

Enviro Economics Dave Sawyer and Seton Stiebert

### Approach

- Aggregate all Tesla spending in Canada between 2018 and 2021.
- Map Tesla spending categories to economic sectors for conformance with Statistics Canada economic impact multipliers.
- Apply relevant economic impact multipliers to Tesla spending.
- ✓ Estimate direct, indirect, and induced employment and gross domestic product.
- Estimate avoided GHGs for the 2018 to 2021 period.



# Tesla's Canadian spending is increasing rapidly

Canadian operations spent

\$836M in 2021 Doubling in 3 years

25% annual growth

Spending is distributed across 51 economic sectors

#### **Tesla Spending in Canada** (Million 2021 CDN\$)



# A solid contribution to Canada's GDP\*

\$762M contribution to GDP in 2021

Equivalent to 0.7% of Canada's <sup>\$900</sup>
GDP

# Direct GDP is \$343M

 Equal to 2% of all GDP from Motor Vehicle and Parts Manufacturing



**TESLA's Contribution to Canada's GDP** 

\*GDP will be less than Tesla expenditures as GDP measures the value of final or finished output not including the value of intermediate inputs, which are foreign and domestically-produced goods and services used up in the production process.

## **Big employment gains**

- More than doubling in three years 6,645 total jobs in 2021 31% year-over-year growth
- Direct jobs are 3,100 Equal to 3% of all employment in the vehicle and parts manufacturing sector

#### 2021 6,645 2020 4,480 2019 3,550 2018 2,990 2,000 4.000 0 6.000 8,000 Indirect Jobs Induced Jobs Direct Jobs

**TESLA's Contribution to Canada's Employment** (Full Time Equvialent)

\*Total jobs includes direct, indirect, and induced jobs created. Note the direct jobs are not Tesla employment alone but also include the creation of employment in other enterprises due to Tesla spending. Indirect jobs are then supply chain impacts triggered by other enterprises as they respond to Tesla spending. Induced employment occurs when wages and profits are spent.

## Contribution to emissions reductions, 2018 to 2021

Cumulative 583,000 tonnes  $CO_2e$  or 2.9 tonnes per car annually

#### Based on:

- Emissions reductions compared to gasoline internal combustion engines (new average vehicle fuel economy).
- Assuming same mileage and average provincial grid emissions intensity factors.

#### A growing contribution to emission reductions with an increasing fleet size



# **Contribution to operational fuel savings, 2021**

# \$113M savings for TESLA fleet in 2021 Average savings of \$1,259 per vehicle

#### Based on:

- Average provincial residential rates and supercharger rates - compared to average provincial gasoline prices and new average fuel economy ICE vehicles.
- Average gasoline price in Canada in 2021 was \$1.33 per liter.
- Not including cost of installing at home residential charging equipment.
- Does not account for time-of-day charging.

#### TESLA Annual fuel savings 2021 by province

