

Other Hydrogen Initiatives

5,000 Vehicle Challenge - Led by Edmonton Global and Alberta Motor Transport Association

A “Challenge-Based Approach”, being developed by Edmonton Global, is intended to encourage regional competition. Project partners will work with Alberta’s Hydrogen Centre of Excellence to issue requests for consortia-based projects with the main goal to have over 5,000 hydrogen-use vehicles deployed in the Edmonton region by 2028. This will help to drive creation of hydrogen fueling infrastructure, help secure government funding support for vehicle conversion and fueling infrastructure and understand the economics and non-financial risks from the carriers’ perspectives. It also offers an opportunity to support the dual fuel conversion suppliers’ landscape and conduct technical due diligence on suppliers through field tests.

A Regional Advocacy Path for Regulatory Change - Edmonton Region Hydrogen HUB

The rapid evolution of the hydrogen economy will likely demand an equally rapid evolution of the regulatory environment. Led by senior administrations, informed by international experience and coordinated by the Hydrogen HUB, this initiative would build an understanding of current regulatory gaps and needs and would enable the development of a common set of priorities and supporting materials for advocacy use with regulating agencies at federal, provincial and industry levels.

Alberta Motor Transport Association (AMTA) Road Show - Led by Alberta Motor Transport Association

The AMTA has secured a number of heavy transport vehicles from a number of manufacturers that will be leased on a short-term basis to interested fleet operators (including the City of Edmonton) to test their suitability in real life long-haul conditions over the next two years.

ATCO Blending Project - Led by ATCO and Fort Saskatchewan

Using a limited area in Fort Saskatchewan to blend hydrogen into the existing natural gas distribution system, this project will evaluate carbon intensity standards, equipment standards and ultimately establish a commercial model for a hydrogen market through a common pipeline approach.

Dual Fuel Trials/Transitions - Led by Alberta Motor Transport Association, Edmonton and Strathcona

As part of ongoing discussion, Administration is exploring offering the City fleet as a platform to understand which heavy municipal fleet vehicles are best candidates for interim partial hydrogen conversion (e.g. Class 8 trucks, waste collection trucks, sanders/dump trucks, etc.) as well as investigating viable vehicle technologies for new and possible mid-life retrofit opportunities. There are also opportunities to coordinate vehicle technology purchases and fueling station commitments.

EIA Initiatives - Edmonton International Airports, City of Edmonton

Edmonton International Airport is developing its own onsite hydrogen vehicle strategy that may be complementary to the City's work and may lead to joint approaches to funders, regulators and industry stakeholders.

Pipeline Proof of Concept - Led by Strathcona County

A detailed feasibility study to explore construction of a pipeline from hydrogen supply in the Transmission Utility Corridor (TUC) to Millennium Place and along Streambank Ave that can serve demand for utility blending, fuel for the municipal and transit fleet, and heat and electricity at Millennium Place and the nearby municipal and transit facilities. This project would construct the pipeline, connect it to a utility blending gate, a fueling station, and Combined Heat and Power equipment in a first-of-a-kind commercial operation.

Pure Hydrogen Heat/Power for New Development - Led by Private Land Developers, City of Edmonton, Sturgeon, Strathcona

These projects will determine feasibility of a pure hydrogen-supplied greenfield residential development. This will support a complete understanding of public adoption, economic, regulatory and standards requirements (including appliances), and possibly explore different development models, such as district heat/power concepts.