ELECTRIC VEHICLES & MAINE’S TRANSPORTATION FUTURE

Benjamin Lake for E2Tech
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Types of electric vehicles

**CONVENTIONAL VEHICLES**
Use internal combustion engines. Fuel is injected into the engine, mixing with air before being ignited to start the engine.

**HYBRID ELECTRIC VEHICLES**
Powered by both engine and electric motor. The battery is charged internally through the engine.

**PLUG-IN HYBRID ELECTRIC VEHICLES**
Battery can be charged both internally and externally through outlets. Run on electric power before using the engine.

**ALL-ELECTRIC VEHICLES**
Powered only by electric motor with no engine. Have large traction battery and must be plugged externally to charge.

Source: Reuters Graphics and U.S. Department of Energy
EV 101
TRANSPORTATION EMISSIONS GROWING

Source: Maine Dept. of Environmental Protection
EVs ARE OUR FUTURE – HERE’S WHY:

➢ Regulations
➢ Supply
➢ Price
➢ Simplicity
Figure 1. EV annual passenger car and light duty vehicle sales in major regions

Source: International Energy Agency (IEA), IHS Markit
Figure 2. Outlook for annual global passenger car and light duty vehicle sales

Source: IEA, IHS, Deloitte analysis
MAINE’S CURRENT EV CHALLENGES

- Low sales
- Limited Models
- Limited Infrastructure
- Higher Purchase Prices
- Awareness / Perception
HOW CAN WE ACCELERATE MAINE’S EV MARKET AND TRANSFORM TRANSPORTATION?
Benjamin Lake
Sustainability Program Manager
Maine Clean Communities Coordinator
blake@gpcog.org