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Axpo Holding AG

Profits in Europe but continuing losses from Swiss production

Further progress with implementing its strategy enabled Axpo to close out the 2016/17 financial year with a pleasing result for the period of CHF 310 million (previous year: CHF –1,252 million). Thanks to the improved outlook for electricity prices from 2020 onwards, no substantial impairments were required for the first time in a number of years. For now, therefore, Axpo can shelve its plan to enter the capital market that was announced a year ago and is pushing ahead with the Group's strategic realignment using its own resources.

Dear Readers,

In an environment that remains dominated by low electricity prices and influences that distort the market, Axpo achieved a pleasing result in the 2016/17 financial year. The Group has stuck firmly to its strategy of recent years, which is geared towards strengthening cash flow and increasing value, and has achieved measurable success.

Operations in other European countries have also performed very positively this year and are now a sustainable source of substantial revenue. In Switzerland too, Axpo has tapped into new market potential in the grid business, which is not dependent on electricity prices, as well as via its IT subsidiary Avectris and, in the sphere of smart energy, via CKW.

Nevertheless, neither these successes nor the pleasing annual result must be allowed to disguise the ongoing earnings problems affecting electricity production in Switzerland. Persistently low revenues from electricity sales will continue to impact negatively on Axpo's results over the next few years. As, with the exception of CKW, Axpo does not have any committed customers against whom it can offset production costs, whatever it generates has to be sold on the market. As part of its efforts to optimise its core business, therefore, Axpo has further fine-tuned its portfolio. New owners have been found for the participating interests in the Albbruck-Dogern, Argessa and Lizerne-et-Morge hydro power plants. The interest in the utility company of the canton of Schaffhausen has also been sold.

Another pleasing performance by renewable energies and the customer business.

Cost savings: target exceeded

At CHF 5,567 million, total income recorded a pleasing increase in 2016/17 compared with the previous year (CHF 5,416 million). The key factors were higher energy prices in Europe coupled with increased income from energy trading. Earnings before interest and tax (EBIT) came to CHF 269 million. Unlike the previous year (CHF –1,226 million), EBIT was no longer eroded by high impairments.

The additional compensation from Swissgrid in 2017 for taking over the extra-high-voltage grid, amounting to CHF 163 million, bolstered the result, as did the greatly improved financial result and the pleasing figures from Axpo's CKW subsidiary. Cost savings also made a significant contribution towards improving the operating result. The target of making sustainable cost savings of CHF 200 million by the end of the financial year was even exceeded slightly thanks to further optimisation measures in purchasing and IT. Furthermore, the impairments performed in 2016 resulted in lower depreciation and increased usage of provisions for onerous energy procurement contracts.

Investments fell by around two thirds year-on-year. Over the next few years, Axpo will continue to focus on investing in the safety of power plants and in profitable business areas.

Sustainable profits from abroad – success with new business in Switzerland

Axpo has worked to generate more added value from subsidised renewable energies and the international customer business in a targeted manner. The profits thus earned from Europe help to offset the earnings problems affecting the Swiss production fleet.

Axpo subsidiary Volkswind has connected six wind farms in France to the grid, containing 35 plants in all. By way of comparison: there are currently 37 plants producing power in Switzerland. Volkswind has now installed an impressive 60 wind farms with output of over 700 MW, with a further 3,000 MW in the pipeline. With Volkswind, Axpo now has a presence along the entire

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Thomas Sieber, Chairman of the Board of Directors

Andrew Walo, CEO

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wind energy value chain, from development, construction and operation of the plants through to the marketing of the electricity. Although no wind farms were sold during the last financial year, a number of such sales are planned again for 2018.

The international customer business, which involves marketing and procuring energy for customers from various segments, continued to develop well during the last financial year. Axpo now has a presence in 27 countries and is active in 39 markets. A new branch office in Lisbon was added in 2017. As well as being named Europe's best energy trader once again, Axpo is also the leading marketer of renewable energy in Europe at over 14,000 MW. It has increased its electricity supplies to end customers by 22 per cent to 69 TWh and its gas supplies by more than 75 per cent to just over 43 TWh. The volume of trade in liquefied natural gas (LNG) grew substantially, delivering energy totalling around 20 TWh. Axpo already ranks fourth in total electricity sales in Italy. In Norway, meanwhile, Axpo concluded a long-term power purchase agreement for the 112 MW wind farm in Egersund during the last financial year.

Axpo has now concluded its first energy contracts at higher prices for 2020.

The grid business has successfully strengthened its position in the service business involving third-party customers. Major orders have been won from customers such as Swissgrid, SBB and ASTRA. Axpo now offers its grid customers overhead line surveys using laser scanning. Another new addition is the calculation tool ERIS (Evaluation of Reliability Index for Electric Systems), which assesses the quality of security of supply. The move to extend engineering activities into western Switzerland is bolstering the positive business trend. Some major customers in the form of BKW and Salt have also been won in the data network services business. In order to expand this business in a targeted manner, Axpo is setting up "Axpo WZ-Systems AG" in partnership with WZ Systems. This new company offers a comprehensive range of communication solutions for business customers including crisis-proof language and data communication for the emergency services.

With its new range of smart energy solutions, the Central Swiss subsidiary CKW gives its end customers access to modern ways of using energy. From proprietary electricity production, storage and electromobility through to cost-efficient heat generation, CKW is a single-source provider. At the heart of its offering is an intelligent controller that enables the amount of energy consumed from self-generated solar power to be optimised and monitored online or on a smartphone app.

The repositioning of Avectris deserves to be seen as a success story. The IT service provider has turned its focus squarely towards the external market and won several new customers in Swica, Generali, Swissphone-Wireless, Stadtwerk Winterthur and Bystronic. Avectris's strengths lie in managed IT services with high security requirements, SAP services, collaboration and IT security consulting for medium-sized companies as well as various solutions for the supply industry.

Nuclear energy was a subject of much political debate in the 2016/17 financial year. Switzerland set a new course with two referenda: there will be no more new nuclear power plants – but existing ones will continue to be used for supply as long as they are safe. Axpo has been quick to address the consequences of the decisions, with the focus on opening up new business areas. The safe operation of the existing nuclear power plants is the priority. Following extensive material inspections, Axpo expects block 1 of the Beznau nuclear power plant to be restarted in 2018.

With its supply and climate market model, Axpo made a key contribution to the debate about improving

the conditions for electricity production in Switzerland in the 2016/17 financial year and will remain actively involved.

No increase in capital

Price and currency hedging will mean that the record-low electricity prices and weak euro will continue to have a negative impact on the result over the next two years. However, Axpo has now concluded its first energy contracts at higher prices for 2020. The markets expect the trend of recovering wholesale prices to continue beyond that year, not least because numerous large power plants will be disappearing from the grid in Europe.

Thanks to the operational progress made, the anticipated changes to the political and regulatory framework conditions and the likelihood of a return to higher income from electricity sales from 2020 onwards, Axpo has chosen not to enter the capital market for the time being. The option of pooling growth areas is being prepared in such a way that we would be able to obtain investment capital again within a year should the environment deteriorate again. Axpo is thus ensuring that it has the strategic flexibility to respond swiftly to changing situations on the market.

The situation for Swiss electricity producers remains tense.

Despite these pleasing developments for the company and its shareholders, the Axpo Group still faces considerable challenges over the next few years. Whether the price recovery will last is by no means certain. The situation for Swiss electricity producers therefore remains very tense.

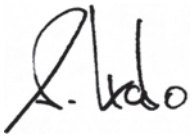
Changes on the Board of Directors

In 2016, the owner cantons of north-eastern Switzerland decided that they would now be electing specialists to the Board of Directors of Axpo Holding AG rather than Cantonal Councillors in order to protect their interests. In addition, the move to abolish dual Board of Directors mandates at Axpo and at the cantonal utilities was finalised at the Annual General Meeting of 10 March 2017. As a result, financial specialist Dorothée Deuring, economist and energy expert Peter Kreuzberg and electrical engineer and digital expert Roger Wüthrich-Hasenböhler were elected to the Board of Directors as representatives of the canton of Zurich and EKZ along with energy expert Hanspeter Fässler representing AEW Energie AG.

By stepping down, Cantonal Councillors Carmen Walker Späh, Stephan Attiger and Markus Kägi as well as Ueli Betschart, Reto Dubach, Andreas Frank, Peter Reinhard and Ernst Werthmüller cleared the way for Axpo's Board of Directors to be downsized and realigned as had been announced in December 2016. The company would like to thank the former members of the Board of Directors as well as the shareholders who enabled the realignment. This overhaul will be completed at the Annual General Meeting in 2018.

We would like to express our tremendous gratitude to the entire Axpo team in these challenging times: to the strategic and operational management for their pioneering and challenging work implementing the strategy and readying the Group for future challenges and, above all, to all the staff members who work hard for Axpo on a daily basis, in Switzerland, Europe and the US. They energetically and untiringly pursue ever-better solutions for our customers and for our company.

Thomas Sieber
Chairman of the Board of Directors



Andrew Walo
CEO

The problem comes to a head in winter

There may be problems with security of supply if all nuclear power plants were removed from the grid. But certainly not before that. The Swiss Federal Office of Energy (SFOE) is certainly confident. Yet there could be a blackout at any time – as an example from 24 January 2017 shows.

The SFOE is backing imports, assuming that Switzerland will always be able to procure enough electricity from neighbouring countries, even in extreme winter conditions, by completely opening up the electricity market and concluding an electricity agreement that connects us with the EU market. However, even leaving aside the tough third-country rules that are currently being discussed by the EU, Swiss opposition to an institutional framework agreement and the liberalisation of the electricity market, the question remains: would our EU neighbours always have enough energy to help us out?

The answer is no, as the example of 24 January 2017 shows. On this cold winter's day, Germany was in the grips of the "dark doldrums" due to the almost complete loss of solar and wind production. From 9 am, consumption in Germany outstripped the country's own output. With a vast area hit by the same weather conditions, compounded by parts of the French nuclear energy fleet failing at the same time, all neighbouring countries were also having to import energy. A tricky situation, to say the least. In the end, a potential blackout was prevented by imports from Scandinavia. It is important to note that, on that day, Germany could still count on its nuclear fleet. The loss of that fleet by 2022 will seriously aggravate the supply gap during such "dark doldrums".

Self-sufficiency to fall to 50 per cent by 2035

This cautionary tale demonstrates that we must never rely solely on our neighbours. France, too, can suspend its contractual deliveries to Switzerland in order to meet its own requirements – and there is no doubt that our other neighbours would also put a non-EU country last in line to receive backup power in extreme circumstances. Indeed, under EU rules, they would have no choice.

Thus Switzerland too must have a healthy level of self-sufficiency. By present-day standards, however, Switzerland will be losing as much as one third of its self-sufficiency by gradually decommissioning its nuclear power plants. According to assumptions by the Association of Swiss Electricity Companies (VSE), self-sufficiency will fall from around 80 per cent in 2020 to between 50 and 60 per cent in 2035. This is the case over the year as a whole. In winter, the situation is far more dramatic. Nuclear energy currently meets up to 70 per cent of daily requirements during the coldest season. The SFOE believes that self-sufficiency is not a priority; while talking of a "strategic reserve", it fails to clarify what this means. Typically, it means backup power plants that can be deployed in critical situations on the instructions of the transmission grid operator. This could, for instance, justify the construction of gas power plants in Switzerland, which would be highly suited to such a role. The problem is that as well as being detrimental to the carbon footprint, gas power plants damage Swiss production on the market because they erode price peaks – and in so doing deprive Swiss hydro power producers, among others, of money for investment. So a "strategic reserve" looks set to become an additional burden for the Swiss hydro power sector, putting it at a further competitive disadvantage.

Market prices down 50 per cent, water rates up 37 per cent

On top of this, there is still no sign of a solution to the unsustainable situation with regard to water rates. These have risen by around 37 per cent since 2009, while market prices have fallen by around 50 per cent after adjusting for currency effects. Income on the market now barely covers taxes, duties and water rates at some hydro power plants, which are therefore no longer able to cover their operating and capital expenses.

> The question remains: would our EU neighbours always have enough energy to help us out?

Plans to reduce exorbitant water rates temporarily are being challenged. Politicians are also proving reluctant to introduce greater flexibility and an alignment with market prices straight away. Their argument is that many energy supply companies clearly have a monopoly that enables them to sell hydro power at production cost, meaning they cannot possibly have earnings problems. While this is true, it is precisely the companies that, like Axpo, operate on the market and have no committed customers that pay the majority of water rates – because, after all, they are the biggest producers of domestic hydro power.

The indifference towards the problems faced by hydro power is particularly astonishing in view of the fact that, with its storage capacities, hydro power is the only technology capable of increasing Switzerland's own production in winter as part of the Energy Strategy 2050. As well as being the most important source of renewable energy, hydro power is also the necessary complement to an increasingly erratic output from solar and wind power.

Coal policy shapes electricity prices

The more we rely on imports, the more we will also depend on the price of German electricity, which in turn is driven by the price of coal. Over the coming years, coal policy not just in Germany, but worldwide, will determine the trend in electricity prices.

The current European market models give preference to coal over gas, due to cheap CO_2. In 2016, this resulted in record-low prices of just over EUR 20/MWh. And even the current recovery in electricity prices to up to EUR 35/MWh is down to coal. Prices are rising again because coal is getting more expensive.

China's role on the coal market

Swiss hydro power producers are hoping that this trend will continue because nuclear and coal-fired plants will be withdrawn from the grid over the next few years in Germany, and France too is likely to reduce its nuclear capacities in the medium term. There are also plans to make CO_2 and, with it, coal combustion more expensive. As well as these positive prospects, however, there are some very different scenarios. Nobody knows whether the recovery in prices will last.

A major reduction in China's coal imports will have a knock-on effect on European electricity prices.

One threat is being posed by what would actually be a pleasing development in the Far East: China wants to reduce its CO_2 emissions, moving away from coal power thanks to more renewables and new nuclear technology. But this could have serious repercussions for the international coal market and, by extension, the price of electricity.

A look at the figures soon reveals why. In 2016, Germany imported around 43 million tonnes of power plant coal. The total volume of sea-traded coal was around 891 million tonnes. China alone consumed 2,960 million tonnes of coal, of which 189 million tonnes were imported. It is easy to see that a major reduction in China's coal imports will have a knock-on effect on European electricity prices. Prices could plummet to EUR 20/MWh just as quickly as they have recovered on the European electricity exchanges since 2016, spelling disaster for Swiss hydro power.

Swiss hydro power needs investment

Considering the likelihood of such scenarios, the current optimism amongst Swiss politicians towards the issue of security of supply is hard to believe. The political will to replace nuclear energy with renewable energies is being enforced. But then there must also be investment in those renewable energies. With wind, solar or biomass, politicians are encouraging such investment with compensatory feed-in remuneration or direct contributions.

In the case of hydro power, however, which supplies 60 per cent of the electricity produced in Switzerland and is thus by far the most potent source of renewable energy, the job of investing is being left to the market. Yet the general environment and price trends remain uncertain. Current price levels are too low to enable investment in expanding or upgrading hydro power plants.

In the 2016/17 financial year, Axpo invested in renovating the Tschar/GR hydro power plant, thus doubling its electricity production. Aside from this, Axpo did not undertake any renovations and expansion investments at its hydro power plants. Producers that are unable to pass their production costs on to end customers are doing likewise. This is because the costs (including taxes, duties and water rates) are so high that it is impossible to generate either the return on equity or the profits necessary to invest. Investment is being put on hold, awaiting "better times" – but nobody knows whether and when they will arrive.

A market model creates investment security

Although the new Energy Act, in which a market premium for hydro power is enshrined, is a step in the right direction, it is not enough. Consequently, Swiss hydro power producers are carrying a backlog of investment running to several hundred million Swiss francs.

A market model like the one proposed by Axpo in the political debate would create the necessary investment security and offer Swiss producers protection against the distortions of international markets. Particularly in winter, when imports are not always guaranteed, hydro power is our backup plan due to our country's topology and the volume of water at our disposal. Regular storage power plants can be controlled, can respond flexibly and can still supply many system services.

In other words, the Chinese really are playing an important role for Swiss hydro power. Forward planning is key.

Key figures

Finances

	2016/17 in CHF million	2015/16 in CHF million	2014/15 in CHF million	2013/14 in CHF million	2012/13 in CHF million
Total income					
Total income	5 567	5 416	5 860	6 705	7 025
of which revenues from energy sales and grid usage	5 330	5 169	5 596	6 533	6 736
EBIT					
Earnings before interest and tax (EBIT)	269	–1 226	–867	–838	364
as % of total income	4.8%	–22.6%	–14.8%	–12.5%	5.2%
Result for the period					
Result for the period	310	–1 252	–990	–730	212
as % of total income	5.6%	–23.1%	–16.9%	–10.9%	3.0%
Cash flow and investments					
Cash flow from operating activities	175	361	461	765	876
Net investment in non-current assets (excl. loan receivables)	–294	–890	–699	–779	–742
Free cash flow	–119	–529	–238	–14	134
Balance sheet					
Total assets	19 023	18 588	18 908	20 219	20 557
Equity incl. non-controlling interests	4 884	4 634	6 065	7 517	8 331
Equity ratio in %	25.7%	24.9%	32.1%	37.2%	40.5%
Net financial assets	56	93	476	935	961
Employees (full-time equivalents)					
Average number of employees	4 231	4 293	4 312	4 435	4 430
Number of employees at balance sheet date	4 222	4 294	4 284	4 477	4 509

Energy business[1)]

	2016/17 in million kWh	2015/16 in million kWh	Year-on-year change in %
Procurement			
Nuclear power plants	16 395	18 346	–11
Hydro power plants	7 846	8 347	–6
Conventional thermal power plants	7 567	6 940	+9
New energies (incl. other associates)	1 096	1 050	+4
From third-party companies and trading	35 832	51 005	–30
Gas (excl. gas-based electricity generation)	9 638	15 373	–37
Total	**78 374**	**101 061**	
Sales			
Electricity sales	67 981	84 947	–20
Gas sales	9 638	15 373	–37
Losses/own use	220	224	-2
Direct sales from other associates	535	517	+3
Total	**78 374**	**101 061**	

[1)] The sales and procurement figures shown here relate only to the marketing of Axpo's own production output and to the SME sales business. They do not include origination business served using energy procured on the market.

Publishing details

Published by
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Editor
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Layout
media & more GmbH, Zurich

Printing
cube media AG, Zurich

Photos
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12.2017 | en