Q&A on the climate and energy incentive system

As at 28.10.2015

From 2021, the Federal Council intends to replace the promotion system for climate and energy policy with an incentive system. What is the advantage of such an incentive system?

Energy and climate goals can be achieved at a lower economic cost with incentive taxes than with regulatory or subsidy-based measures. The advantages of incentive taxes come to the fore primarily in the medium to long term. For a start, the change in relative prices leaves households and companies free to adapt their energy consumption in a way that will minimise their costs. Secondly, price incentives encourage efforts to find even better ways to reduce emissions and energy consumption, leading to the development of innovative new solutions. Moreover, incentive taxes are less costly to implement than subsidy-based or regulatory measures. The burden of incentive taxes will be offset by redistributing the incentive tax revenue to households and companies.

Why is a constitutional provision needed?

The existing taxes, which are not in line with the ideal of an incentive tax on account of various forms of partial earmarking, will be replaced in the medium term by genuine incentive taxes. Only the proposed constitutional provision creates clear preconditions for the transition from a promotion system to an incentive system in that it sets a time limit for existing earmarking and excludes new forms of promotion by using climate and electricity tax revenue. Moreover, only a constitutional provision allows for democratic legitimacy by means of a majority vote by the people and the cantons. In addition, the proposed constitutional provision provides the legislator with the necessary flexibility for the implementation of the incentive system (choice of assessment basis, rates, redistribution of revenue, flexible transition from promotion system to incentive system).

What does the constitutional provision specify? Are the tax rates already decided?

With the proposed provision, the transition from the promotion system to the incentive system for climate and energy policy is to be enshrined in the constitution. The proposed constitutional provision gives the legislator considerable scope for designing the climate and electricity taxes and ensures a flexible transition period between the promotion system and the incentive system. In the dispatch on the constitutional provision, the Federal Council uses examples to illustrate possible ways of implementing the climate and incentive taxes, as well as their implications for the first phase from 2021 to 2030.

What are the objectives of the 2050 energy strategy and to what extent will they be achieved with incentive taxes according to the sample types of implementation?

The incentive taxes are to make a significant contribution to the achievement of the Confederation's climate and energy objectives. The Federal Council published the climate objectives in March 2015. It is aiming to achieve an overall objective of reducing 1990 greenhouse gas emissions by at least 50% by 2030. In Switzerland, it is striving to cut greenhouse gas emissions by at least 30%. The additional reductions necessary to reach the overall objective can be achieved by means of measures abroad.

In the dispatch on the 2050 energy strategy, the Federal Council proposed energy and power consumption targets per capita and expansion targets in the area of power production from new renewable energies. Based on these targets and extrapolated for 2030, the reduction target for power consumption is approximately minus 10% in comparison to the per-capita consumption in 2000. According to current projections, CO_2 emissions will drop by approximately 40% relative to the 1990 level by 2030 if the overall energy consumption and expansion targets in accordance with the 2050 energy strategy are achieved.

The extent to which the objectives are achieved with the sample forms of implementation ranges from 18% to 71% in 2030 depending on the amount of the taxes and the assessment basis relative to the reference scenario. Depending on the implementing arrangements, supplementary statutory measures would thus have to be decided by Parliament in order for the objectives to reduce CO_2 emissions to be achieved.

Can the energy system be turned around and nuclear power be phased out with the climate and energy incentive system?

The Federal Council and Parliament made the fundamental decision to withdraw from nuclear energy in 2011. Switzerland's energy supply is to be transformed gradually, and the Federal Council prepared the 2050 energy strategy for this purpose.

The first stage consists of a comprehensive bill. It contains a package of measures to expand the existing instruments to increase energy efficiency and promote renewable energy. In particular, this package of measures will strengthen the promotion measures in the area of buildings and the cost-covering remuneration for feed-in to the electricity grid (CRF) to promote the domestic generation of electricity using renewable energy sources.

In the second stage, from 2021, the Federal Council intends to replace the promotion system with a climate and energy incentive system based primarily on incentive taxes on electricity and combustibles. The planned incentive system is to be implemented in a manner that is as acceptable as possible from an economic and social perspective.

How will the promotion system be phased out?

It should be possible in a transition period for the revenue from climate and power taxes to be used for existing promotion purposes for a limited time. The subsidies financed by means of the partial earmarking of the current CO_2 tax should be gradually phased out with the introduction of the climate tax and be discontinued within five years of its introduction. This concerns the building programme and the deposits in the

technology fund. Subsidy-based measures, which up to now have been financed from the current grid supplement (cost-covering remuneration for feed-in to the electricity grid, one-off remuneration for small photovoltaic systems, competitive tenders, risk guarantees for geothermal projects and water quality improvement measures), will be gradually phased out and will be discontinued ten years from the introduction of the power tax. Commitments which are undertaken during this transition period will have to end at the latest 25 years after the introduction of the power tax. It should not be permissible for subsidy-based measures above and beyond this and other subsidy-based measures to be financed with the revenue from climate and power taxes. This will ensure that the revenue from these taxes will not be subject to new earmarking without a new constitutional amendment.

To what extent should the incentive tax burden the generation of power using renewable energy sources?

Regarding the design of the power tax, the constitutional proposal is formulated in an open manner. This means that a uniform power tax as well as a power tax based on different production types is also possible. The model calculations were based on a uniform power tax. The power consumption targets could be achieved efficiently with it.

If the various external costs are taken into account, it would generally make sense for power generation using renewable energy sources to benefit from a low tax rate. However, a differentiated power tax would scarcely promote domestic power generation using renewable energy sources given that it is not known from which plants the consumed power comes. Certificates of origin thus serve as proof of electricity labelling, but these can be traded independently of power. It should be noted, however, that domestic and foreign differentiation is not permitted under international trade law in the electricity market nor in the market for certificates of origin. This means that imported nuclear power from France, for example, is classified as renewable power if it is combined with a simultaneously acquired certificate of origin for Swedish hydropower, for instance. The level of power consumption in Switzerland from non-renewable energy sources could easily be covered using foreign certificates of origin, which are considerably less expensive than Swiss ones. In this case, the differentiated power tax would not promote domestic power production.

How will incentive tax revenue be redistributed to households and companies?

Long term, the incentive system is to be designed as budget neutral, i.e. the public sector should have the same amount of financial resources available to it as without the climate and power taxes. Accordingly, incentive tax revenue is to be redistributed in full to households and companies. As with the current CO_2 tax on combustibles, it is planned for the revenue to be redistributed to the Swiss population on a per-capita basis via health insurance premiums and to businesses in proportion to their AHV wage bill or the maximum insured AIA wage bill.

In a clearly defined transitional period, it should also be possible to use the climate and power tax revenue for the existing promotion purposes of the partial earmarking of the current CO_2 tax and the grid supplement.

The incentive taxes will make energy more expensive. How can we be sure that consumers will actually reduce their energy consumption?

Households and companies react to price changes; this is evident from scientific studies as well as everyday reality. The extent to which energy consumption and greenhouse gas emissions are actually reduced as a consequence of an incentive tax will depend on how high the incentive taxes are, what substitutes are available and the time horizon observed. A change in consumer behaviour is easier to achieve in the medium to long term than the short term.

How much will the price of petrol rise? Are motorists' fears of 5 francs a litre realistic?

A few years ago, talk of petrol prices possibly rising to 5 francs a litre created quite a stir. Such fears are totally unfounded with the current proposal. The Federal Council is aware that a majority of the population would not accept a massive increase in energy prices and that this would place a burden on the border and mountainous regions in particular. Even though the constitutional basis is formulated in an open manner, the Federal Council believes it is more expedient not to subject fuel to the climate tax in an initial phase up to 2030. An increase of 6 centimes in the mineral oil surtax is already planned within the scope of the motorway and urban transport fund. Moreover, in the case of a climate tax on fuel, alternatives in the form of fuel tourism must also be taken into account. Finally, it has to be noted that other measures apart from taxation can help achieve the energy and climate objectives (e.g. emission requirements for new cars) in the area of fuel.

Will the climate and power taxes make Switzerland less competitive as a business location?

No, and for several reasons. Firstly, the additional burden of the incentive taxes on companies would be offset in the long term by redistributions, as in the case of private households. The total tax burden for companies should therefore not increase. Secondly, mitigating measures are foreseen for particularly energy-intensive companies and those that produce large amounts of greenhouse gasses which are exposed to international competition. In particular, it should be possible for energy-intensive companies and those that produce large amounts of greenhouse gases to be exempted from the incentive taxes, but in return, they must commit themselves to reduction measures in the form of target agreements.

Low-income households spend a larger proportion of their income on energy. How can we prevent these households from being excessively burdened?

It is true that climate and power taxes would raise the prices of goods on which low-income households spend relatively more than those with a higher income. Accordingly, incentive taxes of this nature would place a proportionately higher burden on low-income households. In absolute terms, however, they consume less energy than higher-income households. Consequently, they get an above-average benefit in the event of a per-capita redistribution of incentive tax revenue.

Once the incentive effect of the climate and power taxes comes to bear, energy consumption and thus also incentive tax revenue will decline in the medium to long term. A reduction in energy consumption would also mean lower mineral oil tax receipts. How are these declining receipts to be offset?

The climate and power taxes are primarily designed to achieve climate and energy policy goals rather than fiscal objectives. In the initial phase, budget neutrality would be easy to ensure because of increasing tax rates and tax revenue. However, if the significant incentive effect intended is delivered in the long term, revenue from the climate and power taxes will fall. Given that in the medium to long term a complete redistribution of the revenue to households and companies is envisaged, the amount redistributed would also be lowered as incentive tax revenue declines. Maintaining budget neutrality is therefore relatively straightforward.

In case a climate tax were to be introduced on fuel, the decline in mineral oil tax receipts as a result of the incentive effect could be offset by either a one-time increase in mineral oil tax upon introduction of the climate tax or periodic adjustment of the mineral oil tax. This adjustment of the mineral oil tax would once again be taken into account when setting the amount of the climate tax on fuel.

In case a climate tax were to be introduced on fuel, the external climate-related costs caused by heavy vehicles would at least be partially covered and should thus no longer be used for calculating the mileage-related heavy vehicle charge (LSVA). This could lead to a reduction in the LSVA tax rates. In this case, the loss of LSVA revenue resulting from this would be offset by the revenue from the climate tax on fuel.

What are the differences between the 2012 and 2015 Ecoplan studies?

The 2012 Ecoplan calculated how high the incentive taxes should be in order for the energy and climate objectives to be met with that as the sole instrument. In contrast, the 2015 Ecoplan gives the incentive tax rates as exogenous factors. The four combinations of the sample types of implementation set out in the dispatch on the constitutional provision differ in terms of the amount of the tax on fossil fuels and combustibles, and thus the reduction in emissions that can be achieved. Moreover, certain assumptions were changed, e.g. regarding the use of biofuels. The time horizon was also defined in different ways.

What experience have other countries had with incentive taxes in terms of climate and energy policy?

Some countries (such as Australia, Canada/British Columbia, Denmark, Finland, Germany, Ireland, the Netherlands, Norway, Sweden and the UK) already have incentive systems with climate and energy taxes. Most of the receipts from these incentive taxes are used mainly to lower non-wage labour costs and income taxes and to promote energy efficiency and renewable energy sources. In these countries, a reduction in CO_2 emissions and an increase in energy efficiency can be observed. Most studies have shown that the economic costs are deemed to be minimal, have shown a positive impact on employment and it is reported that in some cases there are

strong incentives for innovation. A negative impact on competitiveness has also been prevented by means of exemptions for those companies particularly affected by the taxes. However, since other economic policy framework conditions are also altered, it should be noted that this impact is not clearly attributable to incentive taxes.

Why should the electorate approve the Federal Council's climate and energy incentive system in spite of the fact that the popular initiative "energy tax instead of VAT" was clearly rejected?

Although the Federal Council supported the climate and energy policy thrust of the initiative, it clearly rejected the design of the proposal. Important differences in the design of the climate and energy incentive system planned by the Federal Council relative to the "energy tax instead of VAT" initiative are as follows:

- The climate and power taxes are geared to the climate and energy targets and not to the financing requirements of the Confederation.
- Alongside the climate and power taxes, other economic policy instruments (e.g. regulations) contribute to achieving targets.
- Significantly lower tax rates are envisaged and these will be gradually increased.
- The incentive system makes provision for a per-capita redistribution of the revenue to households. In this way, the negative distributive effects of the tax can be offset, which renders the proposal compatible in socio-political terms.
- The incentive system makes no provision for the abolition of VAT, which is important, and does not intend to reduce any other taxes or fees, which could adversely affect secure financing for the tasks of the federal government.
- The incentive system constitutes the second stage of an overall energy and climate policy strategy.

The analysis of the Swiss federal elections points in a similar direction (gfs.bern & University of Zurich 2015). It indicates that the clear rejection of the initiative entitled "energy tax instead of VAT" is due more to the fundamental overhaul of the tax system, in particular the abolition of the broadly accepted value added tax, which is the most important source of funding for the Confederation, than to doubts about the effectiveness of an incentive tax or the environmental issues in the initiative.