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Empowering technological progress: Switzerland's path to net zero

Switzerland is in a comparatively comfortable situation regarding the energy transition. 61.5% of our electricity is produced from hydropower, 28.9% from nuclear power, 1.9% from fossil fuels and just under 7.7% from new renewables. But it is clear that the share of renewable energy sources must continue to increase as we transition away from oil and gas.

Fossil fuels will become less important in the future - also for Switzerland as a trading centre. Many players in the oil and gas industry operate their trading centres in Switzerland. The largest companies in our country are Trafigura, Vitol, Gunvor, and Mercuria. According to Bilanz, they occupy seven of the ten places in the top ten of the largest Swiss companies with their billion-dollar sales. Bloomberg reported the three largest Russian oil producers Rosneft, Lukoil, and Gazprom have already begun exploratory talks for moving trading activities in the Gulf region following the EU sanctions against Russia. Our country is likely to lose some of this business - but with it, probably also its reputation for putting business before morals.

Banks and financial institutions, for which Switzerland acts as a global hub, will be crucial for the global transition away from oil and gas towards renewable energy and other net zero industries. The sector is strongly self-regulating, with institutions constantly updating their investment strategies. The global economy is still largely fuelled by oil and gas for now, but a new net zero age is dawning: Switzerland's world-leading financial services will provide the necessary capital and expertise for investment in clean technologies and industries.

Within Switzerland itself, technological innovation opens up many opportunities for decarbonisation and electricity supply. We need to push ahead with the expansion of renewable energies - especially solar and wind power - as quickly as possible, in response to possible electricity shortages due to Russia's invasion of Ukraine. Our parliament is working on a law to speed up the lengthy approval procedures for such plants. Long-term financial incentives are needed for project developers to increase investment security. Competitive auctions for long-term power purchase agreements for solar and wind power, as successfully implemented in numerous European countries, are a step in the right direction.

Gas-fired combined-cycle power plants will only be an emergency instrument that can be switched on and off when there is a shortage of electricity at peak times. Meanwhile, although it is important that we keep an open mind on technology, I am personally unconvinced that new nuclear power plants - with the currently known technologies - are a solution either. They would arrive too late and be too expensive for the power shortage that is now looming. If the risks known today and the problem of final storage can be solved, and the high costs reduced, then new nuclear power plants could have a chance again. The existing Swiss nuclear power plants may be operated in Switzerland as long as they are safe, but they must not be replaced after they are shut down. In the meantime, we should greatly expand renewable energies to prevent an electricity shortfall.

Switzerland's current prosperity is not a product of chance, but a consequence of a far-sighted economic policy that promotes technological progress. One example is the massive expansion of the railroads in the 19th century and the completion of what was then the world's longest railroad tunnel through the Alps, the Gotthard Tunnel, in 1882. This technological transformation, supported by parliament and led by the liberal politician and industrialist Alfred Escher, led to a significant competitive advantage for the Swiss economy at the time. The cost of transporting goods fell as demand for Swiss engineering skills increased abroad, and many industrial companies settled in Switzerland. Due to the large amounts of credit needed, numerous banks also established themselves and laid the foundation for today's Swiss financial centre.

In the 20th century, Switzerland then made the next technological transformation with the construction of numerous dams and hydroelectric power plants to secure its electricity supply. Thanks to this strategy, Switzerland decoupled its electricity supply from coal within a few decades, which brought huge economic benefits.

The decarbonisation of the Swiss economy is the next technological transformation that can become another economic success story. In my view, the prerequisites are:

- **Market-based policies:** the electricity market must be fully opened up to competition so that consumers can choose their electricity provider and an electricity agreement must be concluded with the EU.
- **Security and sustainability:** Switzerland's energy supply security should be strengthened without increasing CO2 emissions. The goal is not complete self-sufficiency for Switzerland, but a clear definition of the necessary domestic electricity production capacities in the sense of a strategic reserve.
- **Insulation:** Switzerland's building stock is responsible for about 45% of final energy consumption. A higher renovation rate is needed. The tax deductibility of renovation costs must be increased. In parliament, we have passed resolutions to this effect.

To convince people of the need for these measures, they must be economically and socially acceptable. We have to inform and empower people to make sustainable decisions. As a liberal, I also advocate that everyone pays for what he or she consumes.

We should also deregulate: what we regulated for a decade ago may not be right today. Deregulation doesn't mean blindly trusting the market, believing that the strongest should prevail. Deregulation means starting where the burden of regulation is particularly great. It is also important that it should guide consumer demand.

I would like to do this with liberal approaches such as education, research, and innovation. State intervention is always only the second or even third best solution compared to sensible, self-responsible action. For a liberal party, incentive mechanisms are a core element of effective climate policy. We must not leave the field to the utopians.

Finally, we should only impose bans as a last resort. Of course, setting a good example is not enough in all cases. Sometimes internationally binding benchmarks are needed. This was the case, for example, with ozone-depleting chlorofluorocarbons. It was necessary to enforce an international ban on this climate-damaging gas. But it should not be the first lever to pull in every situation. Instead, we need to promote new technologies and innovations by creating the right framework conditions. We are at the forefront of research and developing: a great deal of work is being done at the Federal Institutes of Technology in Zurich and Lausanne. Innovation projects play an important role in driving technological progress.

We have to be pragmatic in all these steps. In June 2021, the Swiss electorate narrowly rejected the revision of the CO₂ Act, which says greenhouse gas emissions must be reduced to half of the 1990 level by 2030, at the ballot box, despite the fact that the law was very liberal and did not include any strict bans. But it would have made gasoline more expensive if the target values had not been achieved. A carbon tax on airline tickets was also planned. We would have channelled just under half of the additional revenue into the new climate fund so that targeted investments could be made, with the remaining portion would have been returned to citizens. In the follow-up surveys of voters, citizens' wallets were a key factor for rejection.

This autumn, the government sent its "Plan B" for the CO₂ law to parliament. The new law foregoes incentive taxes and instead introduces billions in subsidies for transport and buildings.

Subsidies are known to be much more popular than taxes and bans because it is often unclear who has to bear how much of the cost of a subsidy and when. To make the existing carbon tax on heating oil and gas, currently CHF 120 per ton of carbon, more attractive, one could pay the full amount back to households by means of a per capita amount. Many households that already live sustainably would then save more money.

Unfortunately, most people are not aware that a large part of the carbon tax is already being redistributed via a reduction in health insurance premiums, which calls into question the effectiveness of this instrument. In a survey conducted in late 2019, only 12% knew about it. Instead, we could consider reimbursing the carbon levy directly via a monthly bank transfer so that awareness increases to help people make more sustainable choices. A political instrument is only good if it is understood by those affected.

With the revision of the CO₂ Act, we in Switzerland are also taking an important step for the 2025-2030 period: key objectives are the halving of greenhouse gas emissions, a CO₂ guideline values for new cars, the promotion of e-charging infrastructure and an admixture quota for CO₂-neutral kerosene in aviation.

For me, it's clear that we need to set the right priorities and work together above party lines. Particularly in environmental policy, it's not easy to always find a completely liberal position; compromise is sometimes needed. For me, it's about developing the best ideas in fair and civilised ways. I am confident that we will master the challenges for implementing effective climate policy together.