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Concept for the substitution of mineral oil taxes (alternative tax)

Report to the Federal Council

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Executive summary



Key facts in brief

Mandate

The Federal Council has instructed DETEC and the FDF to draw up a concept for a distance-based levy that would replace mineral oil taxes and possibly other transport levies (national road tax, automobile tax, levy on electric vehicles). This is intended to secure the financing of transport infrastructure and federal finances in the long term.

Fall in revenues from mineral oil taxes due to electromobility - no need for action on automobile duty and national highways charge

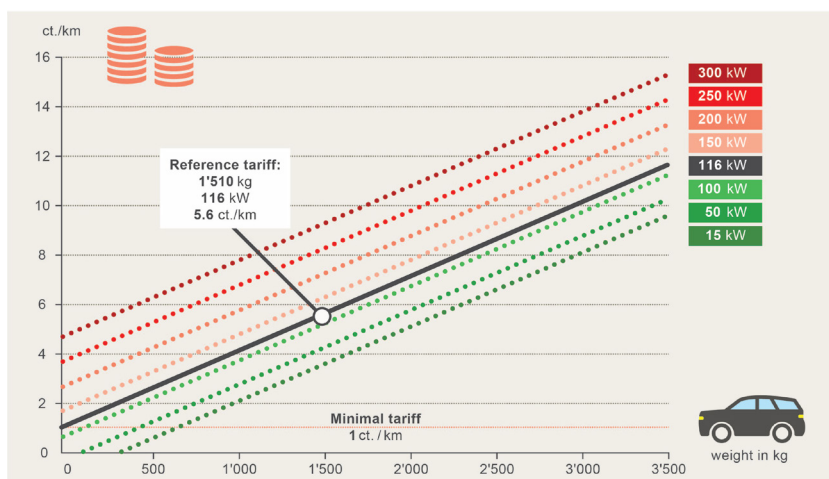
To secure the financing of transport infrastructure and federal finances, a new solution is only necessary to make up for the fall in revenues from mineral oil taxes. In the case of automobile duty and the national highways charge, there is no need for a new solution from a financing point of view.

Mineral oil taxes on fuels are the most important source of revenue for the Special Financing of Road Transport Fund (SFRTF) and the National Highways and Urban Transport Fund (NHUTF). 40 per cent of revenues from mineral oil taxes (basic tax) also flow into the general federal finances. The SFRTF mainly contributes funds to the cantons, but also to public transport and nature and landscape conservation. The growing number of electric vehicles (a collective term for all motor vehicles with alternative propulsion technologies) and the 'net zero' climate goal are leading to a sharp decline in revenues from mineral oil taxes, so that in the long term the financing of road infrastructure at the federal level is no longer assured, and overall mineral oil tax revenues towards the general federal finances are progressively falling.

Concept for a distance-based levy to replace mineral oil tax

In a first step, a study was carried out to examine how mineral oil taxes could be replaced by a distance-based tax and a concept was developed accordingly. The main basis for the assessment of such a levy is the distance driven. The tariff model that has been developed provides for the tax to be differentiated according to the type of vehicle (e.g. passenger car, HGV) and for the level of the tariff to be calculated in general based on the vehicle's weight and engine power. The aim of such a tariff model is to ensure that the financial burden for the individual user of a petrol or diesel-powered vehicle remains roughly the same as it is today, and that electric vehicles are also treated equally. For a passenger car of average weight and engine power, the tariff for the distance-based tax would have to be around 5.6 centimes per vehicle kilometre to compensate for the revenue from mineral oil tax (based on 2019 data). The tariff is independent of the time and place of the journey.

Tariff model for passenger cars according to unladen weight and engine power



Replacing mineral oil taxes would have undesirable side effects

However, further work has shown that completely replacing mineral oil taxes by a new distance-based tax for all vehicles would have considerable negative knock-on effects that would be impossible or difficult to avoid.

Replacing mineral oil taxes with a distance-based tax would result in a significant reduction in fuel prices. This would create undesirable side effects due to the resulting difference in fuel prices compared to

Switzerland's neighbouring countries. Drivers may be tempted to fill up in Switzerland which would lead to increased traffic in border regions and increase Switzerland's climate footprint. In addition, freight transport routes via Switzerland would become more attractive and there would be a risk of additional freight transit traffic through Switzerland because heavy goods vehicles with large fuel tanks could refuel cheaply in Switzerland and so achieve significant savings. The abolition of mineral oil taxes and the associated fall in fuel prices would also reduce the incentive to consume fuel more sparingly, which could appear paradoxical in view of current climate protection efforts, and would also be problematic in terms of the message it sent.

Due to these undesirable side effects, mineral oil taxes should continue to be levied and a distance-based tax be introduced only for electric vehicles as an alternative to the mineral oil tax to which they are not liable (alternative tax). This simplified approach would allow funding to be assured while avoiding the negative effects described above.

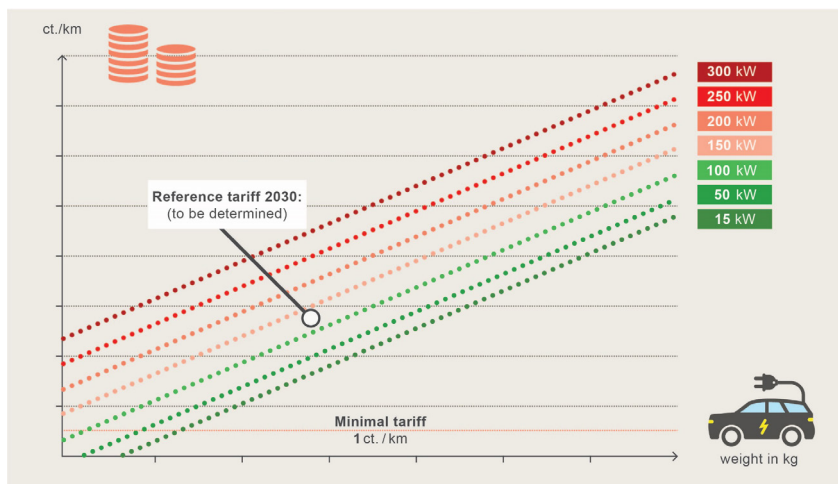
Alternative tax - distance-based tax for electric vehicles

The alternative tax would apply to registered vehicles that do not exclusively use fuels or forms of propulsion that are subject to mineral oil taxes. The new levy is a distance-based tax with a tariff per kilometre driven in Switzerland.

The concept developed for a distance-based tax for all vehicles with differentiated tariffs according to vehicle type (e.g. passenger cars, motorbikes, vans, etc.) and within vehicle types according to vehicle weight and engine power can in principle also be adopted for the subset of electric vehicles. The aim of this differentiation would ensure that comparable vehicles make a roughly equivalent contribution to infrastructure financing, regardless of their form of propulsion. Heavy and more powerful vehicles should pay a higher tariff than lighter, low-powered vehicles (as is the case today in principle with mineral oil tax based on specific fuel consumption).

However, electric vehicles currently have higher average values for the parameters of weight and engine power than conventional vehicles. Before any alternative tax is introduced, it is likely that key parameters such as the average vehicle weight and engine power of electric vehicles will change. In detailed plans to be drawn up at a later date, the tariff model will therefore have to be calibrated to ensure that, on average, approximately the same amount of tax is paid for an electric vehicle as for a conventional vehicle with mineral oil tax.

Tariff model for passenger cars according to unladen weight and engine power



Recording and transmission of distance travelled (distance in km)

For the levying of a alternative tax per kilometre driven in Switzerland, an approach using satellite-based distance measurement (e.g. Galileo and/or GPS) and data transmission via mobile radio would be appropriate due to the technologies already available today.

This approach is future-proof and can be implemented with several solutions:

- Special and specified recording device that must be installed in the vehicle.

- European Electronic Toll Service (EETS), i.e. use of various authorised service providers offering their own collection devices.
- Smartphone app for occasional foreign users.
- Vehicle on-board equipment, i.e. use of electronic systems already installed by vehicle manufacturers, which transmit vehicle data to the vehicle manufacturers, such as the number of kilometres driven.

The mix of co-existing solutions is flexible. It may evolve over time taking into account developments in the market and in other countries, user preferences, and technological advances, without requiring significant adjustments to the system. In the further work, however, a technical approach will also be examined which, in contrast to the abovementioned approaches, does not require the geographical localisation of journeys.

Data protection

A study conducted in 2019 showed it would undoubtedly be technically and organisationally feasible to implement a centralised system of collecting movement data for the alternative tax that is data protection-compliant using established 'best practice' methods. The collection system for the alternative tax would be largely similar in terms of functionality to the central data collection, evaluation, billing and account management systems of many data other processing systems (e.g. tax administrations, banks or telecom providers) and would therefore not be a completely new challenge in terms of data protection.

From a data protection perspective, implementation can be transparent and demonstrably compliant. In future alternative tax legislation, data protection requirements will therefore have to be defined in an explicit and detailed manner. The specific requirements for the alternative tax should therefore include, for example, a conclusive list of the data to be collected, conditions for processing of that data by third parties, limitations regarding the purpose-specific use of the data for the alternative tax and not for enforcing other legal provisions (e.g. speeding offences, investigation procedures), as well as time limits for retaining and deleting the data.

Timeframe for introduction

The alternative tax should be introduced by 2030 at the latest. In particular, the timeframe takes into account the time required to put in place the necessary legislation and to set up the data collection system. Other factors to consider are the financial situation of the SFRTF and the NHUTF, as well as the ongoing need for the indirect promotion of electromobility for a rapid switch to climate-friendly vehicles. Depending on how the project progresses, the future requirements and the general conditions, the alternative tax could be introduced slightly earlier (i.e. approximately one to two years earlier).