HOW BIG IS THE TREND?

• By 2025, > 50% of U.S. transit purchases will be EV, annual market size of $3.6 billion
• California planning to eliminate new demand for internal combustion transit by 2028
• Multiple city and transit resolutions pending that call for 100% EV Transit (Foothill Transit, Santa Monica, King County Washington, Seneca, Stockton...)
• Trend is independent of California policy, i.e. this is happening nationwide, red states and blue states
• International EV transit trend... China, Canada, U.K., major cities in Europe going EV
• Proterra has been approached by 50+ international partners
Cities throughout the world are transitioning to EV; China and the U.S. are leading. Proterra has 75% of the U.S. ZEV bus market.
OUR CUSTOMERS NOW

290 announced orders from 31 customers
100+ orders not yet announced
ECONOMIC & SUSTAINABLE

BUS TRANSIT
LOWEST COST PER PASSENGER

ELECTRIC VEHICLE
LOWEST CO₂ PER PASSENGER MILE

= Lowest Cost, Lowest Environmental Impact for Urban Transportation
EV HAS **DECREASED** IN PRICE 4.2% PER YEAR SINCE 2010
DIESEL HAS **INCREASED** IN PRICE > 3.4% SINCE 2005
BY 2025, THERE IS NO TRANSIT MARKET FOR DIESEL / CNG

![Price Graph]

Source: National Transit Database; represents 40-foot buses

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**Price ($k)**

**ACTUAL**

**FORECAST**

- Diesel Hybrid: 3.2%
- CNG: 3.5%
- Diesel: 3.4%
- EV: (4.2)%
ADVANCED BATTERY TECHNOLOGY HAS DECLINED IN COST TO THE POINT OF MASS ADOPTION IN TRANSIT

Sources: Navigant Research, green.autoblog.com, Electric Drive Transportation Association. xEV = PHEV, HEV, EREV and BEV.
The Learning Curve rate on Li-Ion battery technology is 14% (i.e. 2X volume = 14% savings).
The cost of battery packs will drop from $384 per kilowatt hour in 2015 to $182/kWh in 2025.
At $140 / kWh for EV, diesel / CNG fuel would have to be free to compete with EV maintenance savings alone.
The Proterra 35 and 40-foot Catalyst platform is designed to deliver a turn-key electric vehicle system, fully customized to meet the needs of your most demanding routes.

Proterra Catalyst®

Flexible Energy System

Multiple Charging Options

Financing & Services

Highest Performance

Ultimate Flexibility

Meet Every Route Need

Ease of Ownership
THE PROTERRA CATALYST® PLATFORM

Proterra’s use of advanced composite materials makes the Proterra Catalyst not only the lightest, most efficient vehicle, but the most durable and safe as well.

**Lightest** transit vehicles on the market
- Increased passenger seating capacity
  - 40’ vehicle: 44 seated passengers
  - 35’ vehicle: 28 seated passengers
- Lowest rear axle weight in industry
- Less damage to roadways

**Most efficient** in its class
- Highest efficiency of any vehicle in its class
- Longest range per kWh of energy storage
- Lowest fuel cost per mile
  - 1.61 - 1.89 kWh/mile

**Highly durable for greatest safety**
- Advanced carbon-fiber-reinforced composite material: used in Formula 1 race cars and marine vessels with proven durability
- Super strong, lightweight and impact-resistant
- Non-conductive and rust-resistant
MULTIPLE CHARGING TECHNOLOGY OPTIONS

On-Route Overhead Charger
- Variable-rate conductive charging
- Intelligent charging system adjusts to vehicle energy storage capabilities
- 350 kW maximum charge rate

Fast-Charging Technology
Enables overhead charging

Wireless Interface
Vehicle and charger automatically connect and communicate charging needs

Proterra Catalyst® vehicles can be configured for overhead and/or plug-in charging at a variety of rates, to maximize available charging opportunities.

Configuring for “Smart Range” – the Most Efficient Combination of Energy Storage and Charging Options
SAE Combined Charging Standard (J1772 CCS) for plug-in charging. Enables full interoperability across vehicle platforms.

50 KW per vehicle. Proterra has added 50 vehicles of power capacity in one Burlingame location via a 2.5 MW transformer upgrade. Cost $900,000… time < 6 months.

> 35,000 public EV charging stations deployed in the U.S. already
## Catalyst 40 FT. Total Cost of Ownership Advantage

<table>
<thead>
<tr>
<th></th>
<th>Proterra EV</th>
<th>CNG Bus</th>
<th>Diesel Bus</th>
<th>Diesel Hybrid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vehicle</td>
<td>$749</td>
<td>$470</td>
<td>$454</td>
<td>$650</td>
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<tr>
<td>Energy/Fuel</td>
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<td>Maintenance</td>
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<tr>
<td>TCO</td>
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<td>$1,196</td>
<td>$1,221</td>
<td>$1,428</td>
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<tr>
<td>TCO $'s/Mile</td>
<td>$2.47</td>
<td>$2.77</td>
<td>$2.83</td>
<td>$3.30</td>
</tr>
</tbody>
</table>

- **Battery-electric vehicles** have the **lowest operational lifecycle cost**:
  - High EV energy efficiency, low electricity rates, and high annual vehicle mileage combine to create significant fuel savings
  - 30% fewer parts dramatically reduce maintenance and operating costs
  - Electricity prices far more stable and predictable than volatile fossil fuel prices

### 12-yr Operational Savings per Bus
- $448k vs. Diesel
- $459k vs. Hybrid
- $408k vs. CNG

*est. over 12 year lifetime / $ in thousands, except TCO $'s/mile*
Proterra can help you find the right combination of financing tools that map to your procurement plans.

**Municipal Capital Lease**
A generally low-cost financing tool for local governments with investment-grade credits. Can be paid for with FTA funds. Offers structured ownership that enables you to own a Proterra bus at the end of the lease term.

**Operating Lease**
Operating leases allow you to pay for the use of a bus over time, with the option to permanently transition the bus into your fleet. No upfront capital costs.

**Bus Rental Program**
For fleet operators looking to “test drive” a Catalyst® bus before making a long-term commitment, Proterra offers the option to rent a bus for up to 12 months before making a long-term purchasing decision.

**Battery Lease**
A battery lease enables you to buy a Catalyst vehicle for roughly the same price as a diesel bus, putting the operating savings toward the battery lease. Proterra is responsible for the performance of the batteries through the life of the lease, removing operator risk.
With a vision to deliver clean, quiet transportation for all, Proterra makes zero-emission, battery-electric buses that help fleet operators decrease fossil fuel dependency and reduce costs.