

Leading the charge in the national strategy toward greener driving future

Yang Jian

Everyone agrees that electric vehicles are a positive response to tackling greenhouse gases, and China is a leader in their manufacture. But new technologies also come with teething problems.

Buyers of new energy cars face a surge in battery-charging costs, travel hardships during peak holiday seasons and some difficulties in getting their vehicles insured at reasonable prices.

By the end of last year, China had more than 10 million new energy vehicles, comprising a significant portion of the world's total electric fleet.

The stunning growth of the industry has been fueled by government initiatives, including investment in charging infrastructure and stringent emissions controls on gasoline-powered cars.

Accompanying the rapid growth has been a rise in fees at battery-charging stations.

A screenshot showcasing a charging rate of 2.98 yuan (42 US cents) per kilowatt-hour at the Dayu service area in Jiangxi Province sparked widespread online discussion about whether the cost of driving electric cars might soon eclipse that of traditional internal combustion vehicles.

Some Shanghai drivers have also reported surging EV charging prices, with rates rising from 1.4 yuan per kilowatt-hour to as high as 2.2 yuan. Similar price increases have been noted in the cities of Guangzhou, Chongqing, Zhengzhou and Qingdao — in some cases doubling.

“Such hikes, compounded by reduced winter battery efficiency, significantly increase costs,” a taxi driver told

Shanghai Daily.

Some drivers have to go to great lengths to find cheaper charging options amidst rising prices.

Operators of charging stations, many of them privately owned, contend they have had to raise prices to cover the high cost of charging infrastructure development and maintenance. The stations initially set prices low to capture market share in a highly competitive environment.

Increased prices also followed a revised electricity-pricing structure announced last May by the National Development and Reform Commission, which reclassified large charging stations as “industrial users” and subjected them to higher rates.

The recent Spring Festival travel rush also highlighted some of the logistical nightmares faced by electric car owners. Stories of prolonged waits for ferry crossings in the southern island province of Hainan painted a somewhat grim picture of driving electric cars during peak travel times.

Due to the risk of fires that the lithium-ion batteries pose, limited slots on ferries are allocated to electric cars.

Yan Lei and her family, among other electric vehicle owners, waited four hours to board a ferry to leave Hainan at the end of the holiday. Many electric car drivers, fearing they would miss their scheduled ferry, drained battery charges while circling in nearby areas as they waited for their turn at crossing, Yan said.

As of 11am on February 18, the first work day after the Chinese New Year holiday, about 5,600 vehicles were still waiting to leave the island, with an expected clearing time exceeding seven hours.



New energy cars are being charged at a station in north China's Tianjin city. — IC

Despite the pitfalls, driving electric vehicles to Hainan is popular due to the island's higher gasoline prices and well-developed charging infrastructure. Over half of the vehicles in Hainan are electric cars, the highest rate among all provinces in China.

Meanwhile, heavy snowfall in central province of Hubei ahead of the Chinese New Year left some electric vehicle drivers stranded with over 30 hours of road congestion.

China has over 2 million public charging piles, yet the number falls short of meeting demand during peak travel times, such as the Spring Festival holiday. Long queues appeared at charging stations along the highways.

Battery life in cold weather can be problematical. To conserve power, many drivers had to turn off heating.

Low temperatures affect battery performance and charging speed, doubling the time

needed for fast charging. In cold conditions, batteries drain even when a car is parked.

Moreover, the high torque of electric-car motors makes them prone to slipping in snow, especially rear-wheel-drive models.

Car insurance also bedevils electric car owners. Insurance costs for electric vehicles have gone up significantly, with some car owners seeing their renewal rates jump by half.

Insurance companies said the increase is because fixing the high-tech parts in electric vehicles costs more. Electric cars also tend to be involved in more accidents due to their fast acceleration, according to the insurers.

A local driver surnamed Chen, who bought a Tesla Model Y in February last year and uses it for commercial purposes, told Shanghai Daily that he received no response from his insurance company after inquiring repeatedly about

renewing his insurance. His insurer eventually explained that his driving distance exceeded 30,000 kilometers and he had two traffic violations to boot, making him a “high risk” in company's algorithms.

Another major insurer quoted Chen 12,000 yuan for coverage, compared with 7,000 yuan for the first-year insurance cost, a price Chen found absurd. Eventually, he opted for a smaller insurance company, securing a more reasonable rate.

Zheng Xin, a Tongji University associate professor, told Jiefang Daily that uncertainty about risks and the cost of paying claims keep insurance prices high for electric vehicles. Some insurers, he noted, are starting to develop personalized insurance products for the vehicles.

As China leads the charge toward a greener automotive future, obstacles demand attention from policymakers, industry stakeholders and the public, according to Wang Yao, the secretary general of the China Electric Vehicle Charging Infrastructure Promotion Alliance.

Better charging infrastructure, longer battery life and fair insurance practices are crucial steps in reaching the nation's goal of green driving.

Wang recommends introducing high-capacity charging stations along highways, modernizing existing facilities and increasing the number of stations in heavily trafficked areas, particularly during peak travel periods.

He also notes the importance of simplifying the installation of charging units in residential areas, so that drivers can pay for their battery charging in the same way they pay for home electricity bills.