

"We need to speed up on renewable energies".

Beatrice Petrovich, researcher at the Institute for Economics and Environment (IWÖ-HSG) at the University of St.Gallen, on rising prices, the energy crisis and the Energy Strategy 2050.

Interview: Gerhard Lob

Energy costs have risen by 20 per cent in one year. As a result of the war in Ukraine, the price of petrol has already risen to more than two francs a litre. What scenarios are conceivable for the development of prices?

It is difficult to make predictions at the moment. We are certainly entering a phase of extreme volatility in the prices of fossil fuels such as gas and oil, and prices can change dramatically in a short period of time, so they can also rise further.

How might the markets react?

There are two possible scenarios. The first: the price is so high that no one asks for the product anymore. In this case there is demand destruction and people switch to another product. The other possibility is that we use fossil fuels from production sites that have so far been too expensive. This alternative does not seem desirable to me, because we remain tied to fossil fuels, and that goes against our climate objectives.

These days the climate aspect seems to have lost importance.

In recent weeks the war in Ukraine has rightly filled the front pages and the headlines, but climate change with its consequences is a very important issue, as recognised by a large majority of the population. An awareness also highlighted by our Consumer Barometer of Renewable Energy last summer.

How much do energy prices weigh on Switzerland's gross domestic product?

Energy prices weigh heavily in energy-intensive sectors. A large proportion of Switzerland's energy requirements are met by oil. In particular, the transport sector is still mainly based on the combustion engine, which uses petrol or diesel. Around 70 per cent of the overall energy used in Switzerland is imported from abroad

Can you say that the current crisis has opened our eyes to this dependence on foreign countries?

I think so. And this doesn't just apply to fossil fuels, but also to raw materials such as uranium, which is used in nuclear power plants. It is also supplied by Russia.

A lot of people say: in Switzerland we have hydropower and a lot of hydroelectric power stations, so we can be safe. Is that true?

You have to make a distinction between energy consumption and electricity consumption; they are two different things. As far as electricity is concerned, Switzerland covers a large part of its needs with hydropower, but the total energy needs are much greater, mainly because of the transport sector.

But the potential of hydropower is practically exhausted. No more new hydroelectric plants are being built, at most the dams are being raised by a few meters.

There is actually more potential in other branches of renewable energy, particularly solar energy. This is why the federal government, as part of its Energy Strategy 2050, is planning to increase solar energy to almost reach the potential of hydropower.

In your opinion, is this goal achievable?

It is feasible, producing more solar energy in Switzerland is a goal shared by the Swiss population, as our recent survey showed. Solar is an existing technology that can be implemented quickly, even in peripheral regions.

To create solar energy you need solar panels, which in 70 per cent of cases come from China. Isn't there a risk of creating a new dependence on China after the dependence on Russia for fossil energy?

It is true that the solar panel needs raw materials, and it is true that at present most of the producers are in China. But Europe is catching up, there are productions of both solar panels and batteries in Europe. Once purchased, a solar panel produces energy for 20 to 30 years. It is important to invest in the circular supply chain now.

What do you mean by 'circular supply chain'?

It means reusing old components - panels, batteries - instead of disposing of them. We need to think about this now, without further due.

Federal Councilor Sommaruga has put forward the idea of building gas-fired power stations, a fossil that we have to import...

The federal government has made the proposal of gas-fired power stations to cope with possible supply problems as a back-up proposal, but at the same time has said that processes must be streamlined to increase renewable energies. In this context, gas-fired power stations can be compared to an insurance policy that one would never want to use. However, this is an option with problematic points. On the one hand, the 'insurance premium' is very expensive and unpredictable, and on the other hand, it conflicts with climate targets.

How much does the lack of a framework agreement with the EU weigh on the energy situation?

The lack of an agreement with the European Union on energy issues makes the management of the Swiss grid much more complex and is not ideal for a transit country for electricity like Switzerland, it creates more insecurity.

The Energy 2050 strategy, voted in 2017 by a majority of the people established the abandonment of nuclear energy. Now more and more countries that had taken the same decision are extending the lifespan of their nuclear plants, France is even building new ones. Should Switzerland review its strategy?

I think we should focus on proven technologies in the field of renewable energies. That is the future. In Finland, it took 17 years to build a new-generation nuclear power plant, and the costs were tripled. Nuclear power is more expensive than solar and wind power, and it works with uranium that has to be imported from abroad. Not to mention the storage of waste and the risk of accidents. In my opinion we need to focus on proven technologies in the field of renewable energies.

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