Schweizerische Eidgenossenschaft
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Federal Department of the Environment,
Transport, Energy and Communications DETEC

Swiss Federal Office of Energy SFOE
Sektion Analysen und Perspektiven

19 June 2025

Factsheet: Revision of electricity balances for 2020–2024

1 Overview

New datasets enable monthly electricity production estimates for photovoltaics (PV), wind power and thermal power.[1] These production estimates for monthly electricity balances have been used since January 2024. As soon as definitive annual production values for PV systems, wind power systems and thermal power plants are available, the Swiss federal Office of Energy (SFOE) revise monthly electricity balances (see Section 2). This has been done retrospectively for all monthly electricity balances from 2020 onwards (see Section 3). In addition, starting from the reporting year 2020, the solar power statistics include a methodological revision of the production factor of newly installed PV systems. This results in a slight increase in statistical electricity production for PV systems (see Section 4).

The new breakdown of electricity production statistics is also included in the annual 'Swiss Electricity Statistics' report. Since monthly electricity balances are retrospectively revised, the release of this report has been postponed to mid-August, i.e. two months later than previously. All revisions are systematically reflected in the different energy statistics 2024.

The various revisions are briefly described below.

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[1] Total generation and supply of electrical energy in Switzerland in 2024 (de)

2 Definitive monthly electricity balance for 2024

Starting from the reporting month of January 2024, monthly electricity balances include separate electricity production estimates for thermal power, wind power and photovoltaics. Once the annual surveys[2] provided the definitive annual production values for 2024 for thermal power plants, wind power systems and PV systems, the corresponding monthly electricity balances for 2024 has been retrospectively revised to bring them in line with the definitive annual production values. The monthly consumption values shown in the electricity balance have been also adjusted as the calculation of final electricity consumption depends on total domestic production and the import/export balance minus storage pump consumption and grid losses. With these changes, the monthly electricity balances for 2024, which has been published on 19 June 2025, are considered definitive. This procedure is also applied for all monthly electricity balances for 2025 onwards.

3 Revision of electricity balances for 2020–2023

Prior to 2024, electricity production from thermal power, wind power and photovoltaics was aggregated together in monthly electricity balances under the category 'Conventional thermal & renewable generation'. With the introduction of new reporting categories, the monthly electricity balances has been revised retrospectively from 2020 onwards to ensure consistency. Electricity production from thermal power, wind power and photovoltaics are also reported separately. Annual production figures for each of these three sources will be calculated using monthly production data from Pronovo AG's certificate of origin database. The new individual categories replace the previously aggregated category 'Conventional thermal & renewable generation'. The revision of the electricity balances also requires adjustment of electricity consumption figures. In general, net production increase, particularly due to higher photovoltaic production values in the summer. The impact on annual net production and year-end consumption is less than 2%. For individual months, particularly in the summer, net production levels may increase by up to 6%. These revisions have been incorporated into the Swiss overall energy and electricity statistics.

4 Revision of solar power statistics

In solar power statistics, solar power production is calculated based on the total installed photo-voltaic (PV) capacity in kW and the specific output in kWh/kW. The installed capacity in service in a given year is determined by collecting sales figures for PV panels and drawing assumptions regarding the usage cycle of PV panels and applying a cohort model.
The PV systems newly installed within a given year do not yet produce electricity for the entire year. If, for example, a system is commissioned in August of a given year, it will only produce electricity in five of the twelve months of the installation year. This circumstance is taken into account in solar energy statistics using a reduction factor. This factor determines what proportion of the hypothetical annual

[2] Annual survey data are generally available in early June and published later in the relevant special publications set out in the list of energy statistics publications, along with a detailed description of the technologies concerned:
- Swiss thermal power generation, including combined heat and power (CHP) (2024), published on 26 September 2025 (de)
- Swiss renewable energy statistics (2024), SFOE. Preliminary results published on 27 June 2025, report on 25 September 2025 (de)
- Swiss solar power statistics (2024), published on 10 July 2025 (de)

production actually occurs in the installation year of new systems. Analyses of Pronovo AG's certificate of origin database show that this factor has been around 50% in recent years, i.e. on average, new photovoltaic systems are installed evenly throughout the year. In previous years, a lower proportion was assumed. To determine the photovoltaic production of newly installed systems, a reduction factor of 50% is therefore used from 2020 onwards, and the corresponding production values in solar energy statistics has been revised retrospectively from 2020. This revision increased annual production values by up to 290 GWh or 6% in 2023 compared to those published in the previous year.