

City Operations
Urban Planning and Economy

Edmonton

Overview of City Hydrogen Activities

WHAT'S NEXT

Edmonton Position in H2 Sector



Evolved Technology in Transit Sector

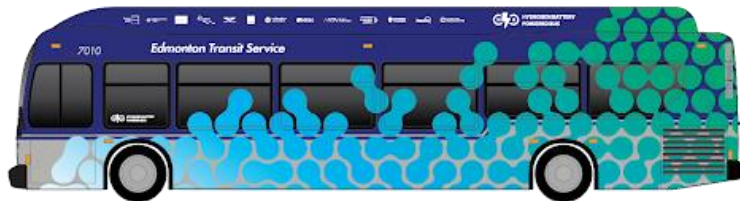


- Fuel Cell Technology
- Potential to meet program outcomes

Emissions Reduction Alberta (ERA) Opportunity



- Alberta Zero Emissions Hydrogen Transit Project (AZEHT)



HOW: THE APPROACH

- 1** FUELLING STATION
- 2** FLEET CONVERSION
- 3** TRANSIT GARAGE



1

FUELLING STATION



**Volume
dictates fleet
transition**



**Location for
future piped H₂
transition**



RFI to RFP



**Public vs.
Private access**

- Drive demand
- Build H₂ economy



**Partner for over
billion \$
program**



Edmonton

FUELLING STATION RFP

Vendors/respondents are to provide:



1

**End-to-end
Fuelling Station
Solution**

(e.g. build,
operations and
maintenance)

2

**A Reliable
Source
of H₂**

3

**Fuelling station
Maintenance for
contract duration**

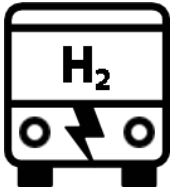
4

**Demonstrate
station expansion
and evolution**

Meet changing
needs of fleet and
private sector

2

FLEET CONVERSION



- Over 40% reaching retirement age
 - Up to 440 vehicles in next 4-6 yrs
- Centennial Garage
 - Up to 250 Vehicles
- New Transit Garage
 - Up to 350 - 400 Vehicles
- Represents opportunity of over 20 tons H₂/day

3

TRANSIT GARAGE



Kathleen Andrews Garage



Ferrier Garage



Mitchell Garage



Centennial Garage



Percy Wickman Garage

A new diesel-electric garage gives us the ability to grow our service and gain efficiencies at **ALL** garages.



Kathleen Andrews Garage



Ferrier Garage



Mitchell Garage



Centennial Garage



Percy Wickman Garage



NEW Diesel-Electric Garage



Kathleen Andrews Garage



Ferrier Garage



Mitchell Garage



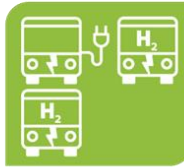
Centennial Garage



Percy Wickman Garage



NEW Diesel-Electric Garage



NEW EV Garage 2050

SEIZING THE OPPORTUNITY

- 10 year window to capitalize on the use of hydrogen
 - Being dubbed as “hydrogen gold rush”
- Expand to municipal fleet and facilities



World-leading hydrogen energy provider

- Fueling station is the catalyst
- Leading distributor of H2
- Transform and secure economy

Thank You

City Operations
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edmonton.ca/changeforclimate

The logo for the City of Edmonton, featuring the word "Edmonton" in white text on a dark blue square background.

Edmonton