



Worth to read: Ryders “Electric Vehicle - Total Cost to Transport Analysis”

Posted on 03.Sep 2024

In response to frequent inquiries from customers regarding the costs and benefits of converting commercial diesel vehicles to zero-emission vehicles (ZEVs), Ryder conducted an analysis to evaluate the total cost of transitioning from internal combustion engines (ICE) to electric vehicles (EVs) for U.S. commercial fleets.

Key Findings

Cost Analysis by Vehicle Class:

- **Class 4 (Light-Duty):** Modest cost increase of up to 5% for converting to EVs.
- **Class 6 (Medium-Duty):** Significant cost increase of 22% to 28%.
- **Class 8 (Heavy-Duty):** Substantial cost increase of 94% to 114%.

Mixed Fleet Conversion:

- **California:** Transitioning a mixed fleet (light, medium, and heavy-duty) of 25 vehicles results in a 56% cost increase.
- **Georgia:** The cost increase is even higher at 67%.

Economic Impact

- **Inflation:** The increase in transportation costs due to EV conversion could potentially add approximately 0.5% to 1% to overall inflation.

Challenges

- **EV Availability:** Limited production and availability of commercial EVs, with only an estimated 18,000 EVs out of 16.4 million Class 3-8 commercial vehicles in operation.
- **Charging Infrastructure:** Insufficient charging infrastructure with an estimated \$1 trillion investment needed to support electrification, according to the Clean Freight Coalition.

Conclusion

Ryder's analysis highlights the substantial cost increases associated with converting commercial fleets from ICE to EVs, especially for medium and heavy-duty vehicles. This transition may lead to supply chain disruptions and inflationary pressures. Ryder emphasizes the need for collaborative efforts among regulators, manufacturers, and technology innovators to develop cost-competitive and efficient EV solutions, along with exploring other alternative fuel technologies.

Read the full report: [Electric Vehicle Total Cost to Transport Analysis \(ryder.com\)](http://Electric Vehicle Total Cost to Transport Analysis (ryder.com))