 2 years
- **Projects must facilitate broader adoption of i) low-carbon approaches to the procurement of goods and services (e.g. development of criteria or statements of work) and/or ii) life-cycle analysis (LCA)**
- **Up to \$2M total is available to disperse. The application form and details are available on the GGF GCPedia page.**
- **A bilingual information session will be held November 15th (2-3 pm EST) for those who want to learn more. Please email ggf.fgv@tbs-sct.gc.ca to sign up.**
- **Submissions are due to the GGF by December 29, 2023.**
- **Eligibility:** open to departments and agencies that contribute to the GGF



Thank you!

Helpful Links

- Federal [Greening Government site](#)
- [Fleet - GCpedia](#)

Awareness and information guides:

- [NRCan](#)
- [Plug'n Drive](#)
- [CAA](#)

Fuel use and GHG emissions data:

- [NRCan](#)

Driver training:

- [Stantec/ NRCan ecoDriving online](#)

Interdepartmental fleet working group:

- **Fleet Green Solutions Team (FGST)**

Please email Vanessa to be added to the contact list.

Contact info

Chris Lindberg













Senior Advisor, Fleets, Centre for Greening Government
Treasury Board of Canada Secretariat / Government of Canada
Chris.Lindberg@tbs-sct.gc.ca / Tel: 613-292-4481

Vanessa Weber

Analyst, Centre for Greening Government
Treasury Board of Canada Secretariat / Government of Canada
Vanessa.weber@tbs-sct.gc.ca / Tel: 343-576-9868

Annex

Green Vehicle 101 Refresh

	ZERO EMISSION VEHICLES			
	ICEV CONVENTIONAL	HEV HYBRID	PHEV PLUG-IN HYBRID	BEV ALL-ELECTRIC
SOURCES OF ENERGY				
CONSUMPTION				
EMISSIONS				 NO EMISSION

Note:

HEVs reduce emissions and contribute to 75% purchase target but do not contribute to 2030 target

PHEVs can be operated without onsite charging (and BEVs in some circumstances)

Charging Stations:

- Level 1 – 120v: 8 km of driving range per hour.
- Level 2 – 240v: 30 to 50 km of driving range per hour
- Level 3 (DC Fast) – ≥ 480v: more than 100 km of driving range per hour

ENERGUIDE ESTIMATED EV RANGE FOR VEHICLES IN THE 2022-23 GMVOG

- PHEVs – 42 to 60 km
- BEVs – 373 to 499 km

Policy context for greening fleet

- **Key fleet greening policy context:**
 - Greening Government Strategy (GGS) – updated in 2020 (fleet commitment updated in 2022)
 - Policy on Green Procurement (PGP) - updated in 2018
 - TBS Directive on the Management of Materiel
 - Federal sustainable development strategy (Reflects commitments in GGS)
 - Departmental sustainable development strategies
- **Light-duty fleet procurement via Government Motor Vehicle Ordering Guide & Executive listing**
- **TBS, NRCan and PSPC meet regularly to collaborate on fleet greening activities**

TBS
<ul style="list-style-type: none">• Centre for Greening Government<ul style="list-style-type: none">• Lead and coordinate federal activities• Lead for GGS and PGP and related guidance and purchase requirements• Annual reporting• Greening government fund (GGF)• Office of the Comptroller General<ul style="list-style-type: none">• Directive on the management of materiel (Mandatory procedures for land vehicles). Balancing program and service delivery with best value.• Requirements for governance, planning, acquisition, operation and divestiture

NRCan
<ul style="list-style-type: none">• Greening Government Fleets program<ul style="list-style-type: none">• Technical analysis and support• Fleet telematics and analysis services• Charging infrastructure readiness assessments• Greening Government Fleets best practices• National Safety and Security fleet ZEV deployment and evaluation• Forward-looking market analysis and projections

PSPC
<ul style="list-style-type: none">• Industrial products and vehicles procurement directorate<ul style="list-style-type: none">• Light-duty and commercial vehicles procurement• Electric vehicle charging station (EVCS) procurement• Real property services – Greening Government<ul style="list-style-type: none">• EVCS for PSPC custodial properties• Green and Clean Technology Procurement

ON-ROAD FLEET COMMITMENTS (EFFECTIVE MARCH 31, 2022)

At least seventy-five per cent of new light-duty fleet¹⁷ vehicle purchases will be zero-emission vehicles (ZEVs)¹⁸ or hybrids, with the objective that the government's light-duty fleet comprises 100% ZEVs by 2030.¹⁹ Priority is to be given to purchasing ZEVs.

All new executive vehicle purchases will be ZEVs or hybrids. Priority is to be given to purchasing ZEVs.

Fleet management will be optimized to achieve the targets, including by exploring options for commercial vehicles, assessing ZEV charging infrastructure needs and applying telematics to analyze vehicle usage data on vehicles scheduled to be replaced.

Footnotes:

17 - As defined in Treasury Board Secretariat guidance, where one or more suitable option per vehicle group is available and considers operational feasibility.

18 - ZEVs include battery electric, plug-in hybrid and hydrogen fuel cell vehicles

19 Where necessary, Treasury Board Secretariat may exempt particular vehicles or locations where suitable ZEV options are not available to meet operational requirements. The purchase and fleet composition targets do not apply to the National Safety and Security fleet.

New fleet green reporting on Greening Government website

TBS developing a webpage with reporting on the fleet composition and HEV/ZEV performance by fiscal year end following a similar layout as GHG inventory.

- Data will also be accessible from the GoC's Open Data site.

Reporting – At the GoC level

- Overall performance against both fleet targets e.g. annual purchases and total composition.
- Proportion of fleet composition by vehicle type (passenger car, multi-purpose vehicles, pickup trucks, vans).

Reporting – At the Dept level

- Total new purchases by powertrain (ICEV, HEV, ZEV)
- Total light-duty fleet size by powertrain type

Key Results

- Narrative highlights from the data

Greening Government Inventory website - [LINK](#)

Progress	Facilities Scope: 1,2	Fleets Scope: 1,2	Security Scope: 1,2	Air Travel Scope 3	Procurement Scope 3	Methodology
----------	--------------------------	-----------------------------	------------------------	-----------------------	------------------------	-------------

Greenhouse gas emissions generated by federal conventional fleets

Operating a fleet results in the combustion of fossil fuels and the emission of GHGs. The Government of Canada has a large and diverse conventional fleet that includes:

- on-road vehicles and equipment, such as:
 - cars
 - vans
 - trucks
 - other vehicles
- off-road vehicles and equipment, such as:
 - marine vessels (boats and ships)
 - aircraft
 - other mobile equipment (for example all-terrain vehicles, lawn mowers and generators)

Federal conventional fleets consist of vehicles and equipment primarily used to transport people and cargo in the conduct of government business, and excludes fleet used for National Safety and Security operations.

Figure 7: Greenhouse gas emissions by federal organization for conventional fleet in fiscal year 2020 to 2021 and the percentage change in emissions compared with fiscal year 2005 to 2006

