



Evaluation of Potential and Readiness of Edmonton to Adopt Electric Vehicles

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Executive Summary

In April 2015, City of Edmonton had developed *Edmonton's Community Energy Transition Strategy* to help the city reach its ambitious targets of 50% and 80% emissions reduction by year 2020 and 2050 respectively compared to 2008 levels. In the *Energy Transition Strategy*, transportation sector was identified as one of the sectors with the biggest potential for emission reduction and adoption of electric vehicles are among the best mitigation strategy in this sector.

The applicability of technology in terms of compatibility with the unique climatic condition of the city as well as the potential impact of large number of electric cars on the electricity generation sector was assessed in this report. The results show that, although performance of the technology reduces in cold weather, it is adequate for the average travel distance of individuals in the city. The long-term impacts of a large number of electric vehicles on the electricity sector was found to be minimal and accounted for 0.5% of the overall electricity demand.

Experiences of pioneering countries in terms of supportive measures for promoting electric cars were studied and the most effective measures were prioritized based on the unique characteristics of the city. A road map was developed for the city to prepare for the large scale adoption of electric vehicles.