



Accelerating EV Adoption in Saskatchewan

Agenda

- Where this came from
- My first EV
- Low carbon economy
- Your Next EV
- Factors affecting range
- EV battery life
- Charging stations
- GHG emissions
- EV costs

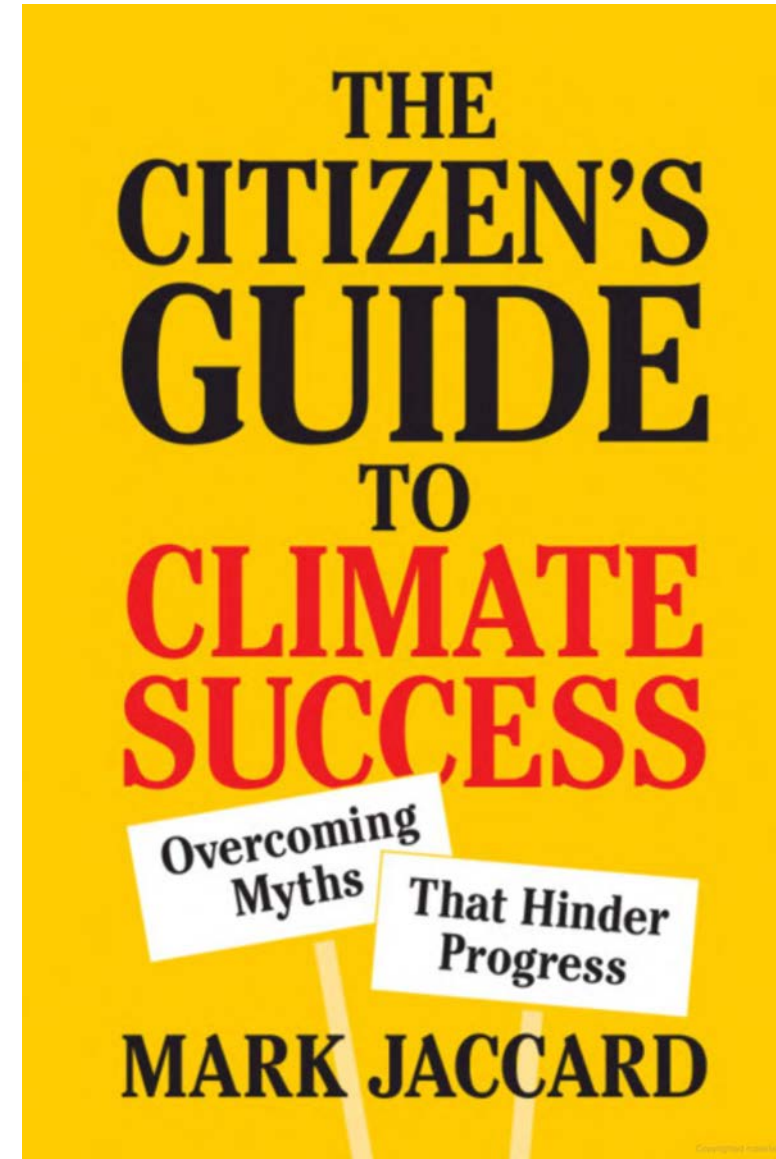






Pathways to a Low Carbon Economy

- Decarbonization of the grid
- Electrification of transportation



Your Next EV Sales Ltd.



Factors Affecting Range

- Temperature
- Speed
- Headwind
- Heating and cooling
- Payload
- Rolling resistance



Factors Affecting EV Battery Life



High Temperatures



Overcharging

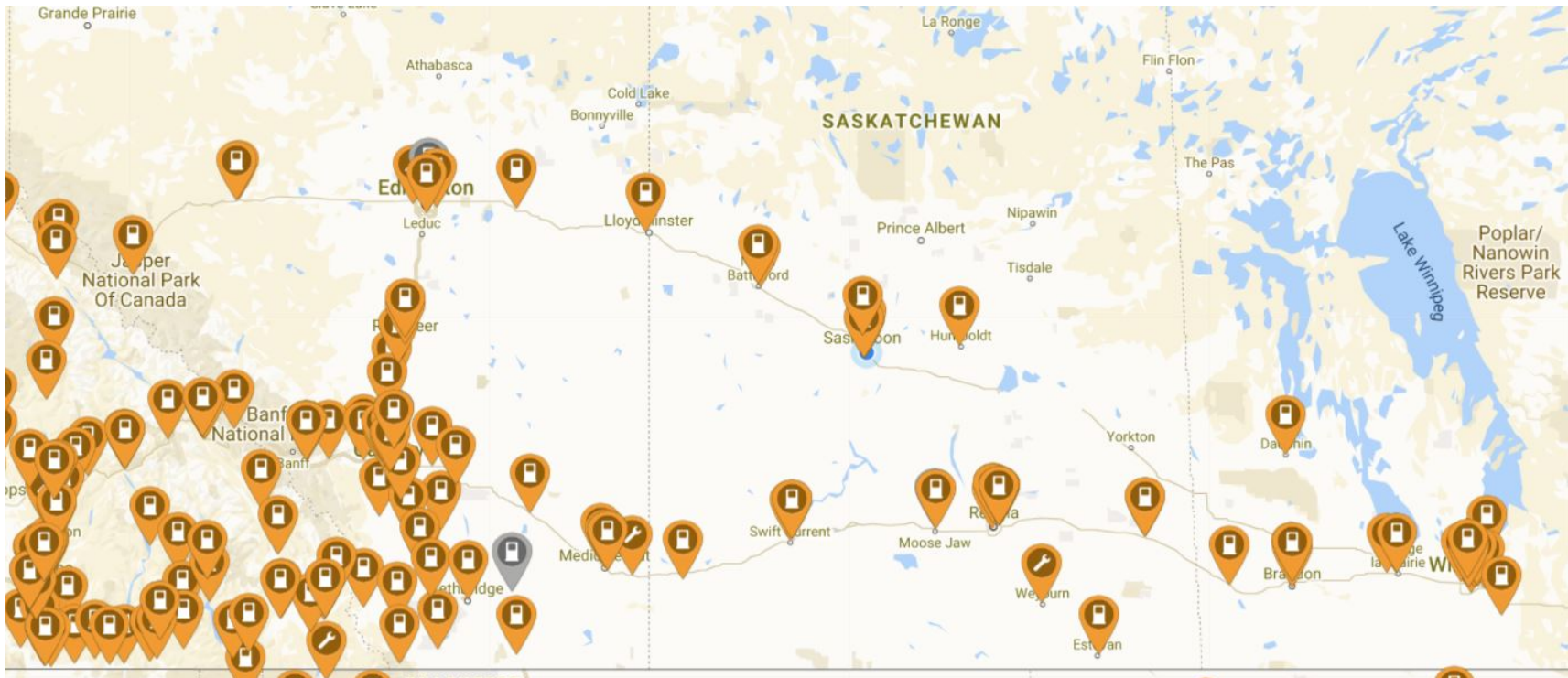


Deep Discharges



High Discharges

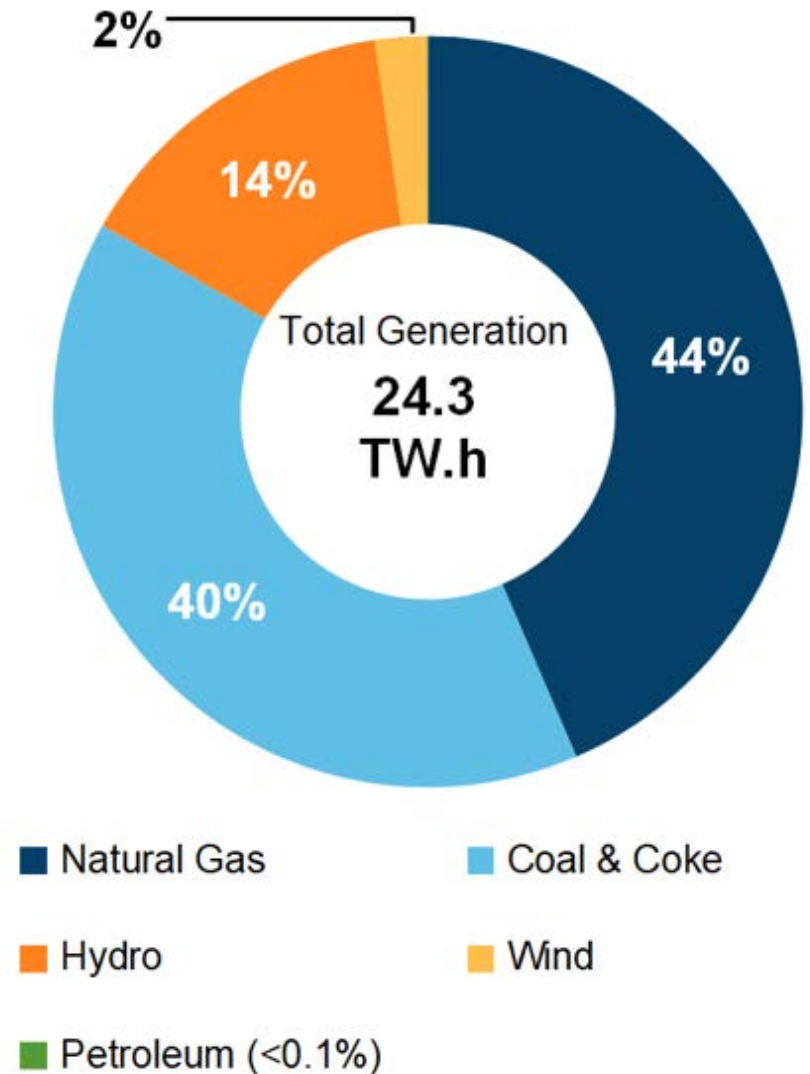
Where Are the DCFCs?



GHG Emissions in SK

- 2019 Nissan Leaf S
 - EPA 243 km/40 kWh
 - SaskPower grid intensity 0.641 kg/kWh*
 - **0.12 kg CO₂/km**
- 2011 Nissan Murano
 - EPA (combined) 10.3 l/100km
 - Gasoline 2.246 kg CO₂/l
 - **0.23 kg CO₂/km**
- Result
 - Leaf produces 52% of Murano GHG emissions

* SaskPower generation mix 2018



2022 Chevrolet Bolt LT Cost in SK

MSRP	\$38,198
Freight	1,800
A/C	<u>100</u>
Net Price	\$40,098
Fed rebate	<u>-4,504</u>
Price pretax	\$35,594

<https://ev.plugndrive.ca/vehicles>



SK Diesel Prices

Base \$/l	\$1.465
Federal tax	0.04
Prov fuel tax	0.15
Fed fuel charge	0.1341
GST	<u>0.089</u>
Total price/l	\$1.879*

* April 4, 2022 Saskatoon



SK Gas Prices

Base \$/l	\$1.248
Federal tax	0.10
Prov fuel tax	0.15
Fed fuel charge	0.1105
GST	<u>0.08</u>
Total price/l	\$1.689*

* April 4, 2022 Saskatoon

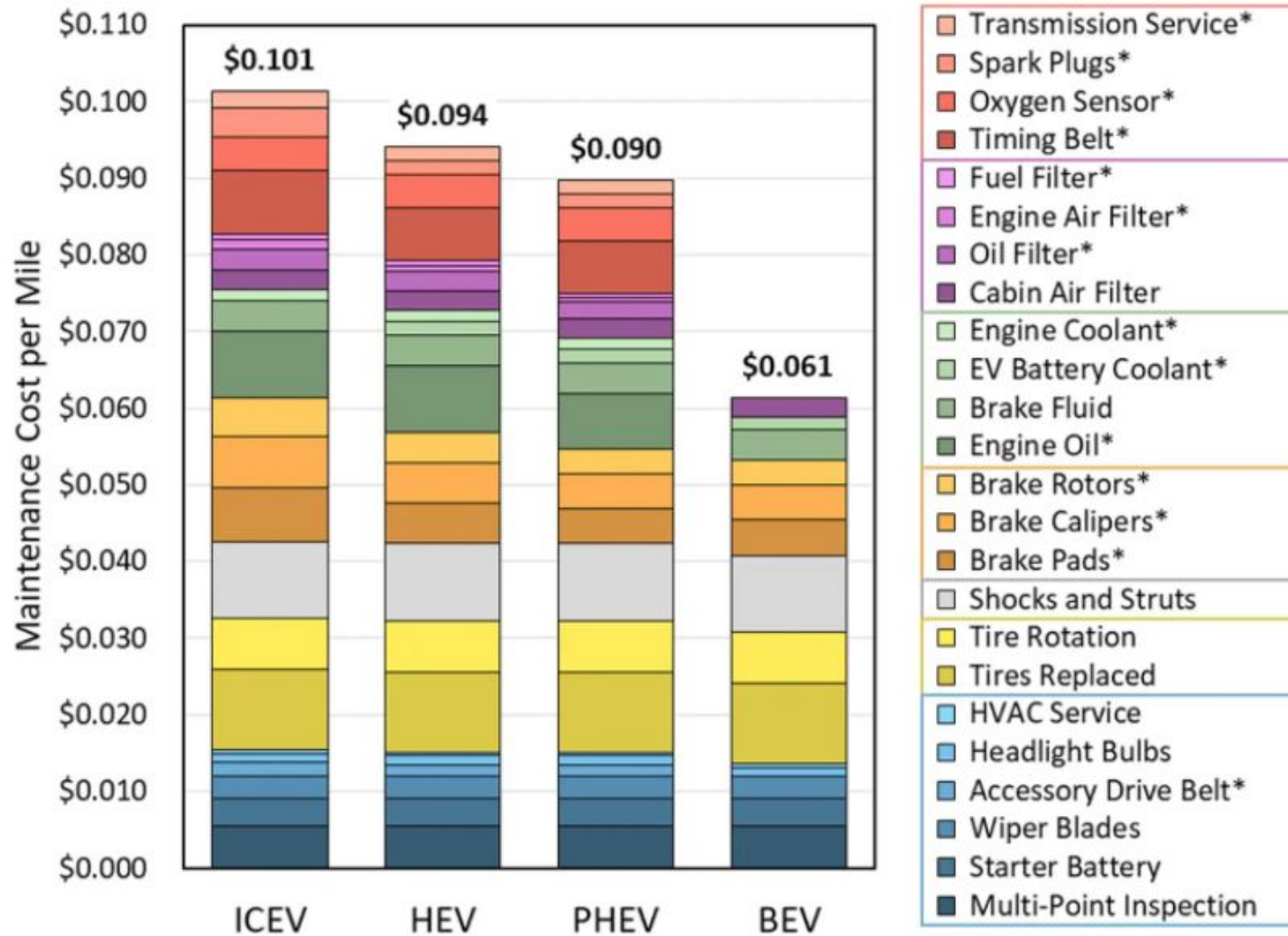


Fuel Costs

- 2019 Nissan Leaf S
 - EPA 243 km/40 kWh
 - SL&P cost \$0.1717/kWh
 - **\$0.033/km**
- 2011 Nissan Murano
 - EPA (combined) 10.3 l/100km
 - Gasoline \$1.689/l
 - **\$0.174/km**
- Result
 - Leaf fuel costs 20% that of Murano



Scheduled LDV Maintenance Costs

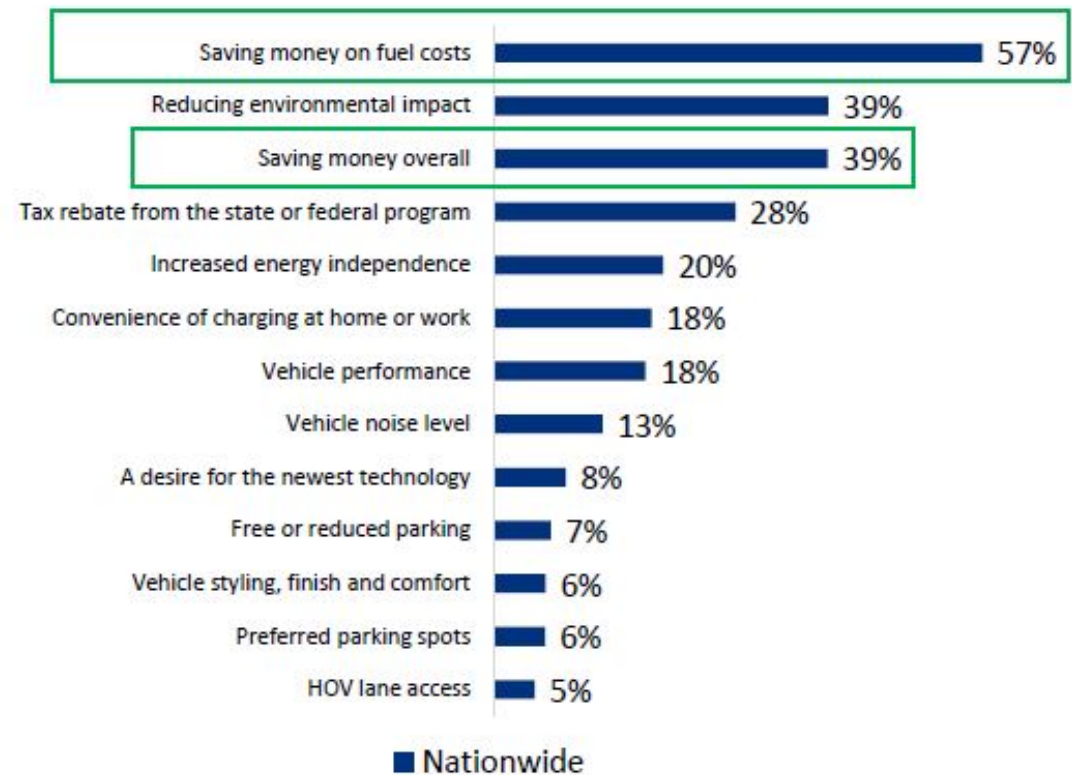


Why Drive an EV? (they do work here)

- Fuel savings
- Reduced GHG emissions
- Lower cost to operate
- Rebates
- Energy independence
- Charging at home
- Vehicle performance

But ...

- They cost more
- Range is a consideration



What Are Next Steps?

- Talk to a friend with an EV
- Join SaskEV, SEVA
- Test drive
- Shop for a car (new SK availability, longer range, rebate eligible)
 - Chevy Bolt EV, EUV
 - Hyundai Kona Electric
 - Hyundai Ioniq 5
 - Kia Soul EV (Regina)
 - Kia Niro EV (Regina)
 - Kia EV6
 - Nissan Leaf Plus (Prince Albert)

Discussion

