

China

Purchase Subsidies for New Energy Vehicles

OBJECTIVE

Accelerate the development and adoption of environmentally friendly and energy-efficient transport. By offering financial incentives to electric vehicles (EVs), plug-in hybrid electric vehicles (PHEVs) and hydrogen cell electric vehicles (HCEVs), the Chinese government aimed to reduce the country's dependence on fossil fuels, improve air quality, and support broader environmental sustainability and innovation within the automotive sector. The subsidy standard is determined based on the basic price difference between new energy vehicles and similar traditional vehicles. It declined year by year in line with factors such as scale effect and technological progress.

COUNTRY

China,
2013 – 2015

SECTOR AND APPROACH

Transport; Incentive

SOURCE

[Purchase Subsidies for New Energy Vehicles \(NEVs\)](#)

DESCRIPTION

The central government administered the subsidies in partnership with local authorities, who distributed funds to purchasing individuals and companies. The incentive was designed to reduce the high initial cost of EVs, PHEVs, and HCEVs, making them more accessible to a wider consumer base. The target groups for the incentive were consumers, manufacturers, and local governments. From 2016 to 2020, [the subsidies were reduced](#) and in 2024 they were replaced by [a tax reduction scheme](#).

UNIQUE ASPECTS OF THE INCENTIVE

The incentive represented significant financial support, which led to a substantial increase in vehicle sales and market share. Additionally, the scalability of the subsidy allowed it to evolve in response to technological advancements, with subsidy levels being adjusted as vehicle performance improved (e.g., better battery life, longer ranges, lower production costs), ensuring continued support for NEVs adoption while aligning with market developments.

Furthermore, the incentive worked in conjunction with other supporting measures, such as investments in charging infrastructure and incentives for manufacturers, creating a comprehensive ecosystem supporting the growth of the NEV market. Over time, the policy was phased out and replaced by other measures such as tax incentives.

RESULTS

[Research has shown](#) that the subsidies launched in 2013 and phased out from 2015, led to a sizable uptake of domestically produced NEVs and increased consumer awareness. Estimates show a high marginal subsidy cost of USD 712 per tonne of reduced CO₂ emissions, but there are substantial long-term benefits from the emergence of clean and scalable technologies. As a result, NEV sales increased sharply – from approximately 17 600 units in 2013 to more than 330 000 units in 2015 – making China the largest NEV market in the world by 2015.

The incentive likely spurred the proliferation of charging infrastructure – by 2020 more than 1 million charging stations had been installed across the country. Domestic manufacturers have made significant progress in reducing vehicle costs, increasing energy efficiency, and improving driving ranges.

LESSONS LEARNED

Over time, the government has reduced subsidy levels to avoid creating market dependency. This process has required careful management to ensure that consumers and manufacturers are still incentivised to adopt NEVs even as financial support decreases.

While some regions have offered more generous subsidies than others, this has led to uneven adoption of NEVs across the country. To address this issue, the government has worked to standardise subsidy levels and ensure more equitable support across regions. The expansion of charging infrastructure has also been a significant factor in the programme's success. However, gaps remain in less-developed areas, where access to charging stations is limited.

ALIGNMENT WITH REGULATORY AND POLICY FRAMEWORKS

The subsidies are complemented by other measures, such as tax incentives for manufacturers, low-interest loans, and research and development grants, which support the growth of the NEV industry.

The NEV subsidies also align with China's national environmental goals, which include reducing air pollution and the country's dependence on oil imports while lowering carbon emissions.

IMPLEMENTATION AND ENFORCEMENT

The central government allocates funds to regional authorities, who are responsible for distributing subsidies to consumers and manufacturers. The subsidy amount varies based on the type of vehicle and the specific region, with each locality setting its own criteria and guidelines for disbursement.

Eligibility for the subsidies is determined based on the vehicle's energy efficiency, battery performance, and driving range. To ensure the correct allocation of funds, the government monitors and evaluates the incentive regularly. Local authorities are tasked with conducting inspections to verify that vehicles meet the necessary criteria and that subsidies are distributed fairly and efficiently.