WHAT IS HYDRO-QUÉBEC DOING IN TRANSPORTATION ELECTRIFICATION?

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One constant: mobility will be electric
SIGNIFICANT PRICE DIFFERENCE BETWEEN ELECTRICITY AND GAS

<table>
<thead>
<tr>
<th>CONSUMPTION PER 100 KM</th>
<th>PRICE</th>
<th>COST</th>
<th>100 KM</th>
<th>CO₂ PER YEAR¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.2 liters</td>
<td>X $1.18 / liter</td>
<td>= $9.67</td>
<td></td>
<td>3.5 tons</td>
</tr>
<tr>
<td>20 kWh</td>
<td>X $0.0989 / kWh</td>
<td>= $1.98</td>
<td></td>
<td>negligible</td>
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</tbody>
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ANNUAL SAVINGS OF
$1,500 TO $2,000

¹. For 20,000 km per year
WHAT'S NEXT?
TOMORROW'S GRID – POWER EXCHANGE

EXPERIMENT USING ENERGY IN BATTERY WHEN VEHICLE IS PARKED AT HOME

- Interrupt or reduce charge (Demand response – V2G)
- Supply part of home in case of power failure (V2H)
- Supply power grid during peak hours (V2G)

EV CARS MAY BECOME AN OPPORTUNITY RATHER THAN A THREAT FOR THE GRID
PUBLIC TRANSIT

- Contribute financially to electrify public transit
  - Quick-charge all-electric buses – STM in Montreal
  - Quick-charge plug-in hybrid buses – STL in Laval
  - Analysis of various electric solutions available for public transit – AVT
  - 67-km light electric train – CPDQ Infra
  - In China, 6,000 electric buses equipped with TM4 motors
THANK YOU!

Hydro Québec