

Artificial intelligence, data and energy demand

*Dr Alexander Ressos, TEP
Attorney-at-Law (Switzerland), Solicitor (Hong Kong),
Solicitor (England & Wales)*

Artificial intelligence brings a further, less visible pressure: the demand for data centres and electricity. Large language models and other applications require computing capacity on a scale that has driven a global boom in the construction of data centres. Switzerland has attracted some of these investments, with the result that the electricity consumption of its data centres rose by almost a fifth between 2019 and 2024.¹ The canton of Zug, with its limited space and high land prices, is not a natural location for large data centres. Its companies nonetheless depend on computing capacity, including a crypto industry that has always been closely linked to questions of energy consumption.

The electricity supply of Switzerland has become a political issue. The country imports electricity in winter and faces the phase-out of its nuclear power plants over the coming decades. While voters approved a law in June 2024 to expand renewable energy production, the debate about new nuclear plants has reopened.² For the companies of Zug, a reliable and affordable electricity supply is a condition of their operations. For the commodity traders, the European power and gas markets are also a field of business. The energy question thus links the canton's economic future to national decisions that it cannot control.

1 Notes

1. Swiss Federal Office of Energy, study on the electricity consumption and efficiency potential of data centres, press release of 7 May 2026, admin.ch: data centres used 2.1 TWh in 2024 (about 3.6 per cent of Swiss consumption), 18 per cent more than in 2019, with 2.5 to 3.2 TWh projected for 2030; Switzerland has no dedicated facilities for training large language models. Federal Act on a Secure Electricity Supply from Renewable Energy Sources (Mantelerlass) approved on 9

Artificial intelligence, data and energy demand

June 2024 with 68.72 per cent Yes (Swissvotes, vote no. 670, [swissvotes.ch](https://www.swissvotes.ch)). ↩

2. Federal Council, press release "Initiative «Blackout stoppen» – Bundesrat verabschiedet Botschaft zum indirekten Gegenvorschlag", 13 August 2025, [admin.ch](https://www.admin.ch): the Federal Council rejects the initiative and proposes, as an indirect counter-proposal, an amendment to the Nuclear Energy Act that lifts the ban on general licences for new nuclear power plants; consultation from December 2024 to April 2025. ↩

For general information only. This article does not constitute legal or tax advice, does not replace advice on an individual case and creates no lawyer-client relationship. It reflects the legal position as of September 2026.

Online version: helveticaregister.com/zug-artificial-intelligence-data-and-energy-demand