

Investments in renewable energy production outside Switzerland by Swiss energy providers and institutional investors

Update - March 2018

Short version (with updated data as per March 2018) of the original report from September 2016 which is downloadable at:
www.energiezukunftschweiz.ch -> Info -> Dokumentation (available only in German)

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Summary

Energie Zukunft Schweiz (EZS), the organizer of the annual [New Energy Investor Summit](#), has researched investments in European renewable energy production by major Swiss energy providers as well as important institutional investors.

Swiss energy providers and institutional investors invest heavily in renewable energy production, especially in Switzerland's neighboring countries. To date (March 2018), they have invested in non-Swiss production facilities with an annual production of about **8.3 Terawatt hours (TWh)** electricity – almost **1.6 TWh more** than counted in our original report (09/2016).

Overview of investments

The chart below shows which Swiss investors have invested in renewable energy production facilities outside Switzerland and the amount of the yearly production in gigawatt hours (GWh) respectively. The total production sums up to around 8'280 GWh, or nearly **8.3 TWh**, per annum, the total installed power capacity to over **3.8 Gigawatt (GW)**. For detailed data please go to the appendix.

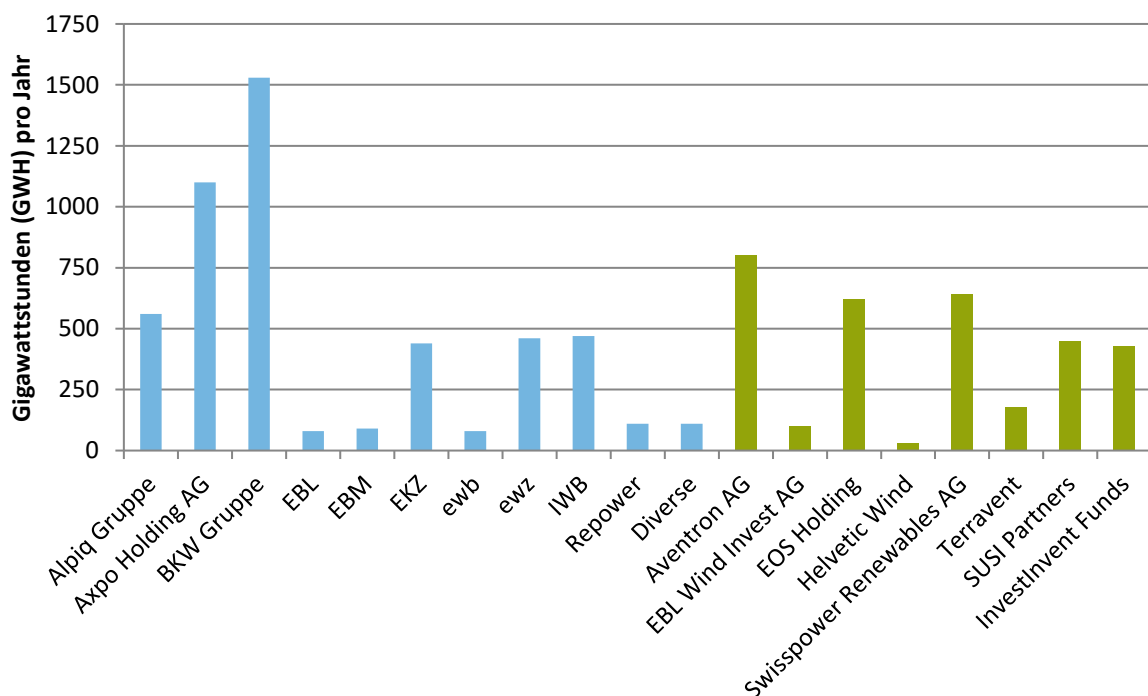


Figure 1: Annual electricity production of renewable energy facilities invested in by Swiss companies outside Switzerland (by share of investing companies). Blue bars: energy suppliers; green bars: affiliates and institutional investors. The electricity from these facilities is fed into the grid and offered on the power market with a green energy premium either via national compensation organizations (e.g. Stiftung KEV) or directly from the producer. Increasingly, direct marketing with a suitable premium is being established.

New Energy Investor Summit

This document/update is produced once a year by Energie Zukunft Schweiz, which also organizes the annual New Energy Investor Summit. In this context, it is interesting to see how successfully the most important Swiss investors can realize investments in renewable energy.

The 8th New Energy Investor Summit takes place on May 28 & 29, 2018, at the Swiss Re Centre for Global Dialogue in Zurich. The New Energy Investor Summit is an annual meeting for senior management, project developers and investors focusing on investments in Renewable Energy.

The event offers:

- Prescheduled half-hour meetings with top managers
- Evaluations of the most important European markets
- Direct and indirect investment opportunities in the EU and Switzerland
- Project, company and market presentations; best practice solutions.

www.investorsummit.ch



Providers of direct and indirect investments, energy suppliers, institutional investors, family offices and service providers all come together in half-hour prearranged meetings. Every year at the Investor Summit, renewable energy projects with a cumulative capacity of three to five gigawatts are typically offered. Participating investors have approximately 700-900 million euros available for investments. Thanks to the half-hour “Speed Dating” meetings, multiple transactions have been realized at the Investor Summit in recent years.

Appendix / Data

A) Details Concerning Investments in European Renewable Energy Facilities by Swiss Energy Providers

Disclaimer

The disclosures of this report are a snapshot of the most important Swiss investments in renewable energy known to us, about which information has been published online and is publicly available. The investment portfolios of the companies listed may have changed as a result of purchases and sales of investments or shares. The listing does not claim to be complete. Double counts cannot be completely ruled out due to the occasionally complex participation structures. Smaller holdings of investors not included in research or not listed in the sources may be missing from the listing.

Company / Investor ¹	Invested Facilities: Installed Capacity in Megawatts ² (MW)	Invested Facilities: Annual Electricity Production in Gigawatt Hours ³ (GWh)	Technology and/or Country Allocation of the Facilities (if possible with the consulted source) F=France, D=Germany; I=Italy, NO=Norway, SE=Sweden, POR=Portugal, BG=Bulgaria, ESP=Spain, FIN=Finland
Alpiq Gruppe ⁱ	290	560 ⁱⁱ	Wind Power: F/11.6 MW/29.1 GWh; I/196 MW/346.3 GWh; BG/72.5 MW/145 GWh Small Hydro: F/2.3 MW/12.5 GWh; I/9.5 MW/30 GWh
Axpo Holding AG ⁱⁱⁱ	470	1100	Mostly Wind Power in D, F, I, ESP.
BKW Gruppe ^{iv}	640 (475+165 under construction)	1530 (960+570 under construction)	Wind Power: D/149.8 MW/275.3 GWh; F/62.5 MW/158.7 GWh; I/239.6 MW; 442.8 GWh; NO/166 MW under construction/571 GWh under construction) Small Hydro: I/18 MW/70.2 GWh Biomass: I/3.7 MW/29.9 GWh
EBL ^v	40	80	Wind Power: D/19.3 MW/38.6 GWh; I/5.7MW/11.9 GWh Solar Thermal: ESP/15.3 MW/25.5 GWh
EBM ^{vi}	40	90	Wind Power: ESP/42 MW/91 GWh

¹ Investments of the mentioned utilities through the holdings Helvetic Wind and Terravent are, if not stated different in the sources, attributed to the utilities. Investments through Aventron AG, EBL Wind Invest AG, EOS Holding, Swisspower Renewables AG are not attributed to utilities.

^{2/3} Proportion of companies; calculated/researched values round to 5 MW/10 GWh

Company / Investor¹	Invested Facilities: Installed Capacity in Megawatts² (MW)	Invested Facilities: Annual Electricity Production in Gigawatt Hours³ (GWh)	Technology and/or Country Allocation of the Facilities (if possible with the consulted source) F=France, D=Germany; I=Italy, NO=Norway, SE=Sweden, POR=Portugal, BG=Bulgaria, ESP=Spain, FIN=Finland
EKZ ^{vii}	195	440	Wind Power: F/73.3 MW/164.3 GWh; D/76 MW/169 GWh; I/10 MW/22 GWh; POR/33 MW/83 GWh Solar Thermal: ESP/1.8 MW/3 GWh
ewb ^{viii}	40	80	Wind Power: D/25M W/46.7 GWh, I/15 MW/31.6 GWh Solar Thermal: ESP/1.8 MW/3 GWh
ewz ^{ix}	180	460	Wind Power: D/118.6 MW/ 276.7 GWh; F/12 MW/36 GWh; NO/14.7 MW/44.4 GWh; SE/31.2 MW/93.1 GWh Solar Thermal: ESP/3 MW/5 GWh
IWB ^x	245	470	Wind Power: F/156.8 MW/308.5 GWh; D/51 MW/110.4 GWh Photovoltaics: F/15.1 MW/19.9 GWh Biomass: D/16.6 MW/26.3 GWh Solar Thermal: ESP/3.6 MW/6 GWh
Repower ^{xi}	60	110	Wind Power: D/14.8 MW/28.9 GWh; I/46.9 MW/81 GWh
Various ^{xii}	>65	>110	Wind Power, Small Hydro, Photovoltaics in various countries

B) Details Concerning Investments in Renewable Energy Facilities Abroad by Affiliates and Institutional Investors

Affiliates and Institutional Investors			
Company / Investor	Invested Facilities: Installed Capacity in Megawatts (MW)	Invested Facilities: Annual Electricity Production in Gigawatt Hours (GWh)	Technology and/or Country Allocation of the Facilities (if possible with the consulted source) F=France, D=Germany; I=Italy, NO=Norway, SE=Sweden, POR=Portugal, BG=Bulgaria, ESP=Spain, FIN=Finland
Aventron AG ^{xiii}	360 (~335+~25 under construction)	800	Wind Power in F, D, I, ESP, NO; total of about 205 MW Photovoltaics in F, I, ESP; total of about 65 MW Small Hydro in F, NO, I; total of about 90 MW
EBL Wind Invest AG ^{xiv}	50	100	Wind Power in D/47.7 MW/104.6 GWh.
EOS Holding ^{xv}	350	620	Wind Power and Photovoltaics in F, D, POR.
Helvetic Wind ^{xvi}	15	30	Wind Power: D/9.3 MW/17.5 GWh; I/5.7 MW/11.9 GWh
Swisspower Renewables AG ^{xvii}	280	640	Wind Power: D/195.7 MW/390 GWh; I/39 MW/57 GWh Small Hydro: I/45 MW/190 GWh Photovoltaics: I/2 MW/3 GWh
Terravent ^{xviii}	70	180	Wind Power: F/55 MW/140 GWh; D/15MW/40GWh
SUSI Partners ^{xix}	240	450	Wind Power (167 MW) and Photovoltaics (72 MW) in D, FIN, F, UK, POR and I.
InvestInvent Funds ^{xx}	190	430	Wind Power in D and F.

Sources

- ⁱ Source: <http://www.alpiq.com/de/alpiq-gruppe/unsere-anlagen/our-assets.jsp>, as of February 2018.
- ⁱⁱ Average annual production of the power plants according to the plant descriptions.
- ⁱⁱⁱ Sources: Axpo Geschäftsbericht 2016/2017, Axpo Nachhaltigkeitsbericht 2016/2017.
- ^{iv} Source: <https://www.bkw.ch/ueber-bkw/unsere-infrastruktur/unsere-kraftwerke>, as of February 2018.
- ^v Source: <https://www.ebl.ch/de/unternehmen/standorte.html>, as of February 2018, without shares of EBL Wind Invest AG.
- ^{vi} Investments via EBM Greenpower AG. Source: Personal message, Antoine Millioud, CEO Aventron AG, 20.01.2017
- ^{vii} Sources: www.ekz-renewables.ch, www.terravent.ch, as of February 2018. Wind and solar power plants. Capacity in MW: Estimate EZS (2,200 full load hours).
- ^{viii} Investment via Helvetic Wind. Sources: www.snee.ch/beteiligung; www.ewb.ch/anlagen, as of February 2018.
- ^{ix} Sources: <https://www.ewz.ch/de/services/dokumentencenter/ueberewz.html>; <https://www.ewz.ch/de/ueber-ewz/medien/medienmitteilungen/2017/WindparkBorkum.html>, as of February 2018.
- ^x Sources: IWB, Annual Report 2016; <https://www.iwb.ch/ueber-uns/Kraftwerke/Europa.html>, energate-messenger.de/news/163387/badenova-erneut-in-frankreich-aktiv, as of February 2018.
- ^{xi} Source: <https://www.repower.com/gruppe/tabelle-anlagen>, as of February 2018.
- ^{xii} Sum of smaller Swiss investments by WWZ, Energie Thun, Edisun Power and others. Estimate EZS, February 2018.
- ^{xiii} Sources: <http://aventron.com/assetsportfolio/hydro>, as of February 2018; Aventron Press Release 26.1.2018; <https://www.ee-news.ch/de/article/36627/aventron-kraftwerke-von-norwegen-bis-sudspanien>, as of February 2018. Production in GWh: Estimate EZS.
- ^{xiv} <https://www.ebl.ch/de/unternehmen/standorte.html>, as of February 2018, facilities of EBL Wind Invest AG. https://www.ee-news.ch/de/article/37908/ebl-wind-invest-erweitert-bestehendes-portfolio-in-deutschland?utm_source=newsletter769&utm_medium=email&utm_campaign=newsletter769, as of March 2, 2018. Production in GWh: Estimate EZS (2,200 full load hours).
- ^{xv} Sources: EOS Holding, annual report 2016, P. 11-13. Actual production of the year 2016. Reported numbers in our original report and the last update were too high by mistake.
- ^{xvi} Only the shares of SN Energie (without shares of BKW, EBL, EKZ Renewables, ewb). Source: www.snee.ch/beteiligung; www.ewb.ch; as of February 2018.
- ^{xvii} Source: <https://swisspower.ch/ueber-uns/swisspower-renewables-ag>, as of February 2018.
- ^{xviii} Source: www.terravent.ch, as of February 2018. Without shares from Axpo and EKZ.
- ^{xix} Source: http://www.evaluateenergy.com/View/7261-1025-co-colnfo/Company/susi_renewable_energy_fund_ii/news, as of February 2018. Production in GWh: Estimate EZS (2'200 full load hours/Wind, 1'200 full load hours/PV)
- ^{xx} Source: <http://www.investinventfund.com/wind-energy-fund/assets/fund-structure>, as of February 2018.