Reducing Pollution, Powering our Future: Clean Transportation in B.C.
Outline

- CleanBC
- The path BC has taken
- **NEW!** Zero-Emission Vehicles Act
- How our market is evolving
- What is next
Cleaner Transportation

**Switch to ZEVs & Reduce carbon intensity of fuels**

- Bring down the price of clean vehicles
- Make it easier to charge or fuel a ZEV
- Train mechanics and electricians for ZEVs
- Speed up the switch to cleaner fuels

**ZEV Targets: 10% by 2025, 30% by 2030, 100% by 2040**
Budget 2019

- Light-duty vehicle incentive ($42m)
- Public charging and hydrogen ($20m)
- Home and workplace charging ($5m)
- Commercial vehicles ($10m)
- Fleet support LD ($6m)
- Training/ research + commercialization ($6m)
- Public outreach/implementation ($1m)
A Market Transformation Approach

- Incentives, infrastructure roll-out, education & awareness
- R&D, information, education and branding
- Evolving Regulated Standards

Targeted Market Position

Market Evolution Over Time

- Demonstration
- Early Markets
- Mass Deployment

Early Adopters

Standard Practice
BC’s ZEV Experience

It takes an ecosystem

Local gov’ts

Vendors, Installers (Infra)

OEMs

Industry Associations

- VEVA
- NCDAC
- Plug In BC
- SFU
- BC Hydro
- FORTIS BC
- MNP LLP
- University of Victoria
- BCIT
- CleanBC
- Ministry of Energy, Mines and Petroleum Resources
Clean Energy Vehicle Program

Since 2011, more than $194 million:
- Light-duty vehicle incentives: CEVforBC
- Commercial vehicle incentives: SUVI
- Infrastructure: Utilities, Plug-In BC
- Fleet support: Fleet Champions
- Public awareness: Emotive
- Research & training: colleges & universities
- Green dealer awards: NCDA
- Advanced Research and Commercialization
ZEV Supply Issues

- Topic with highest interest in the CleanBC public consultations
- 33% to over 50% of British Columbians say their next car likely a ZEV
- Summer 2018 study by Clean Energy Canada:
  - 40% of dealers had ZEVs on lots to purchase
  - Wait times up to 18 months
Zero-Emission Vehicles Act

- Provides consumers with more choice
- Meet increasing demand for ZEVs in a variety of models and price ranges
- Provide regulatory certainty for achieving CleanBC targets
ZEV Act Key Elements

- Sets provincial targets with annual public reporting
- Requires all new light-duty vehicles to be ZEVs by 2040
- Suppliers have to accumulate ZEV units to reach the annual targets
- Targets can be set in regulation for different vehicle classes
ZEV Act Key Elements (cont’d)

- Four ways to accumulate ZEV credits:
  - Selling new ZEVs - earliest “early action” credits is MY2019
  - Credit transfers between automakers
  - Initiative agreements
  - Purchase agreements

- Reporting, compliance and enforcement, including penalties and offenses
How the BC market is evolving

- ZEVs over 6% of LDV sales in first quarter of 2019 (over 15% in May)
- Over 20,000 ZEVs in BC
- Over double the public charging infrastructure compared with 2015
- Network of 6 public hydrogen fuelling stations by 2020
- Since May 1, doubling of uptake in incentive program
- Over 40 ZEV models available
- Moving along the market transformation curve from “innovators” to larger segment of “early adopters/early majority”
## 2018 Sample Automaker ZEV Sales in BC

<table>
<thead>
<tr>
<th>Automaker</th>
<th>Est. 2018 ZEV % of LDV Sales</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tesla</td>
<td>100%</td>
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<tr>
<td>Mitsubishi</td>
<td>40%</td>
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<tr>
<td>Nissan</td>
<td>7%</td>
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<tr>
<td>Kia</td>
<td>5%</td>
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<tr>
<td>Hyundai</td>
<td>4%</td>
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<td>GM</td>
<td>4%</td>
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<tr>
<td>BMW</td>
<td>4%</td>
</tr>
<tr>
<td>VW</td>
<td>3%</td>
</tr>
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What is next

- Development of regulations under ZEV Act
- Roll-out of expanded CleanBC programming
- Expanded outreach and infrastructure into more rural and northern regions
Thank you

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Visit: www.gov.bc.ca/cleanenergyvehicleprogram