gm envolve

Tested tough, designed for extremes.

Chevrolet Silverado EV proves its resilience in Alaska's harsh Arctic conditions.

Why cold weather resilience matters

Operating in extreme climates like Alaska's North Slope, where temperatures can plunge to -40°F or lower, poses unique challenges for fleet vehicles. For companies like Delta Leasing, which services industries in some of the harshest environments on the planet, vehicle reliability isn't just important — it's critical.

How it works

Working with GM Envolve, Delta Leasing set out to test whether fleet electrification could be both viable and valuable under Arctic working conditions. Delta Leasing deployed seven Silverado EVs — and the results speak volumes about the electric truck's design and engineering.

Performance in extreme cold

EVs are proven to operate effectively in temperatures as low as -40°F, backed by robust engineering and advanced battery management systems.

Helps optimize cold weather range

Heating your vehicle when it is plugged in, prior to driving, draws energy from the grid, rather than your battery – conserving energy and increasing range efficiency during the winter.

1 EPA-estimated up to 493 miles of range. Requires 2026 Silverado EV 8WT with Max Range battery pack. On a full charge. Actual range will vary based on several factors, including ambient temperature, terrain, battery age and condition, loading, and how you use and maintain your vehicle.

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Delta Leasing's Results

The Silverado EV exceeded Delta Leasing's expectations, delivering measurable benefits for the company and its customers.

REDUCED COSTS

Transitioning to EVs resulted in immediate cost savings on fuel and maintenance and diversified leasing assets for customers.

OPTIMIZED ENERGY EFFICIENCY

Typical daily driving distances of 100 miles or less — with the heat running and long idling hours — are well within the Silverado EV's available[1] range, helping improve personnel comfort and driver confidence.

DRIVER COMFORT

For electric vehicles, battery thermal management systems work to automatically keep the battery warm enough for operation and help to prevent damage. Plus, preconditioned cabins can help keep drivers warm and comfortable.

BUILDING CONFIDENCE IN EVs

Delta Leasing's commitment to sharing performance data and best practices builds confidence in the potential of electric vehicles among prospective clients. This includes a large nonprofit utility company based in Anchorage, Alaska, which has directly experienced the effectiveness and quality of the Silverado EV.

Delta Leasing: An extreme test case for EVs in Alaska

GM Envolve worked closely with Delta Leasing to identify unique challenges and develop a tailored solution to meet their operational needs.

Designed to withstand winter

Preconditioning and remote climate control

Heated cabs help keep drivers comfortable, and the ability to heat the interior while the Silverado EV is plugged in and using electricity from the source helps preserve battery range.

Heat pump technology

This technology captures heat from various sources — like regenerative braking[1] — and converts it into usable energy to be redeployed where it's needed, such as heating the vehicle's cabin or battery.

Flexibility and customization

Delta Leasing successfully trained its own technicians, a unique capability supported by GM Envolve. The Silverado EV's ability to adapt to specialized operational needs, such as manually shutting off some driver assistance features on featureless ice roads, further enhanced its utility.

Lessons learned

Delta Leasing's experience with the Silverado EV highlights valuable truths about fleet electrification in challenging conditions.

- **EVs can thrive under extreme weather conditions**
- **Remote preconditioning features help improve both driver comfort and energy efficiency**
- **Collaborations like Delta Leasing's with GM Envolve are critical for building the infrastructure and expertise needed for EV integration**

About Delta Leasing

Delta Leasing, a leader in vehicle and equipment leasing in Alaska, was one of the first Alaskan companies to adopt the Silverado EV in the frigid Arctic state. The company's efforts to collect and share data on EV performance in extreme conditions are helping to build confidence among other potential adopters.

"The Silverado EV surpassed our expectations with its capability and range. It was a pleasure to drive the truck in rough, industrial road conditions. We see a future for it in the Arctic."

– Mike Forsythe, Fleet Manager

Explore electrification

Delta Leasing is proof that electrification can succeed even in the most unforgiving environments. Curious about what EVs can do for your fleet? GM Envolve's data-rich Fleet Electrification Analysis can identify customized solutions for your specific challenges. Take the first step in transforming your fleet today. **Contact your GM Envolve account executive to learn more.**

1 Feature may be limited when the battery temperatures are extremely cold or hot or when battery is near full charge. See Owner's Manual for details.