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# The new energy battery industry is experiencing a cold winter

Could greater Bay technology solve EV battery problems in cold weather?

Chinese unicorn Greater Bay Technology, a subsidiary of China's state-owned Guangzhou Automobile Group (GAC), claims to have the solution for what is arguably one of the biggest drawbacks of EV batteries - loss of range in cold weather.

## Does cold weather affect EV range?

However, the range loss varies for different EVs. Manufacturers like Tesla use heat pumps and features like battery preconditioning to lower the impact of cold weather on the battery and range. We're curious to see if the new technology works as advertised, and which other manufacturers would purchase it.

### Do EVs lose range in cold weather?

One study that sampled 7,000 cars indicated that some EVs can lose up to 35 percent range in freezing temperatures. However, the range loss varies for different EVs. Manufacturers like Tesla use heat pumps and features like battery preconditioning to lower the impact of cold weather on the battery and range.

#### How hot does a Phoenix battery get?

The company's Phoenix battery comprises superconducting materials and thermal management, which allow the battery to heat from -4 degrees Fahrenheit to 77Fin five minutes, reported Bloomberg.

### How long does it take a battery to charge?

Huang Xiangdong, co-founder and chairman of Great Bay Technology, claimed that the battery operates like normal and charges in under six minutes in all climates.

#### Is the Phoenix battery a good battery?

Remember that China's CLTC testing cycle is usually more optimistic than EPA, whose test results appear to be comparatively closer to the real-world driving range. Although the Phoenix battery's all-weather capability and heat management are aspects certainly worth looking into.

The battery market is experiencing rapid growth and innovation, driven by increasing demand for energy storage solutions. In the Net Zero Scenario, installed grid-scale battery storage capacity expands 35-fold between 2022 and 2030 to almost 970 GW. Around 170 GW of capacity is added in 2030, up from 11 GW in 2022.

Milestones and Emerging Battery Industry Trends. The past year was significant for the global battery industry, with passenger electric vehicle (EV) sales reaching over 10 million units, marking a 32% increase from the previous year, despite rising interest rates. This growth coincided with a 25% decrease in the average price of new EVs due to ...

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With the rate of adoption of new energy vehicles, the manufacturing industry of power batteries is swiftly entering a rapid development trajectory.

Northeastern University battery experts Juner Zhu and Hongwei Sun are working to prevent similar occurrences in the future -- focusing, respectively, on what happens when batteries are exposed to extreme cold temperatures, and developing a temperature management system to regulate battery temperatures.

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As winter's grip tightens, EV owners and industry innovators are keenly observing the impact of cold weather on electric vehicle battery range. The issue extends beyond mere inconvenience, posing a significant technical challenge that puts our current technological advancements to the test.

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