

Greener than green – A Swiss nuclear perspective

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ABSTRACT

In 2020, for the second year running, Switzerland topped the World Energy Council's *Energy Trilemma Index*. One of the main contributing factors was Switzerland's electricity generation mix, comprising as it does roughly one-third of nuclear and two-thirds of hydro. Today, average electricity-related emissions in Switzerland amount to less than 20g CO₂ eq. / kWh.

Problem solved? Climate saved? Not quite.

Despite this stunning track record, in a statistically significant public questionnaire carried out in 2019 only 50% of those asked believe that nuclear power is a low carbon technology. It is therefore hardly surprising that the Swiss electorate has chosen not to replace the currently operating nuclear power plants at the end of their safe, economic lives in 20-30 years' time.

Hopeless situation? Give up? Not yet.

This year, with the goal of reducing carbon emissions by 55% until 2030 the European Union agreed, in the framework of the so-called "Green Deal", on a package of measures that could transform the European electricity landscape.

Whereas these measures will clearly benefit low carbon technologies, this is no reason to become complacent. The nuclear industry still needs to get better in communicating what we do but also to get better at doing what we do. As an example, although the process of nuclear electricity generation itself is practically carbon free, we still have some homework to do elsewhere in the nuclear life cycle.

Like it or not, we need to become cleaner than clean, greener than green.

In this short presentation, I will provide a brief overview of some economic and environmental aspects of nuclear power in Switzerland and in doing so highlight some of the initiatives and measures that have been taken to improve transparency, sustainability and hopefully acceptance of nuclear electricity production in Switzerland.