

The energy crisis

Can sun and wind fix it? Is the trigger also the cause? Is the energy crisis turning into an existential crisis?

by Ueli Gubler*



Ueli Gubler (Photo ma)

The skyrocketing energy prices leave no doubt, we are in an energy crisis, even if electricity is (still) flowing. It is rare that the trigger of a crisis is also its cause. If snowfall brings down a roof top, it is usually a material or

calculation error that is the cause, not the snow.

The balance of supply and demand is increasingly interfered by party-political or ideologically motivated dictates. The planned economy is in the process of replacing market economy.

There is no doubt that the Ukraine war is the cause of today's shortages. But is it also the cause, or does it simply relentlessly expose the failures of the past?

In 2004, Switzerland said YES to the *Bilateral Agreements II with the EU*. The free movement of persons agreed there brought Switzerland an immigration of 1 million people in less than 20 years. The municipalities responded accordingly and expanded their infrastructure. According to *Ruedi Noser*, a member of the Council of States, the federal government failed to keep up with this development.

The chaos is visible on the roads every day. Gradually energy security was undermined with additional requirements (e.g. residual water quantity). The legal channels in construction matters have been expanded to such an extent that the most banal building projects can be prevented for decades – or should they be?

The Energy Strategy 2050 specifically allows for the shutdown of our nuclear power plants, but is groping in the dark when it comes to replacement procurement. It is unclear when, how, where, what with and what costs are to be expected. Despite this ignorance, oil-fired heating sys-

* Ueli Gubler is an engineer HTL and freelance journalist. He scrutinises claims and speculations. As an engineer he takes a close look at certain regularities and numbers. tems are being prevented, and the sale of internal-combustion engines will be banned in the EU from 2035.

At the end of 2022, Germany intends to close the last three of the original 19 nuclear power plants. England has permanently shut down 28 and France 30 AKWs temporarily. Austria never commissioned the completed nuclear power plant in Zwentendorf. According to court ruling, the most modern coal-fired power plant, "Datteln 4" near Dortmund, is located in an area in which the development plan is invalid.

Nord-Stream II cost around 10 billion euros and, according to the will of politicians, should not be put into operation at all, thus threatening to become probably the most expensive construction ruin. Putin offered to deliver gas through Nord-Stream II – but Germany only wants gas from Nord-Stream I. This means a shortage of 55 billion m3 of gas. That is 25 times more than Switzerland's combined nuclear power plants supply. The attack on Nord Stream I and II at the end of September created a new dramatic situation.

Angela Merkel let Germany know on 12 February 2019, "If we continue like this, we will fail", and then economy minister Sigmar Gabriel announced in Kassel; quote, "The truth is that the energy transition is on the verge of failure".

In the "referendum booklet" of the Swiss Federal Government on the Energy Concept 2050, the resulting costs per household and year were estimated at 40 Swiss francs [edit.=40 €/40\$]. On 18 June 2021, Simonetta Sommaruga announced that the energy turnaround would require an effort of 100 billion. That is 48,000 Swiss francs per household. The incompetence of the Federal Council and Parliament is staggering. There is a lack of confidence and belief that they can lead us out of the crisis.

The federal government let it be known in September that 1000 wind turbines were initially planned. To replace nuclear power plants, 6000 would be needed, for fossil fuels 17,000 and for combustibles 9,000 wind turbines and the cor-

responding storage. Nobody seriously believes in such utopias.

According to the Swiss Federal Laboratories for Materials Testing (EMPA) of February 2022, 16 m² of solar panels per person are required to replace the nuclear power plants, as well as a battery (9.5 kWh/person) to balance day and night and 3 dams the size of the Grande Dixence for the entire country to balance the fluctuation of summer/winter. To reach the "CO₂ neutral" targets of the Energy Concept 2050, these estimates would have to be tripled.

"Good ideas" are springing up like mushrooms. Hydrogen is probably the ideal solution. But it will fail because of the implementation. The energy required to separate H_2O is enormous. Currently, the hydrogen combustion cell in automobiles is an issue. For this, however, it must be compressed to 700 bar in cars!

Such a car needs a fuel cell with a platinum coated membrane, a battery and an e-motor and is no longer affordable for an average consumer. To believe that people buy an expensive E-mobile in order to be able to store electricity for

cooking and heating is an infantile and stupid belief and exposes the helplessness of self-proclaimed experts.

With the introduction of electricity as a source of energy over 100 years ago, the energy concept grew with hydroelectric and nuclear power. They enabled us to have lasting security and prosperity. Both are CO₂-neutral. In the current gas crisis, the Federal Council is pinning its hopes on gas plants of all things and, five minutes before the alleged climate catastrophe, is asking companies that can still do it to switch to oil.

Thomas Stocker, the number one Swiss "climate alarmist", spoke of the necessary "great transformation" in Vaduz in 2015. During the voting campaign in the German Bundestag in 2021, posters could be seen with the slogan, "The economy will experience the GREEN miracle". Bluntly, there is already talk of deindustrialisation. In concrete terms, this means the destruction of the economy.

The beginning has been made – there is no sign of any resistance ...