



**The Coalition
of Finance Ministers
for Climate Action**

Introduction of a replacement levy on electric vehicles

Switzerland—Federal Department of Finance

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The electrification of the transportation sector is expected to reduce Government revenues from fuel taxes. In Switzerland, the mineral oil tax is an excise tax on crude oil, other mineral oils, natural gas, their processed products, and engine fuels. Fifty percent of the revenue from the mineral oil tax is earmarked to finance transportation infrastructure, 40% of the revenue goes to the general budget of the Federal Government, and 10% of the revenue is allocated to the National Highways and Agglomeration Traffic Fund. Based on a previous analysis by the Federal Department of the Environment, Transport, Energy and Communications (DETEC, 2022), the Federal Department of Finance, in its 2024 Fiscal Sustainability Report, estimates the revenue loss from the mineral oil tax (compared with a business-as-usual scenario in which the net zero target is not achieved by 2050) to be up to Sfr2 billion per year (in 2021 prices), or about 2.5% of federal revenue in 2021 (FDF, 2024).

In order to ensure the financing of transportation infrastructure and federal finances in the long term, the Federal Council has mandated the DETEC and the Federal Department of Finance to draw up a concept for a distance-related charge to compensate for the expected decline in revenue from the mineral oil tax in the coming years.

The concept for a distance-based replacement levy on electric vehicles

As a first step, a study was conducted to examine the possibility of introducing a distance-based tax for electric vehicles (DETEC, 2022). The main basis for the assessment of such a tax is the distance driven. The tariff model developed assumes a tax that takes into account the type of vehicle (e.g., passenger car, truck), the weight of the vehicle, and the engine power. For a passenger car of average weight and power, the rate of the distance-based tax would have to be about 5 to 6 Swiss centimes per kilometer to offset the revenue from the mineral oil tax. For heavy vehicles, it will be about 22 Swiss centimes per kilometer. These amounts have been computed in order to compensate for the loss of the mineral oil tax in the next few years without increasing or decreasing the price of mobility. Mineral oil taxes should continue to be levied on fossil fuel vehicles. Distance-based replacement levies should only be introduced for electric vehicles as an alternative to the mineral oil tax, to which they are not subject.

Replacement levies should be introduced by 2030

In mid-2022, the Federal Council defined the key parameters for a replacement levy on electric vehicles. According to these parameters, a replacement levy should enter into force by 2030 in order to ensure the financing of transportation infrastructure and federal finances. This timeframe takes into account the time needed to enact the necessary legislation, including public consultations and parliamentary debates, expected to take place in 2025 to 2026. It also accounts for the time needed to set up the technical requirements, including data collection systems to record and transmit the distances traveled by vehicles. Finally, the tariff model will be continuously monitored and, if necessary, adjusted according to the characteristics of new vehicles to ensure that electric vehicle owners are not disadvantaged on average compared with owners of fuel-based vehicles, thus maintaining indirect support for electric mobility and ensuring a rapid transition to climate-friendly vehicles.

References

Federal Department of the Environment, Transport, Energy and Communications (2022a) *Concept for the Substitution of Mineral Oil Taxes*. Executive summary. DETEC Report to the Federal Council, Bern. <https://www.astra.admin.ch/astra/en/home/topics/nachhaltige-finanzierung.html>.

Federal Department of the Environment, Transport, Energy and Communications (2022b) *Konzeption für den Ersatz der Mineralölsteuern (Ersatzabgabe)*. Report to the Federal Council, Bern (in German). <https://www.astra.admin.ch/astra/de/home/themen/strassenfinanzierung/nachhaltige-finanzierung.html>.

Federal Department of Finance (2024) *2024 Fiscal Sustainability Report for Switzerland: Ageing and Net Zero Target*. FDF, Bern. <https://www.efd.admin.ch/efd/en/home/fiscal-policy/report-long-term-sustainability-public-finances.html>.

Federal Roads Office (2023) *A Major Challenge: New Road Infrastructure Financing in the Context of Increasing Electromobility*. FEDRO Presentation at ETH Zürich, October. <https://ethz.ch/content/dam/ethz/special-interest/mavt/csfm-dam/events/2023/10-seminar/presentations/astra-rosenfellner-new-road-infrastructure.pdf>.