



A Comparative Study on India's Green Tax Policies Vis-a-Vis China with Reference to Environmental Justice in the Automobile Industry

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ABSTRACT

As part of green economics, taxes are imposed on emissions of pollutants that adversely impact the environment and public health to reward more innovative, environmentally sustainable, and low-carbon resource use. There are still many nation-states testing the concept of green taxation. Many environmental performance indicators place India low on the list of countries with the worst pollution. One of the main sources of pollution is vehicle exhaust. Green taxes will be imposed on older motor vehicles under guidelines released by the Indian government in 2021. The United Nations Framework Convention on Climate Change received the Indian Nationally Determined Contribution Report in 2022. Taxonomies and low-carbon transport systems were prioritized in India, and incentives and tax breaks were offered to encourage the manufacture and use of vehicles that consume more ethanol. Academic discussions and literature on the subject are still lacking among the masses. Researchers intend to analyze the legal and economic measures taken by the Indian Government to curb vehicular pollution against this background. Due to its significant contribution to air and water pollution, as well as greenhouse gas emissions, the automobile industry has come under increasing scrutiny in recent years. India and China, for instance, have implemented green tax policies to reduce the automotive sector's environmental footprint and promote environmental sustainability. These policies are effective, but not all of them address the disproportionate impact of environmental injustice on vulnerable populations. Specifically, this study examines the impact of Indian green tax policies on environmental justice in the automobile industry as compared to those in China. A key aim of this study is to provide insights into the strengths and weaknesses of the green taxation policies adopted by each country in the automotive sector, as well as their implications for achieving environmental justice, by analyzing the scope, enforcement, impact on vulnerable communities, industry implications, and alignment with international commitments.

INTRODUCTION

Producers/polluters do not bear the cost of pollution associated with the creation of their products. In addition to climate change, impaired health, and noxious odors, we are all responsible for pollution's negative effects. There is a potential to reduce pollution with indirect taxes, such as taxes on alternative policies or related goods like authorized technology standards, but the costs may be quite high (Lehmann 2012).

It would be ineffective for drivers to make sure the pollution control equipment in their cars is maintained if the gasoline tax was raised to reduce environmental damage caused by automobile emissions. Increasing pollution control equipment taxes on direct emissions is a cost-effective way to make sure those who need to work towards reducing pollution start doing so. Those who find pollution reduction

expensive will continue to pollute and pay more taxes as a result, while those who find it less expensive can reduce their pollution and, therefore, pay less taxes. Green taxes are not the only alternative to tradable permits (Carattini et al. 2017).

Due to the issuance of a certain number of emission permits, it is as cost-effective as levying direct taxes. As a result, polluters can trade these permits. Permit prices are similar to taxes in that polluters who find it expensive to lower their emissions purchase permits that allow them to keep emitting pollutants instead. Before selling their unused permits, those who can reduce emissions at a lower price can reduce emissions.

THE RESEARCH PROBLEM

The rapid industrialization, urbanization, and economic growth of India and China have created environmental

challenges. To counteract environmental degradation, both countries have implemented green tax policies. The effectiveness of these policies, however, remains to be evaluated in terms of their effectiveness in addressing environmental justice concerns. Green tax policies in the automobile industry are explored and compared in this research problem.

RESEARCH OBJECTIVES

1. To assess the environmental justice implications of green tax policies in India and China, focusing on their impact on different socio-economic groups and vulnerable populations in the automobile industry.
2. To explore the institutional and governance factors influencing the implementation and effectiveness of green tax policies in India and China, including issues of transparency, accountability, and stakeholder engagement in the automobile industry.
3. To synthesize the findings into policy recommendations aimed at enhancing the environmental justice outcomes of green tax policies in India and China, considering the unique contexts and challenges faced by each country.

SIGNIFICANCE OF THE STUDY

Environmental justice in India and China is a topic of utmost importance in this study, which examines the effects of green tax policy on environmental justice. Using the automobile industry in both countries as a case study, we examine green tax policies to identify their strengths and weaknesses and to identify opportunities for enhancing environmental justice outcomes. Researchers will develop policy recommendations based on the findings of the study to support the development of more equitable and sustainable environmental governance in India, China, and other similar cases.

GREEN TAX POLICIES IN INDIA

Environmental pollution varies significantly among Indian states in terms of its extent and source. The Supreme Court of India recognized the right to a pollution-free environment as part of the fundamental right to life underlying Article 21 of the Indian Constitution in *Mehta v. Union of India 1986*. This method of reducing carbon emissions and their impacts on the environment is referred to as the carbon tax on fossil fuels. Even though driving does not pose any inherent danger or danger, drivers and other polluters are responsible for any pollution and health risks resulting from their actions. Ecosystem management policies that combine multiple methods and instruments are hybrid policies. Regulations such as environmental taxes, saleable emission permits,

and minimum environmental standards are key, as well as incentives for renewable technology enhancements in the manufacturing sector (Rissman et al. 2020).

Environmental concerns in the automobile sector have been addressed by India through policies and initiatives, including green taxation measures. These policies encourage clean and fuel-efficient vehicles, along with discouraging pollution-generating vehicles. Indian automobile policy on green tax includes the following aspects (Sulkowski et al. 2016):

Vehicle scrappage policy: As part of its voluntary vehicle scrappage policy, the Indian government proposed retiring old and inefficient vehicles from the road. Old vehicles were to be scrapped voluntarily at authorized scrappage centers under this policy. To encourage participation in the scrappage program, incentives were offered, including discounts on new vehicles, road tax rebates, and scrap value for old vehicles. A green tax was also proposed to be imposed on old vehicles as part of the scrappage policy. Depending on the age, type of fuel, and emissions of a vehicle, a green tax would be imposed. Essentially, the green tax disincentivizes the use of older, more polluting vehicles and encourages the use of cleaner, newer ones. In addition to reducing emissions, improving air quality, and conserving natural resources, the vehicle scrappage policy and green tax were intended to reduce vehicular emissions and improve air quality. To combat air pollution and mitigate climate change, the policy encouraged the retirement of old vehicles and the adoption of newer, greener vehicles (James et al. 2023).

Goods and Services Tax (GST): GST replaced multiple indirect taxes in 2017 by the Indian government. Various goods and services, including automobiles, are taxable according to different tax slabs in the GST regime. EVs are more affordable and more widely adopted due to lower GST rates compared with conventional vehicles (Revathi & Aithal 2019).

FAME India scheme: To promote the adoption of electric and hybrid vehicles, the Indian government launched the Faster Adoption and Manufacturing of Hybrid and Electric Vehicles (FAME) India scheme. The purpose of this scheme is to make electric and hybrid vehicles more affordable by providing incentives to manufacturers and buyers. Tax benefits and subsidies are among these incentives (Sangodkar 2021).

Green cess: Vehicles with high pollution levels are subject to a green cess or pollution tax in some Indian states to discourage their use. Engine capacity, age, and emissions are usually factors that determine the amount of cess. A fuel-efficient and cleaner vehicle is encouraged by this additional tax (Singh & Gahlot 2023).

BS-VI emission standards: In April 2020, Bharat Stage VI (BS-VI) emission norms were implemented across the country to reduce vehicular emissions. To comply with these stricter emission standards, automobile manufacturers must produce vehicles that emit fewer pollutants and have cleaner engines. Pollution reduction has been achieved by adopting advanced emission control technologies in vehicles as a result of BS-VI compliance (Gajbhiye et al. 2023).

Incentives for scrappage: To phase out old and polluting vehicles, the Indian government implemented a vehicle scrappage policy. By offering discounts on vehicle purchases and reducing registration fees for new vehicles, this policy encourages owners of old vehicles to scrap them and purchase new ones (Singh et al. 2021).

Research and Development incentives: R&D incentives and grants are provided by the government to encourage the development of hybrid and electric vehicle technologies in the automobile sector (Wu et al. 2021).

Incentives like these are intended to encourage innovation and the development of cleaner, more sustainable transportation solutions. India's green tax policies aim to reduce pollution and greenhouse gas emissions from the transportation sector and encourage the adoption of environmentally friendly vehicles. In order to achieve India's sustainability goals, these policies are crucial. In order for green tax policies to be successful in the long term, it is important to monitor their effectiveness and make necessary adjustments. India has a number of green tax policies that apply to automobiles. As a result of these laws, pollution levels are expected to be reduced, fuel-efficient vehicles will be adopted, and sustainable transportation practices will be promoted. Green tax policy in the automobile sector in India is governed by the following laws and regulations:

1. **Motor Vehicles Act, 1988:** India's Motor Vehicles Act governs road transport and vehicles. Regulations provide for the registration and taxation of vehicles, as well as safety and environmental standards. It has been amended over the years in order to incorporate provisions related to green taxation and emission standards (Bansal & Bandivadekar 2013).
2. **Central Motor Vehicles Rules, 1989:** In addition to detailed provisions regarding vehicle standards, specifications, and registration procedures, these rules are based on the Motor Vehicles Act. Vehicle fuel efficiency standards, emissions regulations, and pollution control devices are also covered in the rules (Freund 2007).
3. **Bharat Stage Emission Standards:** There are a series of emission standards known as Bharat Stage (BS)

norms that regulate what is allowed as far as pollution is concerned from vehicles in India. Carbon monoxide (CO) is one of the pollutants that are included in these standards, as well as hydrocarbons (HC), nitrogen oxides (NOx), Sulfur oxides (SOx), and particulate matter (PM). Vehicle emissions have been reduced, and air quality has improved thanks to stricter BS norms (Anchan 2018).

4. **Goods and Services Tax (GST) Act, 2017:** Taxes on goods and services in India are governed by the GST Act. Automobile taxes, including those on electric and hybrid vehicles, are included in the act. EVs are more affordable and are incentivized to be adopted because GST rates are lower than for conventional vehicles (Stephens et al. 2018).
5. **Finance Act:** Various taxation and incentive provisions may be included in the annual Finance Act as part of the Union Budget. Automobile and automotive component excise duties, customs duties, and other tax changes may affect these changes (Cnossen 2001).
6. **State Motor Vehicles Taxation Laws:** State laws and rules concerning motor vehicle taxation in India are in addition to the central laws. In addition to road tax, registration fees, and pollution taxes, states have the authority to charge vehicles a variety of fees and taxes. Polluting vehicles are being discouraged in some states by green cesses or pollution taxes. Green tax policies in the automobile industry in India are governed by these laws and regulations. In this way, environmental concerns and public health goals are balanced with the economic interests of the automotive industry. To reduce vehicular pollution and promote sustainable mobility solutions, stakeholders must obey these laws (Singh & Gahlot 2023).

IMPACT OF GREEN TAX POLICIES ON VARIOUS SOCIO-ECONOMIC GROUPS IN INDIA

Socio-economic groups in India may be affected differently by automobile green taxes based on factors such as income levels, access to alternative transportation, and geographic location. Various socioeconomic groups may be affected differently. People who use older and more polluting vehicles due to affordability constraints may face additional financial hardships if a green tax is imposed. A higher tax or upgrading to a cleaner vehicle may be too expensive for them. It may be difficult for low-income people to switch to greener modes of transportation due to limited access to public transportation. The green tax may be levied without viable alternatives, putting them at risk. Older vehicles subject to higher tax

rates may also be affected by the green tax, particularly if they belong to a middle-income family. To accommodate the increased tax burden, they might have to reevaluate their budgets (Gupta & Köhlin 2006).

Although middle-income individuals may be more able to afford cleaner vehicles than low-income individuals, they may still face difficulty purchasing electric or hybrid vehicles if the upfront costs are high. There is a possibility that individuals with high incomes may be in a better position to absorb the costs. Vehicle owners may even see it as an incentive to upgrade to cleaner and more fuel-efficient vehicles due to the environmental impact of the green tax. Investing in electric or hybrid vehicles may be more appealing to them since they often come with tax benefits. Market trends can also be influenced by high-income individuals' purchasing decisions, which can lead to increased demand for eco-friendly vehicles and technological advances. Often, people in rural areas are dependent on their own vehicles for transportation because public transportation is limited. Rural communities may be disproportionately affected by the green tax since they typically lack access to cleaner vehicles and alternative modes of transportation. Green taxes may have a lesser impact in urban areas that have better access to public transportation and rideshare services. For some segments of the population, affordability remains a concern when it comes to investing in cleaner vehicles or switching to greener modes of transportation (Lusk et al. 2023).

The green tax may present some short-term challenges in terms of economic growth, but the long-term benefits of reducing air pollution, improving public health, and mitigating climate change can be positive for all groups of society. By improving the quality of air and living environment, productivity can be improved, healthcare costs can be reduced, and overall quality of life can improve. As a result of the impact of the green tax on socio-economic groups in India, policy measures should be designed to ensure equitable access to cleaner transportation alternatives, especially for marginalized groups, while also considering affordability constraints. A smoother transition to greener mobility solutions may require subsidies, incentives, and support mechanisms (Alvarez et al. 1997).

FACTORS RESPONSIBLE FOR THE IMPLEMENTATION OF GREEN TAX POLICIES

Green tax policies in India are influenced by the following factors:

- **Environmental challenges:** Deforestation, pollution, and resource depletion are among the significant environmental issues facing India. By encouraging environmentally friendly practices and reducing

pollution, green tax policies aim to address these challenges (Barbier 2011).

- **Public health Concerns:** Public health risks in Indian cities are mainly caused by poor air quality caused by vehicular emissions. By encouraging cleaner technologies and alternative transportation modes, green tax policies aim to improve air quality.
- **Climate change mitigation:** As part of its commitment to addressing climate change, India is reducing its carbon footprint. Through the promotion of energy-efficient technologies, renewable energy sources, and the reduction of greenhouse gas emissions, green tax policies play a crucial role in achieving these goals.
- **International commitments:** Indian green tax policies align with global environmental objectives as a signatory to international agreements like the Paris Agreement.
- **Technological advancements:** The advancement of technology enables us to develop cleaner, more sustainable solutions. As a result of green tax policies, these technologies are adopted, resulting in innovation and a transition to a greener economy.
- **Public awareness and support:** Environmental issues are becoming more popular, and governments are being pressured to take action. The public usually supports green tax policies, particularly when the funds are invested in environmentally friendly infrastructure and conservation.
- **Revenue generation:** Environmental conservation, infrastructure development, and public welfare programs can be funded with revenue from green taxes (De Serres et al. 2010).
- **Policy stability:** Long-term investments in green technologies must be encouraged by stable and predictable policy frameworks. Businesses and consumers can transition to sustainable practices with confidence if green tax policies are clear and consistent.
- **Industry collaboration:** To implement green tax policies successfully, collaboration with industry stakeholders is crucial. Maintaining compliance with regulations and promoting innovation in sustainable practices can be accomplished by working with automobile manufacturers, energy companies, and transportation providers.

CHALLENGES FACED BY INDIA IN IMPLEMENTING GREEN TAX POLICIES

Green taxes in India face multiple challenges, including:

1. **Inadequate infrastructure and financial mechanisms:** Large-scale scrapping is hampered by limited registered scrapping facilities and malfunctioning automated testing stations. Due to land constraints and a lack of access to business finance, the informal sector cannot handle increasing volumes of End-of-Life Vehicles (ELVs) with crude methods and slow processing. Incentives for scrapping ELVs rely solely on state governments and Original Equipment Manufacturers (OEMs) since on-road emissions inspections are time-consuming. Since owners have a strong attachment to their vehicles, higher compensation is needed to convince them to scrap (Naik 2018).
2. **Criteria for fleet renewal/scrappage policies:** The lack of centralized databases hinders monitoring emissions and retesting vehicles, which should be prioritized in vehicle-renewal policies.
3. **Viability for OEMs to set up ELV scrappage units:** For dismantling to be economically viable, large volumes of ELV are necessary. It is imperative to optimize the entire chain from fitness testing to recycling units for both economic and environmental benefits. In addition, OEMs lack Extended Producer Responsibility (EPR) because of a lack of regulation regarding aftermarket parts (Wong et al. 2018).
4. **Usage and disposal of hazardous materials in vehicles:** Hazardous materials must be properly disposed of, but informal dismantlers lack modern equipment, contaminating the environment. The ozone layer can be negatively affected by escaping. The ozone layer can be harmed by refrigerants such as Freon, making regulation essential. The circular economy does not integrate recycled materials, and Freon gas accumulates at de-pollution stages, which requires authorized vendors to collect it. The quality of recycled products is affected by challenges in plastic recycling, including segregation issues. To ensure the effective implementation of the scrappage policy and minimize environmental impacts, comprehensive measures, including infrastructure development, regulatory reforms, and compliance with environmental regulations, are essential (Zorpas & Inglezakis 2012).

GREEN TAX POLICIES IN CHINA

To address environmental concerns and promote the adoption of cleaner vehicles, China has implemented several green tax policies in the automobile industry. As a result of these policies, emissions have been reduced, air quality has been improved, and environmentally friendly technologies have been developed and adopted. In China, the automobile

industry is governed by the following green taxes and laws (Zhang & Bai 2017):

1. **Vehicle Emission Standards (China VI):** With China VI being the most stringent standard, China has been progressively tightening its vehicle emission standards. In addition to nitrogen oxides (NO_x), particulates (PM), and hydrocarbons (HC), these standards mandate lower levels of pollutants emitted by vehicles. To register and operate a vehicle, these standards must be met.
2. **New Energy Vehicle (NEV) Subsidies and Incentives:** Electric vehicles (EVs) and plug-in hybrid vehicles (PHEVs) are among the new energy vehicles (NEVs) that China promotes with subsidies and incentives. It is possible to provide incentives for NEVs in the form of subsidies, tax exemptions or reductions, as well as preferential registration.
3. **Fuel Efficiency Standards:** China has set fuel efficiency standards for automobiles in order to reduce fuel consumption and greenhouse gas emissions. Getting their fleets to meet these standards requires manufacturers to improve their fuel efficiency.
4. **Vehicle Purchase Tax:** Depending on automobile type, engine displacement, and emissions, China imposes a vehicle purchase tax on its automobile sales. NEVs, for instance, may be eligible for lower tax rates in some cases to encourage their adoption.
5. **Carbon Emissions Trading System (ETS):** Several industries, including the automobile sector, are participating in China's nationwide carbon emissions trading system. Carbon emission allowances are assigned to companies, and those who exceed their allowances are required to purchase additional allowances (Meckling & Nahm 2019).
6. **Green Vehicle Registration Policies:** Green vehicle registration policies have been implemented in some Chinese cities, which provide preferential parking and access to restricted areas for low-emission vehicles.
7. **Environmental Protection Laws and Regulations:** In China, there are numerous laws and regulations related to environmental protection. These laws and regulations govern emissions, pollution control, and environmental standards related to the automobile industry. Regulations on vehicle emissions and pollution control measures are included in the Environmental Protection Law as well as the Air Pollution Prevention and Control Law.
8. **Industry Development Plans:** Clean and energy-efficient vehicles are being developed and manufactured by the Chinese government through development plans

and policies. In order to shift to greener technologies, these plans outline targets, incentives, and support measures. Its commitment to environmental protection, sustainable development, and a transition to a low-carbon economy is reflected in the green tax policies and regulations in the auto industry. Environmental challenges are addressed by these policies, pollution is reduced, and cleaner vehicles and technologies are developed and adopted (Zhang et al. 2014).

CHALLENGES FACED BY CHINA IN IMPLEMENTING GREEN TAX POLICIES

Several challenges face China's automobile industry when implementing green tax policies, including (Hu et al. 2010):

Complex Regulatory Framework: There are multiple government agencies and overlapping regulations in China's automobile regulatory framework. Inconsistencies and loopholes in enforcement may result from a lack of coordination between these agencies when implementing and enforcing green tax policies.

- **Resistance from Industry Stakeholders:** A green tax policy that imposes additional costs or requirements on auto manufacturers and related industries may be objected to by these industries. Green tax policies could be weakened by resistance from powerful industry stakeholders.
- **Lack of Consumer Awareness and Demand:** It is possible that many Chinese consumers are unaware of the environmental benefits of green vehicles or the implications of green tax policies. Green tax policies may not work well if there is not sufficient consumer demand for eco-friendly vehicles.
- **Infrastructure Challenges:** Investing in infrastructure, such as charging stations, battery swapping plants, and hydrogen refueling stations, is crucial to making the switch to green vehicles, such as electric or hydrogen-powered vehicles. Adoption of green vehicles may be hindered by insufficient infrastructure, while green tax policies may be less effective.
- **Technological Barriers:** The Chinese automobile industry may not have the expertise or technologies needed to develop and produce green vehicles. In order to accelerate the adoption of green vehicles and maximize the benefits of green tax policies, technological barriers should be overcome, such as battery performance and range limitations.
- **Enforcement and Compliance Challenges:** A robust enforcement strategy and monitoring system are needed to ensure auto industry compliance with green

tax policies and emission standards. In the event of corruption, insufficient resources, or administrative capacity limitations hampering enforcement, green tax policies may lose their effectiveness and be rendered ineffective.

- **Social Equity Considerations:** Certain segments of the population may be disproportionately affected by green tax policies, particularly low-income individuals who may be unable to afford green vehicle upfront costs or have difficulty accessing alternative transportation options. In order to garner public support and minimize social resistance, green tax policies must ensure social equity and address potential disparities in distributional impacts.
- **International Trade and Competition:** There is fierce competition from foreign manufacturers in both domestic and international markets for the Chinese automobile industry due to its profound integration into global supply chains. Chinese automakers' competitiveness could be affected by green tax policies, resulting in trade imbalances and market access concerns.

COMPARISON BETWEEN INDIA AND CHINA GREEN TAX POLICIES

There are differences in approach and outcomes between India and China's green taxes on automobiles with respect to environmental justice. In India, green tax policies, such as vehicle scrappage, focus primarily on phasing out old and polluting vehicles, with little treatment of fuel efficiency and emissions standards. A larger number of policies are in place in China, including strict vehicle emission standards, fuel quality regulations, and incentives for the use of clean vehicles. Environmental benefits are greater as a result of this broader scope. Consequently, India's policies may unfairly affect the low-income community, as they may lack access to alternative transportation options or are unable to afford newer, cleaner vehicles. In addition to affecting low-income groups, China's policies may promote environmental justice more effectively due to measures such as subsidies for electric vehicles and public transportation investments. Inadequate infrastructure, limited compliance mechanisms, and regulatory loopholes make it difficult for India to enforce its green tax policies. In China, emission standards and pollution control measures are strictly enforced due to a more robust regulatory framework and enforcement mechanisms (Pucher et al. 2007).

The automotive industry may oppose India's policies and face economic consequences such as job losses in the informal sector and disruption of the automotive value

chain. China's policies have fostered economic growth and job creation in the green automotive sector by investing in clean technology and innovation. There is an international agreement called the Paris Agreement, which commits both India and China to reduce greenhouse gas emissions and combat climate change to reduce greenhouse gas emissions. China's green tax policies demonstrate greater leadership in addressing environmental challenges and align closely with international commitments. As a result, although India and China have instituted policies to promote environmental justice through green taxes on automobiles, China's policies appear to be more comprehensive, effective, and aligned with international commitments. It may be difficult for India to achieve environmental justice through green tax policies due to challenges in enforcement, coverage, and industry acceptance. While both countries have opportunities to learn from one another's experiences and improve their policies, environmental and social equity issues still need to be addressed effectively (Lam & Mercure 2021).

RECOMMENDATIONS AND CONCLUSIONS

A comprehensive approach to implementing green tax policies in the automobile industry is required to take into account the interests of various stakeholders, economic factors, and environmental objectives. Focus on reducing emissions and encouraging fuel efficiency in the automobile sector by implementing green tax policies that encourage the adoption of electric and hybrid vehicles. Adapt tax rates based on vehicle emissions, fuel efficiency, and carbon footprint to account for the environmental performance of vehicles. For eco-friendly vehicles, lower taxes or incentives should be provided, while higher taxes or incentives should be imposed on vehicles with higher emissions and lower fuel efficiency. Fund the development of infrastructure associated with green mobility, such as charging stations for electric and hydrogen vehicles and public transportation. Cleaner transportation options will be made possible by this infrastructure investment. Promoting green vehicles and green tax policies through public awareness campaigns. Consumers will be encouraged to purchase eco-friendly vehicles if they receive tax rebates, subsidies, or discounts. Contribute to the development of advanced clean and sustainable transportation technologies, such as electric vehicles, hydrogen fuel cells, and alternative fuels, by supporting research and development (R&D) initiatives. Incentives are available to promote innovation in the automotive industry, such as grants, tax credits, and other incentives.

Setting industry-wide environmental performance standards with automobile manufacturers and encouraging

the development of greener vehicles should be a priority. Investing in green technology and adopting sustainable manufacturing practices can earn companies incentives or tax breaks. Compliance with green tax policies and emission standards needs to be enforced through strict regulations and monitoring mechanisms. To promote accountability among automobile manufacturers and deter violations, implement fines and penalties for non-compliance. Identify, share, and harmonize environmental standards with international organizations, governments, and stakeholders. It is possible to accelerate the transition towards sustainable transportation by participating in global initiatives that leverage resources and expertise. Provide investors and businesses with stability and predictability by developing long-term strategies and policies. Coordinate and align green tax policies with broader environmental objectives and goals. In addition to monitoring and evaluating a green tax policy's effectiveness, it should also identify ways to improve economic and environmental outcomes. Ensure continuous improvement by reviewing and updating policies based on performance data. In implementing these recommendations, governments can encourage a cleaner and healthier future for society by driving sustainable transformation in the automobile industry, reducing environmental impact, and promoting sustainable transformation.

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