

Axpo Holding AG

Sustainability Report 2017/18



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CEO interview

Axpo CEO Andrew Walo discusses the relevance and importance of sustainability within the Group

Andrew Walo, economic sustainability has been very much in the foreground in recent years. Have these efforts paid off?

The last few years have been very testing for us in economic terms. Technological, regulatory and economic changes have thrown up challenges for the electricity sector. From today's perspective, I can say that Axpo took early steps to overcome the challenges presented by these far-reaching changes and to fully exploit the opportunities inherent in them.

What does this mean exactly?

We've been making a profit again for the last two years; operationally, we are stronger. Firstly, we've achieved recurring savings of 200 million francs. Secondly, we are growing in many areas. The lower electricity revenues from Switzerland, for instance, were largely offset by successful business abroad and in trading. The international businesses contributed around CHF 100 million to the result in the 2017/18 financial year. Business that is not dependent on electricity prices is also making significant contributions to the result. Furthermore, we are exploiting the potential of digitisation to further optimise our processes while at the same time developing new customer interfaces and services.

Electricity prices appear to have bottomed out. So are things calming down on that front too? Absolutely: we're seeing a return to rising electricity prices. For Axpo, however, these rising electricity prices will only start to have a positive impact from 2020 onwards. Revenues from electricity sales remain low. This is because our production is always hedged up to three years in advance. What this actually means is that the 2019/20 financial year will be affected by the lows. The price recovery will not begin to have a positive effect until the 2020/21 financial year.

Let's talk about renewable energies. Axpo is the number 1 in Switzerland in renewables. How important to you is this form of energy?

Very important. In Switzerland, 60 percent of the electricity produced comes from hydro power. It's the most important renewable energy and is also a key component of Axpo's portfolio. We operate more than 60 run-of-river, storage and pumped-storage power plants. One of the most significant plants of late is the Linth-Limmern pumped-storage power plant. The once-in-a-generation project has been on the grid since the end of 2017.

Further evidence of the environmental dimension of sustainability is the fact that we have increased energy efficiency at our power plants, on our grids and among our customers by a total of 13,640 MWh. We are also promoting the environmental sustainability of our assets. At the new Etzel substation, for example, the climate-friendly insulating gas G3 is being used for the first time anywhere in the world, as a substitute for SF_6 .

Aside from hydro power, which renewable energies are to be found in Axpo's Swiss portfolio? Besides hydro power, we are also committed to energy generated from biomass. Although this form of energy is still niche, it's a niche with potential. Axpo operates 15 fermentation plants and five composting sites across the whole of Switzerland. In 2018, we launched a pilot project in Chavornay in the canton of Vaud which involves storing biogas so that renewable electricity generated from biomass can be used when it is needed, around the clock. When it comes to the issue of storage, we have to keep innovating. The objective is to supply Swiss households with renewable electricity on a more constant and targeted basis.

Our subsidiary CKW is building solar power plants for private individuals and companies on an almost daily basis. One flagship project in 2018 was the solar power unit mounted on SC Kriens' new football stadium. CKW is also involved in a wind farm on the Lindenberg, on the border between the cantons of Lucerne and Aargau.



You're talking specifically about your activities at home. How active is Axpo abroad?

In renewables, with our subsidiary Volkswind we're a strong player in wind energy, along the whole value chain. We build wind power plants in locations where they produce more electricity because of the wind conditions.

In 2018 alone, we built five wind farms with 26 wind power plants in France. As well as building and operating plants, we also sell parts of the portfolio; in France, for instance, we sold four wind farms in 2018. In this way, we exploit the entire wind power value chain. In addition, between 2018 and 2020 the Unilever Group will be procuring the electricity for its plants in Italy from the southern Italian wind farm WinBis, which is owned by Axpo. Signing this contract signals the start of the "Axpo Green Energy" programme, a new kind of certification for renewable energies in Italy.

What's the situation with photovoltaic energy?

Our subsidiary CKW is involved in installing photovoltaic plants and battery solutions and, as I've mentioned, is promoting the local expansion of solar power production. Internationally, too, we are committed to expanding photovoltaic energy. In early 2018, the first-ever non-subsidised 25 MW solar power plant was built in Portugal with Axpo's support, under a ten-year power purchase agreement.

Axpo has managed to retain the Gold standard in the EcoVadis sustainability ratings, placing it among the top 5 percent of all companies rated. Are ratings like this important to you?

I was delighted with this award, because it acknowledges the achievements of our employees in the area of sustainability. EcoVadis is an established rating, so it is also important to our customers, who are increasingly expecting their business partners to have good sustainability ratings. This is particularly true of origination customers in Europe.

Internationally, Axpo is also involved in energy trading and distribution. How are these businesses progressing?

We now have a presence in 29 countries and are active in 39 markets. In Italy, we already have more than around 200,000 supply points for electricity and gas and rank fourth in electricity sales for private customers. We're driving forward the volume of renewable energies marketed in Western Europe. Our branch in the USA is delivering positive results and is now active not only on the East Coast but also on the Texan market. The origination business, i.e. marketing and procuring electricity, natural gas and energy certificates and granting market access to international customers, also plays an important role. With a customer portfolio representing an installed capacity of 14,000 MW, Axpo is amongst the leading marketers of renewable energy in Europe.

It's not just at the economic and environmental level that sustainability matters. How important is social sustainability?

We attach great importance to ethical business conduct: right now, we're rolling out a code covering this at our business partners. In the last financial year, as much as 60 percent of our order volume was processed through business partners who have signed up to this code. We want to increase this share to 90 percent by the 2020/21 financial year.

How does Axpo make a contribution to society?

Axpo supports over 200 different organisations, institutions and projects, which are committed to culture, the environment or young and disabled sporting talent. For more than ten years, we've been a partner of PluSport, the umbrella organisation for disabled sport in Switzerland. We stepped up this cooperation in 2018 and are now the main sponsor of the PluSport Day. This day of sport is held annually in Magglingen and is aimed at children and adults with disabilities. The event is of great personal importance to me. I help to organise and run it each year along with 50 other Axpo colleagues.



Fields of action and goals

The focus of Axpo's commitment to sustainability is on the business view and all the related strategic and operational activities. However, Axpo is also part of the Swiss economy and Swiss society. Based on this broad understanding of sustainability, Axpo is committed to the following six fields of action and is working to achieve the targets set for each one.

1. Axpo ensures its long-term corporate success

The challenge: Ensuring the long-term success of the business is currently a priority challenge for Axpo, and will remain so in the coming years. Although wholesale prices seem to have bottomed out in 2015/16 and there are signs of a slow recovery, this effect will take a few years to benefit Axpo. This is chiefly because the volume of energy produced on the electricity exchanges is hedged up to three years in advance.

Axpo's approach: In this challenging situation, Axpo will place the focus on positive free cash flow (FCF). Consequently, Axpo will reduce operating costs, selectively invest and increase its revenues from new or expanded areas of business. By taking this approach, Axpo is seeking to maintain its good credit rating (currently "investment grade"), because of which Axpo is viewed as a trustworthy business partner and is able to obtain favourable financing terms. This enables it to make investments in the expansion of new business areas and in the maintenance of its power plants, for example.

2. Axpo reduces its carbon footprint and increases energy efficiency

The challenge: Climate change is one of the global mega trends of our time – the mostly negative consequences can likewise only be countered by a global rethink and global action. Under the Paris Agreement of December 2015, the member states of the United Nations Framework Convention on Climate Change commit to limiting man-made global warming to a maximum of 2°C compared with pre-industrial levels. Developed industrial nations such as Switzerland can play an exemplary role in achieving this goal.

Axpo's approach: Axpo's contribution involves the low greenhouse gas intensity of its production mix and boosting its energy efficiency. The relevant possibilities for increasing energy efficiency lie in maintaining the production plants with the most up-to-date and most efficient technology, reducing energy losses on the distribution grids and making careful and efficient use of energy when operating buildings. Moreover, Axpo supports its customers in their plans to boost their own energy efficiency.



3. Axpo enforces sustainability principles among its business partners

The challenge: In today's globalised world, supply chains are complex and there are often few opportunities for influencing downstream suppliers and their own suppliers in particular.

Axpo's approach: To do justice to its understanding of sustainable corporate governance, Axpo creates a binding basis on which its business partners can engage with their own corporate responsibility. Axpo does so by means of its Code for Business Partners.

4. Axpo plays an active role in shaping the energy turnaround

The challenge: Energy systems are in the process of transformation throughout Europe. The number of decentralised elements is increasing, the passive consumer is transforming into a discerning customer and "prosumer" and, due to changing customer needs and ever-sinking costs, renewable energies are booming. At the same time, state subsidies for renewable energies are being replaced with market-driven funding, or even abolished outright in many European countries. The upshot of these regulatory changes is that investors in new plants are increasingly exposed to the risk of changing wholesale prices. As renewable energies increase, the volatile electricity production associated with them must also be adaptable in line with demand. This is making electricity storage technologies ever more important.

Axpo's approach: Axpo is helping through various business activities to reshape the energy system. In Switzerland, it is one of the leading producers of renewable energy. Furthermore, the flexible hydro power plants, such as the new Limmern pumped-storage power plant, create the capacity needed to balance out volatile electricity production. With the takeover of wind farm developer Volkswind in 2015, Axpo strengthened its activities in the development of onshore wind farms in Germany and France and added to its own portfolio of wind farms in Europe outside Switzerland.

As well as building and operating its own plants, Axpo is positioning itself as one of the leading marketers of electricity from renewable energies in Europe. The customer portfolios it manages chiefly comprise wind and photovoltaic energy and are spread right across Europe. Axpo offers investors in renewable energies individual and long-term power purchase agreements at guaranteed purchase prices, thereby enabling the construction of new plants which are not subsidised by a fixed feed-in remuneration. These PPAs give investors planning certainty, particularly if they lack expertise in marketing electricity. Institutional investors such as pension funds or other investment funds are increasingly being joined by large corporations which, under various initiatives, are committed to achieving 100 percent renewable electricity supply (one example being the RE-100 Initiative).

Axpo is responding to the trend towards increasingly decentralised and intelligent elements in the energy system through its subsidiary CKW and its sites in Italy and Spain, by developing and selling smart energy products. Products and services focusing on decentralised production and optimised consumption (photovoltaics, batteries, e-mobility), heat solutions and intelligent control are offered to private and commercial customers. Products and services to increase energy efficiency, for flexibility management and in the area of building technology are offered to business customers.



5. Axpo is a responsible employer

The challenge: The success and long-term continuance of Axpo as a going concern is based on the achievements, motivation and continuing development of its employees.

Axpo's approach: Particularly at times when it is focusing on new business areas and services, Axpo seeks to maintain a high level of employee satisfaction, as this is the prerequisite for good performance and the driver of innovations. Employee satisfaction is periodically gauged by means of a Group-wide employee survey, which then serves as a basis for improvement measures. In addition, guaranteeing safety at work, in particular during the construction and operation of production systems and grids, is a central priority.

6. Axpo makes a contribution to society

The challenge: As a public-sector enterprise, Axpo has a particular duty towards society.

Axpo's approach: For Axpo, credible commitment is based on open and honest dialogue with all stakeholders and on setting down roots in the regions where it its located. In this respect, Axpo focuses on the transparent and politically neutral communication of knowledge on all aspects of energy at its visitor centres and power plants, a comprehensive annual reporting suite on all sustainability topics of relevance to Axpo, and support for over 200 different organisations, institutions and projects which are committed to culture, the environment or young and disabled sporting talent.



An overview of our fields of action, goals and performance

Fields of action	Goals	Performance 2017/18	
Axpo ensures its long- term corporate success	Ensure long-term capital market viability	The ability to access the capital market was ensured by maintaining an investment grade rating.	
	Ensure the company's risk capacity	Equity of around CHF 5 billion enabled risk capacity to be assured.	
2) Axpo reduces its car- bon footprint and in- creases energy effi- ciency	Annual measurement of greenhouse gas emissions in accordance with ISO 14064	Verification of group-wide green- house gas inventory conducted by independent auditors Ernst & Young Ltd.	
	The greenhouse gas intensity of electricity generation from our own plants and associ-	The greenhouse gas intensity of Axpo's electricity generation is 83 kg/MWh.	
	ates is below the European target path for the electricity sector to achieve the 2°C target set in the Paris Agreement.	The European target reductions for the electricity sector are: • 2017: approx. 300 kg/MWh; • 2022: approx. 200 kg/MWh;	
	By the end of the 2021/22 financial year, improvement of 150,000 MWh in energy effi-	An increase of 13,640 MWh was achieved (planned: 8,900 MWh).	
	ciency as regards electricity in the production and distribution of electricity, in operations and at customers, compared with the 2015/16 base year.	The cumulative energy efficiency gain compared with the base year is 25,810 MWh.	
3) Axpo enforces sustainability principles among its business partners	By the end of the 2018/19 financial year, 60% of the order volume ¹ in excess of CHF 100,000 that Axpo can influence will be placed with business partners who have accepted the Axpo Code for Business Partners on compliance with the principles of business ethics and minimum social and environmental standards, rising to 90% by the end of the 2021/22 financial year.	Around 60% of the order volume that Axpo can influence was placed with business partners who have accepted the Axpo Code.	

¹ The order volume that Axpo can influence involves the purchase of goods and services. It does not include official levies and charges, costs for energy procurement and grid utilisation, financing, membership and association fees, sponsorship and insurance.



Fields of action	Goals	Performance 2017/18
4) Axpo plays an active role in shaping the energy turnaround	Annual development and creation of renewable energy capacity in Switzerland and abroad, in MW.	Expansion of 67.3 MW (Previous year: 110.7 MW): Wind: +63.5 MW Photovoltaics: + 3.8 MW
		Hydro: No expansion during the reporting year
		Wind: Completion of five onshore wind farms in France by Volkswind, with a total capacity of 63.5 MW.
		Photovoltaics: Addition of 2 plants to CKW's own PV portfolio, with a capacity totalling 518 kWp.
		Development and installation of PV plants for customers: - Switzerland: 2,230 kWp - Italy: 728 kWp - Spain: 317 kWp
		Own production of electricity from new energies totalled 1,292 GWh and from all renewable energies 10,599 GWh.
	Annual expansion of renewable energies enabled by a long-term power purchase agreement with Axpo, in MW	Expansion of 372 MW (Wind: 347 MW; PV: 25 MW)
	Total capacity of renewable energy marketed by Axpo for customers in Europe, in MW	Total approx. 14,000 MW (Approx. 40 TWh/a)
	• •	The biggest portfolios are in Spain (5,800 MW), Scandinavia (3,200 MW) and Italy (1,300 MW).



Fields of action	Goals	Performance 2017/18
5) Axpo is a responsible employer	The annual rate of occupational accidents (= number of occupational accidents per 1,000 FTEs) is below the industry average for insurance group 55A (energy suppliers), as calculated by Suva.	At 42, the annual rate of occupational accidents was well below the industry average of 63.
	The absence rate (= number of lost days due to illness (including work-related mental illness such as burnout), occupational and non-occupational accidents per FTE) is below the industry average for insurance group 55A (energy suppliers), as calculated by Suva.	At 5.99, the absence rate was below the industry average of 7.0 calculated by Suva.
6) Axpo makes a contribution to soci- ety	Each year, Axpo imparts transparent and politically neutral knowledge on all aspects of energy at its visitor centres and power plants to between 60,000 and 70,000 visitors.	With around 60,000 visitors, the target was just reached.
	Each year, Axpo reports with the greatest possible transparency on its sustainability performance in line with the Global Reporting Initiative (GRI) requirements.	Reporting with the "Comprehensive" option in compliance with the GRI Standards was achieved.
	Through sponsoring and cooperation, Axpo supports over 200 different organisations, institutions and projects, which are committed to culture, the environment or young and disabled sporting talent. In addition, Axpo is involved in a national innovation project —	Four Headwaters Trail: Axpo is patron of the eponymous foundation. The Four Headwaters Trail is a family-friendly hiking trail in the Gotthard range that leads to the sources of four rivers; the Rhine, Reuss, Ticino and Rhone.
	the Park Innovaare in Villigen – and supports innovative start-ups in the energy sector.	PluSport: Axpo is committed to disabled sport and partners closely with PluSport, the umbrella organisation for disabled sport in Switzerland. Activities in this area include regional football training sessions and tournaments involving people with disabilities. Axpo also became the main sponsor of the PluSport Day in Magglingen, a very popular annual event, in 2018.



Reporting in accordance with the GRI Standards

Axpo has once again prepared its report for the 2017/18 financial year in accordance with the Global Reporting Initiative's requirements (GRI). For the first time, the "GRI Standards" published in 2016 were applied. This report was prepared in accordance with the GRI Standards: "Comprehensive" option. Limited assurance has been continued and is explicitly indicated for each indicator that has been assured ("Disclosure") (see Sustainability Report 2017/18, GRI content index, p.65).

Important sustainability aspects are addressed in the annual report; comprehensive reporting now takes place separately in this Sustainability Report, as is the case with the financial reports (for further information, see www.axpo.com).

Axpo retained the GRI reporting principles when preparing the report. These define the process for determining the report content and criteria for the quality of reporting. When it came to choosing the report content, an active dialogue was held with stakeholders to include them in the sustainability reporting process. The developed action fields provide context, illustrating just how important the topic of sustainability is for Axpo. As required by the GRI Standards, the material topics and indicators were chosen based on their relevance to external stakeholders and impact on sustainable development. Care is taken to achieve a clear and balanced presentation of key figures, to facilitate the comparability of Axpo's performance over time and in the reporting year and enable an overall assessment to be made available to all stakeholder groups.

When updating materiality this year, a few new topics were added and a handful of relevant topics dropped (see Sustainability Report 2017/18, Choosing the material topics, p. 12). Structural changes were necessitated chiefly by the switch from GRI G4 guidelines to the GRI Standards, and the majority of disclosures have been retained (GRI: 102-48, 102-49).

Reporting in accordance with the EU CSR Directive

The Axpo Sustainability Report 2017/18 implements the requirements of the EU CSR Directive (EU Directive 2014/95). Axpo reports on environmental matters, employee matters, social concerns and the observance of human rights, anti-corruption and anti-bribery. In the reporting process, specific topics were identified as material if they are relevant to Axpo's business activity and have a significant impact on sustainability aspects (see Sustainability Report 2017/18, Choosing the material topics, p. 12). The Sustainability Report contains disclosures for each of the material topics mentioned, pertaining to the concepts and the associated results as well as the due diligence processes and risk management.



Materiality analysis



Choosing the material topics

The materiality analysis conducted in previous years was expanded for this report in terms of the topics covered and the methods involved. The topics from previous years were compared with the Group strategy 2018-2022 developed during the reporting year. Topics that are relevant to the changes in Axpo's business activities were added. In order to implement the requirements of the GRI Standards and the EU CSR Directive, the method applied consisted of analyzing the topics from three perspectives (instead of the previous two).

The materiality analysis covered all the topics from three perspectives:

- relevance to business activity and business success for Axpo
- relevance to external stakeholders
- relevance to impacts on sustainable development

As in previous years, the appraisal of relevance to Axpo's business activity and business success is carried out by Axpo's Executive Board. The appraisal of relevance from the stakeholders' perspective comprises the assessments from recent years by members of the Board of Directors of Axpo Holding (owner's view), by members of UREK-N (view of political decision-makers), by the NGOs WWF Switzerland and Economiesuisse, by lenders (Zürcher Kantonalbank), by customers (SH Power) and by employees from various functional levels and departments. The assessment based on business relevance and relevance to external stakeholders was largely retained from previous years (with the exception of the handful of added topics). The appraisal of relevance to sustainable development was undertaken by Axpo's and CKW's Sustainability Management function. The extent of any significant positive or negative effects on sustainability aspects such as environmental concerns, employee concerns, anti-bribery and anti-corruption, observance of human rights and social concerns was assessed. (GRI: 102-46).

By considering three perspectives, we are able to fulfil the requirements of both the GRI Standards and the EU CSR Directive at the same time. According to the GRI Standards, topics that are relevant to stakeholders and that have a significant impact on sustainable development are deemed material. Under the EU CSR Directive, topics that are relevant both to business activity and business success and that have a significant impact on sustainability aspects are material.

All topics were analysed from three perspectives, according to the relevance categories "high", "medium" and "low". In both cases, topics were only considered material for reporting purposes if they are of at least medium significance in both relevant perspectives (see the two graphics on materiality according to GRI Standards and according to the EU CSR Directive). Respective GRI topics and indicators ("Disclosures") were assigned to the topics identified as material. For all indicators, the reporting boundaries refer to the fully consolidated companies. Differences in reporting periods are highlighted in context and explained accordingly (GRI: 102-45)

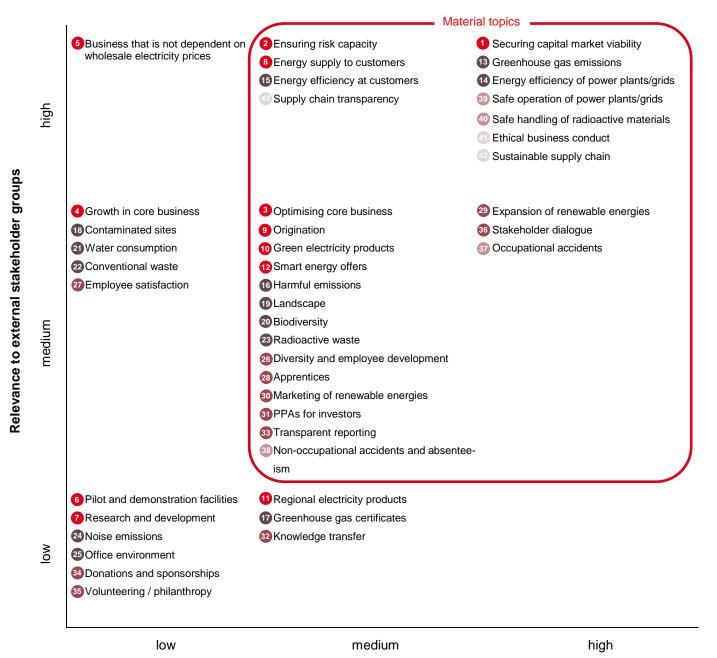
In the charts and tables below, the topics are broken down according to the five dimensions of Axpo's sustainability policy:¹

<u> </u>	Economy Ensuring the long-term success of the business; customer focus and reliability			
Ecology Protecting the environment; increasing energy efficiency		Protecting the environment; increasing energy efficiency		
Social dimension		Attractive employer; energy turnaround; dialogue with stakeholders		
Safety Sa		Operational and occupational safety; safe operation of power plants and grids		
V	Ethical business conduct	Ethical business conduct at the company; sustainability in the supply chain		

¹The Axpo sustainability policy can be downloaded at www.axpo.com



Materiality analysis according to the GRI Standards



Impact on sustainable development



Materiality analysis in accordance with the EU CSR Directive

Material topics 13 Greenhouse gas emissions 1 Securing capital market viability 36 Stakeholder dialogue 14 Increasing energy efficiency of power plants/grids 29 Expansion of renewable energies Occupational accidents high 39 Safe operation of power plants/grids 40 Safe handling of radioactive materials 41 Ethical business conduct 42 Sustainable supply chain 8 Energy supply to customers Regional electricity products 2 Ensuring risk capacity Greenhouse gas certificates 10 Green electricity products 3 Optimising core business 20 Biodiversity 12 Smart energy offers Origination 15 Energy efficiency at customers 26 Diversity and employee development 16 Harmful emissions 30 Marketing of renewable energies 19 Landscape medium 23 Radioactive waste 28 Apprentices 31 PPAs for investors 32 Knowledge transfer 33Transparent reporting 38 Non-occupational accidents and absenteeism Supply chain transparency 6 Pilot and demonstration facilities 27 Employee satisfaction 4 Growth in core business Research and development 34 Donations and sponsorships 5 Business that is not dependent on 18 Contaminated sites wholesale electricity prices 21 Water consumption Š 22 Conventional waste 24 Noise emissions 25 Office environment 35 Volunteering / philanthropy low medium high

Business relevance

Impact on sustainable development

14/70



Overview of the material topics and reference to GRI indicators (GRI 102-47)

Material topics for Axpo from the economic dimension

Торіс		Materiality		Reporting	
No.	Topic	GRI	EU Directive	Report	Reference
Ecoi	nomic dimension: Ensuring the long-term succes	s of the l	business		
	Action field 1: Ensure the long-term succe	ss of the	business		
1	Maintain long-term capital market viability to ensure that future investments can be financed on favourable terms and to contribute to the nuclear energy fund	Yes	Yes	Yes	Economic performance, p. 34
2	Ensure the company's risk capacity	Yes	Yes	Yes	Economic per- formance, p. 34
3	Optimise core business in terms of costs, investments, income	Yes	Yes	Yes	Economic performance, p. 34
4	Growth in the core business with the focus on wind, distribution, trading and the IT and data business	No	No	Yes, volun- tary	Economic performance, p. 34
5	Develop new business that is not dependent on electricity prices	No	No	Yes, volun- tary	Economic performance, p. 34
6	Finance pilot and demonstration facilities	No	No	No	-
7	Finance research and development	No	No	No	-
Ecol	nomic dimension: customer focus and reliability				
8	Contractually compliant energy supply to customers	Yes	Yes	Yes	GRI 102-15, p.24
9	Further develop products and services for wholesale customers (origination)	Yes	Yes	Yes	Economic performance, p. 34; GRI 201-2, p.35
10	Sale of environmentally friendly electricity products	Yes	Yes	Yes	GRI 201-2, p.35
11	Sale of regional electricity products	No	No	No	-
12	Sale of smart energy products and services	Yes	Yes	Yes	Economic per- formance, p. 34



Material sustainability topics for Axpo from the environmental dimension

Topi	Topic		ality	Reporting	
No.	Topic	GRI	EU Directive	Report	Reference
Envi	ronmental dimension: protecting the environmen	nt and inc	creasing energy ef	ficiency	
	Action field 2: Climate and energy efficiency				
13	Quantification and reduction of GHG emissions	Yes	Yes	Yes	Energy and emissions, p. 39
14	Increasing energy efficiency of power plants and grids	Yes	Yes	Yes	Energy and emissions, p. 39
15	Increasing energy efficiency for customers	Yes	Yes	Yes	Energy and emissions, p. 39
16	Reduction of harmful emissions	Yes	Yes	Yes	Energy and emissions, p. 39
17	Offset greenhouse gas emissions with certificates	No	No	No	-
18	Management of contaminated sites	No	No	No	
19	Protection of the visual landscape	Yes	Yes	Yes	Local communities, p. 54
20	Protecting biodiversity	Yes	No	Yes	Local communities, p. 54; effluents and waste, p. 44
21	Reduction in water consumption	No	No	No	-
22	Reduction of conventional waste	No	No	No	
23	Reduction of radioactive waste	Yes	Yes	Yes	Effluents and waste, p. 44
24	Reduction of noise emissions	No	No	No	
25	Improve office environment	No	No	Yes, volun- tary	Energy and emissions, p. 39



Material sustainability topics for Axpo from the social dimension

Topi	ic	Materia	ality	Reporting	
No.	Topic	GRI	EU Directive	Report	Reference
Soci	al dimension: attractive employer				
26	Promotion of diversity by further developing employees' skills and ensuring equal opportunities	Yes	Yes	Yes	Training and education, p. 53; Compliance, p.61
27	Promotion of employee satisfaction	No	No	No	-
28	Training for apprentices	Yes	Yes	Yes	Training and education, p. 53
Soci	al dimension: energy turnaround				
	Action field 4: energy turnaround				
29	Development and expansion of renewable energies	Yes	Yes	Yes	Economic per- formance, p. 34
30	Marketing of electricity from renewable energies	Yes	Yes	Yes	Economic per- formance, p. 34
31	Offer long-term power purchase guarantees (PPAs) for investors in renewable energies without state subsidisation	Yes	Yes	Yes	Economic per- formance, p. 34
Soci	al dimension: stakeholder dialogue				
	Action field 6: Social commitment				
32	Communication of (energy-related) knowledge	No	Yes	Yes	Local communities, p. 54
33	Transparent reporting and information for stakeholders	Yes	Yes	Yes	Local communities, p.54; GRI 102-43, p.29
34	Donations and sponsorships	No	No	Yes, volun- tary	GRI 102-43, p.29
35	Volunteering / philanthropy	No	No	No	-
36	Engagement with external stakeholders	Yes	Yes	Yes	Local communities, p.54; GRI



Material sustainability topics for Axpo from the safety dimension

Topi	ic	Materia	ality	Reportin	g
No.	Topic	GRI	EU Directive	Report	Reference
Safe	ety dimension: guaranteeing operational and occ	upational	safety		
	Action field 5: Responsible employe	r			
37	Minimisation of occupational accidents	Yes	Yes	Yes	Occupational health and safety p.50
38	Minimisation of non-occupational accidents and absenteeism due to illness	Yes	Yes	Yes	Occupational health and safety p.50
Safe	ety dimension: Safe operation of power plants an	d grids			
39	Guarantee the safe operation of power plants and grids	Yes	Yes	Yes	Customer health and safety, p.59
40	Safe handling of radioactive materials	Yes	Yes	Yes	Effluents and waste, p. 44

Material sustainability topics for Axpo from the ethical business conduct dimension

Topic		Materi	Materiality		g
No.	Topic	GRI	EU Directive	Report	Reference
Ethic	cal business conduct dimension: Ethical busines	ss condu	ct at the company	,	
41	Enforce ethical business conduct at the company	Yes	Yes	Yes	Compliance, p.61
Ethic	cal business conduct dimension: sustainable su	pply cha	in		
	Action field 3: Enforce sustainability principle	es at bus	iness partners		
42	Compliance with environmental and social standards in supply chains	Yes	Yes	Yes	Supply chain and supplier management, p. 57
43	Ensure supply chain transparency	Yes	Yes	Yes	Supply chain and supplier management, p. 57



Reporting in accordance with GRI Standards

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Training and education	53
Non-discrimination	54
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Supply chain and supplier management	57
Customer health and safety	59
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General Standard Disclosures

Organisational profile

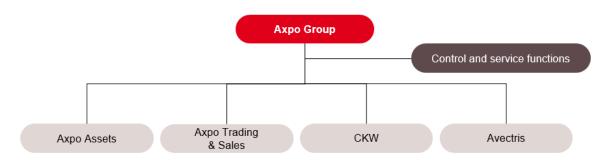
102-1 Name of the organisation

Axpo Holding AG

102-2 Activities, brands, products and services

Axpo is a Swiss energy company and is wholly owned by the cantons of North Eastern Switzerland and a few North Eastern Swiss cantonal utilities. Together with its partners, Axpo delivers electricity to most of the population of North Eastern Switzerland – safely, without harming the climate and at affordable prices. Axpo has local roots and a global reach. The Group produces, distributes and sells electricity. It is also involved in international energy trading and provides energy services to customers in Switzerland, Europe and the USA.

The Axpo Group consists of Axpo Holding with its four business areas Axpo Assets, Axpo Trading & Sales, Centralschweizerische Kraftwerke (CKW) and Avectris.



The Business Area Assets operates the power plant fleet (nuclear energy, renewable energies, gas) as well as Axpo's distribution grids. The Business Area Assets also optimises the power plant fleet and invests in new power plant and grid capacity.

The Business Area Trading & Sales markets energy from the power plant fleet and is engaged in energy trading throughout Europe. It trades in physical energy volumes and financial products in around 39 countries and on numerous broker platforms throughout Europe and the USA, as well as directly with counterparties (OTC business). Axpo trades in the most diverse commodities, such as electricity, natural gas, oil, coal, biomass, CO₂ certificates and Green Certificates for energy from renewable sources. Its trading activities cover the entire time spectrum from what is termed intraday trading to multi-year contracts. Axpo not only offers standardised products, but also customised products which are used to assume and manage the risks of its customers (origination).

Centralschweizerische Kraftwerke AG was established in 1894 and is the leading provider of energy services in Central Switzerland. It plays an important role in the supply business of the Axpo Group. Together with its regional Group companies, CKW provides electricity to around 200,000 private customers in the cantons of Lucerne, Uri and Schwyz.

As the competent IT partner for the energy industry, Avectris AG provides technical and commercial IT services to Axpo, the cantonal electricity utilities of North Eastern Switzerland and third-party customers.



102-3 Location of the organisation's headquarters

Axpo Holding AG Parkstrasse 23 5401 Baden Switzerland

102-4 Location of operations

Axpo operates in 36 European countries as well as the USA, Tunisia and Ukraine. In 29 of those, it is locally represented with local offices. In addition, as the Group's internal IT service provider, Avectris AG looks after international customer sites.

102-5 Ownership and legal form

The cantons and cantonal utilities of North Eastern Switzerland own 100% of the shares of Axpo Holding AG (see table below).

Shareholders of Axpo Holding AG	In %	in CHF million
Canton of Zurich	18.342	67.9
Electricity utilities of the Canton of Zurich	18.410	68.1
Canton of Aargau	13.975	51.7
AFW Energie AG	14.026	51.9
SAK Holding AG	12.501	46.3
EKT Holding AG	12.251	45.3
Canton of Schaffhausen	7.875	29.1
Canton of Glarus	1.747	6.5
Canton of Zug	0.873	3.2
Total share capital	100.000	370.0

102-6 Markets served

As a Swiss energy company, Axpo has local roots and a global reach. It is involved in all phases of the value chain: electricity production, electricity distribution, trading with electricity, natural gas, other commodities, certificates and energy-based financial products, as well as electricity sales and services. Axpo operates in 36 European countries as well as the USA, Tunisia and Ukraine.

102-7 Scale of the organisation

The Group-wide permanent full-time equivalents including apprentices as at 30 September 2018 was 4,441 for the reporting year. These full-time equivalents comprise 4,756 persons or 901 women (around 20%) and 3,855 men (around 80%). Axpo employs 4,076 persons in Switzerland (around 86%) and 680 abroad (around 14%).

Total income: Financial Report of Axpo Holding AG 2017/18, p. 7 Total capitalisation: Financial Report of Axpo Holding AG 2017/18, p. 9

Quantity of products provided:

Electricity sales totalled 59,339 million kWh and gas sales amounted to 2,902 million kWh.



102-8 Information on employees and other workers



Total number of employees by employment contract and gender, employment type and region.

Number of employees; in FTEs	Total for	r Group	Switze	erland	Interna	tional
	2017/18	2016/17	2017/18	2016/17	2017/18	2016/17
Total	4,440.62	4,224.02	3,776.49	3,593.60	664.13	630.42
Women	720.53	686.50	479.58	462.98	240.95	223.52
Part-time	209.53	207.50	185.58	174.98	23.95	32.52
Full-time	511.00	479.00	294.00	288.00	217.00	191.00
Men	3,720.09	3,537.52	3,296.91	3,130.62	423.18	406.90
Part-time	306.09	242.52	297.91	236.62	8.18	5.90
Full-time	3,414.00	3,295.00	2,999.00	2,894.00	415.00	401.00

Note: Employees including apprentices on a permanent contract. No significant activities are carried out by workers who are not employees of Axpo. There are no significant seasonal fluctuations. The data is taken from the HR system and collated. Data not available in the HR system is obtained from the companies concerned using Excel templates and consolidated with the other data. No assumptions had to be made.

102-9 Supply chain

Sustainability Report 2017/18, Supply chain and supplier management, page 57.

102-10 Significant changes to the organisation and its supply chain

Detailed information on all changes to the scope of consolidation is provided in the Financial Report of Axpo Holding AG for 2017/18, p. 71 - 75.

Detailed information about the capital structure is provided in the Financial Report of Axpo Holding AG for 2017/18, p. 9.

The supply chain did not see any significant changes in the reporting year.

102-11 Precautionary principle or approach

Axpo is obliged to take a precautionary approach to risks. When it comes to the environment and the population, the safe operation of its production plants is of central importance.

To ensure the safety of its nuclear plants, Axpo is committed to complying with the international nuclear safety standards specified by the IAEA Safety Convention (International Atomic Energy Agency) and ratified by Switzerland. National and international authorities carry out nuclear safety checks on a regular basis. Regular safety checks are very important. They serve as the basis for all measures to maintain and improve safe plant operation. In addition, safety at the nuclear installations is analysed and appraised by WANO (World Association of Nuclear Operators) on a regular basis. WANO is a global association of nuclear power plant operators for the mutual exchange of information. Axpo's aim is for its nuclear installations to be among the best, and therefore safest, by international standards. Since its commissioning, the Beznau nuclear power plant has been regularly refurbished. Safety precautions at the Beznau nuclear plant are thus on a par with those at new power plants. The Beznau nuclear plant has passed all the European stress tests carried out in the wake of the Fukushima disaster. In addition to the safety of its nuclear plants, the proper treatment of radioactive waste is a key concern for Axpo (see Sustainability Report 2017/18, Effluents and waste, p. 44).

Axpo's dams also meet the most stringent safety standards. They are permanently monitored and regularly checked. Dams of a certain category have to be resistant to earthquakes of a magnitude that is only expected once every 10,000 years. They are subject to supervision by the Swiss Federal Office of Energy (SFOE).

In operating electricity grids, Axpo makes sure that all the legal rules and limits with regard to non-ionising radiation ("electrosmog") are strictly observed.



102-12 Agreements and initiatives

Axpo applies the following established international standards: International Financial Reporting Standard (IFRS), IAEA Safety Convention, nuclear safety performance indicators of the World Association of Nuclear Operators (WANO), environmental product declarations pursuant to ISO 14025 and certified greenhouse gas protocol pursuant to ISO 14064. Axpo also has ISO 9001-, ISO 14001-, ISO 50001- and OHSAS 18001-certified companies, divisions and business units. Axpo erects its own office buildings in compliance with the Swiss Minergie standard.

102-13 Memberships of associations and organisations

Axpo represents its interests directly or indirectly as a member or in a supporting/advisory function of a large number of associations and organisations. The most of important of these are:

Association/organisation	Description of membership
National level	
VSE	Umbrella association of Swiss electricity companies:
Association of Swiss Elec-	 Axpo is a sector member
tricity Companies	 Axpo is represented on the board
	 Axpo is represented in all strategically relevant working groups
Economiesuisse	Umbrella association for the Swiss business community:
	 Axpo is a member
	 VSE is on the board
	 VSE is represented in the standing committee
	Axpo is represented in some working groups
International level	
Eurelectric	Umbrella association of the European electricity industry:
The Union of the Electricity	 The Swiss member is the VSE
Industry	 Axpo is represented in all strategically relevant working groups
	 Axpo CEO was involved in drafting the Eurelectric Presidency Manifesto 2017 2019
EFET	Association of European energy traders:
European Federation	 Axpo is a full member
of Energy Traders	 Axpo is represented on the board
	 Axpo is represented in all strategically relevant working groups
WindEurope	Umbrella association of the European wind energy industry
	 Axpo is a full member
	 Axpo is represented in strategically relevant working groups
Energy Charter	International organisation for countries to ensure investment security and cross-
	border energy trading:
	 Axpo is a member of the Industry Advisory Panel (an advisory committee con-
	sisting of representatives of the energy sector)
RECS	Association for the development and organisation of trading in green certificates:
Renewable Energy Certifi-	 Axpo is a full member
cate System	



Strategy and analysis

102-14 Statement by CEO

Interview with CEO Andrew Walo, Sustainability Report 2017/18, p. 3.

102-15 Key impacts, risks and opportunities

Axpo's key impacts on sustainable development lie in its contribution to the sufficient, secure and environmentally benign production of energy through its climate-friendly electricity mix. As the biggest producer of electricity in Switzerland, Axpo ensures the reliable supply of energy to its customers. By expanding and marketing renewable energies, Axpo contributes to the restructuring of the energy supply system that is desired by politicians and society in general. With innovative PPAs, Axpo also offers investors the environment they need to make investments in renewable energies (see Sustainability Report 2017/18, Action field 4, p. 6). As an operator of power plants and grids, Axpo has a responsibility to the population to ensure safe and environmentally friendly operations (see Sustainability Report 2017/18, 102-11 Precautionary Principles, p. 22. Customer health and safety, p. 59). This includes securing funding for dismantling nuclear power plants and disposing of radioactive waste (see Sustainability Report 2017/18, Provisions for the dismantling of nuclear power plants, p. 37). Axpo has a duty to its employees to guarantee their safety in all their activities (see Sustainability Report 2017/18, Occupational health and safety, p.50). As a major employer, Axpo also attaches great importance to the professional training and development of its employees and offers a challenging environment which guarantees equal opportunities for all employees and protects them against discrimination thanks to clearly defined rules (see Sustainability Report 2017/18, Training and education, p. 53, Compliance, p. 61).

The main sustainability trends that have a significant influence on Axpo's business activities are the moves to continuously decarbonise the electricity sector and, driven by this, the further expansion of renewable energies throughout Europe. Where Axpo's long-term development is concerned, these trends present opportunities, as Axpo already has a climate-friendly production portfolio (see Sustainability Report 2017/18, Action field 2, p. 5) and can further consolidate the business activities built up in recent years in the wind energy segment as well as the marketing of energy from renewable energy sources for customers (see Sustainability Report 2017/18, Action field 4, p. 6). The majority of major risks faced by Axpo lie in the future shape of the electricity market in both Switzerland and Europe. There is the risk that, depending on the regulatory framework for and the trend in wholesale prices, hydro power plants and the other conventional power plants will lose value, which translates directly into reduced investment values for power plant operators (see Sustainability Report 2017/18, Action field 1, p. 5).

Ethics and integrity

102-16 Values, principles, standards and norms of behaviour

Sustainability Report 2017/18, Compliance, p. 61

102-17 Mechanisms for advice and concerns about ethics

Sustainability Report 2017/18, Compliance, p. 61



Governance

102-18 Governance structure

The Axpo Group is managed via its management structure. The Group companies that comprise the legal structure represent the legal entities in which business is transacted. The business of the Axpo Group is transacted legally via the individual subsidiaries of Axpo Holding AG (Axpo Power AG, Axpo Solutions AG, Axpo Services AG, CKW AG and Avectris AG).

The duties of the Board of Directors are based on the provisions of the Swiss Code of Obligations. The Board of Directors is responsible for formulating the corporate strategy, which incorporates objectives relating to the economic, environmental and social aspects. The Board of Directors is also responsible for the top-level management of the company and for supervising the Executive Board. In particular, it is responsible for establishing organisational structures, arranging the accounting system, financial controlling and financial planning, appointing the members of the Executive Board and determining their salaries, producing the annual report, and preparing the Annual General Meeting and implementing its resolutions. There are currently three standing committees whose task is to analyse in greater depth all business or personnel-related decisions submitted by the Executive Board: the Audit and Finance Committee (AFC), the Remuneration and Nominations Committee and the Strategy Committee.

102-19 Delegation of authority for economic, environmental and social topics by the highest governance body

Economic, environmental and social topics are covered by the targets within the corporate strategy, which was adopted by the Board of Directors. As the Executive Board is responsible for the operational implementation of the corporate strategy, it takes all strategic decisions on sustainability. The Executive Board also approves the sustainability strategy. Responsibility for the preparation and implementation of this strategy lies with the Head of Corporate Development, who delegates this task to the Head of Sustainability Management.

The Executive Board monitors the implementation of the sustainability strategy and developments in group-related sustainability performance by reviewing the annual internal sustainability reports and topic-specific motions submitted to the Executive Board for decisions. This is the remit of the Head of Corporate Development who delegates this task to the Head of Sustainability Management.

102-20 Executive-level responsibility for economic, environmental and social topics

Developing the Group's sustainability is the responsibility of Sustainability Management, a Group function reporting to the CEO Staff Office, which falls under the Corporate Development Group function. The Head of Sustainability Management submits all internal sustainability reports to the Executive Board.

102-21 Consulting stakeholders on economic, environmental and social topics

Engagement with stakeholders primarily takes place during the process of operational implementation of the corporate strategy, for which the executive management is responsible (see Sustainability Report 2017/18, Stakeholder engagement, p. 28). The CEO regularly updates the Board of Directors on business performance and important events.

102-22 Composition of the highest governance body and its committees

Annual Report of Axpo Holding AG 2017/18, Board of Directors and Executive Board, p. 12-13.

102-23 Separation of the Chair of the Board of Directors and Executive Board

The Chairman of the Board of Directors is not a member of the Executive Board.



102-24 Nominating and selecting the highest governance body

The Board of Directors is elected by the Annual General Meeting of Shareholders. The members of the Board are elected for a term of office of two years and re-election is possible (age restriction: age 70). The current term of office runs from the 2017 AGM to the 2019 AGM.

The composition of the Board of Directors is important for the performance of the tasks and responsibilities of the Board of Directors of Axpo Holding AG. The Requirements and Skills Matrix forms the basis for formulating a meaningful proposal to the owners for the selection and nomination of members of the Board of Directors. This matrix illustrates the relevant criteria in regard to professional experience and expertise for the various necessary roles on the Board of Directors. They serve as the basis for the detailed requirement profile for holding a mandate on the Board of Directors and are taken into account when identifying and nominating new Board members.

102-25 Avoidance of conflicts of interest by the highest governance body

None of the members of the Executive Board belong to any other boards or own shares in any supplier companies or other stakeholder companies. Furthermore, no controlling shareholders are represented on the Executive Board and none of the members have ties to any related companies or persons.

102-26 Role of highest governance body in setting purpose, values and strategy

It is part of the remit of the Board of Directors to adopt the corporate strategy, which incorporates an objective to improve Axpo's sustainability performance in all three dimensions.

The Executive Board is responsible for the operational implementation of the corporate strategy, including the sustainability objectives. To this end it has adopted a sustainability strategy designed to achieve the operational implementation of the 'sustainability' corporate objective.

102-27 Measures taken to develop and enhance the highest governance body's collective knowledge of economic, environmental and social topics

The Board of Directors' Strategy Committee deals with all strategically relevant topics that affect the Group, which it subsequently submits to the full Board of Directors. As it is also responsible for monitoring the implementation of the corporate strategy, it is informed of all measures taken to ensure the achievement of the "sustainability" corporate objective.

The Sustainability Report was submitted to the full Board of Directors for information prior to publication.

102-28 Evaluating the highest governance body's performance with respect to the governance of economic, environmental and social topics

All senior managers are given a sustainability target as part of their personal targets. The target may be geared towards the environmental, economic or social aspects, or alternatively governance or safety.

102-29 Identifying and managing economic, environmental and social impacts

Axpo's risk management process has been in place for many years. As part of this process, Axpo identifies the risks in the Group companies and at Group level every six months and assesses them according to probability of occurrence and impact. Basically, each Group company is responsible for its own risks according to the principle of causation and manages them under its own responsibility. Risks that affect all Group companies are captured together, and measures to manage these risks are coordinated at Group level. By aggregating the individual risks using Monte Carlo simulation, the risks can be presented on a consolidated basis at Group level. The results of this Group-wide risk analysis are compiled every six months in a risk report and a catalogue of measures that are processed by the Corporate Risk Council. The Corporate Risk Council consists of the Executive Board, representatives of various Group functions and a representative of the Board of Directors of Axpo Holding AG. The risk report is subsequently discussed by the Audit and Finance Committee as well as the Board of Directors.



102-30 Effectiveness of risk management process

The Board of Directors performs its role of monitoring and controlling the risk management process by having a representative of the Board on the Risk Council and by having the Audit and Finance Committee as well as the full Board of Directors discuss the risk reports.

102-31 Frequency of the highest governance body's review of economic, environmental and social risks and opportunities

The risk reports are submitted to the Board of Directors and are prepared and discussed every six months.

102-32 Review and approval of the Sustainability Report

The Executive Board of Axpo Holding AG is responsible for reviewing and approving the Sustainability Report.

102-33 Communicating critical concerns to the highest governance body

The CEO regularly updates the Board of Directors on important economic, environmental and social developments and events.

102-34 Nature and total number of critical concerns

Anonymity is guaranteed as a principle of whistleblowing; for this reason, Axpo does not divulge any details about this. For more on complaints, discrimination and corruption, please consult the Sustainability Report 2017/18, Compliance, p. 61

102-35 Remuneration policies for the highest governance body and senior executives

The Board's Remuneration and Nominations Committee reviews the fees paid to the members of the Board of Directors and the committees and submits requests for changes if required. The Board of Directors determines the fee to be paid to its members. The members of the Board of Directors receive a fixed fee which differs for the positions of Chairman, Vice-Chairman, the Chairman of the Audit and Finance Committee (AFC), the members of the AFC and the other members of the Board of Directors. The (fixed) remuneration for a Board member currently consists of a fixed annual fee plus a meeting attendance fee (except for the Chairman of the Board of Directors). Axpo Holding AG does not generally make severance payments to members of the Board of Directors or Executive Board who resign.

The remuneration of the members of the Executive Board consists of a fixed basic salary and a variable salary component of (usually) up to 50% of the basic salary, which depends on the degree of attainment of the financial and individual thematic objectives defined by the Board of Directors, as well as pension benefits and benefits in kind. The thematic objectives can refer to all three sustainability dimensions. There are no other payments.

102-36 Process for determining remuneration

A "Management Remuneration" project was launched in the 2017/18 financial year. This involved engaging a recognised remuneration consultant to review the current model in light of market practice and its suitability for Axpo's business. External benchmarking with the Swiss and European energy sector and with similar management functions was also carried out in the Swiss market. The suggested improvements based on the review will be presented to the Board of Directors of Axpo Holding AG for a decision in the 2018/19 financial year. The process of implementing the adjustments would begin at the start of the 2019/20 financial year.

In addition, a review of the Board of Directors' remuneration was conducted. A decision on the potential adjustments will be made during the 2018/19 financial year. The remuneration paid to the members of the Board of Directors and the Executive Board is set out in the Financial Report (see Financial Report for Axpo Holding AG 2017/18, p. 68 and p. 91 - 93).



102-37 Stakeholders' involvement in remuneration

The Board of Directors takes the final decision regarding the remuneration framework for the Executive Board and the Board of Directors. The Remuneration and Nominations Committee decides on the salaries of the Executive Board within this remuneration framework. The Committee suggests changes to the remuneration of the Board of Directors to the latter. As a non-listed company, Axpo is not subject to the provisions of the ERCO (the Ordinance against Excessive Remuneration in Listed Companies Limited by Shares). The introduction of a simplified form of involvement of the AGM is currently under review (vote or advisory vote on the remuneration elements and the remuneration report).

Changes to the salaries and allowances of the Axpo employees are only approved by the Executive Board after consultation with the Staff Council. Any decision deviating from the Staff Council's recommendation must be justified.

102-38 Ratio of annual total compensation for the highest-paid individual employee to the median annual total compensation for all employees

Calculated for the fixed-term and permanent full-time equivalents in Switzerland, the ratio is 9.6 to 1 (previous year: 9.9 to 1).

G102-39 Ratio of percentage increase in the annual total compensation

The ratio of the percentage increase in compensation between the highest paid staff members and all employees is -6.7 percent.

Stakeholder engagement

102-40 List of stakeholder groups

Sustainability Report 2017/18, 102-43, p. 29

102-41 Collective bargaining agreements

Percentage of total employees covered by collective bargaining agreements.

	Switze	rland	Interna	tional
	2017/18	2016/17	2017/18	2016/17
Total	11.16%	9.99%	34.12%	34.87%
Women	3.08%	0.63%	33.47%	34.62%
Men	12.70%	11.93%	34.50%	35.01%

Note: Permanent and fixed-term employees receiving a monthly salary or hourly wage, including apprentices

102-42 Identifying and selecting stakeholders

Sustainability Report 2017/18, 102-43, p. 29



102-43 Approach to stakeholder engagement

Axpo attaches great importance to an open, active and honest exchange of views with all key stakeholders, with an emphasis on communication that meets the needs of the target groups. On the one hand, Axpo provides its stakeholders with transparent information on it activities, performance and goals. This is achieved by producing annual, sustainability and financial reports and numerous other publications, as well as through its visitor centres and power plants. On the other, it engages in a direct exchange of views between representatives of Axpo and its key stakeholders, and through associations and organisations in which Axpo is a member and can thus voice its position.

Axpo's key stakeholders are customers, shareholders, suppliers, politicians, employees, suppliers, concession grantors (cantons and municipalities), the local population, NGOs, the media and the general public, all of whom can be affected by Axpo's activities and/or are able to influence such activities. Active and continuing dialogue is therefore key to successfully managing the company.

Dialogue with employees:

Employee performance and motivation is a decisive factor in successfully establishing a leading position for a company in the face of competition and rapidly changing markets. Axpo maintains a regular dialogue with its staff members. Another focus during the last twelve months was Axpo's strategy in response to the persistently challenging market environment and the resulting tasks and scope of each individual. Some key topics were digitisation and diversification and expanding our growth areas, specifically with individual customer solutions throughout Europe and elsewhere. However, the focus was also on Axpo's activities in renewable energies, specifically hydro power and wind energy.

Information-sharing and dialogue take place at employee information events at the head offices and other locations, through line management and in electronic form. The Intranet is a forum for interactive dialogue and staff members are actively and specifically encouraged to get involved. The online version of Energy Dialogue creates even greater scope for participation and interaction. The magazine was supplemented with an external version, so that most articles published are accessible to other stakeholders as well. The Executive Board also uses various communication channels to provide regular information about important decisions and the latest core issues.

Employee concerns are discussed at regular meetings between the Group CEO, the Head of Corporate Human Resources and employee representatives, from which actions are developed. Each year, the Executive Board holds a half-day dialogue with delegates of the Staff Councils of all Axpo companies.

A Group-wide employee survey is conducted every two to three years, with the next one planned for 2019. The results are shown to all staff members and, based on them, specific measures are developed for implementation in the following financial year.

Dialogue with politicians:

Dialogue with politicians always relates to specific issues that reflect the current political debate and takes place through two channels: either through direct dialogue with Axpo representatives (employees from Public Affairs or top management) or through associations of which Axpo is a member. In the reporting year, for instance, there was direct dialogue between members of the Executive Board of Axpo Holding and members of the Parliament of the Canton of Zurich as well as between the Chairman of the Board of Directors of Axpo Holding and government representatives at cantonal and federal level. As part of the review of the Water Rights Act, there were various other meetings between members of the Committee for the Environment, Spatial Planning and Energy of the Council of States and employees of the Public Affairs department. They were held as part of efforts to ease the financial burden on hydro power plants.



Dialogue with the general public:

Its dialogue with the public enhances the Group's credibility and promotes understanding of its business policies. The general public can contact Axpo via its website, its media office and various social media channels to register any concerns. In addition, the visitor centres and various power plants operated by Axpo encourage direct exchange, by acting as a source of information for anyone interested.

Dialogue with the media:

Around 60 media releases regarding current events at the Group and its subsidiaries were sent out to the media. Axpo also calls media conferences and media briefings as well as teleconferences where it informs the media directly of important developments affecting the Group. Axpo's media office is staffed round the clock, 365 days a year. Media representatives and other stakeholders are also sent a newsletter roughly eight times a year informing them about the latest news. Once or twice a year, they receive the Energy Dialogue magazine, another source of updates. Interested parties can subscribe to the newsletter and magazine free of charge at www.axpo.com, where all the media releases and other information and dossiers on focus topics such as water or wind power can also be found.

Dialogue with shareholders:

The shareholders' rights of participation are described in detail in the chapter on corporate governance in the Annual Report of Axpo Holding AG 2017/18, p. 9-11. Exchanges with shareholders mainly took place at the twice-yearly shareholder information events and the Annual General Meeting. In order to comply with the politically determined governance strategies of some cantons that apply to the management of companies in which the cantons hold an investment, regular and institutionalised meetings between the specialist units and employees of Axpo's Public Affairs department are also scheduled. One example of such an event in the reporting year was the meeting with the management of the Energy department of the Office for Waste Management, Water, Energy and Air (AWEL) of the Canton of Zurich. The agenda items included the mutual exchange of information, including forward-looking information regarding the possible political implications of Axpo's activities and projects.

Dialogue with business associations:

An important dialogue with the business sector was channelled through Economiesuisse, the umbrella association for the Swiss business community. Axpo is represented in this association through VSE and was also represented via Swisselectric until the end of 2017. Exchanges were topic-focused and took place in working groups. During the reporting year, the main concern of both sides was easing the financial burden on hydro power and adjusting the water rates. The dialogue will no longer take place in the current institutionalised setting as Swisselectric is disbanding.

Dialogue with local communities, non-governmental organisations, government offices and municipal representatives:

Sustainability Report 2017/18, Local communities, p. 54.

102-44 Key topics and concerns raised

Sustainability Report 2017/18, 102-43, p. 29



Reporting practice

102-45 Entities included in the organisation's consolidated financial statements

All indicators for the reporting period refer to the fully consolidated companies. Differences in reporting periods are highlighted in context and explained accordingly.

Financial Report of Axpo Holding AG 2017/18, Notes to the consolidated financial statements, p. 71-73; Sustainability Report 2017/18, Materiality analysis, p. 12.

102-46 Defining report content and topic boundaries

Sustainability Report 2017/18, Materiality analysis, p. 12

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102-47 List of material topics

Sustainability Report 2017/18, Overview of the material topics and reference to GRI indicators, p. 15



102-48 Restatements of information

Sustainability Report 2017/18, Reporting principles, p. 11

102-49 Changes in reporting

Sustainability Report 2017/18, Reporting principles, p. 11

102-50 Reporting period

The information in this report covers the 2017/18 financial year (1 October 2017 to 30 September 2018).

102-51 Date of most recent report

The last Sustainability Report was published for the 2016/17 financial year on 20 December 2017.

102-52 Reporting cycle

The first two GRI reports issued by Axpo each covered a period of two years (2005/06 and 2006/07 as well as 2007/08 and 2008/09). Since the publication of the Annual and Sustainability Report 2009/10, Axpo has issued annual reports based on the GRI guidelines.

102-53 Contact point for questions regarding the report

For contact information, please consult the Sustainability Report 2017/18, Publishing details, p. 70

102-54 Claims of reporting in accordance with the GRI Standards

This report was prepared in accordance with the GRI Standards: "Comprehensive" option.

102-55 GRI content index

Sustainability Report 2017/18, GRI content index, p. 65

102-56 External assurance

On selected indicators Ernst & Young Ltd has provided limited assurance. The indicators concerned have been identified in the Sustainability Report 2017/18 . Please consult the Sustainability Report 2017/18, External assurance, p. 64



Additional information for electricity companies

GRI Sector Supplements

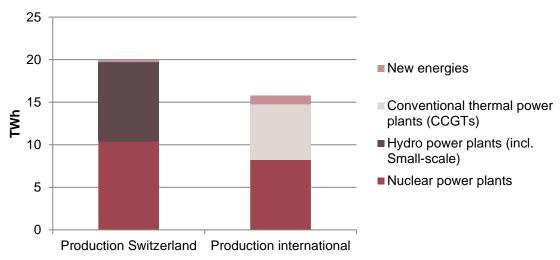
EU1 Installed capacity

Axpo (including CKW) has a total installed power plant capacity of around 9,300 MW. This includes the fully consolidated plants as well as all investments in other companies based on the shareholdings (renewable energies) and share-ownership ratios (other technologies). The breakdown by technologies and countries is as follows:

Technologies and countries	Installed capacity 2017/18 FY	Installed capacity 2016/17 FY
Hydro power Switzerland, including small-scale hydro power plants	approx. 4,300 MW	approx. 4,400 MW
Nuclear energy Switzerland, including long-term contracts	approx. 1,500 MW	approx. 1,600 MW
New energies Switzerland, without small-scale hydro power	approx. 30 MW	approx. 30 MW
plants, mainly biomass		
Foreign nuclear energy (long-term contracts with France)	approx. 1,200 MW	approx. 1,400 MW
Foreign gas-fired combined-cycle power plants (CCGTs, Italy)	approx. 1,700 MW	approx. 1,700 MW
New energies abroad, mainly wind power (Germany, France, It-	approx. 490 MW	approx. 470 MW
aly, Spain)		
Total	approx. 9,300 MW	approx. 9,600 MW

The values in the table have been rounded off. The main changes in Swiss hydro power activities compared with the previous year involve the sale of an investment (Lizerne et Morge); in Swiss nuclear energy, the biggest changes are the consequence of purchase rights/delivery obligations with AEW; for foreign nuclear energy, the expiry of a long-term contract (Fessenheim) was the biggest change; and, for new energies abroad, the main changes are due to the expansion of wind farms. The significant difference compared with the prior year figures is also attributable to rounding off the figures.

EU2 Net energy production 2017/18 FY



Energy procurement from fully consolidated power plants and power plant holdings in the 2017/18 financial year.

EU3 Number of private, industry and business customers

In Switzerland, Axpo mainly sells electricity to the B2B sector. Its biggest customers are 5 cantonal utilities and 2 municipal utilities. Through its subsidiary CKW, Axpo delivers electricity directly to some 200,000 private customers and 5,000 business customers as well as indirectly to other customers through a total of eleven local distributors.

In Italy, Portugal and Poland, Axpo supplies a total of around 190,000 customers with electricity and 35,000 customers with gas, both directly and through its sales partners.



EU4 Length of transmission and distribution grids

Grid level	Overhead line	Cable
Grid level 1 (stub lines – Axpo only)	-	1 km
Grid level 3 (cross-regional distribution grid)	2,089 km	438 km
Grid level 5 (regional distribution grid)	749 km	1,545 km
Grid level 7 (local distribution grid, including home electricity connec-	292 km	4,601 km
tions – CKW only)		

EU11 Generation efficiency of thermal power plants

The net generation efficiency of the Beznau nuclear power plant in the 2016 calendar year was 0% for Block 1 (Block 1 has been idle since the refurbishment shutdown in 2015) and 33.9% for Block 2.

The gas-fired combined-cycle power plants in Italy reported an average generation efficiency for the reporting year of 51.3% (Calenia) and 53.1% (Rizziconi).

EU12 Transmission and distribution losses

Losses on the distribution grids of Axpo Grids (grid levels 1 to 5) amounted to 0.5% and those on the CKW grids (grid levels 3 to 7) were 2.9%.

EU28 Power outage frequency

Reliability and security of supply are core requirements for electricity customers. Axpo uses the distribution codes developed by the Association of Swiss Electricity Companies (VSE) to measure the reliability of electricity supply.

The average interruption frequency per end user and year (SAIFI, System Average Interruption Frequency Index) was 0.014 [1/a] for Axpo grids and 0.254 [1/a] for CKW (excluding the grids of EW Altdorf and EW Schwyz).

EU29 Average power outage duration

The average interruption duration per end user and year (SAIDI, System Average Interruption Duration Index) was 0.28 [min/a] for Axpo grids and 17.7 [min/a] for CKW (excluding the grids of EW Altdorf and EW Schwyz)¹.

¹ To ensure consistency with the ElCom statistics, events due to force majeure are disregarded. This applied to Storm Eleanor on 3 January 2018 in the reporting year.



Specific Standard Disclosures

Economic dimension

Economic performance

Relevance

As the need to secure the company's long-term economic success is an indispensable requirement for all of Axpo's activities, it is also the Group's key objective. This is particularly so since Axpo and the entire energy sector in Switzerland and Europe are currently contending with a difficult market environment in which wholesale prices are only slowly recovering and which is beset by regulatory uncertainties in regard to the future design of the electricity market, upheaval driven by the trends towards decarbonisation, the expansion of new energies and decentralisation. Rising wholesale prices now will not impact positively on Axpo's business results until 2020 onwards, as electricity production is always hedged on the markets several years in advance.

Management approach

By adopting a strategy geared towards strengthening cash flow and increasing value, Axpo took early steps to respond to the far-reaching changes on the energy markets. The focus was therefore on optimising the core business, cutting costs, making targeted investments and expanding new business areas, especially in origination and wind power in Europe. Now that wholesale prices are recovering, growth in the business areas within Axpo's portfolio that are not dependent on electricity prices will be driven forward. In addition, new business will be developed in order to achieve greater diversification and promote growth. The focus is on developing the wind business, expanding sales in Europe and developing the origination business, both geographically and in terms of products and services for wholesale customers. This includes offering long-term power purchase agreements (PPAs) at fixed prices in order, for example, to give investors in renewable energy plants the requisite planning certainty if there is no guarantee of a government feed-in tariff. The development and distribution of smart energy products and services will also be stepped up at CKW.

Impacts and results

The systematic implementation of the strategy resulted in a generally pleasing financial year in 2017/18. Both EBIT and cash flow from operating activities increased substantially. Efforts to fine-tune the portfolio in recent financial years were concluded with the sales of the investments in GeoEnergie Taufkirchen and Elektrizitätswerk des Kantons Schaffhausen (EKS).

Lower electricity revenues from Switzerland were largely offset by successful business abroad and in trading. Overall, Axpo's international business generated revenue in the amount of approximately CHF 150 million. Business activities have been further expanded on the Iberian Peninsula, in Italy and in Northern Europe. Axpo already has over 200,000 delivery points in Italy. In Portugal, Axpo enabled the construction of Europe's first-ever non-subsidised PV plant. Another example of this is the origination contract with Amsterdam-based AEB, one of the biggest waste-to-energy producers in the region. Developments at Axpo's branch in the USA remain on track. In the last financial year, the first deal was sealed on the Texan market (ERCOT). Now that its branch in Kiev (Ukraine) has opened, Axpo has a presence in 29 countries and is active in 39 markets. With a customer portfolio representing an installed capacity of around 14,000 MW, Axpo is amongst the leading marketers of renewable energies in Europe. Added value has been selectively augmented n the field of renewable energies. Axpo subsidiary Volkswind sold four wind farms from its extensive portfolio in France to Allianz Global Investors. The transaction is part of its profitable growth strategy in the New Energies segment. Axpo's aim is to achieve high added value from the business with new energies. Besides building and operating wind farms, sales are also an option. In France, Volkswind plans to inaugurate five wind farms in 2018, with output of around 64 MW. Axpo's subsidiary is one of the leading wind farm developers and operators in France and Germany. In total, Volkswind has so far built 60 wind farms with a total of around 400 wind power plants and an installed capacity of 700 MW. 4,000 MW are currently in the pipeline. By way of comparison: there are currently 37 wind power plants in Switzerland with an installed capacity of around 75 MW.



Axpo has also made further progress in its business areas in Switzerland that are not dependent on electricity prices. The grids business won major contracts for companies including Swissgrid and BKW in the service business involving third-party customers. In the first year of operating, the new Axpo WZ Systems AG enjoyed success with its data network services. Axpo WZ Systems AG and Sunrise successfully tested a data network for the emergency services at the Zurich Street Parade. One of the ways in which Axpo is exploiting the opportunities presented by digitisation is Elblox, the electricity trading platform for renewable energies which is based on blockchain technology. Following the pilot project in Wuppertal, Germany, the market launch in other European countries is imminent.

For more information, please consult the Annual Report of Axpo Holding AG 2017/18, p. 3-6, and the Financial Report of Axpo Holding AG 2017/18.

201-1 Direct economic value generated and distributed

	2017/18	2016/17
Total income (in CHF m)	4,850	5,567
Result for the period (in CHF m)	131	310

For more information, please consult the Annual Report of Axpo Holding AG 2017/18, p. 7, and the Financial Report of Axpo Holding AG 2017/18.

201-2 Financial implications and other risks and opportunities due to climate change

As confirmed by the climate change scenarios published by the Federal Office for the Environment, climate change will substantially affect future climatic conditions in Switzerland (Swiss Climate Change Scenarios CH2018). Because of changes to the distribution of rainfall (less rain in summer) and the general decline in run-off on the one hand, and a possible increase in extreme weather events with high rainfall volumes and the resulting increase in soil erosion on the other, climate change will have a particularly strong impact on the water management sector. This could have a negative financial impact on Axpo as the largest Swiss producer of hydro power.

Combating climate change is a global mega trend of our times. Efforts to combat climate change involve the adoption of a new political mindset and concerted action on the international stage. As part of its mission to play a pioneering role, in 2005 the EU launched the EU emissions trading system (EU ETS) as an important tool of EU climate policy. Internationally, this objective was underpinned by the UN climate conference in Paris in 2015. The climate agreement adopted at that conference seeks to limit global warming to well below 2°C. This will mean reducing greenhouse gas emissions to zero worldwide between 2045 and 2060.

In conjunction with the Clean Energy Package, the EU has set itself new targets for the EU's 2030 climate and energy framework:

- 40% less CO₂ emissions compared with 1990; binding target for EU Member States; for the sectors subject to emissions trading, there is no sharing of the burden between the EU Member States;
- Renewable energies account for 32% of the energy mix; binding target at EU level;
- 32.5% greater energy efficiency compared with 2007; non-binding target at EU level;

The prices of CO₂ emission rights have been rising since the summer of 2018. As Axpo's gas-fired combined-cycle power plants in Italy are covered by the EU ETS, their electricity production could become more expensive going forward. Axpo's two gas-fired combined-cycle power plants, Rizziconi and Calenia, emitted around 1.6 million tonnes of CO₂ in the reporting year. Looking at the entire production portfolio, however, Axpo's low-CO₂ energy mix would benefit from a more robust EU ETS.

In November 2016, the European Commission presented the "Clean Energy Package" (CEP), which comprises eight draft laws. The package is intended to overhaul almost every aspect of the EU's internal elec-



tricity market (market design, ACER's powers, risk provisioning/security of the electricity supply, promotion of renewable energies, energy efficiency – particularly in buildings – governance/division of power between EU and Member States). The legislative process is expected to last until the end of 2018. The purpose of the CEP is to strengthen competition on the wholesale market and in the end customer business. This will create new opportunities for Axpo, in both origination and the end customer business.

In Switzerland, there is potential for CKW in particular with private customers for new products and services in the area of energy efficiency and in the range of green electricity products and the installation business. More products and services will also be available to business customers in the areas of energy efficiency and green electricity products.

201-3 Defined benefit plan obligations and other retirement plans

The Axpo Group's employees in Switzerland are insured under the defined contribution plan of the PKE Energy Pension Foundation. KKL and other partner plants (equity-consolidated), which were still insured under the defined benefits plan of the PKE Energy Pension Fund Cooperative in the last financial year, were transferred to the PKE Energy Pension Foundation during the 2017/18 financial year, where they are now insured under the defined contribution plan. The PKE Energy Pension Foundation (founded in 2002) is a joint institution of the energy sector.

Depending on the age category, the total savings contributions paid by employers and employees amount to between 11% and 33% of the pensionable salary, whereby the employer pays 50% to 72% of the contributions.

From 1 January 2018, the risk contribution is 0.8% (previous year: 0.8%) of the pensionable salary, with the employer contributing 60%.

The CKW employees are also insured exclusively with the PKE defined contribution plan. The CKW Group's pension cost for the 2017/18 financial year was CHF 17.3 million (previous year: CHF 19.1 million).

The funding ratio of the collective pension fund for the PKE Energy Pension Foundation is 114.8% (30.09.2018) and 119.8% (30.09.2017). There is therefore no funding deficit.

The partner plants of the CKW Group (not consolidated in the report) are insured separately. Employees of the Axpo Group working in foreign countries are insured under defined contribution plans.

201-4 Financial assistance received from government

The company does not receive any significant financial allocations from state funds. Axpo receives contributions from subsidy programmes and the compensatory feed-in remuneration (CFR) in Switzerland for the operation of its power plants in the sphere of new energies, e.g. for the wood-fired power plant in Domat/Ems or under similar European subsidy programmes such as the German Renewable Energies (Expansion) Act (shortened to the Renewable Energies Act [Erneuerbare-Energien-Gesetz, EEG 2014]) for the Global Tech I offshore wind farm, for example. The subsidies are the same for all market players.



Anti-corruption

Management approach: Sustainability Report 2017/18, Compliance, p. 61

205-1 Operations assessed for risks related to corruption

Sustainability Report 2017/18, Compliance, p. 61

205-2 Communication and training about anti-corruption policies and procedures

Sustainability Report 2017/18, Compliance, p. 61

205-3 Confirmed incidents of corruption and actions taken

Sustainability Report 2017/18, Compliance, p. 61

Anti-competitive behaviour

Management approach: Sustainability Report 2017/18, Compliance, p. 61

206-1 Legal actions for anti-competitive behaviour, anti-trust and monopoly practices

Sustainability Report 2017/18, Compliance, p. 61

Sector-specific aspect: Provisions for the dismantling of nuclear power plants

Relevance

The task of guaranteeing the safe operation or safe handling of radioactive substances involves the entire value chain and the life cycle of nuclear energy plants. In particular, the funds for decommissioning the nuclear power plants and disposing of radioactive waste safely must be secured. As the biggest producer of nuclear energy in Switzerland, Axpo has a special responsibility in this regard.

Management approach

The operators of nuclear power plants make regular contributions to the Federal Decommissioning Fund and the Federal Nuclear Waste Disposal Fund for Nuclear Installations (STENFO) to ensure that financial liabilities will be covered even after a nuclear power plant has reached the end of its useful life. Both funds are under the supervision of the Swiss federal government.

Impacts and results

In the reporting year, Axpo Power AG did not make any contributions for the Beznau nuclear power plant to either the decommissioning fund (previously CHF 8.0 million) or the disposal fund (previously CHF 14.8 million). The contributions in the 2017/18 financial year are calculated based on the unaudited decommissioning and nuclear waste disposal costs from the 2016 cost study. The previous year's figures, however, are still based on the interim order for 2015 and 2016 for the period from October to December 2016, applying a fixed safety supplement of 30 percent to the total calculated decommissioning and nuclear waste disposal costs. The fund contributions by Kernkraftwerk Leibstadt AG and Kernkraftwerk Gösgen-Däniken AG, in which Axpo has significant stakes, are made by the companies themselves.

The fund contributions are calculated based on the five-yearly cost estimates for decommissioning and dismantling nuclear power plants and disposing of nuclear waste in accordance with the Ordinance on the Decommissioning Fund and the Disposal Fund for Nuclear Installations (DDFO). The last cost study was conducted in 2016. For the first time, the 2016 cost study used a new cost breakdown structure which is based on international standards. As well as basic costs, this also assesses and values forecasting accuracy and opportunities and risks. Based on this 2016 cost study, which at the time was still unaudited, the STENFO Administration Committee ordered provisional fund contributions for the years 2017-2021 in December 2016. According to this provisional assessment, Axpo Power AG no longer had to pay any contri-



butions for the Beznau nuclear power plant. In 2017, the 2016 cost study was audited by the Swiss Federal Nuclear Safety Inspectorate (ENSI) and external national and international experts. Based on the findings of the 2016 cost study and the subsequent audits, at the end of 2017 the STENFO Administration Committee made an application to the Federal Department of the Environment, Transport, Energy and Communications (DETEC) to set the likely amount of the decommissioning and disposal costs. In April 2018, DETEC decreed that the likely costs of decommissioning the nuclear power plants and disposing of radioactive waste would be higher than those suggested by the STENFO Administration Committee. The operators of the nuclear power plants filed an objection against this decree on costs with the Federal Administrative Court. In September 2018, the STENFO Administration Committee ordered revised provisional contributions for the years 2017-2021 for the period until the definitive contribution assessment. According to this revised provisional assessment, Axpo Power AG must contribute CHF 2.8 million a year to the funds for the Beznau nuclear power plant. The back payment is expected to be made by the end of 2018. The definitive contribution assessment is not expected before the end of 2019, once the amount of the decommissioning and disposal costs has been legally determined and once the ongoing revision of the DDFO has taken effect.

For more information, please consult the Financial Report of Axpo Holding AG 2017/18, Uncertainty of estimates for Beznau nuclear power plant (KKB) p. 24–25.



Environmental dimension

Energy and emissions

Relevance

The entire Axpo Group has a binding commitment to environmental protection that is documented in the sustainability policy (see Sustainability at www.axpo.com). As the products and services of the Axpo Group are all related to energy, the focus falls on the environmentally benign and, most importantly, climate-friendly production, use and distribution of energy. Axpo consistently strives to minimise the impact of its business activities on humans, animals and the environment as much as possible.

Management approach

The different companies, in particular the planning and producing units, are individually responsible for the practical implementation of environmental protection in line with regulatory requirements and the Group-wide sustainability strategy.

Measures to improve energy efficiency are being successfully applied in the following four areas: increases in production in power plants, reductions in transmission losses, reductions in consumption in building management, and reduction in consumption by the customers. For Axpo, it is important not only to generate more electricity with the same resources, but also to offer more services that can help customers make energy savings. Measures intended to increase energy efficiency – where economically feasible – are also being consistently implemented within the company itself.

The generation and distribution of power always affect nature. To reduce this impact as much as possible, Axpo constantly optimises its production facilities. The environmental aspects of energy – in particular with regard to the use of non-renewable primary energy carriers and emissions, mainly greenhouse gas emissions – are carefully monitored throughout the Group with the help of an ISO 14064-certified greenhouse gas inventory (see Sustainability Report 2017/18, Emissions, p. 42).

As part of our commitment to the sparing use of resources, Axpo's 15 Kompogas plants recycle biowaste from households, gardens, commerce and industry into materials and energy. The fermentation of this waste produces energy in the form of biogas, which can then be converted into electricity, heat, fuel or biogas that has the same high quality as natural gas. Moreover, the residual waste from the fermentation process contains important nutrients, which means it can be used as a fertiliser to encourage new plant growth, thus completing the material cycle.

Impacts and results

All energy efficiency and environmental measures that are mandatory by law, including the conditions attached to power plant concessions, are monitored by the competent government offices. Axpo did not receive any fines for breaches of environmental laws and regulations in the reporting period. For more information, please consult the Sustainability Report 2017/18, Compliance, p. 61.

In the reporting period, energy efficiency was improved by 13,600 MWh in total. The biggest contributions were made by efficiency improvements at production plants (+8,200 MWh) and at customers of Axpo (+5,000 MWh). For more information, please consult the Sustainability Report 2017/18, Reduction of energy consumption, p. 41.

Axpo makes a further important contribution to the protection of the climate with its low- CO_2 production mix: measured for Axpo's entire power plant fleet, greenhouse gas intensity is 83 g of CO_2 equivalents per kWh. This is just a fraction of the GHG intensity of the European electricity mix of around 500 g of CO_2 equivalents per kWh¹.



¹Source: ETH ecoinvent database, UCTE electricity mix



302-1 Energy consumption within the organisation



Direct energy usage covers the fuel used in the company's fully consolidated production facilities, buildings and vehicles, namely natural gas, oil and renewable fuels.

Compared with the previous financial year, energy consumption increased at the Beznau nuclear power plant due to the recommissioning of Block 1. However, the Italian CCGTs reduced their operating hours.

Direct energy consumption in production and operations in TJ	2017/18	2016/17	2015/16	2014/15
Nuclear fuel for production: Beznau nuclear power plant, gross	52,740	31,688	24,096	46,104
thermal energy production				
Fossil fuels for production: Natural gas for gas-fired combined-cycle power plants, diesel for emergency backup generators, oil for boilers and gas turbines (until FY 2013/14) and gas for boilers (until FY 2014/15)	31,130	40,137	38,144	36,379
Fossil fuels for operations: Building heating with gas and oil; fuel for cargo, delivery and passenger vehicles	54	61	56	56
Renewable fuels: Biomass, biogas and wood for energy production	2,415	2,392	1,380	1,493
Total	86,340	74,278	63,676	82,539

Indirect energy consumption refers to the fuel volume supplied by pipeline and cable used within the company, such as electricity and district heating. It should be noted that the energy losses include all grid losses attributable to Axpo even if part of the transported energy is only forwarded on behalf of other companies.

Pump energy consumption rose significantly compared with previous years because greater use could be made of the Linth-Limmern power plant (KLL). There were also major changes to system services. Besides KLL, this has had the biggest impact on the Sarganserland power plants.

Indirect energy consumption for production, in buildings and via transmission losses in TJ	2017/18	2016/17	2015/16	2014/15
Energy procurement for production: Electricity required for	6,045	3,511	1,982	1,147
pumped-storage power plants (fully consolidated power plants) and				·
for production facilities				
Energy lost via transmission: Total transmission losses via	759	773	787	807
Axpo's grids (caused by Axpo energy and third parties)				
Energy required for building management: District heating and	61	49	53	57
electricity used in buildings and computer centres				
Total	6,865	4,333	2,822	2,011

302-2 Energy consumption outside of the organisation



Indirect energy consumption for production, in buildings and via transmission losses in TJ	2017/18	2016/17	2015/16	2014/15
Energy procurement for production: Electricity required for pumped-storage power plants (partner plants)	727	701	528	488

302-3 Energy intensity



Total energy consumption per full-time equivalent is around 21,160 GJ (previous year: 18,700 GJ).



302-4 Reduction of energy consumption

Sustainability Report 2017/18, Energy and Emissions, p. 39

As regards electricity, improvements in energy efficiency are targeted in the following four areas: increases in production in power plants, reductions in transmission losses, reductions in consumption in building management, and reduction in consumption by the customers.

Production increases in power plants are achieved by boosting generation efficiency. The measures vary, depending on the technology and the type and location of the power plant (particularly relevant for hydro power plants). The following measures to increase production were implemented successfully in the reporting year:

Hydro power plants: Energy efficiency gains of around 8,200 MWh were achieved at the Filisur and Emmenweid power plants during the reporting year.

Nuclear energy: no efficiency gains were realised in the reporting year.

Biomass fermentation: no efficiency gains were realised in the reporting year.

Transmission grids: The replacement of 38 transformers at grid level 6 and 2 transformers at grid level 4 enabled energy efficiency gains of around 120 MWh in the reporting year.

With a view to increasing energy efficiency in terms of building management, energy efficiency gains of 340 MWh were achieved in the buildings operated by Axpo and CKW, chiefly by optimising operations.

Increasing energy efficiency for customers

With the help of the "ProKilowatt" support programme (circulating pump programme) and other measures to improve efficiency, consumption by CKW's customers was also reduced by around 960 MWh of electricity. In Spain and Italy too, Axpo offers a wide range of services for increasing energy efficiency for customers from commerce and industry. In addition to consumption analyses and energy audits, specific energy efficiency measures were also implemented in the areas of heating technology and lighting at its customer premises and resulted in a reduction of around 4000 MWh in electricity consumption.

Annual energy efficiency gains in MWh	2017/18	2016/17	2015/16
Production increases in power plants	8,203 MWh	9,207 MWh	7,397 MWh
Reductions in transmission losses	120 MWh	0 MWh	4,690 MWh
Reductions in consumption in building management and at computer centres	340 MWh	306 MWh	529 MWh
Reductions in consumption by customers (CKW, Axpo Italy, Axpo Iberia)	4,977 MWh	2,659 MWh	2,560 MWh
TOTAL	13,640 MWh	12,172 MWh	15,176 MWh

302-5 Reductions in energy requirements of products and services

Sustainability Report 2017/18, Energy and Emissions, p. 39



305-1 Direct greenhouse gas emissions (Scope 1)



In the reporting year, Axpo once again drew up an ISO 14064-certified greenhouse gas inventory for the Group as a whole. Greenhouse gas emissions are expressed in CO₂ equivalents. As with the Axpo Annual Report and Sustainability Report, the fully consolidated Group companies form the system boundaries for the greenhouse gas inventory. Exceptions are listed under voluntarily disclosed emissions (Scope 3 emissions). Additional, relevant emissions sources are shown over which Axpo exerts little influence, because they are non-controlling interests. The breakdown by source is as follows:

Detailed greenhouse gas emissions	0047/40	0040/47	2245/42	0044/45
in tonnes of CO ₂ equivalents	2017/18	2016/17	2015/16	2014/15
Production				
Direct emissions international	1,682,220	2,204,180	2,036,050	1,950,830
Direct emissions Switzerland	27,630	25,770	27,930	24,020
Indirect emissions international	6,110	4,110	4,250	3,850
Indirect emissions Switzerland	447,700	254,640	177,240	73,310
Voluntarily ¹ disclosed, indirect emissions in Switzerland	52,530	49,300	_	_
(Scope 3 emissions from pump energy of shareholdings from				
pumped-storage power plants)				
Voluntarily ¹ disclosed direct emissions international (Scope 3	881,020	626,640	_	_
emissions from non-controlling interests from CCGTs)				
Transmission (only relevant for Switzerland)				
Direct emissions (SF ₆ emissions)	860	980	830	1,220
Indirect emissions (transmission losses)	13,770	13,820	10,210	10,480
Operation administration buildings				
Direct emissions international	190	210	180	200
Direct emissions Switzerland	3,820	4,330	4,000	3,950
Indirect emissions international	380	380	310	270
Indirect emissions Switzerland	1,170	840	680	780
Total greenhouse gas emissions	3,117,400	3,185,180	2,261,680	2,068,890

The values in the table have been rounded off. In reporting years 14/15 and 15/16, voluntarily disclosed indirect emissions in Switzerland from purchased pump energy were subsumed under indirect emissions Switzerland. Since the 2016/17 reporting year, direct emissions abroad from non-controlling interests from CCGTs have been voluntarily disclosed. Emissions from purchased pump energy are calculated on the basis of the time availability of our own power plants and a production mix from the neighbouring countries Germany and France.

In the reporting year, Axpo emitted a total of around 3.1 million tonnes of CO_2 equivalents. This is on a par with the previous year. In total, emissions from CCGTs fell by nearly 300,000 tonnes due to the market environment. In contrast, indirect emissions from the purchase of pump energy increased year-on-year by around 200,000 tonnes of CO_2 equivalents. This is chiefly because greater use could be made of the Linth-Limmern AG power plant in the reporting year. It was also possible to make greater use of pumped-storage power plants last winter across the board due to more favourable market conditions.

The breakdown of emissions by scope is as follows:

Greenhouse gas emissions by scope in tonnes of CO ₂ equivalents	2017/18	2016/17	2015/16	2014/15
Total greenhouse gas emissions	3,117,400	3,185,180	2,261,680	2,068,890
of which direct emissions (Scope 1)	1,714,660	2,235,390	2,068,950	1,980,150
of which indirect emissions from the generation of purchased	468,320	273,170	155,000	65,760
energy				
(Scope 2)				
of which voluntarily disclosed emissions (Scope 3)	934,420	676,620	37,730	22,980

The values in the table have been rounded off.

¹ Voluntary in the sense that, in order to fulfil the requirements of ISO 14064 on the preparation of greenhouse gas emissions inventories, direct emissions (Scope 1 emissions) and indirect emissions from purchased electricity (Scope 2 emissions) must be disclosed. All other emissions (Scope 3 emissions) may be listed voluntarily.



The breakdown by greenhouse gas is as follows:

Emissions by greenhouse gas in tonnes of CO ₂ equivalents	2017/18	2016/17	2015/16	2014/15
Total greenhouse gas emissions	3,117,400	3,185,180	2,261,680	2,068,890
of which CO ₂	3,089,390	3,158,460	2,234,590	2,044,230
of which CH ₄	23,992	22,170	22,320	20,090
of which N ₂ O	3,170	3,560	3,950	3,330
of which SF ₆	720	950	790	1,190
of which coolants	130	40	30	50

The values in the table have been rounded off.

EU15 Greenhouse gas intensity in CO₂ per MWh for i) total electricity generation capacity and ii) conventional thermal power plants

Greenhouse gas intensity of Axpo's Swiss production mix:

• 7 kg CO₂ equivalents per MWh (direct and indirect emissions, previous year: 7 kg CO₂ equivalents per MWh)

Greenhouse gas intensity of Axpo's total production mix:

• 83 kg CO₂ equivalents per MWh (direct and indirect emissions, previous year: 103 kg CO₂ equivalents per MWh)

Greenhouse gas intensity for fossil-based generation:

• The two gas-fired combined-cycle power plants in Calenia and Rizziconi (Italy) report direct greenhouse gas emissions of 403 and 387 kg CO₂ equivalents per MWh, respectively.

305-2 Energy indirect greenhouse gas (GHG) emissions (Scope 2)

Sustainability Report 2017/18, 305-1, p. 42

EU16 Greenhouse gas intensity in CO₂ per MWh for electricity supplied to end customers

Axpo supplies its end customers in Switzerland via its subsidiary CKW. The delivery mix disclosure is prepared per calendar year. In the 2017 calendar year, the greenhouse gas intensity of CKW's delivery mix was 2.8 kg CO₂ equivalents/MWh (direct emissions) or 10.1 kg CO₂ equivalents/MWh (direct and indirect emissions).

305-3 Other indirect GHG emissions (Scope 3)

Sustainability Report 2017/18, 305-1, p. 42

305-4 Intensity of greenhouse gas emissions

The greenhouse gas emissions (Scope 1 and 2) per full-time equivalent is around 490 tonnes of CO₂ equivalents (previous year: 590 tonnes of CO₂ equivalents). The decrease in greenhouse gas intensity is mainly due to the higher number of employees.

305-5 Reduction of greenhouse gas emissions

Specific greenhouse gas reductions were achieved during the reporting year mainly as a result of energy efficiency gains at customers and in our own office premises. However, it is not possible to reliably quantify the reduction in greenhouse gas emissions.

305-6 Emissions of ozone-depleting substances

Axpo prepared environmental product declarations for the Kompogas plant in Otelfingen, the Wildegg-Brugg run-of-river power plant, the Löntsch regular storage power plant, the Au-Schönenberg small-scale hydro power plant, the Tegra wood-fired power plant in Domat/Ems and the Rizziconi gas-fired combined-cycle power plant. These declarations report the total emissions of ozone-depleting substances per kWh













over the entire life-cycle of the plant. However, in the overall context of Axpo's environmental impacts these emissions do not play a major role.

Axpo is constantly drawing up new environmental product declarations for the rest of its power plants and technologies. All current studies and figures can be found at: www.axpo.com – Sustainability – Climate protection.

305-7 Nitrogen oxides (NO_x) , sulphur oxides (SO_x) and other significant air emissions

The main power plants that emit air pollutants are the two gas-fired combined-cycle power plants in Italy. Changes compared with the previous year are due primarily to different operational circumstances of the plants. Emissions data is measured continuously at both power plants.

Air pollutant emissions in tonnes	NO _x emis	NO _x emissions		sions
	2017/18	2016/17	2017/18	2016/17
Calenia combined-cycle gas turbine plant	143	269	35	60
Rizziconi combined-cycle gas turbine plant	230	277	29	17

EU21 Emissions per MWh from combustion power plants

The main power plants that emit air pollutants are the two gas-fired combined-cycle power plants in Italy.

Air pollutant emissions in kg/MWh	NO _x emi	NO _x emissions		sions	
	2017/18	2016/17	2017/18	2016/17	
Calenia combined-cycle gas turbine plant	0.08	0.09	0.019	0.021	
Rizziconi combined-cycle gas turbine plant	0.09	0.10	0.012	0.006	

Effluents and waste

Relevance

Radioactive waste is the most important type of waste for Axpo. Axpo is responsible to the public and its employees for its nuclear facilities. The protection of the public, its employees and the environment against radiation has absolute priority. This also involves the proper treatment of radioactive waste.

With respect to water and effluents, Axpo's business activities have two main impacts: the warming of the Aare river by the inflow of cooling water from the Beznau nuclear power plant and the effects of hydro power plants in terms of residual flows, hydropeaking, bedload balance and the disruption of fish migration patterns.

Management approach

Radioactive waste originating from the operation of Beznau nuclear power plant is grouped into operational waste, spent fuel rods and waste from reprocessing.

The health and safety of employees are ensured by consistently implementing all the relevant regulations. The permitted radiation levels for employees defined in the Swiss Federal Nuclear Safety Inspectorate (ENSI) guideline G15¹ are monitored in accordance with the ENSI guideline B09² and reported to ENSI in accordance with its guideline B03³.

¹ ENSI-G15: Radiation protection objectives for nuclear installations, November 2010.

² ENSI-B09: Calculation and documentation of dosage for persons exposed to radiation, July 2011.

³ ENSI-B03: Notifications by nuclear facilities, September 2008, rev. 2, 15 February 2010.



Operational waste (IAEA classification: Low-level and short-lived intermediate-level waste (LILW)):

At the Beznau nuclear power plant, radioactive operational waste (raw waste) is regularly generated by the water purification systems and the flue gas and exhaust air cleaning processes. Other waste is generated by the replacement of components when doing maintenance, refurbishment or retrofitting work and by the consumables used during these processes.

The radioactive raw waste is collected, conditioned in batches and transferred to intermediate storage. Unconditioned waste at the Beznau nuclear power plant is stored in special areas in the controlled zone¹. At the Beznau nuclear power plant, waste is conditioned by mixing resins with polystyrene and cementing the radioactive sludge. Flammable and fusible raw waste and exhaust air filters are prepared for treatment at the ZWILAG plasma plant. Specific approval has been obtained for all processes in accordance with the Nuclear Energy Ordinance and ENSI guideline B05². It is routine to store the conditioned waste packages in the power plant's own interim storage facility (residue storage and low-level waste storage in the interim storage facility ZWIBEZ). The Beznau nuclear power plant also uses the facilities of the central interim storage facility in Würenlingen.

The Beznau nuclear power plant's radioactive waste is captured in an electronic accounting system used by all Swiss nuclear facilities. This means that information about the volumes, storage location and radiological features of the waste is always available.

A key element in the minimisation of radioactive waste is the testing of materials from the controlled zone to confirm that the levels of residual radioactivity are below regulatory limits. In the reporting year, 43.8 tonnes of material at the Beznau nuclear power plant were tested and confirmed to be inactive in accordance with ENSI guideline B04³.

Spent fuel rods and waste from reprocessing (IAEA classification: High-level waste, HLW):

After their final removal from the reactor core, spent fuel rods are stored in the power plant's own spent fuel pool for cooling for several years. As the temperature of the spent fuel rods decreases significantly during this time, the spent fuel rods can subsequently be packed safely into interim storage casks. These storage casks are built in compliance with international standards⁴ and are licensed and stored in Switzerland in accordance with ENSI guidelines G04⁵ and G05⁶. The packed casks are stored in the plant's own ZWIBEZ interim storage facility. Two consignments were transported from Block 1 and 2 to ZWIBEZ in the reporting year.

The Swiss regulations for the road and rail transport of radioactive materials are based, among others, on the international regulations on the transport of hazardous goods by road⁷ and by rail⁸. The IAEA recommendations for the safe transport of radioactive materials apply to all transport carriers⁹.

The handling of water and effluents is determined separately for each power plant.

The necessary compensation habitats and other compensation measures (environmental mitigation and replacement measures) are defined in detail during the Environmental Impact Assessments. Environmental Impact Assessments are part of the standard approval procedure for new and rehabilitation projects. For hydro power plants, the concession conditions for using the water often also include measures to pro-

¹ Controlled zones are marked or demarcated areas reserved for working with radioactive materials pursuant to Art. 69 of the Radiological Protection Ordinance (RPO 814.501).

² ENSI-B05: Requirements for the conditioning of radioactive waste, February 2007.

³ ENSI-B04: Tests to confirm that the levels of residual radioactivity of materials and areas from controlled zones are below the regulatory limits, August 2009.

⁴ Regulations for the Safe Transport of Radioactive Material, 2012 edition, IAEA Safety Standards no. SSR-6.

⁵ ENSI-G04: Design and operation of storage facilities for radioactive waste and spent fuel rods, rev. 1 March 2012.

⁶ ENSI-G05: Requirements for transport and interim storage casks, April 2008.

⁷ 0.741.621: European Agreement of 30 September 1957 concerning the International Carriage of Dangerous Goods by Road (ADR)

⁸ 0.742.403.1: Convention of 9 May 1980 concerning International Carriage by Rail (COTIF).

⁹ IAEA Safety Standards: Regulations for the Safe Transport of Radioactive Material, 2012 Edition, Specific Safety Requirements SSR-6.



tect biodiversity. In special cases, additional protection plans agreed with the authorities have to be implemented. Investments and expenses related to environmental protection are usually part and parcel of all major infrastructure projects and are therefore included in the project costs.

Impacts and results

To ensure consistency with the information provided in the 2017 ENSI safety report, the following figures concern the 2017 calendar year.

All radiation limits were met in 2017, so that the safety and health of the employees are guaranteed. The objective of the safe handling of radioactive waste was achieved.

The volume of unconditioned operational waste (raw waste) generated at the Beznau nuclear power plant was 27 m³. The nuclear plant also produced another 4 m³ of conditioned waste. In addition, the Beznau nuclear power plant reported 5.2 tonnes of high-level waste from spent fuel rods. At the Leibstadt partner plant (KKL), which is managed by Axpo, 52 m³ of unconditioned, 29 m³ of conditioned and around 12.8 tonnes of high-level waste from spent fuel rods were generated.

	LILW unconditioned		LILW conditioned		HLW from nuclear fuel	
	m^3	m³/MWh	m^3	m³/MWh	tU	tU/MWh
Beznau NPP	27	9.6 × 10 ⁻⁶	4	1.4 × 10 ⁻⁶	5.2	1.8 × 10 ⁻⁶
Leibstadt NPP	52	9.3 × 10 ⁻⁶	29	5.2 × 10 ⁻⁶	12.8	2.3 × 10 ⁻⁶

No long-lived intermediate-level waste (ILW) resulting from the reprocessing of spent fuel rods was transported back to Switzerland in 2017 as all the obligations to take back waste for processing were fulfilled.

The Beznau nuclear power plant (Beznau NPP) is the only power plant in Axpo's fleet whose operation causes a significant temperature increase in a body of water. The cooling water of the Beznau NPP discharged back into the river Aare is on average 8.6 degrees Celsius warmer than the original temperature of the river water. Once the discharged cooling water has mixed with the rest of the water in the river, the temperature increase is minimal at about 0.6 degree Celsius. The introduction of heated cooling water is set out in detail within the water removal concessions. Due to the high temperatures of the Aare river in July and August 2018, the output of the Beznau nuclear power plant was substantially reduced voluntarily as far as was operationally possible. The aim was for the inflow temperature of cooling water to be permanently at least 2 degrees below the permitted maximum as per the water removal concessions.

Additional information for energy companies: Strategy for the storage and handling of nuclear waste.

Sustainability Report 2017/18, Effluents and waste, p. 44

306-1 Water discharge by quality and destination

The technologies used by Axpo to generate electricity do not produce large volumes of effluents. As a result, total water discharge by quality and destination is not captured in detail.

EU22 Thermal discharges associated with planned and unplanned water discharges

Sustainability Report 2017/18, Effluents and waste, p. 44

306-2 Waste by type and disposal method

Radioactive waste is the most important type of waste for Axpo (see Sustainability Report 2017/18, Effluents and waste, p. 44). This is why other forms of waste are not captured and reported in detail.



306-3 Significant spills

Since 2010, nuclear plant operators have communicated all nuclear energy key figures (reportable incidents, operational availability, dose values) on a calendar year basis only in order to ensure comparability with the official ENSI and WANO reports. To avoid contradictory data and misinterpretation of the ENSI and WANO reports, a conscious decision was taken to forgo the additional effort of converting and communicating these figures for other time periods (hydrological year).

Reportable incidents do not necessarily entail the accidental leakage of measurable quantities of radioactive substances. They only indicate that an irregular event took place during operations, which had to be monitored and reported. There were no accidental incidents with leakage of measurable quantities of radioactive materials during the 2017 reporting year.

Incidents which do not fall under Chapter 5.1 "Nuclear safety reporting criteria", or Chapter 5.3 "Reporting criteria: Public Interest" or Chapter 54 "Reporting criteria: safety" according to ENSI guideline B03 are rated as INES "Not applicable" (NA).

Number of reportable incidents in 2017		
Beznau nuclear power plants, Block I and Block II	Total 9	1 INES NA, 8 INES 0
Leibstadt nuclear power plant (partner plant)	Total 10	1 INES NA, 9 INES 0
Gösgen nuclear power plant (partner plant)	Total 6	0 INES NA, 6 INES 0

306-4 Transport of hazardous waste

The transport of radioactive materials and waste is relevant for Axpo. Rather than falling under the Basel Convention, however, these are regulated by other international treaties (see Sustainability Report 2017/18, Effluents and waste, p. 44). Consequently, this performance indicator does not apply to Axpo.

306-5 Water bodies affected by water discharges and/or runoff

The operation of Axpo's power plants does not result in any discharges of water that materially affect any water bodies.

Compliance Environmental protection

Management approach: Sustainability Report 2017/18, Compliance, p. 61

307-1 Non-compliance with environmental laws and regulations

Axpo did not receive any fines for breaches of environmental laws and regulations in the reporting period.

Supplier environmental assessment

Management approach: Sustainability Report 2017/18, Supply chain and supplier management, p. 57

308-1 New suppliers that were screened using environmental criteria

No figures can be determined for the "percentage of new suppliers that were screened". The KPI for the application of the Code for Business Partners in relation to order volume is deemed more relevant from a management perspective.

308-2 Negative environmental impacts in the supply chain and actions taken

Sustainability Report 2017/18, Supply chain and supplier management, p. 57



Social dimension

Employment

Management approach: Sustainability Report 2017/18, Training and education, p. 53

401-1 Total number and rates of new employee hires and employee turnover by age group, gender and region



EU-LA1 Average length of tenure of employees leaving

	Total new hires (persons)		Rate of	new hires		Total departures Length of tenure Tu (persons) (years)**		Turn	over rate*	
	2017/18	2016/17	2017/18	2016/17	2017/18	2016/17	2017/18	2016/17	2017/18	2016/17
Group	535	403	13.02%	9.97%	405	402	7.32	9.16	9.85%	9.95%
Switzer-	442	309	12.52%	8.77%	349	352	7.95	9.83	9.88%	9.99%
land										
Women	79	45	14.06%	7.80%	69	66	8.13	6.98	12.28%	11.44%
< 20	3	1	66.67%	13.85%	0	1	0.00	0.00	0.00%	13.85%
20–29	21	15	27.70%	23.84%	11	7	3.55	4.29	14.51%	11.13%
30–39	21	16	14.31%	10.25%	20	18	4.50	5.11	13.63%	11.53%
40–49	20	12	12.96%	7.08%	19	24	8.00	6.17	12.31%	14.15%
50–59	11	1	7.23%	0.65%	10	14	8.80	11.29	6.57%	9.12%
≥ 60	3	0	10.53%	0.00%	9	2	21.33	16.50	31.58%	7.32%
Men	363	264	12.23%	8.96%	280	286	7.90	10.49	9.43%	9.71%
< 20	9	10	51.43%	37.50%	2	0	2.00	0.00	11.43%	0.00%
20–29	118	73	28.52%	19.41%	70	52	3.13	3.00	16.92%	13.82%
30–39	115	77	17.49%	12.04%	69	65	5.95	4.93	10.50%	10.16%
40–49	72	65	8.80%	7.82%	70	68	7.53	7.78	8.56%	8.18%
50–59	42	35	4.98%	4.22%	32	40	10.48	10.89	3.79%	4.82%
≥ 60	7	4	3.20%	1.64%	37	61	19.36	25.55	16.93%	25.06%
Internatio-	93	94	16.06%	18.11%	56	50	3.41	4.46	9.67%	9.63%
nal										
Women	36	31	15.45%	14.87%	22	11	4.44	3.27	9.44%	5.28%
< 20	0	0	0.00%	0.00%	1	0	1.00	0.00	0.00%	0.00%
20–29	15	19	35.29%	47.50%	5	1	3.20	1.00	11.76%	2.50%
30–39	19	9	16.89%	9.18%	11	6	4.15	3.83	9.78%	6.12%
40–49	1	2	1.63%	3.54%	5	4	7.00	3.00	8.13%	7.08%
50–59	1	1	6.90%	8.33%	0	0	0.00	0.00	0.00%	0.00%
≥ 60	0	0	0.00%	0.00%	0	0	0.00	0.00	0.00%	0.00%
Men	57	63	16.47%	20.29%	34	39	2.75	4.80	9.83%	12.56%
< 20	1	2	28.57%	80.00%	2	0	0.00	0.00	57.14%	0.00%
20–29	25	18	39.37%	36.73%	6	5	1.75	1.20	9.45%	10.20%
30–39	23	28	15.49%	20.59%	16	18	2.69	4.11	10.77%	13.24%
40–49	7	15	6.76%	15.54%	7	14	3.71	6.29	6.76%	14.51%
50–59	1	0	4.08%	0.00%	3	2	4.67	9.50	12.24%	8.33%
≥ 60	0	0	0.00%	0.00%	0	0	0.00	0.00	0.00%	0.00%

Notes: The data is based on employees with a permanent employment contract who earn a monthly salary or an hourly wage; the rates are based on the number of new hires and departures as a ratio of the total number of employees. *Turnover excluding retirements based on average values. **Average length of tenure



401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees

In Switzerland, all employees, whether full-time or part-time, receive the same benefits. However, employees with a fixed-term contract of up to three months are not subject to the general employment conditions, but to the Swiss Code of Obligations. Annual leave entitlement is also due to employees with fixed-term contracts of up to three months under the general employment conditions.

Internationally, company benefits depend on the country and employment contract and may vary for full-time and part-time employees. The statutory provisions, however, are always observed.

401-3 Parental leave

	Number of employees entitle leave	d to parental	Number of employees who leave	took parental
	2017/18	2016/17	2017/18	2016/17
Group	4,756	4,519	187	138
Switzerland	4,076	3,870	113	105
Women	650	625	21	21
Men	3,426	3,245	92	84
International	680	649	74	33
Women	251	233	40	20
Men	429	416	34	13

	Number of employees who re after parental leave	eturned to work	ork Number of employees who were still en ployed 12 months after returning from tal leave		
	2017/18	2016/17	2017/18	2016/17	
Group	148	132	131	135	
Switzerland	107	105	100	105	
Women	16	22	20	17	
Men	91	83	80	88	
International	41	27	31	30	
Women	24	14	18	16	
Men	17	13	13	14	

Note: The data is based on employees with a permanent employment contract who earn a monthly salary or an hourly wage; for reasons related to the IT systems, the rate of return and retention rate for the reporting year cannot be calculated.



Occupational health and safety

Relevance

As a responsible operator of large power plants and other infrastructure relevant to the supply of energy, Axpo has a particular obligation to address all aspects of safety in a consistent, comprehensive and efficient manner. This also means taking into account various ethical, economic and social principles and any statutory provisions. Axpo sees its responsibility for people and the environment as central to everything it does. The emphasis here is on the health and safety of our employees, external contractors and the wider public.

The overarching objectives, rules of conduct and responsibilities associated with the protection of people (employees and third parties) are set out in the vision, mission, strategy, code of conduct and the Management and Organisational Manual.

Management approach

A systematic approach to prevention goes beyond merely remedying individual safety shortcomings and is designed, on a sustainable basis, to prevent such safety shortcomings being repeated or occurring in the first place across the business as a whole. This generally calls for a combination of systems-related, technical, organisational and HR measures. The occupational health and safety management system guarantees this sustainability for all employees of the Axpo Group. It also brings together the main requirements in terms of occupational health and safety within a single handy tool. As regards implementation, Axpo abides by national directives (EKAS 6508), industry solutions and the occupational health and safety management system in accordance with OHSAS 18001 or now ISO 45001:2018 "Occupational health and safety management systems. Requirements with guidance for use". Core aspects of the established occupational health and safety management system include:

- setting out safety objectives;
- operating a safety organisation and setting out responsibilities and competences accordingly within the area of health and safety;
- systematic identification of dangers and risk assessment with a view to recognising and evaluating actual hazards;
- establishing and consistently implementing measures for reducing or eliminating the dangers identified:
- 5. monitoring of whether objectives are being achieved.

The elements shown are repeated continuously in a kind of cycle with a view to achieving constant improvements in health and safety. The Swiss Accident Insurance Institution (Suva) is responsible for monitoring whether the EKAS directive is being properly implemented at Axpo in Switzerland.

Axpo refers all cases showing signs of long-term absenteeism due to disease or accident to a professional case manager as soon as possible. These cases are managed by the daily sickness benefits insurer, where case managers analyse the situation together with the employee who is unable to work. The next steps are decided in cooperation with Axpo. They specifically coordinate the case and liaise with the general practitioner and other professionals providing medical treatment, the company's medical officer, the relevant social or private insurance schemes, the employee's family and friends as well as line managers and work colleagues. Axpo's Social Counselling department can also be contacted for support. For Axpo, an important element of prevention is to avoid cases of burnout. Managers are trained to recognise the relevant signs and employees are offered courses on how to consciously manage the body's energy balance. At Axpo, the health and safety of employees take top priority. Protective measures are implemented to remove or mitigate potential risks. As a result there are no occupations with a high incidence or high risk of diseases. The same is true of activities carried out by third parties on Axpo's behalf. To reduce non-occupational benefits, campaigns to raise awareness and support employees are periodically launched.

Operational Health Management is a high priority at the CKW Group and encompasses occupational and leisure time safety, measures to promote health, absenteeism management and case management. CKW is thus creating a supportive foundation to ensure that employees remain healthy and efficient even dur-



ing periods of change. Besides planning and implementing measures pertaining to relationships and behaviour, the aim of Operational Health Management is to systematically integrate health aspects into corporate structures and management processes.

External contractors and/or subcontractors are obliged by contract to take occupational health and safety precautions for the benefit of their employees. They are informed about the dangers associated with their work at Axpo and their rights and obligations in terms of occupational health and safety.

Impacts and results

Axpo and the safety officers are in regular contact with Suva. The controls undertaken so far have not revealed any significant complaints.

On taking up their position, and periodically throughout their service, all employees are given the training and development they need to be able at any time to identify potential dangers, adopt appropriate measures and take suitable steps at their own initiative to prevent accidents and protect people's health. Line managers pick up on what each employee needs in the way of training and draft training plans accordingly. Training, instruction and informative measures are documented to provide the relevant evidence. As part of the training/awareness measures, following on from the "Occupational health and safety for line managers" e-learning module, which all line managers must complete, an equivalent module for employees was produced this year. In future, this e-learning course will be mandatory for all new employees at the start of their employment relationship. It is available to all other employees and line managers as a (recurring) training module. Third parties working on our behalf have provided assurances that the protection they enjoy against accidents and occupational diseases is consistent with statutory requirements. They have been informed about the dangers associated with their work at Axpo and their rights and obligations in terms of occupational health and safety.

Safety officers are appointed in each Axpo Group company as process owners for the occupational health and safety management system. They give managers support and advice and help them assume their responsibility for occupational health and safety. The safety officer or occupational safety specialist/safety engineer is responsible in this regard for ensuring the recommendations they make are factually correct. However, the responsibility for implementing occupational safety remains with managers. The employees are actively involved in decisions made, by identifying dangers and devising suitable protective measures. The safety officer, together with the employees affected and line managers responsible, devises appropriate improvement and protective measures. All employees must say STOP in dangerous situations. Near-accidents are reported and analysed and help further optimise occupational safety. The safety officers, together with the Staff Council and staff representatives, form the Occupational Health and Safety Committee, which represents all employees. The Staff Council/Staff Representatives have a right of co-determination regarding occupational health and safety.

At CKW, a number of activities also took place in financial year 17/18 to raise awareness of attitudes and behaviours. Firstly, a Group-wide initiative with various talks by experts on the subjects of resource management, nutrition, sleep and injury prevention. This initiative will be stepped up and continued next year, particularly for apprentices. Secondly, CKW took part in the nationwide "Made Visible" campaign and raised awareness of visibility during the dark season with various activities in November.

403-1 Workers representation in formal joint management–worker health and safety committees

Sustainability Report 2017/18, Occupational health and safety, p. 50



403-2 Work-related injuries and ill health

	Rate of o	ccupati- ccidents	Rate of n	on-occu- onal acci-	Rate of	sickness	Abse	ntee rate	Rate	of injury
	17/18	16/17	17/18	16/17	17/18	16/17	17/18	16/17	17/18	16/17
Group	18.77	28.79	97.41	96.53	459.86	409.76	576.03	535.07	13.75	14.44
Women	1.99	2.72	22.36	50.20	626.57	602.77	650.92	655.69	6.60	8.92
Men	22.22	33.72	112.84	105.28	425.57	373.30	560.63	512.29	15.22	15.48
Switzer-	21.97	32.51	112.82	107.99	452.60	391.89	587.39	532.39	16.03	16.10
land										
Women	1.91	2.79	34.35	70.31	672.01	574.35	708.27	647.45	9.87	11.79
Men	24.95	36.84	124.47	113.49	420.01	365.28	569.43	515.62	16.94	16.73
Internatio-	0.86	1.41	11.14	12.02	500.46	541.41	512.46	554.83	1.00	2.21
nal										
Women	2.14	2.57	0.71	2.05	544.61	670.78	547.46	675.39	0.71	2.05
Men	0.00	0.66	18.14	18.44	470.86	458.04	489.00	477.14	1.19	2.31

Notes: Permanent and fixed-term employees receiving a monthly salary or hourly wage, including apprentices. Rates expressed as days per 200,000 regular working hours or number of injuries per 200,000 regular working hours. The rate for occupational accidents also includes occupational diseases. Minor accidents are included in the rate of injuries. Deaths are included in the rate of injuries if they occur due to an occupational accident/non-occupational accident. "Work calendar days" are used as the basis for the rate for occupational accidents. The occupational accident rate starts to count from the first day.

The rate of occupational accidents has fallen further, which is attributable to a few days of absence per occupational accident given that the number of occupational accidents has increased slightly. The rate of non-occupational accidents has risen slightly, which suggests that the absences for each individual non-occupational accident were longer as the number of non-occupational accidents remained the same. Both accident rates are sensitive to the ratio of cases to absence days (few/many days of absence per case) and will therefore continue to fluctuate in future. The rate of illness rose this year. Flu-related GP consultations were roughly on a par with the previous year in January according to the seasonal flu report for 2017/2018 produced by the Federal Office of Public Health (FOPH). In March, however, they reached a level that was again similar to January in contrast to the previous year. Despite the increase, the rate of sickness thus reflects a "normal" average value and there is no need for urgent action due to the cyclical nature of the fluctuations. As in the past, absenteeism is dominated by the rate of sickness.

There were no work-related fatalities of Axpo employees during the reporting year. There were also no known serious or fatal accidents suffered to employees of subcontractors which occurred while working on behalf of Axpo.

To compare occupational accident and absence rates in the various Swiss sectors, the key figures are also obtained using Suva's calculation method (see Sustainability Report 2017/18, Action field 5, p. 10). The data basis for the Suva industry key figures is the 2017 calendar year.

At 42, the annual rate of occupational accidents (= number of occupational accidents per 1,000 FTEs) is well below the industry average of 63 for insurance group 55A (energy suppliers). With regard to the rate of occupational accidents, it should be borne in mind that the Group is a diverse collective body and the figure is affected by the insured office operations as well as the electrical installation business. Rather than being coincidence, however, the low number of occupational accidents can be attributed to the high level of safety awareness coupled with targeted preventive measures. The general environment in terms of processes and organisation is evidently designed to maintain the good safety standards. There is no need for urgent action. At 5.99, the number of lost days due to illness (including work-related mental illness such as burnout), occupational and non-occupational accidents per FTE (absence rate)) is below the industry average of 7.0 for insurance group 55A (energy suppliers) as calculated by Suva. The trend must continue to be monitored and preventive measures taken to avoid a rise in the figures.

403-3 Workers with high incidence or high risk of diseases related to their occupation

Sustainability Report 2017/18, Occupational health and safety, p. 50



Training and education

Relevance

The employees are the most important asset in Axpo's long-term success. This requires the company to successfully recruit qualified employees, in particular also young and well-trained university graduates, to ensure a balanced age structure.

Rapid developments in technology and IT as well as changing political and economic parameters also emphasise the importance of continuing education throughout an employee's professional career. Moreover, attractive employment conditions retain employees at the company.

At Axpo, diversity is not a theory; it is a living culture: the diversity of skills that are needed in order to develop intelligent energy solutions for the future and the diversity of people at Axpo who ensure that Axpo is close to the market and close to the customer. Because of this, skills diversity among employees is promoted at Axpo with a broad range of training and education courses.

Management approach

Given the challenges currently facing the energy sector, employee development at Axpo is an essential and well-planned process. The future challenges are also reflected in the new skills profiles prepared for managers and employees. These form the basis not only for employee development, training and education, but also for agreements on objectives and the assessment of employee performance. Employee reviews take place twice a year. Employee performance is assessed and compared to the agreed objectives and development options. Employees receive bonus payments based on the overall performance of Axpo and its subsidiary companies. Even in times of additional cost pressure the company offers attractive fringe benefits, excellent insurance cover and attractive employee benefits insurance. In addition to the line managers and a professional HR team, employees have access to a competent social counsellor when they need specific support. The change in the workforce is measured by key figures such as the turnover rate and measures are specifically implemented where necessary.

The company showcases itself at various events for university graduates in order to attract young, well-educated employees. During the reporting year, Axpo participated in a total of nine events held at higher education establishments (informative lunches, guest lectures, fairs at higher education establishments). In the non-academic field, Axpo offers a wide range of apprenticeships, including training positions for electricians, electrical designers and cooks as well as careers in maintenance, information technology, mechanical and electrical engineering and commercial professions.

The employee development programme also includes internal training and education courses to develop management and key skills as well as IT, language and specialist skills. The induction of new employees is supported in part by a comprehensive introduction to the energy sector that covers the entire value chain, from production to trading, transmission and distribution as well as sustainability in electricity production. In addition, employee development comprises advice on external training and education courses, special talent management and management programmes to promote upcoming young employees and managers, manager and development centre programmes, customised offers for teams (e.g. team development, team assessments), individual advisory options such as coaching, career guidance, 360° feedback and management of change processes.

Impacts and results

The commitment to university marketing pays dividends, but can be affected by external factors (a sceptical attitude towards the energy sector). Axpo was ranked the 42nd most popular employer in Switzerland. This was demonstrated by the results of the Swiss Student Survey for the engineering fields. In addition, during the reporting year, 110 apprentices started at Axpo in 21 skilled trades. At the end of 2017/18, 376 apprentices and 6 trainees/interns, i.e. a total of 382 apprentices were employed at the company. The training and education offer was much in demand in the reporting year. The average time spent on training and education was around 22 hours per employee and 21 hours per manager.



404-1 Average hours of training per year per employee, by gender and by employee category

	Employees		Management	t
	2017/18	2016/17	2017/18	2016/17
Total	21.98	17.10	21.17	20.05
Switzerland	22.71	16.47	21.30	19.43
Women	15.74	13.06	23.54	13.38
Men	24.21	17.21	21.11	19.99
International	18.00	20.46	20.42	23.95
Women	17.55	21.79	17.71	31.30
Men	18.30	19.60	20.70	23.50

Note: This data is based on permanent employees who earn a monthly salary or an hourly wage.

404-2 Programmes for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings

Sustainability Report 2017/18, Training and education, p. 53

404-3 Percentage of employees receiving regular performance and career development reviews

At Axpo, all employees receive a regular performance and skills review as part of the MbO process. At the same time, the option to define development objectives based on the review and feedback was created. A broad-based talent review was undertaken in the reporting year with a view to identifying employees with significant development potential. Objectives and ambitions were discussed with these people with the aim of devising and agreeing individual development plans. In addition, for identified talents, as well as individual support programmes, support programmes for talent groups were run.

Non-discrimination

Management approach: Sustainability Report 2017/18, Compliance, p. 61

406-1 Incidents of discrimination and corrective actions taken

The Axpo Complaints Commission did not receive any complaints in the 2017/18 reporting year, nor were any incidents of discrimination registered.

Local communities

Relevance

Particularly when expanding its infrastructure, Axpo is very aware that the company's activities have to be aligned with the specific needs of individual stakeholder groups. Acceptance of its business activities and an open exchange with all stakeholder groups are something Axpo values very highly. The main concerns of the various parties are very different, however. NGOs usually place most emphasis on the protection of biodiversity and the landscape and the sparing use of untouched areas of nature. The concession grantors are mainly interested in local security of supply and the public revenues flowing to the local community. The local population worries first and foremost about the specific impacts of projects: construction and operation of the actual energy plants, the required infrastructure (e.g. access roads), the harm done to the visual landscape, environmental changes versus job creation or the impact on tourism. Involving these groups at an early stage and conducting a regular exchange of views builds trust, facilitates compromises and helps to convey technically complex topics in a way that is understandable and factually correct. A high degree of social acceptance for an energy project speeds up the approval process, thus often improving its cost effectiveness. That is why Axpo is committed to a close dialogue with the population, interest groups, nature conservation and environmental associations.



Management approach

To assess the impact of its business activities on the community, in particular during the construction and operation of infrastructure measures, Axpo engages in transparent communication and investigates the expected effect of all its projects. From the planning stage through to the completion of a project, Axpo works closely with local authority representatives and involves the local population from the outset. This also applies to topics such as the use and production of new energies. Information events and discussions are staged in the immediate communities and cantons where power plants are located as well as in municipalities with grid concessions. The frequency of such events is dictated by current developments and needs. At the national level, responsibility for public dialogue lies with the Axpo Group and is handled by the Corporate Public Affairs department. At the local level, the local companies are responsible for stakeholder dialogue. The broader public has access to a wealth of information on the company at www.axpo.com. Furthermore, Axpo focuses on the transparent and politically neutral communication of knowledge on all aspects of energy at its visitor centres and power plants.

Impacts and results

Example relating to hydro energy:

Advisory groups are set up for new or concession renewal projects for hydro power plants. These groups consist of representatives of the authorities, municipal governments and environmental organisations. Information events for concession municipalities are also organised. For projects already in the process of realisation, construction site visits and various information events are held. Discussions and coordination meetings with neighbouring residents and representatives of interest groups enable solutions to be developed that adequately address the concerns and objections of the local population, authorities and environmental organisations. The public dialogue held in this way meets with broad acceptance. The main topics of discussion with support groups and external organisations include the demands of environmental conservation organisations concerning run-off water, replacement measures, fish passage and the higher-level planning of projects.

Example relating to the distribution grid:

Grid operation and, in particular, grid expansion sometimes meet with a hostile attitude among the affected residents. Many are afraid of the potential health effects of electromagnetic radiation and worry about the impact on the landscape. To raise the level of social acceptance of a power line construction project and thereby simplify the approval process, Axpo engages in a direct dialogue with all stakeholders. This also serves to strengthen the relationship of trust, clarify critical questions at an early stage and enables technically complex topics to be conveyed at first hand in an understandable manner.

Example of CKW:

To assess the social impact of business operations, CKW works closely with cantonal and municipal authorities as well as environmental organisations when developing new energy projects. Visits to existing power plants were organised for individual representatives of local government departments and associations. Further, specific implementation steps will be taken when developing power plants involving new energies. All stakeholders are involved in the project process early on and support the development process from idea to operational plant. Intensive discussions have been taking place for several months now with the authorities (at federal, canton and municipality level) and many of those directly affected in relation to the ongoing projects and, in particular, the Lindenberg wind farm. From a stakeholder management perspective, CKW has arranged for the project to be supported by the University of Applied Sciences of Northwestern Switzerland and the company Sociolution with a view to assessing possible solutions for the wind farm with all interest groups as part of an ongoing dialogue. A participatory process was established for this in the 2017/18 financial year. The municipal authorities are represented in the steering group that plans and conducts the advisory process. The project advisory group is comprised of representatives of the various stakeholder groups, including the regions, environmental associations, residents, committees in the municipalities, opponents and landowners. The advisory group is involved in project development and monitors the process. The full transparency of the process ultimately enables voters to make an informed decision during the zone plan amendment process.

Moreover, cooperation projects with cantonal agencies, municipal authorities and schools in the supply area for CKW play an important role.



Additional information for energy companies: Participation of stakeholders in decision-making processes affecting energy planning and infrastructure development.

Sustainability Report 2017/18, Local communities, p. 54

413-1 Operations with local community engagement, impact assessments and development programmes

Axpo reviews the involvement of the local community for all infrastructure projects such as the construction of new power plants or grids. Local communities are involved in projects relating to existing power plants and administration buildings as and when needed.

413-2 Operations with significant actual or potential negative impacts on local communities

By operating large hydro power plants and the Beznau nuclear power plant, Axpo provides important jobs for the local people. This is particularly true for hydro power plants in sometimes very remote mountainous areas. Apart from these positive impacts, the operation of such power plants also has potential negative impacts. Although Axpo gives top priority to the safety of its power plants and implements many measures to ensure that safety, it is the nature of the business that potential negative impacts cannot be entirely excluded. Examples include the effects of hydropeaking in hydro power plants, the safety of the dams and the safety of the nuclear power facilities.



Supply chain and supplier management



Relevance

Axpo is involved in all phases of the energy sector value chain: from the construction and operation of energy-related infrastructure, to trading with energy products and customer-specific services and products.

Important business activities and suppliers of Axpo at a glance:

Products and services supplied to the organisation Acq. and construction of energy-related infrastructure

Operation of energy-related infrastructure

Trading and sales as well as services

Important suppliers:

Primary activities of Axpo in Switzerland and Europe:

Manufacturers of components

(e.g. generators, transformers, cables, power plant components), fuels (gas, nuclear fuels), operating supplies and materials.

Providers of construction, engineering and other services

Service providers for maintenance work and repairs

Providers of financial and advisory services

Suppliers of energy products and energy services

Acquisition/construction (incl. procurement of services) for:

- Hydro power plants
- New energy plants including projects
- Electricity grids
- Substations and infrastructural facilities
- Gas infrastructure
- Telecommunications facilities

Operation/maintenance/ renovation/modernisation (incl. procurement of raw materials and supplies, components and services) of:

- Hydro power plants
- Nuclear power plants
- Gas-fired combinedcycle power plants
- New energy energy plants
- Electricity grids
- Gas infrastructure
- Telecommunications facilities

Trading with electricity, gas and other commodities as well as certificates (Green, energy performance and CO₂ certificates)

Customer-specific energy products and services for wholesale customers (cantonal and municipal utilities), local distributors and energy producers

Grid-related services

CO₂ services

Supply of electricity, heat and other services to end customers

Electrical, lighting, IT and telecommunication services

As Axpo operates in many different areas along the value chain, both in Switzerland and in Europe – from the construction of large hydro power plants or wind farms, to the operation of nuclear power plants, from trading and sales to sales of IT services – a diverse range of business partners is involved in the supply chain. Axpo has a total of around 20,000 different business partners. These include international technology companies such as ABB, Siemens, Westinghouse and GE-Power, international trading partners for energy products such as EDF, E.On, GDF Suez (Engie) and Vattenfall, as well as a large number of international, national and even regional suppliers from the most diverse sectors.

The order volume for the procurement of goods, materials, third-party services and investments in, for example, power plants totalled around CHF 470 million during the reporting year in Switzerland and around CHF 170 million abroad.



Management approach

Axpo attaches great importance to having business partners who share its values and its principles of compliance and ethics. To achieve a mutually fair, trusting and long-term partnership, Axpo therefore asks its business partners (suppliers of goods and service providers) to commit expressly to observing the guiding principles of Axpo for sustainable, ethical and law-abiding transactions. We therefore strive to adhere to the following principles and guidelines for such procurement:

- GATT/WTO tender procedures to ensure the equal treatment of all providers (Swiss and foreign) as of the agreed thresholds;
- Axpo Code for Business Partners on compliance with the principles of business ethics and minimum social and environmental standards.

Axpo for the first time compiled and published its guiding principles in a Code for Business Partners in 2014. This Code, which applies worldwide to all business partners and their employees, follows the following conventions and standards in terms of its content:

- Principles of the United Nations Global Compact (UNGC)
- OECD Guidelines for Multinational Enterprises (issued by the Organisation of Economic Cooperation and Development)
- Agreements of the International Labour Organisation (ILO)
- ICC Business Charter for Sustainable Development (issued by the International Chamber of Commerce)
- SA8000 (standard for corporate social responsibility (CSR) in company management)
- Recommendations of the procurement offices of the Swiss Confederation

In a separate chapter, the Code lists the requirements for "socially acceptable working conditions". Business partners are obliged to create fair working conditions that take adequate account of the following: occupational health and safety, living wages, acceptable working hours in compliance with local legislation, including regular annual leave, freedom of association (trade unions) and collective bargaining.

In another chapter, the Code states that business partners must respect prevailing human rights and treat their employees with dignity and respect. This includes a ban on child labour, forced labour, discrimination and disciplinary punishment.

The Code also expects business partners to run their business responsibly and in an environmentally compatible manner. They must reduce negative impacts on humans and the environment from their business operations while observing the applicable provisions. This includes using resources efficiently, avoiding and mitigating environmental pollution, dealing safely with hazardous materials and manufacturing environmentally benign products.

Impacts and results

The Code for Business Partners has a binding effect. It applies to public procurement processes and forms part of the Axpo Group General Terms and Conditions of Business. In other business relationships with suppliers of goods and services where the Axpo Group General Terms and Conditions of Business do not apply, the Code must be included as an integral contractual component. As a result, the Code applies to all direct business partners of Axpo.

In addition, Axpo expects business partners to make sure that their important suppliers (and upstream suppliers) and subcontractors also abide by the principles set forth in the Code. In fuel procurement contracts, business partners also have to explicitly undertake to apply the principles of the Code along the entire value chain.

The Code contains regulations for controlling compliance: business partners must provide transparent information. On request, the business partner must give Axpo all the information needed for a correct and comprehensive initial assessment as part of a self-assessment. Axpo reserves the right to check implementation of the Code if there is a suspicion of any violations of the Code. With regard to fuel procurement, business partners agree that they, their suppliers, upstream suppliers and subcontractors may be



visited by external experts and audits may be conducted of them. Axpo reserves the right to demand action in the case of non-performance of this code and, if need be, to end the business relationship.

A binding target was set (see also Sustainability Report 2017/18, Fields of action and objectives, p. 5). By the end of the 2018/19 financial year, at least 60% of the order volume is to be placed with suppliers who have signed the Code for Business Partners, rising to at least 90% by the end of the 2021/22 financial year. The attainment of this target will be monitored on a monthly basis. The figure for this KPI was already around 60% in the reporting year.

When the Executive Board makes a business decision, the Group functions Sustainability Management, Compliance and Corporate Risk Management adopt a proactive approach – as part of the internal presteering process – to checking out potential new business partners against ecological, social and governance-related criteria.

414-1 New suppliers that were screened using social criteria



No figures can be determined for the "percentage of new suppliers that were screened". The KPI for the application of the Code for Business Partners in relation to order volume is deemed more relevant from a management perspective.

414-2 Negative impacts on sustainability in the supply chain and actions taken

No actions had to be taken in this regard in the reporting year.

Customer health and safety

Relevance

The need to ensure safety in the production plants and the transmission of electricity, and thus also the safety and health of the customers, takes first priority. Axpo will continue to invest in the safety of its plants while complying with all official directives. The company is committed to the consistent management of all risks. The obligation to operate its power and transmission plants safely without harming the environment is a central concern.

Management approach

Compared to other countries, Switzerland has very strict official directives when its comes to protection against non-ionising radiation. Since the introduction of the Ordinance on Protection from Non-Ionising Radiation (NIR Ordinance) in 2000, places with sensitive use (where people regularly spend lengthy periods of time, i.e. apartments, offices, etc.) are much better protected. To ensure the best possible protection, a limit of 1 μ T applies, which is considerably more strict than the international standard of 100 μ T that is always required to be met. The NIR Ordinance prescribes a phase-optimised reduction of fields for existing power lines, which Axpo has already implemented throughout the Group. As the above directives are always implemented in full for new lines, all existing and new facilities comply strictly with all statutory regulations on electrosmog

In terms of nuclear energy, the emergency safety measures of the Nuclear Energy Ordinance, the Radiation Protection Ordinance and the various ordinances of the Swiss Federal Nuclear Safety Inspectorate (ENSI) are also important. The Swiss nuclear power plants have been built to withstand extreme conditions such as earthquakes, floods and aeroplane crashes. Axpo's facilities meet all the relevant regulatory requirements in Switzerland; they are constantly modernised and upgraded. To highlight its commitment to nuclear safety and radiation protection, Axpo has adopted a Nuclear Safety Charter. Also, thanks to consistent implementation of radiation protection provisions, normal operation of nuclear power plants does not result in any radiation exposure that might be dangerous to health in the immediate environment of nuclear plants. The local dose or local dose rate resulting from external radiation is monitored via the MADUK measurement network in the immediate environment of the nuclear plants and with passive do-



simeters both in the immediate environment and at the perimeter fence. In addition, ENSI carries out random quarterly dose rate measurements at the perimeter fence, as well as specific measurement campaigns as required.

Axpo's dams also meet the most stringent safety standards. They are permanently monitored and regularly checked. Dams of a certain category have to be resistant to earthquakes of a magnitude that is only expected once every 10,000 years.

Impacts and results

All facilities for the production and distribution of electricity are subject to strict national statutory provisions and regulations, all of which are observed. Dams are subject to supervision by the Swiss Federal Office of Energy. Axpo submitted the required confirmation of earthquake resistance for all 30 of its dams in this category. No cases of harm caused to the health of customers or safety shortcomings that could pose a danger to the public became known in the reporting period. No complaints or legal actions are pending in this regard.

The nuclear power plants in Switzerland operated safely over the last year. ENSI concludes that the operators have adhered to the approved operating conditions. The operators have fulfilled their statutory reporting obligations to the supervisory authority. Emissions of radioactive substances into the environment via effluents and waste air from the nuclear power plants were well below the limits sent in the approvals last year. Even for people who live in the immediate vicinity of a plant, they produced a maximum calculated dose of less than one percent of natural annual radiation exposure.¹

416-1 Assessment of the health and safety impacts of product and service categories

Sustainability Report 2017/18, Customer health and safety, p. 59

416-2 Incidents of non-compliance concerning the health and safety impacts of products and services

Sustainability Report 2017/18, Customer health and safety, p. 59

Sector-specific aspect: Disaster/emergency planning and response

Relevance

Axpo is responsible for the operation of large-scale technical facilities for the generation of electricity such as nuclear power plants and hydro power plants, and for electricity distribution. A professionally run emergency and crisis management system as a component of business continuity management is therefore a fundamental aspect of Axpo's safety culture.

Management approach

A corporate business continuity management (BCM²) approach ensures that critical business functions can be sustained or recovered in good time in the face of internal or external events. The Group directive "Crisis management" sets out the responsibilities and powers.

By setting up emergency and crisis teams, the company takes the organisational measures needed to ensure that all events which could negatively affect the company, the employees, the customers or other human beings and the environment can be managed in an orderly manner.

A uniform interpretation of the minimum number of scenarios that need to be included in a crisis management plan and the standard definition of all terms are key to the establishment of high standards. Each Group company has such an emergency/crisis management organisation. The Group crisis management organisation is initiated and managed centrally by the CEO of the Axpo Group. The Head of Group Safety is in charge of superordinate coordination and controlling.

¹ ENSI-AN-10295 Oversight Report 2017

² Bases or standards: ISO 22301 – "Societal security – Business continuity management systems – Requirements" and ISO 22313

[&]quot;Societal security - Business continuity management systems - Guidance"



Efficient crisis management should achieve the following in the event of a crisis:

- damage limitation or prevention (employees, third parties and operations),
- maintenance and immediate recovery of the most important operational processes,
- timely, active, transparent and reliable internal and external communication geared to the target groups (the reputation of Axpo),
- establishment of the prerequisites for efficient recovery of operations to the status that existed before the crisis (return to the normal organisation).

Impacts and results

As well as business continuity management, Axpo uses risk and issues management to identify early on potential dangers to the Group and measures suitable for dealing with the risks.

To secure the defined processes and structures in the event of a crisis, the emergency/crisis management organisation is continuously improved through the targeted training of the members of the crisis management team and regular crisis management drills.

Compliance

Relevance

The Axpo Group stands for reliability, sustainability and innovation. As a corporate group, Axpo is not only responsible for satisfying the steadily growing body of legal requirements, but also the high expectations of all stakeholders regarding its conduct as a company. True to its mission statement, Axpo will continue to run its business with great integrity and in accordance with the highest ethical standards, and will do so everywhere, at all times and regardless of what others may perhaps expect or demand. Axpo understands the term "compliance" to mean an unconditional commitment to integrity, protecting the environment, ethics and abidance by the law.

Management approach

Since 1 October 2010, the Axpo Group has applied a Code of Conduct according to which Axpo is committed to compliance in its business activities. The Code of Conduct sets out in detail what is permitted and not permitted at the Axpo Group. Its rules of conduct also govern, among other things, Axpo's responsibility towards people, the environment and society. The following twelve principles form part of the Code of Conduct and must be observed by all governance bodies and employees of the Axpo Group in their daily activities:

- Integrity in business operations
- Safety is a priority, as is protecting people and the environment
- Protecting personal privacy, such as banning discrimination or harassment
- Fair competition guarantee
- Prohibition of corruption and other criminal acts
- No exertion of influence through gifts and invitations
- Disclosure of conflicts of interest
- Integrity of business partners
- Observance of confidentiality
- Professional communication
- Procedure for dealing with doubt
- Reporting of breaches of rules

In their daily work, all governance bodies and employees of the Axpo Group at all times comply with the applicable laws, the Code of Conduct and the ethical principles set forth in this Code as well as internal rules – wherever Axpo operates and regardless of what others may expect or demand.

Axpo's Corporate Compliance Programme serves to prevent, recognise and remedy any infringements and to promote a general understanding of compliance. The company must react to compliance breaches in an adequate manner.



a) Prevention of non-compliance:

The Compliance Officers advise the management and employees of the Axpo Group on all compliance topics. Early advice on compliance serves to avoid non-compliance.

When the Code of Conduct was introduced, all employees of the Axpo Group were trained in the Code of Conduct and the principles of anti-corruption. New employees are inducted into the rules of the Code of Conduct on an ongoing basis; internal processes are continuously improved, as required, as part of the compliance management process. Specific compliance courses were also held in the reporting year in the Business Area Trading & Sales in Switzerland and abroad.

In addition to the training courses offered by the Compliance Officer, Axpo's managers in particular are obliged to ensure implementation of the compliance principles. They implement the Code of Conduct by serving as an example and creating a compliance culture shaped by ethics, integrity and trust.

Governance bodies and employees can (and should) ask for help at any time if they suffer any doubts, have any concerns or are unclear about the route that has to be taken. They can turn to their line managers, the Head of Compliance or the competent Compliance Officer. Ideas, concerns or questions of governance bodies and employees can be submitted via Axpo's Ethics Hotline, which can also be used on an anonymous basis.

Axpo's Code of Conduct, which is binding for all governance bodies and employees, including the members of the Board of Directors of Axpo Holding AG and the Executive Board, also regulates the process of handling conflicts of interest.

The Board of Directors of Axpo Holding AG, which is responsible for overall compliance supervision under the law, uses the regular Corporate Compliance Report to form an overview of the status of compliance at the company.

b) Recognition and remediation:

Even the best code of conduct will not be as effective as it could be if the company is unaware of breaches of its provisions or other rules. Axpo maintains a culture of trust and mutual respect, in which the Axpo values and the basic principles described in the Code of Conduct can and should be discussed sincerely, honestly and openly.

Governance bodies and employees are encouraged to report actual or suspected breaches of Axpo's rules or the law to their line managers, the Head of Compliance or the competent Compliance Officer. The same applies if governance bodies or employees are asked by someone to violate such rules or principles. Axpo prohibits any unlawful treatment (e.g. disadvantage, discrimination or retaliation) of governance bodies or employees who follow the Code of Conduct. Furthermore, no person who reports a breach must suffer any detriment as a result of doing so. The unlawful treatment of governance bodies or employees who report actual or suspected (in good faith) breaches by governance bodies, employees or third parties against the Code of Conduct or other regulations, or who help in investigating such allegations, is duly prohibited.

In addition to the Code of Conduct, Axpo implemented internal directives "against bullying and sexual harassment in the workplace". These directives identify the persons whom employees can contact in confidence when a matter is serious. If this does not stop the misconduct, the directive defines the process for submitting a formal complaint against the misconduct.

c) Reaction to breaches of compliance:

Breaches of the Code of Conduct or Axpo's ethical principles are not tolerated. Axpo does not pay "lip service" to compliance. The Code of Conduct must be followed to the letter and spirit of its contents by all governance bodies and employees. Breaches of the law, the Code of Conduct or other Axpo regulations may result in disciplinary action or consequences under labour and/or criminal law.



d) Selected compliance topics

- Measures including an "anti-corruption programme" were put in place in connection with the process to open the new Axpo Ukraine site. Under Ukrainian law, all companies intending to take part in public auctions are required to have a programme like this, which is audited by the National Anti-Corruption Bureau.
- The European General Data Protection Regulation (GDPR) entered into force on 25 May 2018.
 Axpo is affected because of its geographical scope of application. A project has been undertaken to implement the requirements of the GDPR.

Impacts and results

The objective of Axpo's Corporate Compliance Programme is to ensure the consistent and permanent alignment of all actions taken by the Axpo Group with the requirements of the law, articles of association, regulations and internal policies as well as the principles of business ethics and integrity:

- The Axpo Complaints Commission did not receive any complaints in the reporting year. No incidents of discrimination were registered.
- As no cases of corruption were reported in the reporting year, no corrective action was needed.
- Axpo did not receive any fines for breaches of environmental laws and regulations in the reporting year.
- There were no fines for non-compliance with laws and regulations in the social and economic area during the reporting year.
- During proceedings for anti-competitive behaviour or anti-trust and monopoly practices, the Italian
 competition authority launched an investigation into some energy companies in 2013, including
 Axpo's subsidiary Axpo Italy (previously EGL and the power plant company Calenia Energia) and
 issued a fine. The fine was appealed. The action could not be finalised in the reporting year.

419-1 Non-compliance with laws and regulations in the social and economic area

Sustainability Report 2017/18, Compliance, p. 61



External assurance



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To the Executive Management of Axpo Holding AG, Baden

Zurich, 5 December 2018

Report of the independent auditor on the Sustainability Report 2017/18

We have been engaged by Axpo Holding AG to perform a limited assurance engagement on the following information stated in the Sustainability Report 2017/18 (hereafter "report") for the reporting period 1 October 2017 to 30 September 2018, which has been compiled on the basis of the Global Reporting Initiative (GRI):

- ▶ Selected information in the sub-chapter "An overview of our fields of action, goals and performance" (pages 8 to 10 of the report) which are identified with
- Chapter "Materiality analysis" (pages 12 to 18 of the report)
- ➤ Selected information in the chapter "Reporting in accordance with GRI standards" (pages 19 to 63 of the report) which are identified with

Our engagement was limited to the information listed above (hereafter "specified information"). We have not assessed the following information disclosed in the report:

- All information contained in other sections of the report
- Forward-looking statements

The report was prepared by the Executive Management of Axpo Holding AG on the basis of the following criteria:

 Consolidated set of GRI Sustainability Reporting Standards, Comprehensive option

The guidelines can be accessed on the GRI homepage (online at https://www.globalreporting.org/standards/). We believe that these criteria are a suitable basis for our review.

Responsibility of Axpo Holding AG's Executive Management

The Executive Management is responsible for the preparation of the report in accordance with the criteria. This responsibility includes developing, implementing and safeguarding adequate internal controls regarding the preparation of a report that is free of material misstatement due to fraud or error. In addition, the responsibility of the Executive Management includes selecting and applying the criteria and maintaining appropriate records.

Responsibility of the auditor

Our responsibility is to perform a limited assurance engagement and to express a conclusion based on the procedures performed. We performed our engagement

(Translation of the original report in German language)

in accordance with the Swiss Auditing Standard 950 "Assurance Engagements Other than Audits or Reviews of Historical Financial Information". This standard requires that we comply with professional standards as well as plan and perform our audit procedures in order to obtain limited assurance that the report is prepared in all material respects in accordance with the criteria.

Based on materiality and risk considerations, we performed procedures to obtain a sufficient and suitable basis for our conclusion. The selection of the procedures is based on the professional judgment of the independent auditor. In a limited assurance engagement, the procedures are less comprehensive than in a reasonable assurance engagement and therefore a lower degree of assurance is obtained.

The performance of our engagement included the following main procedures:

- Assessment of the suitability of the underlying criteria and their consistent application.
- Interviews with employees regarding the sustainability strategy of Axpo Holding AG.
- Interviews with employees responsible for preparing the report to assess the process of preparing the report, the reporting system, the data capture and compilation methods as well as internal controls to the extent relevant for a review of the report.
- Interviews of employees in specialist departments responsible for the related topics.
- Reviewing the documentation of the systems and processes for compiling, analysing and aggregating sustainability data and testing such documentation on a sample basis.
- Analytical considerations, interviews and review of documents on a sample basis with respect to the compilation and reporting of data during onsite visits to the sites in Baden and Rathausen.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion

Conclusion

Based on our limited assurance engagement, nothing has come to our attention that causes us to believe that the specified information in the report of Axpo Holding AG for the reporting period ended 30 September 2018 does not comply in all material respects with the criteria.

Ernst & Young Ltd



Roger Müller (Qualified Signature)



Mark Veser (Qualified Signature)

Partner

Senior Manager





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