Axpo Holding AG

Sustainability Report 2018/19

Voller Energie

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☑ On this information Ernst & Young Ltd. has provided limited assurance.

Introduction

Dear
Reader,

The provision and efficient use of climate-friendly energy is crucial to the sustainable development of our society. As a leading Swiss energy company owned by the public sector, Axpo strives to achieve economic success while demonstrating social and environmental responsibility. For this reason, sustainability in the broad definition of the word is one of the pillars of our business strategy. For the past two years, for instance, Axpo has been a member of the exclusive circle of the top 5 percent of companies which have obtained the gold standard in the EcoVadis sustainability ratings for the implementation of their sustainability strategy.

Axpo posted a strong operating result in the 2018/19 financial year. The strategy of combining production, trading and the international customer business has also paid off in a challenging market environment: all of the business areas of the Axpo Group achieved pleasing operating results in the 2018/19 financial year.

As an energy company, we shoulder a great responsibility for contributing to protecting the climate. Climate-friendly, or even entirely CO_2-free electricity generation is the key to fulfilling the Paris Agreement, because it enables the “Mobility” and “Buildings” sectors to become greenhouse gas-free (“decarbonised”). In Europe, whilst the average greenhouse gas intensity of electricity generation has fallen significantly in recent years, it is still around 300g CO_2/kWh. Axpo's global electricity production mix is already very climate-friendly and, at around 100 CO_2/kWh, is roughly three times lower than the current European average. The reason for this positive performance is that most of Axpo's electricity in Switzerland and Europe is generated by climate-friendly hydro, nuclear, wind and photovoltaic power plants.

Axpo significantly strengthened its solar power activities when it acquired French photovoltaic company Urbasolar in July 2019. Its portfolio now comprises operational photovoltaic systems with a total capacity of 249 MW. The company also has more than 1,000 MW in its development pipeline and provides servicing, maintenance and asset management services. All the national subsidiaries will benefit from Urbasolar’s specific expertise in their PV projects going forward, including in Switzerland.

Axpo subsidiary Volkswind sold four wind farms in France during the last financial year. This was part of the strategy for renewable energies, which is geared towards profitable growth and, besides developing, constructing and operating wind farms, also entails sales. The company built and commissioned four wind farms in France during the last financial year, representing a total capacity of 88 MW. In all, Volkswind has built more than 70 wind farms with capacity exceeding 1,000 MW. The development pipeline totals around 3,000 MW, at varying stages of development.

Axpo subsidiary Centralschweizerische Kraftwerke (CKW) also achieved a good operating result founded mainly on CKW's increasing diversification to become a comprehensive energy supplier.

To diversify further, Axpo is establishing a new large-scale battery storage business. The expansion of volatile renewable energies is creating a growing need for this form of electricity storage, to safeguard grid stability. In the last financial year, the first battery storage facility, which has a capacity of 2 MW, was built in partnership with CKW for a customer in the canton of St. Gallen.

We believe the increasingly non-subsidised expansion of renewable energies offers great potential, which we are helping to facilitate with long-term power purchase agreements (PPAs). However, there are business risks inherent in driving forward this expansion of renewables. Regulatory risks in particular must not be underestimated. The urgency of the climate issue is compelling politicians to establish conditions conductive to investment, not least in Switzerland.

Axpo also takes its social responsibility as an employer very seriously, as highlighted once again by the results of the employee survey during the last financial year 2018/19. Job satisfaction, identification with the company and motivation are all high. However, employees have identified potential for improvement in areas such as “cross-company collaboration” and “understanding the rationale behind changes”. The results of the survey will be discussed at length in the individual divisions and departments and translated into packages of practical measures.

Axpo runs a corporate volunteering programme to enable employees to do their bit for society. For instance, it is now the main sponsor of PluSport, Switzerland's day of sport for the disabled at which around 40 Axpo employees volunteer every year. This involvement underlines Axpo's commitment to people with disabilities.

Axpo endeavours to make unerring progress towards greater sustainability and to be accountable for its efforts. We are confident that, with our CO_2-efficient energy generation and our innovative services, we are contributing in a major way to resolving the climate issue.

Thomas Sieber,
Chairman of the Board of Directors and Delegate
of the Board of Directors of Axpo Holding AG

Fields of action and goals

The focus of Axpo's commitment to sustainability is on the business itself 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 economic success

The challenge: Ensuring the long-term success of the business is a priority. The key megatrends "decarbonisation", "decentralisation" and "digitisation" are fundamentally transforming the energy market. Axpo must find answers to this transformation. The challenge, however, is the limited availability of financial resources. Due to the substantial production capacities at Axpo's disposal, we are heavily dependent on trends in wholesale prices, which affects the securing of refinancing for this capital-intensive business. Whilst wholesale prices have overcome the lows of 2015/16 and there are signs of a recovery, we still have limited investment capital with which to ensure our capital market viability for the long term.

Axpo's approach: The available investment capital will be used for further growth in existing business areas that are not dependent on electricity prices. Furthermore, we will be focussing on strengthening our innovative capacity and driving forward digital transformation. This will increase efficiency in our existing business activities and gain us the capabilities we need to identify and successfully open up new areas of business. New approaches will be required in order to pool the various capabilities within Axpo and in our external partnerships in the most effective way possible.

2. Axpo reduces its carbon footprint and increases energy efficiency

The challenge: Climate change is one of the global challenges of our time, and the overwhelmingly negative consequences can 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, the aim being to cap the increase at 1.5°C. 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 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 in its 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, Axpo is the leading producer 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. When it acquired wind farm developer Volkswind in 2015 and photovoltaic developer Urbasolar during the current financial year, Axpo strengthened its activities in the development of renewable energies such as onshore wind farms in Germany and France and large-scale solar facilities in France. These acquisitions also enlarged Axpo's own portfolio of renewable energies 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, thereby enabling the construction of new plants which are not subsidised by a fixed feed-in remuneration. These power purchase agreements (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. Solutions 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. Successfully recruiting qualified employees, successfully and continuously training employees throughout their professional lives and retaining employees with attractive terms of employment at the company are the main challenges.

Axpo's approach: Particularly at a time when it is geared towards new areas of business and services, Axpo aspires to a high level of employee satisfaction, as this is essential to a strong performance and is a driver of innovation. This requires, on the one hand, a broad range of skills in order to develop intelligent energy solutions for the future and, on the other, the diversity of people at Axpo who ensure that the company 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. 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 to demonstrate a commitment to society as well. Besides providing and operating a reliable energy supply infrastructure, it must also make meaningful contributions in other areas.

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 2018/19
1) Axpo ensures its long-term economic success	Expansion of business that is not dependent on electricity prices.	• Expansion of PPA business in the areas of PV and wind in Europe • Expansion of the origination business in the USA • Development and construction of wind farms in France • Expansion of the energy efficiency business in Italy and Spain
	Diversification into new areas of business.	• Entry into the development market for large-scale PV facilities in France through acquisition of “Urbasolar”. • Building of first large-scale battery storage facility for customers • Development of Avectris SAP business through takeover of “ERPsourcing”
	Ensuring long-term capital market viability.	The ability to access the capital market was ensured by maintaining an investment grade rating.
2) Axpo reduces its carbon footprint and increases energy efficiency	Annual measurement of greenhouse gas emissions in accordance with ISO 14064	Verification of group-wide greenhouse gas inventory conducted by independent auditors Ernst & Young Ltd.
	The greenhouse gas intensity of electricity generation from our own plants and associates is below the European target path for the electricity sector to achieve the 2°C target set in the Paris Agreement.	The greenhouse gas intensity of Axpo’s electricity generation is 97 kg/MWh. ☑ The European target reductions for the electricity sector are: • 2018: 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 efficiency as regards electricity in the production and distribution of electricity, in operations and at customers, compared with the 2015/16 base year.	An increase of 5,080 MWh was achieved. The cumulative energy efficiency gain compared with the base year is 30,890 MWh.

Fields of action	Goals	Performance 2018/19
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 70% of the order volume that Axpo can influence was placed with business partners who have accepted the Axpo Code. The interim goal for the 2018/19 financial year was thus achieved.
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 around 98 MW (previous year: 67 MW): • Wind: +64 MW • Photovoltaics: +34 MW Wind: Completion of four onshore wind farms in France by Volkswind, with a capacity of 63.5 MW. Photovoltaics: Expansion of Axpo's own PV portfolio in France (Urbasolar) and in Italy with a total capacity of 30.8 MW on a proportionate basis for Axpo. Development and installation of PV plants for customers with a capacity of 3.4 MW
	Annual expansion of renewable energies by third parties, enabled by a long-term power purchase agreement with Axpo, in MW.	Expansion of around 396 MW (previous year: 372 MW) • Wind: +366 MW • Photovoltaics: +30 MW
	Total capacity of renewable energy marketed by Axpo for customers in Europe, in MW.	Total approx. 15,500 MW The biggest portfolios are in Spain (7,400 MW), Scandinavia (3,380 MW) and Italy (960 MW).

[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 2018/19
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 around 40, the annual rate of occupational accidents was well below the industry average of around 56.
	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 5.7, the absence rate was below the industry average of 6.3 calculated by Suva.
6) Axpo makes a contribution to society	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 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. Furthermore, Axpo is involved in a national innovation project, the Park Innovaare in Villigen.	Four Headwaters Trail: As a patron of the eponymous foundation, Axpo supported the construction and operation of the Four Headwaters Trail. 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. PluSport: As a longstanding partner of PluSport, the umbrella organisation of Swiss disabled sport, Axpo is wholeheartedly committed to people with disabilities. Since 2019, Axpo has been the main sponsor of the annual PluSport Day in Magglingen and has supported PluSport football groups as part of its funding project.

Reporting in accordance with GRI Standards

Axpo has once again prepared its report for the 2018/19 financial year in accordance with the Global Reporting Initiative's requirements (GRI). 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 2018/19, GRI content index, p. 66).
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, new topics were added and the relevance of topics was adjusted (see Sustainability Report 2018/19, Choosing the material topics, p. 12) (GRI 102-48, 102-49).

Reporting in accordance with the EU CSR Directive

Axpo is not subject to the reporting obligation in accordance with EU CSR Directive (EU Directive 2014/95). Nonetheless, the company implements the requirements of this directive in its 2018/19 Sustainability Report, reporting 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 2018/19, 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

Based on a wide-ranging stakeholder survey by CKW, the materiality analysis conducted for previous years was broadened for this report with the addition of some new topics. In terms of method, an assessment was conducted from three perspectives as in the previous year, in order to implement both the requirements of the GRI Standard and those of the EU CSR Directive.

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 assessment of relevance from a stakeholder perspective was broadened by incorporating the results of the CKW stakeholder survey. The stakeholder groups covered by this survey included "Customers", "Politicians and authorities", "Employees" and "Associations", among others. Along with 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 Axpo customers (SH Power) and by employees from various functional levels and departments, this yields a very diverse perspective of the stakeholder groups relevant to Axpo for reporting purposes. Relevance to sustainable development was ascertained both by Axpo's and CKW's Sustainability Management function and during the stakeholder survey. 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.

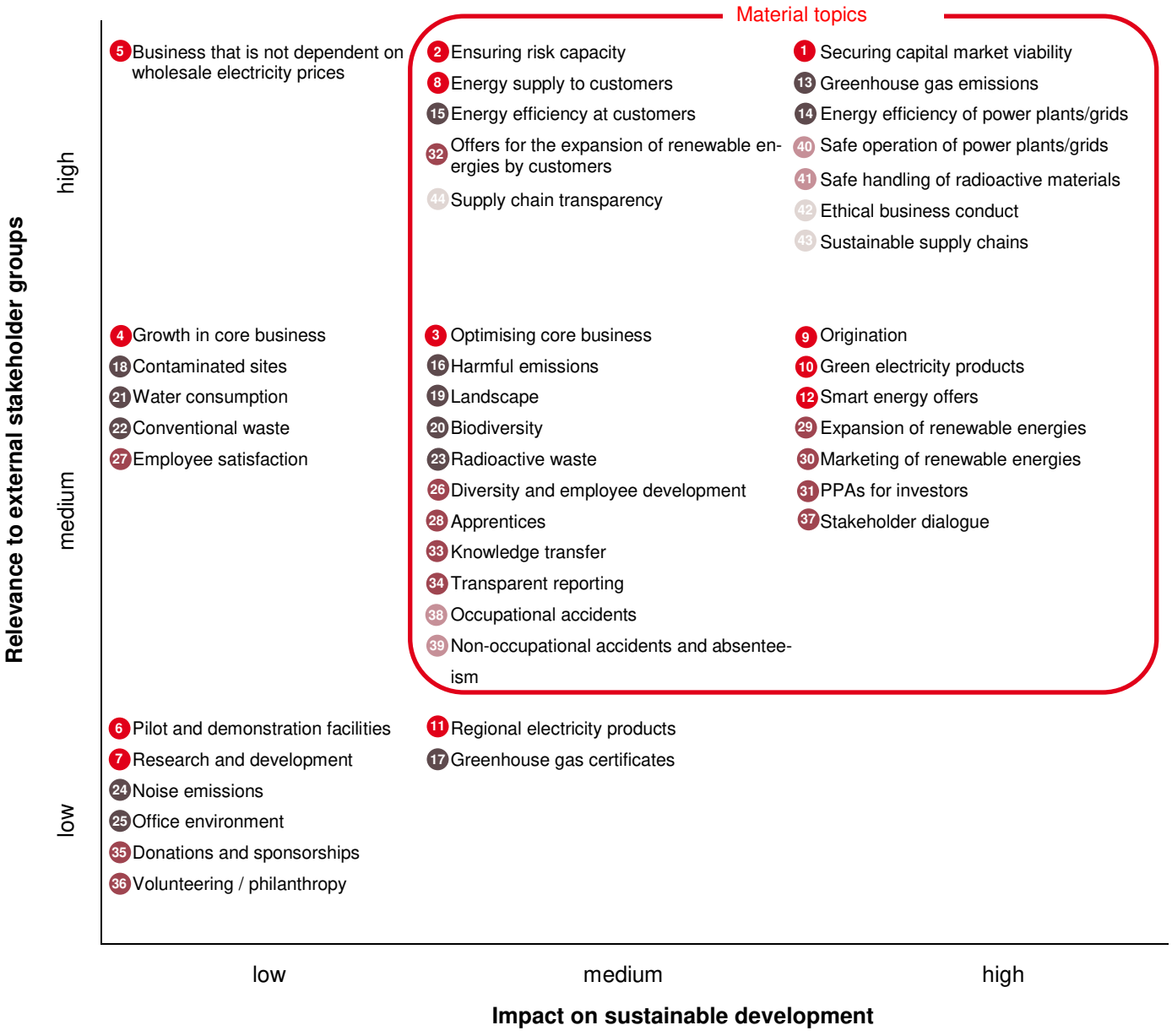
All topics were analysed from three perspectives, according to the relevance categories "high", "medium" and "low". In both cases, topics were only considered material for reporting purposes if they are of at least medium significance in both relevant perspectives (see the two graphics on materiality 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]:

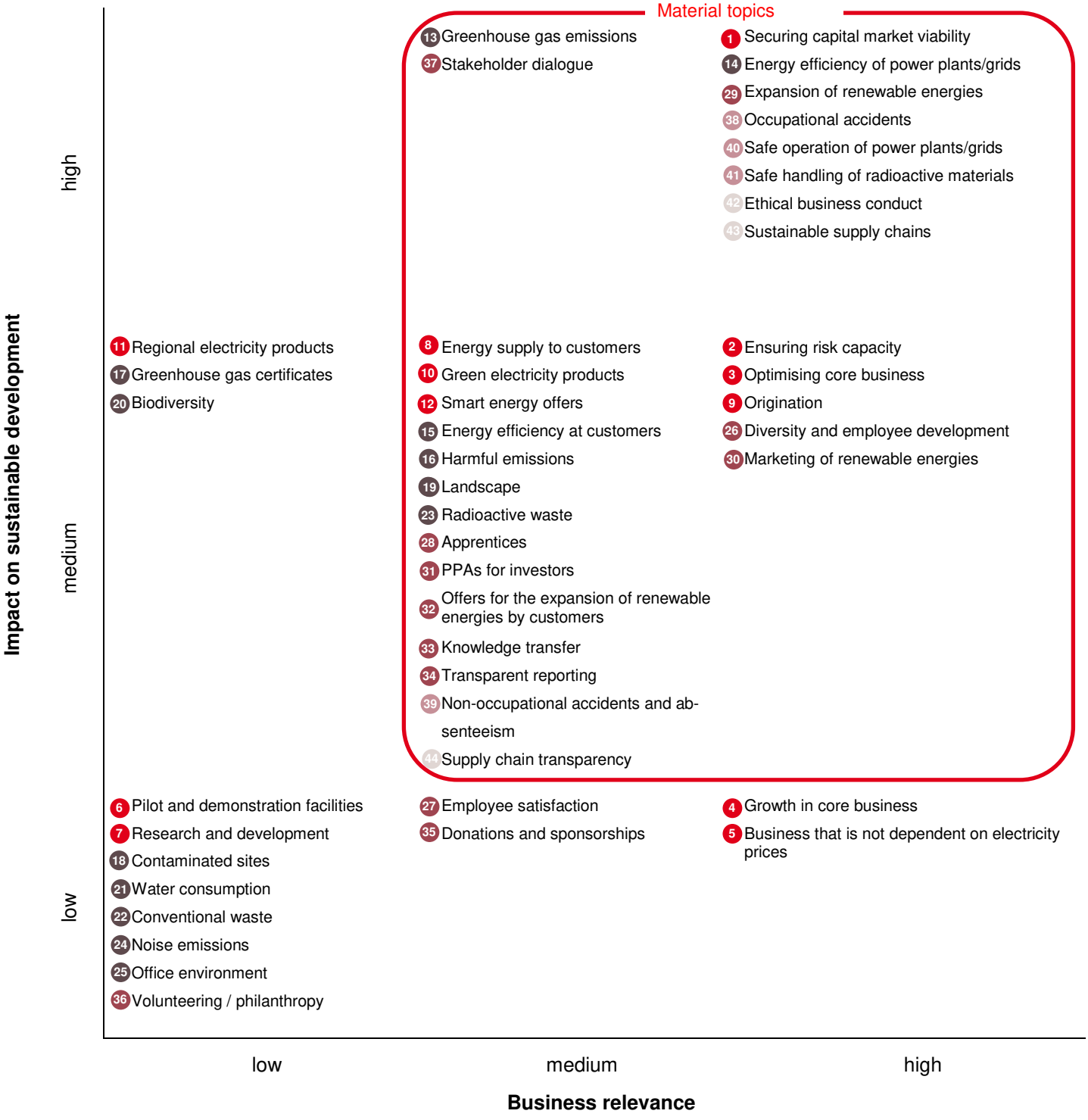
I	Economy	Ensuring the long-term success of the business; customer focus and reliability
II	Ecology	Protecting the environment; increasing energy efficiency
III	Social dimension	Attractive employer; energy turnaround; dialogue with stakeholders
IV	Safety	Operational and occupational safety; safe operation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

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

Materiality analysis according to the GRI Standards



Materiality analysis in accordance with the EU CSR Directive



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

Material topics for Axpo from the economic dimension

Topic		Materiality		Reporting	
No.	Topic	GRI	EU Directive	Report	Reference
Economic dimension: Ensuring the economic long-term success					
Action field 1: Ensure the long-term success 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 performance, 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, PV, distribution, trading and the IT and data business	No	No	Yes, voluntary	Economic performance, p. 34
5	Develop new business that is not dependent on electricity prices	No	No	Yes, voluntary	Economic performance, p. 34
6	Finance pilot and demonstration facilities	No	No	No	–
7	Finance research and development	No	No	No	–
Economic 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, including intelligent storage offers	Yes	Yes	Yes	Economic performance, p. 34

Material sustainability topics for Axpo from the environmental dimension

Topic		Materiality		Reporting	
No.	Topic	GRI	EU Directive	Report	Reference
Environmental dimension: Protecting the environment and increasing energy efficiency					
	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. 56
20	Protecting biodiversity	Yes	No	Yes	Local communities, p. 56; effluents and waste, p. 45
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. 45
24	Reduction of noise emissions	No	No	No	–
25	Improve office environment	No	No	Yes, voluntary	Energy and emissions, p. 39

Material sustainability topics for Axpo from the social dimension

Topic		Materiality		Reporting	
No.	Topic	GRI	EU Directive	Report	Reference
Social dimension: Attractive employer					
26	Promotion of diversity by further developing employees' skills and ensuring equal opportunities	Yes	Yes	Yes	Training and education, p. 54; Compliance, p. 62
27	Promotion of employee satisfaction	No	No	No	–
28	Training for apprentices	Yes	Yes	Yes	Training and education, p. 54
Social dimension: Energy turnaround					
Action field 4: Energy turnaround					
29	Development and expansion of renewable energies	Yes	Yes	Yes	Economic performance, p. 34
30	Marketing of electricity from renewable energies	Yes	Yes	Yes	Economic performance, p. 34
31	Offer long-term power purchase guarantees (PPAs) for investors in renewable energies without state subsidisation	Yes	Yes	Yes	Economic performance, p. 34
32	Offer products and services which enable customers to expand renewable energies	Yes	Yes	Yes	Economic performance, p. 34
Social dimension: Stakeholder dialogue					
Action field 6: Social commitment					
33	Communication of (energy-related) knowledge	Yes	Yes	Yes	Local communities, p. 56
34	Transparent reporting and information for stakeholders	Yes	Yes	Yes	Local communities, p. 56; GRI 102-43, p. 29
35	Donations and sponsorships	No	No	Yes, voluntary	GRI 102-43, p. 29
36	Volunteering / philanthropy	No	No	No	–
37	Engagement with external stakeholders (stakeholder dialogue)	Yes	Yes	Yes	Local communities, p. 56; GRI 102-43, p. 29

Material sustainability topics for Axpo from the safety dimension

Topic		Materiality		Reporting	
No.	Topic	GRI	EU Directive	Report	Reference
Safety dimension: Guaranteeing operational and occupational safety					
Action field 5: Responsible employer					
38	Minimisation of occupational accidents	Yes	Yes	Yes	Occupational health and safety, p. 51
39	Minimisation of non-occupational accidents and absenteeism due to illness	Yes	Yes	Yes	Occupational health and safety, p. 51
Safety dimension: Safe operation of power plants and grids					
40	Guarantee the safe operation of power plants and grids	Yes	Yes	Yes	Customer health and safety, p. 60
41	Safe handling of radioactive materials	Yes	Yes	Yes	Effluents and waste, p. 45

Material sustainability topics for Axpo from the ethical business conduct dimension

Topic		Materiality		Reporting	
No.	Topic	GRI	EU Directive	Report	Reference
Ethical business conduct dimension: Ethical business conduct at the company					
42	Enforce ethical business conduct at the company	Yes	Yes	Yes	Compliance, p. 62
Ethical business conduct dimension: Sustainable supply chain					
Action field 3: Enforce sustainability principles at business partners					
43	Compliance with environmental and social standards in supply chains	Yes	Yes	Yes	Supply chain and supplier management, p. 58
44	Ensure supply chain transparency	Yes	Yes	Yes	Supply chain and supplier management, p. 58

Reporting in accordance with GRI Standards

General disclosures

Organisational profile

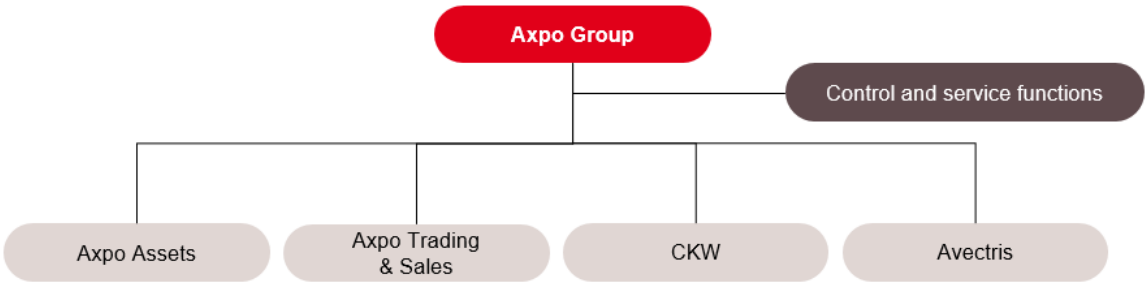
102-1 Name of the organisation

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 and steam power plants) 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, biomass and CO_2 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 28 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 Nature of 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 2019 was 4,958 for the reporting year. These full-time equivalents comprise 5,295 persons or 1,084 women (around 20%) and 4,211 men (around 80%). Axpo employs 4,308 persons in Switzerland (around 81%) and 987 abroad (around 19%).

Total income: Financial Report of Axpo Holding AG 2018/19, p. 5.
Total capitalisation: Financial Report of Axpo Holding AG 2018/19, p. 7.

Quantity of products provided:
Electricity sales totalled 63,826 million kWh and gas sales amounted to 11,019 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 Group		Switzerland		International	
	2018/19	2017/18	2018/19	2017/18	2018/19	2017/18
Total	**4,958.39**	**4,440.62**	**3,986.18**	**3,776.49**	**972.21**	**664.13**
Women	**892.51**	**720.53**	**514.88**	**479.58**	**377.63**	**240.95**
Part-time	222.51	209.53	191.88	185.58	30.63	23.95
Full-time	670.00	511.00	323.00	294.00	347.00	217.00
Men	**4,065.88**	**3,720.09**	**3,471.30**	**3,296.91**	**594.58**	**423.18**
Part-time	308.88	306.09	303.30	297.91	5.58	8.18
Full-time	3,757.00	3,414.00	3,168.00	2,999.00	589.00	415.00

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 2018/19, Supply chain and supplier management, page 58.

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

There were changes to the scope of consolidation during the reporting year as a result of the acquisitions of Urbasolar, ERPsourcing and Comicro. Detailed information is provided in the Financial Report of Axpo Holding AG 2018/19, p. 81-84.

Detailed information about the capital structure is provided in the Financial Report of Axpo Holding AG 2018/19, p.7.

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 2018/19, Effluents and waste, p. 45).
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 External initiatives

Axpo applies the following established international standards: the International Financial Reporting Standards (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 Membership of associations

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 important of these are:

Association/organisation	Description of membership
National level	
VSE Association of Swiss Electricity Companies	Umbrella association of Swiss electricity companies: – Axpo is a sector member – Axpo is represented on the board – Axpo is represented in all strategically relevant working groups
SwissHoldings	Business association for multinational companies in Switzerland – Axpo is a member – Axpo is represented in working groups
International level	
eurelectric The Union of the Electricity Industry	Umbrella association of the European electricity industry: – The Swiss member is the VSE – Axpo is represented in all strategically relevant working groups – Axpo CEO was involved in drafting the *Eurelectric Presidency Manifesto 2017-2019*
EFET European Federation of Energy Traders	Association of European energy traders: – Axpo is a full member – 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
SolarPower Europe	Umbrella association of the European photovoltaic industry – Axpo is a full member
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 consisting of representatives of the energy sector)
RECS Renewable Energy Certificate System	Association for the development and organisation of trading in green certificates: – Axpo is a full member

Strategy

102-14 Statement from senior decision-maker

Introduction to the Sustainability Report by Chairman of the Board of Directors Thomas Sieber, Sustainability Report 2018/19, 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 2018/19, 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 2018/19,102-11 Precautionary approach, p. 22, Customer health and safety, p. 60). This includes securing funding for dismantling nuclear power plants and disposing of radioactive waste (see Sustainability Report 2018/19, 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 2018/19, Occupational health and safety, p. 51). 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 2018/19, Training and education, p. 54, Compliance, p. 62).

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 2018/19, 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. Its acquisition of the photovoltaic developer "Urbasolar" during the reporting year also saw Axpo enter the international solar business (see Sustainability Report 2018/19, 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 2018/19, Action field 1, p. 5).

Ethics and integrity

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

Sustainability Report 2018/19, Compliance, p. 62

102-17 Mechanisms for advice and concerns about ethics

Sustainability Report 2018/19, Compliance, p. 62

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 Delegating authority

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 thus also 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 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 2018/19, 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 2018/19, Board of Directors and Executive Board, p. 12-13

102-23 Chair of the highest governance body

In principle, the Chairman of the Board of Directors is not a member of the Executive Board. Since 1 January 2019, however, the Chairman of the Board of Directors has also taken over operational management of the Group on an interim basis in his role as Delegate of the Board of Directors to bridge the gap until the newly elected CEO takes office.

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: 70).

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 Conflicts of interest

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.

102-27 Collective knowledge of highest governance body

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. In this role, it is responsible for monitoring the implementation of the corporate strategy.

102-28 Evaluating the highest governance body's performance

Economic, environmental and social topics are covered by the corporate strategy. All managers are set targets for their implementation which relate to the environmental, economic or social dimension, as well as governance or safety. Performance is evaluated during the annual MbO process.

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 processes

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 Review of economic, environmental, and social topics

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

102-32 Highest governance body's role in sustainability reporting

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

102-33 Communicating critical concerns

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 2018/19, Compliance, p. 62.

102-35 Remuneration policies

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 and implemented in the 2018/19 financial year. From the 2019/20 financial year onwards, company-wide and area-specific financial targets will be weighted more heavily than in the past when calculating the variable pay of the Executive Board and of the Management. External salary comparisons were once again carried out in the 2018/19 financial year to serve as a basis when setting salaries for individual roles. 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 2018/19, p. 79 and p. 99–101).

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 Annual total compensation ratio

Based on permanent and fixed-term full-time employees in Switzerland, the ratio of annual total compensation for the highest-paid individual employee to the median annual total compensation for all employees is 9.5 to 1 (previous year: 9.6 to 1).

102-39 Percentage increase in annual total compensation ratio

The ratio of the percentage increase in compensation between the highest paid staff members and all employees is 2.9 percent.

Stakeholder engagement

102-40 List of stakeholder groups

Sustainability Report 2018/19, 102-43, p. 29

102-41 Collective bargaining agreements

Percentage of total employees covered by collective bargaining agreements.

	Switzerland		International	
	2018/19	2017/18	2018/19	2017/18
Total	**9.68%**	**11.16%**	**25.03%**	**34.12%**
Women	0.86%	3.08%	22.88%	33.47%
Men	11.38%	12.70%	26.42%	34.50%

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

102-42 Identifying and selecting stakeholders

Sustainability Report 2018/19, 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 its 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, wind energy, and photovoltaics.

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 enables 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 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, most recently during the 2018/19 financial year. The results were presented to employees and specific measures devised, which will be implemented in the 2019/20 financial year.

Dialogue with politicians:

Dialogue with politicians is transparent, open and relates to specific issues that reflect the current political debate. It takes place either through direct dialogue with Axpo representatives (employees from Public Affairs or top management) or through associations of which Axpo is a member. During the reporting year, for instance, there was direct dialogue between the Chairman of the Board of Directors of Axpo Holding and government and parliamentary representatives at cantonal and federal level. A member of the Executive Board also took part in a hearing involving an advisory committee to the Federal Parliament. Against the backdrop of changes to various core legal principles, employees of the Public Affairs department held various other meetings with members of Parliament, the federal government and the cantons. These meetings were held to discuss the anticipated tightening of the regulatory framework for nuclear power plants.
In the run-up to the federal elections, Axpo also set up an online platform on which candidates from all parties could present their concerns and messages about climate policies.

Dialogue with the general public:

Dialogue with the public enhances credibility and promotes an understanding of the Group's 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 2018/19, 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 meetings on specific topics between the specialist units and employees of Axpo's Public Affairs department are also scheduled. One example during the reporting year was the intense exchange of views on the content of ventures involving Axpo's international trading business in the relevant cantonal parliaments.

Dialogue with business associations:

An important dialogue with the business sector was channelled through Economiesuisse, the umbrella association for the Swiss business community, in which Axpo holds individual membership. Exchanges were topic-focused and took place in working groups. During the reporting year, the anticipated tightening of the regulatory framework for nuclear power plants and the resulting negative impact on electricity prices and security of supply were major concerns for both sides.

Dialogue with local communities, non-governmental organisations, government offices and municipal representatives:
Sustainability Report 2018/19, Local communities, p. 56.

102-44 Key topics and concerns raised

Sustainability Report 2018/19, 102-43, p. 29

Reporting practice

102-45 Entities included in the 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 2018/19, Notes to the consolidated financial statements, p. 81–83
Sustainability Report 2018/19, Materiality analysis, p. 12.

102-46 Defining report content and topic boundaries ☑

Sustainability Report 2018/19, Materiality analysis, p. 12

102-47 List of material topics ☑

Sustainability Report 2018/19, Overview of the material topics and reference to GRI indicators, p. 15

102-48 Restatements of information

Sustainability Report 2018/19, Reporting principles, p. 11

102-49 Changes in reporting

Sustainability Report 2018/19, Reporting principles, p. 11

102-50 Reporting period

The information in this report covers the 2018/19 financial year
(1 October 2018 to 30 September 2019).

102-51 Date of most recent report

The last Sustainability Report was published for the 2017/18 financial year on 12 December 2018.

102-52 Reporting cycle

The first two GRI reports 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 and, for the last two years, based on the GRI Standards.

102-53 Contact point for questions regarding the report

For contact information, please consult the Sustainability Report 2018/19, Publishing details, p. 71

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 2018/19, GRI content index, p. 66

102-56 External assurance

On selected indicators Ernst & Young Ltd has provided limited assurance. The indicators concerned have been identified in the Sustainability Report 2018/19 ☑. Please consult the Sustainability Report 2018/19, External assurance, p. 65.

Additional information for electricity companies

GRI Sector Supplements

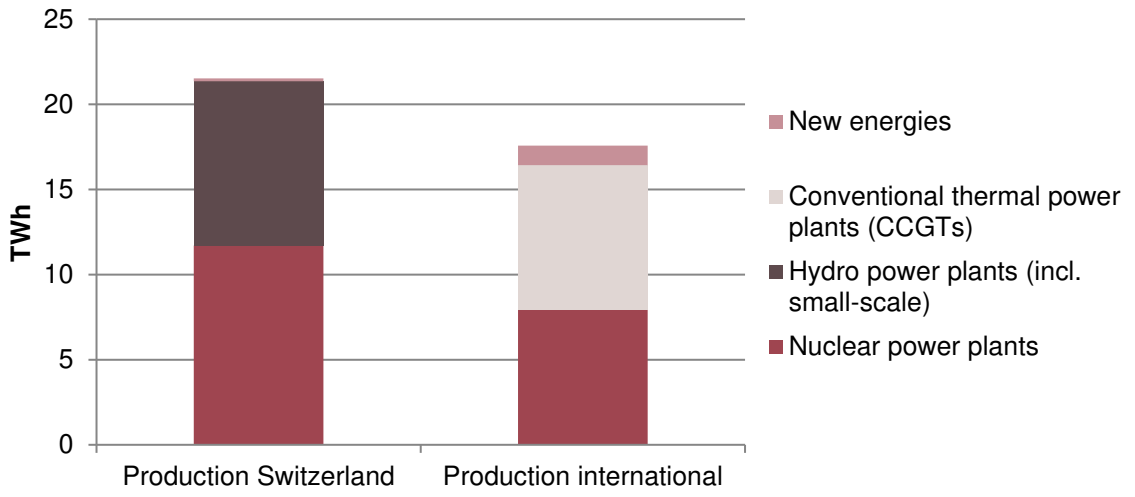
EU1 Installed capacity

Axpo (including CKW) has a total installed power plant capacity of around 9,400 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 2018/19 FY	Installed capacity 2017/18 FY
Hydro power Switzerland, including small-scale hydro power plants	approx. 4,300 MW	approx. 4,300 MW
Nuclear energy Switzerland, including long-term contracts	approx. 1,500 MW	approx. 1,500 MW
New energies Switzerland, without small-scale hydro power plants, mainly biomass	approx. 30 MW	approx. 30 MW
Foreign nuclear energy (long-term contracts with France)	approx. 1,200 MW	approx. 1,200 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, Italy, Spain) and photovoltaics (France)	approx. 640 MW	approx. 490 MW
Total	**approx. 9,400 MW**	**approx. 9,300 MW**

The values in the table have been rounded off. The main changes affecting new energies abroad compared with the previous year involve the takeover of Urbasolar (PV portfolio in France).

EU2 Net energy production FY 2018/19



Energy procurement from fully consolidated power plants and power plant holdings in the 2018/19 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, Spain, Portugal and Poland, Axpo has a total of around 400,000 delivery points for electricity sales and around 45,000 delivery points for gas sales, 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)	–	3 km
Grid level 3 (cross-regional distribution grid)	2,159 km	466 km
Grid level 5 (regional distribution grid)	735 km	1,565 km
Grid level 7 (local distribution grid, including home electricity connections – CKW only)	270 km	4,663 km

EU11 Generation efficiency of thermal power plants

The net generation efficiency of the Beznau nuclear power plant in the 2018 calendar year was 33.2% for Block 1 and 32.8% for Block 2.

The gas-fired combined-cycle power plants in Italy reported an average generation efficiency for the reporting year of 52.2% (Calenia) and 53.6% (Rizziconi).

EU12 Transmission and distribution losses

Losses on the distribution grids of Axpo Grids (grid levels 1 to 5) amounted to 0.6% and those on the CKW grids (grid levels 3 to 7) were 2.9% during the reporting year.

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 0.02 [1/a] for Axpo grids and 0.27 [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 0.25 [min/a] for Axpo grids and 21.6 [min/a] for CKW (excluding the grids of EW Altdorf and EW Schwyz).

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. The key megatrends "decarbonisation", "decentralisation" and "digitisation" are fundamentally transforming the energy market. Axpo must find answers to this transformation. The last financial year 2018/19 was again affected by low electricity revenues as electricity prices are hedged three years in advance. For the current financial year 2019/20 and the two thereafter, Axpo has been able to sell the majority of its production at higher prices, which will gradually impact positively on the result from 2020 onwards. That said, the development of Europe's economy and of the energy markets as well as the political situation in Switzerland and Europe are beset with uncertainties which may have a significant influence on Axpo's result.

Management approach disclosures
In order to meet these wide-ranging challenges, Axpo has positioned itself as a diversified electricity company with substantial production plants, grids and electricity distribution in Switzerland, a strong trading portfolio in Europe and a leading wind and solar farm developer in France and Germany. Linking up the greatly expanded wind and solar business with the innovative services of the trading division, coupled with a consistent strategy of digitisation, are enabling Axpo to leverage more and more synergies in the Group and to exploit competitive advantages in Switzerland and abroad while maintaining a focus on cost discipline.

Impacts and results
The strategy of establishing a broad base for Axpo and focusing on growth, optimisation and diversification is paying off. In a very fast-moving market environment, Axpo's trading business achieved the best result in its history. Axpo made use of its strong presence abroad and its expertise as a leader marketer of renewable energies. It benefited from strong demand for long-term power purchase agreements (PPAs), particularly in Scandinavia.

Axpo significantly strengthened its solar power activities when it acquired French photovoltaic company Urbasolar. As of the end of the 2018/19 financial year, the portfolio comprises operational photovoltaic systems with a total capacity of 249 MW. Moreover, the company has a development pipeline of more than 1,000 MW and provides services in the area of servicing, maintenance and asset management. Axpo subsidiary Volkswind sold four wind farms in France during the last financial year. This was part of the strategy for renewable energies which is geared towards profitable growth and, besides constructing and operating wind farms, also entails sales. The company built and commissioned four wind farms in France during the last financial year, representing a total capacity of 88 MW. In all, Volkswind has built more than 70 wind farms with capacity exceeding 1,000 MW. The development pipeline totals around 3,000 MW, at varying stages of development.

With its power plants in Switzerland, a production capacity of around 25 billion kilowatt hours and its grid infrastructure, Axpo makes a substantial contribution to our security of supply. Axpo sees the planned installation of the first large-scale photovoltaic system in the Swiss Alps, on the Muttsee dam of the Limmern pumped-storage power plant, as a pilot project. The planning application for the project was submitted in late November 2019. The system will have an installed capacity of 2 megawatts and generate 2.7 gigawatt hours of electricity a year.

In the past financial year, Axpo again invested in the digital transformation of the Group in all business areas. The focus was on additional benefits, greater efficiency and cost savings through the use of state-of-the-art technologies for the use of data ("big data") in energy trading. The first digitalized hydroelectric power plant in Switzerland is currently being built as a pilot project at the Sarganserland power plants. It promises fewer routine operations, less administration and greater efficiency. In Spain, Axpo Iberia has

successfully launched an application that helps to market the large wind power portfolio even better on the Iberian power exchanges.

For more information, please consult the Annual Report of Axpo Holding AG 2018/19, p. 3-7, and the Financial Report of Axpo Holding AG 2018/19.

201-1 Direct economic value generated and distributed

	2018/19	2017/18
Total income (in CHF m)	4,856	4,850
Result for the period (in CHF m)	865	131

For more information, please consult the Annual Report of Axpo Holding AG 2018/19, p. 2, and the Financial Report of Axpo Holding AG 2018/19.

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

Combating climate change is one of the biggest challenges of our times. At the climate conference in Paris in 2015, the UN member states agreed for the first time on a general, legally binding and global climate protection agreement. The aim of the agreement is to limit global warming to well below 2°, with the goal of a maximum temperature rise of 1.5°. The European Commission is pressing for an EU-wide net zero emissions target for 2050. This is a tougher aim than the current target of reducing emissions by 80-95% compared with 1990 levels. Switzerland also ratified the Paris Agreement on 6 October 2017, targeting a 50% reduction by 2030 compared with 1990 (2° target). On 28 August 2019, the Federal Council made this a more stringent target of net zero emissions by 2050 (1.5° target).

As shown by the climate change scenarios published by the Federal Office for the Environment (Swiss Climate Change Scenarios CH2018), Switzerland will be particularly badly hit by the consequences of climate change. 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.

In conjunction with the Clean Energy Package, the European Union has set itself targets for EU energy and climate policy for the period to 2030:

- 40% less CO_2 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 new President of the European Commission for 2019-2024, Ursula von der Leyen, has announced the presentation of a CO_2 law dubbed the “New Green Deal” by February 2020: under this law, CO_2 emissions are to be reduced by at least 50% and, if possible, as much as 55% by 2030.

The EU Emissions Trading System (EU ETS) is a key instrument of EU climate policy. Prices for CO_2 emissions rights have risen sharply since summer 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 2.3 million tonnes of CO_2 in the reporting year. Looking at the entire production portfolio, however, Axpo’s low-CO_2 energy mix would benefit from a more robust EU ETS.

Back in November 2016, the European Commission presented the “Clean Energy Package” (CEP) of eight draft laws. The package is intended to overhaul almost every aspect of the EU’s internal electricity

market (market design, risk provisioning/security of electricity supply, promotion of renewable energies, energy efficiency – particularly in buildings). The legislative processes are now complete. 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 as well as the range of new renewable energies in 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.

In the 2018/19 financial year, the Board of Trustees of the PKE adopted a package of measures. As the main measure, the conversion rate for retirement at age 65 will be reduced from 5.65% to 5.0%. The reduction will be implemented over five years and will begin on 1 October 2019. Due to the reduction in the conversion rate and the various compensation measures, all pension plans must be adjusted as of 1 January 2020. This applies not only to basic pension plans, but also to any bonus and shift bonus plans. Until 1 January 2020, the total savings contributions of employers and employees will amount to 11% to 33% of the insured salary, depending on the age group, with the employer paying between 50% and 72% of this amount. From 1 January 2020, the employer's savings contributions will increase by 0.7 %.

Due to the package of measures, the risk contributions have also been adjusted. As of 1 January 2020, the PKE now grants an additional discount of 0.55 percentage points on the risk contribution, which means that from 1 January 2020 it will still amount to 0.35% (previous year: 0.8%) of the insured salary. The employer pays 60% of the 0.35%.

The CKW employees are also insured exclusively with the PKE defined contribution plan. CKW's pension cost for the 2018/19 financial year was CHF 12.1 million (2017/18: CHF 17.3 million).

The funding ratio of the collective pension fund for the PKE Energy Pension Foundation is 112.9% (30.09.2019) and 114.8% (30.09.2018). 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 the 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 offshore wind farms, for example. The subsidies are the same for all market players.

Anti-corruption

Management approach: Sustainability Report 2018/19, Compliance, p. 62

205-1 Operations assessed for risks related to corruption

Sustainability Report 2018/19, Compliance, p. 62

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

Sustainability Report 2018/19, Compliance, p. 62

205-3 Confirmed incidents of corruption and actions taken

Sustainability Report 2018/19, Compliance, p. 62

Anti-competitive behaviour

Management approach: Sustainability Report 2018/19, Compliance, p. 62

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

Sustainability Report 2018/19, Compliance, p. 62

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 disclosures
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 made contributions to the decommissioning fund of CHF 7.7. million (previous year CHF 0.0 million) for the Beznau nuclear power plant (KKB) but, as in the previous year, did not make contributions to the disposal fund. 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 an interim decision of 28 March 2019, the Federal Administrative Court dismissed the objection, which prompted the operators to appeal to the Federal Supreme 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 per calendar year to the decommissioning fund for the Beznau nuclear power plant. In addition to the regular payment of CHF 2.1 million (for the period from January to September 2019), a back-payment of CHF 5.6 million was also made during the reporting year to cover 2017 and 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. In November 2019, the Federal Council approved the third revision of the SEFV, which will enter into force on 1 January 2020. The amended provisions may result in an interim taxation, which will lead to higher fund contributions for nuclear power plants.

For more information, please consult the Financial Report of Axpo Holding AG 2018/19, Uncertainty of estimates for Beznau nuclear power plant (KKB) p. 28.

Environmental dimension

Energy and emissions

Relevance
Climate-friendly electricity generation is essential to fulfilling the Paris Agreement. Firstly, the global energy sector is responsible for around 25% of the world's greenhouse gas emissions[1] and, secondly, the transport, buildings and, to some extent, industrial sectors can only be substantially decarbonised through electrification.

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 disclosures
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.

Energy efficiency gains are being made in the following four areas: production increases in power plants, reductions in transmission losses, reductions in consumption in building management and reductions in consumption by 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 (see the Annual Report of Axpo Holding AG 2018/19, p. 8).

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 2018/19, Direct GHG 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 2018/19, Compliance, p. 62.

Energy efficiency was improved by a total of 5,000 MWh in the reporting period. The biggest contributors were efficiency gains at customers of Axpo (+4,200 MWh) and in production plants (+800 MWh). For more information, please consult the Sustainability Report 2018/19, Reduction of energy consumption, p. 41.

[1] Source: IPPC, AR5, Synthesis Report

Furthermore, Axpo's low-CO_2 production mix makes an important contribution to protecting the climate: for all of Axpo's power plants combined, greenhouse gas intensity is 97 g CO_2 equivalents per kWh. This is just a fraction of the GHG intensity of the European electricity mix of around 300 g of CO_2 equivalents per kWh.[1]

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 Block 1 operating for the full year. The Italian CCGTs also increased their operating hours thanks to the favourable market environment.

Direct energy consumption in production and operations in TJ	2018/19	2017/18	2016/17	2015/16
Nuclear fuel for production: Beznau nuclear power plant, gross thermal energy production	62,713	52,740	31,688	24,096
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)	43,412	31,130	40,137	38,144
Fossil fuels for operations: Building heating with gas and oil; fuel for cargo, delivery and passenger vehicles	63	54	61	56
Renewable fuels: Biomass, biogas and wood for energy production	2,110	2,415	2,392	1,380
Total	**108,298**	**86,340**	**74,278**	**63,676**

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 was at roughly the same high level as the previous year, as frequent use could be made of the power plants, particularly Linth-Limmern (KLL). Electricity demand for computer centres rose sharply, as Axpo company Avectris uses more data centres since the acquisition of "ERPsourcing" and "comicro".

Indirect energy consumption for production, in buildings and via transmission losses in TJ	2018/19	2017/18	2016/17	2015/16
Energy procurement for production: Electricity required for pumped-storage power plants (fully consolidated power plants) and for production facilities	6,360	6,045	3,511	1,982
Energy lost via transmission: total transmission losses via Axpo's grids (caused by Axpo energy and third parties)	778	759	773	787
Energy required for building management: District heating and electricity used in buildings and computer centres	71	61	49	53
Total	**7,210**	**6,865**	**4,333**	**2,822**

302-2 Energy consumption outside of the organisation

Indirect energy consumption for production, in buildings and via transmission losses in TJ	2018/19	2017/18	2016/17	2015/16
Energy procurement for production: Electricity required for pumped-storage power plants (partner plants)	684	727	701	528

[1] Source: European Environment Agency / CO2 emission intensity

302-3 Energy intensity

Total energy consumption per full-time equivalent is around 23,435 GJ (previous year: 21,160 GJ).

302-4 Reduction of energy consumption

Sustainability Report 2018/19, Energy and Emissions, p. 39.

As regards electricity, energy efficiency gains are being made in the following four areas: production increases in power plants, reductions in transmission losses, reductions in consumption in building management and reductions in consumption by 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 800 MWh were achieved at the Göschenen power plant during the reporting year.

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

Biomass fermentation: energy efficiency gains of 150 MWh were achieved at the Kompogas plant in Charvornay during the reporting year.

Transmission grids: the replacement of transformers enabled energy efficiency gains of around 40 MWh during the reporting year.

Building management: no substantial efficiency gains were realised in the reporting year.

Increasing energy efficiency for customers
With the help of the "ProKilowatt" support programme (circulating pump programme), consumption by CKW's customers was reduced by around 40 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 4,200 MWh in electricity consumption.

Annual energy efficiency gains in MWh	2018/19	2017/18	2016/17
Production increases in power plants	800 MWh	8,203 MWh	9,207 MWh
Reductions in transmission losses	42 MWh	120 MWh	0 MWh
Reductions in consumption in building management and at computer centres	0 MWh	340 MWh	306 MWh
Reductions in consumption by customers (CKW, Axpo Italy, Axpo Iberia)	4,236 MWh	4,977 MWh	2,659 MWh
Total	**5,078 MWh**	**13,640 MWh**	**12,172 MWh**

302-5 Reductions in energy requirements of products and services

Sustainability Report 2018/19, 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 CO_2 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.

Gross emissions

In the reporting year, Axpo emitted a total of around 3.8 million tonnes of CO_2 equivalents (gross emissions). Total emissions from CCGTs increased by around 700,000 tonnes due to the favourable market environment, representing the main driver in the increase in emissions compared with the previous year. The breakdown by source is as follows:

Detailed greenhouse gas emissions in tonnes of CO_2 equivalents	2018/19	2017/18	2016/17	2015/16
Production				
Direct emissions international	2,320,400	1,682,220	2,204,180	2,036,050
Direct emissions Switzerland	29,020	27,630	25,770	27,930
Indirect emissions international	5,970	6,110	4,110	4,250
Indirect emissions Switzerland	470,840	447,700	254,640	177,240
Voluntarily[1] disclosed indirect emissions in Switzerland (Scope 3 emissions from pump energy of shareholdings from pumped-storage power plants)	50,600	52,530	49,300	–
Voluntarily[1] disclosed direct emissions international (Scope 3 emissions from non-controlling interests from CCGTs)	946,900	881,020	626,640	–
Transmission (only relevant for Switzerland)				
Direct emissions (SF_6 emissions)	890	860	980	830
Indirect emissions (transmission losses)	11,460	13,770	13,820	10,210
Operation administration buildings				
Direct emissions international	150	190	210	180
Direct emissions Switzerland	4,530	3,820	4,330	4,000
Indirect emissions international	440	380	380	310
Indirect emissions Switzerland	1,100	1,170	840	680
Total greenhouse gas emissions	**3,842,300**	**3,117,400**	**3,185,180**	**2,261,680**

The values in the table have been rounded off. In the 2015/16 reporting year, 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.

The breakdown of emissions by scope is as follows:

Greenhouse gas emissions by scope in tonnes of CO_2 equivalents	2018/19	2017/18	2016/17	2015/16
Total greenhouse gas emissions	**3,842,300**	**3,117,400**	**3,185,180**	**2,261,680**
of which direct emissions (Scope 1)	2,354,970	1,714,660	2,235,390	2,068,950
of which indirect emissions from the generation of purchased energy (Scope 2)	488,900	468,320	273,170	155,000
of which voluntarily disclosed emissions (Scope 3)	998,430	934,420	676,620	37,730

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	2018/19	2017/18	2016/17	2015/16
Total greenhouse gas emissions	**3,842,300**	**3,117,400**	**3,185,180**	**2,261,680**
of which CO_2	3,812,440	3,089,390	3,158,460	2,234,590
of which CH_4	25,500	23,992	22,170	22,320
of which N_2O	3,470	3,170	3,560	3,950
of which SF_6	840	720	950	790
of which coolants	50	130	40	30

The values in the table have been rounded off.

Net emissions

Greenhouse gas emissions from pump energy were offset for the reporting year because procuring grey energy for this purpose has been banned since 1 January 2018. A CO_2-free electricity product was furnished by way of a deposit to cover the pump energy used. This is secured by deleting relevant guarantees of origin. In the reporting year, 531,560 tonnes of CO_2 equivalents of pump electricity were offset in this way, resulting in the following net emissions:

	Scope and emission location	Gross emissions t CO_2 equivalents	Net emissions t CO_2 equivalents
Switzerland	direct, Scope 1	34,810	34,810
	indirect, Scope 2	482,930	1,970
	direct, Scope 3	0	0
	indirect, Scope 3	51,050	450
	Total emissions in Switzerland	**588,790**	**37,230**
International	direct, Scope 1	2,320,160	2,320,160
	indirect, Scope 2	5,970	5,970
	indirect/direct, Scope 3	947,380	947,380
	Total emissions abroad	**3,273,510**	**3,273,510**
	Total emissions	**3,842,300**	**3,310,740**

The values in the table have been rounded off.

EU15 Greenhouse gas intensity in CO_2 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 CO_2 equivalents per MWh (direct and indirect emissions; previous year: 7 kg CO_2 equivalents per MWh)

☑

Greenhouse gas intensity of Axpo's total production mix:

- 97 kg CO_2 equivalents per MWh (direct and indirect emissions; previous year: 83 kg CO_2 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 394 kg and 383 kg CO_2 equivalents per MWh respectively.

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

☑

Sustainability Report 2018/19, 305-1, p. 42.

EU16 Greenhouse gas intensity in CO_2 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 2018 calendar year, the greenhouse gas intensity of CKW's delivery mix was 2.6 kg CO_2 equivalents/MWh (direct emissions) or 10.3 kg CO_2 equivalents/MWh (direct and indirect emissions).

305-3 Other indirect GHG emissions (Scope 3)

Sustainability Report 2018/19, 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 570 tonnes of CO_2 equivalents in the reporting year (previous year: 490 tonnes of CO_2 equivalents). The increase in greenhouse gas intensity is due mainly to the higher number of operating hours of the CCGTs in Italy.

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 (ODS)

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 emissions		CO emissions	
	2018/19	2017/18	2018/19	2017/18
Calenia combined-cycle gas turbine plant	216	143	19	35
Rizziconi combined-cycle gas turbine plant	234	230	20	29

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 emissions		CO emissions	
	2018/19	2017/18	2018/19	2017/18
Calenia combined-cycle gas turbine plant	0.07	0.08	0.006	0.019
Rizziconi combined-cycle gas turbine plant	0.08	0.09	0.007	0.012

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 disclosures
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 G15[1] are monitored in accordance with the ENSI guideline B09[2] and reported to ENSI in accordance with its guideline B03.[3]

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 zone.[4] 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 B05[5]. 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, a total of 11.9 tonnes of material at the Beznau nuclear power plant were tested and confirmed to be inactive in accordance with ENSI guideline B04.[6]

[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.
[4] 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).
[5] ENSI-B05: Requirements for the conditioning of radioactive waste, February 2007.
[6] 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.

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 standards[1] and are licensed and stored in Switzerland in accordance with ENSI guidelines G04[2] and G05.[3] 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 on the international regulations on the transport of hazardous goods by road[4] and by rail,[5] among other things. The IAEA recommendations for the safe transport of radioactive materials apply to all transport carriers.[6]

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 protect 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 2018 ENSI safety report, the following figures concern the 2018 calendar year.

All radiation limits were met in 2018, 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 16 m^3. The nuclear plant also produced another 2 m^3 of conditioned waste. In addition, the Beznau nuclear power plant reported 14.2 tonnes of high-level waste from spent fuel rods. At the Leibstadt partner plant (KKL), which is managed by Axpo, 48 m^3 of unconditioned, 5 $m^3$of conditioned and around 13.5 tonnes of high-level waste from spent fuel rods were generated.

	LILW unconditioned		LILW conditioned		HLW from nuclear fuel	
	m^3	m^3/MWh	m^3	m^3/MWh	tU	tU/MWh
KKB	16	2.89×10^{-6}	2	0.36×10^{-6}	14.2	2.57×10^{-6}
KKL	48	6.15×10^{-6}	5	0.64×10^{-6}	13.5	1.73×10^{-6}

No long-lived intermediate-level waste (ILW) resulting from the reprocessing of spent fuel rods was transported back to Switzerland in 2018 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 degrees Celsius. The discharge of heated cooling water is

[1] Regulations for the Safe Transport of Radioactive Material, 2012 edition, IAEA Safety Standards no. SSR-6.
[2] ENSI-G04: Design and operation of storage facilities for radioactive waste and spent fuel rods, rev. 1 March 2012.
[3] ENSI-G05: Requirements for transport and interim storage casks, April 2008.
[4] 0.741.621: European Agreement of 30 September 1957 concerning the International Carriage of Dangerous Goods by Road (ADR).
[5] 0.742.403.1: Convention of 9 May 1980 concerning International Carriage by Rail (COTIF).
[6] IAEA Safety Standards: Regulations for the Safe Transport of Radioactive Material, 2012 Edition, Specific Safety Requirements SSR-6.

governed in detail by the water removal concessions (Federal Council discharge permit for Beznau NPP I and II dated 15 December 1997).

On 4 July 2019, the Federal Office of Energy (SFOE) issued an interim order containing tougher stipulations for the introduction of cooling water. The temperature once the discharged cooling water has mixed with the rest of the water cannot exceed 25 degrees Celsius. If this figure is exceeded, the reactor power must be reduced. As a result, the power had to be reduced to 50% several times between 23 and 28 July 2019 because of the high temperature of the water in the river. This means that the Waters Protection Ordinance (WPO) applies to the maximum extent and the interim order prohibits any exceptions to this.

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

Sustainability Report 2018/19, Effluents and waste, p. 45.

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 2018/19, Effluents and waste, p. 45

306-2 Waste by type and disposal method

Radioactive waste is the most important type of waste for Axpo (see Sustainability Report 2018/19, Effluents and waste, p. 45). There is no detailed recording of and reporting on other waste.

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 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 5.4 “Reporting criteria: safety” according to ENSI guideline B03 are rated as INES “Not applicable” (NA).

Number of reportable incidents in 2018		
Beznau nuclear power plants, Block I and Block II	Total 4	0 INES NA, 4 INES 0
Leibstadt nuclear power plan (partner plant)	Total 13	1 INES NA, 10 INES 0, 2 INES 1
Gösgen nuclear power plant (partner plant)	Total 14	1 INES NA, 13 INES 0

306-4 Transport of hazardous waste in accordance with the Basel Convention

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 2018/19, Effluents and waste, p. 45). 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 2018/19, Compliance, p. 62.

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 2018/19, Supply chain and supplier management, p. 58

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 2018/19, Supply chain and supplier management, p. 58

Social dimension

Employment

Management approach: Sustainability Report 2018/19, Training and education, p. 54.

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 (persons)		Length of tenure (years)**		Turnover rate*	
	2018/19	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19	2017/18	2018/19	2017/18
Group	**740**	**535**	**16.51%**	**13.02%**	**502**	**405**	**7.42**	**7.32**	**11.20%**	**9.85%**
Switzerland	**502**	**442**	**13.88%**	**12.52%**	**367**	**349**	**8.39**	**7.95**	**10.15%**	**9.88%**
Women	**96**	**79**	**16.59%**	**14.06%**	**67**	**69**	**6.04**	**8.13**	**11.58%**	**12.28%**
< 20	1	3	33.33%	66.67%	1	0	0.00	0.00	33.33%	0.00%
20-29	21	21	27.51%	27.70%	13	11	2.62	3.55	17.03%	14.51%
30-39	33	21	22.40%	14.31%	20	20	4.97	4.50	13.57%	13.63%
40-49	24	20	15.52%	12.96%	11	19	4.73	8.00	7.11%	12.31%
50-59	15	11	9.40%	7.23%	11	10	7.91	8.80	6.89%	6.57%
≥ 60	2	3	5.30%	10.53%	11	9	12.00	21.33	29.14%	31.58%
Men	**406**	**363**	**13.36%**	**12.23%**	**300**	**280**	**8.91**	**7.90**	**9.87%**	**9.43%**
< 20	11	9	73.74%	51.43%	4	2	2.50	2.00	26.82%	11.43%
20-29	93	118	21.04%	28.52%	62	70	3.39	3.13	14.03%	16.92%
30-39	135	115	19.86%	17.49%	77	69	4.22	5.95	11.33%	10.50%
40-49	85	72	10.90%	8.80%	69	70	9.03	7.53	8.85%	8.56%
50-59	63	42	7.27%	4.98%	39	32	7.83	10.48	4.50%	3.79%
≥ 60	19	7	7.41%	3.20%	49	37	24.50	19.36	19.11%	16.93%
International	**238**	**93**	**27.56%**	**16.06%**	**135**	**56**	**4.80**	**3.41**	**15.63%**	**9.67%**
Women	**79**	**36**	**25.71%**	**15.45%**	**47**	**22**	**4.77**	**4.44**	**15.29%**	**9.44%**
< 20	1	0	100.00%	0.00%	0	1	0.00	1.00	0.00%	0.00%
20-29	33	15	54.46%	35.29%	22	5	3.41	3.20	36.30%	11.76%
30-39	30	19	22.77%	16.89%	15	11	6.05	4.15	11.38%	9.78%
40-49	11	1	13.51%	1.63%	6	5	5.56	7.00	7.37%	8.13%
50-59	4	1	14.26%	6.90%	4	0	6.25	0.00	14.26%	0.00%
≥ 60	0	0	0.00%	0.00%	0	0	0.00	0.00	0.00%	0.00%
Men	**159**	**57**	**28.59%**	**16.47%**	**88**	**34**	**4.81**	**2.75**	**15.82%**	**9.83%**
< 20	1	1	61.35%	28.57%	1	2	0.08	0.00	61.35%	57.14%
20-29	86	25	75.32%	39.37%	43	6	3.40	1.75	37.66%	9.45%
30-39	53	23	22.80%	15.49%	22	16	6.46	2.69	9.47%	10.77%
40-49	16	7	10.06%	6.76%	18	7	4.83	3.71	11.32%	6.76%
50-59	2	1	4.76%	4.08%	4	3	12.00	4.67	9.52%	12.24%
≥ 60	1	0	14.29%	0.00%	0	0	0.00	0.00	0.00%	0.00%

Note: 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 entitled to parental leave		Number of employees who took parental leave	
	2018/19	2017/18	2018/19	2017/18
Group	**5,295**	**4,756**	**191**	**187**
Switzerland	**4,308**	**4,076**	**121**	**113**
Women	695	650	31	21
Men	3,613	3,426	90	92
International	**987**	**680**	**70**	**74**
Women	389	251	38	40
Men	598	429	32	34

	Number of employees who returned to work after parental leave		Number of employees who were still employed 12 months after returning from parental leave	
	2018/19	2017/18	2018/19	2017/18
Group	**180**	**148**	**155**	**131**
Switzerland	**114**	**107**	**95**	**100**
Women	24	16	15	20
Men	90	91	80	80
International	**66**	**41**	**60**	**31**
Women	35	24	30	18
Men	31	17	30	13

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 disclosures
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:

1. setting out safety objectives;
2. operating a safety organisation and setting out responsibilities and competences accordingly within the area of health and safety;
3. systematic identification of dangers and risk assessment with a view to recognising and evaluating actual hazards;
4. 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.

CKW again took part in the nationwide "Made Visible" campaign in the 2018/19 financial year and raised awareness of visibility in road traffic during the dark season with various activities in November. Employees' individual health behaviour was supported with various mobility campaigns. Various activities for apprentices, their parents and their trainers ensure a sustained and increasingly targeted focus on apprentices' stable mental health.

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

Sustainability Report 2018/19, Occupational health and safety, p. 51

403-2 Work-related injuries and diseases

	Rate of occupational accidents		Rate of non-occupational accidents		Rate of sickness		Absentee rate		Rate of injury	
	18/19	17/18	18/19	17/18	18/19	17/18	18/19	17/18	18/19	17/18
Group	**27.11**	**18.77**	**104.40**	**97.41**	**425.43**	**459.86**	**556.94**	**576.03**	**13.26**	**13.75**
Women	8.57	1.99	55.19	22.36	592.88	626.57	656.64	650.92	7.33	6.60
Men	31.08	22.22	114.93	112.84	389.60	425.57	535.61	560.63	14.52	15.22
Switzerland	**33.95**	**21.97**	**131.20**	**112.82**	**451.77**	**452.60**	**616.92**	**587.39**	**16.61**	**16.03**
Women	12.57	1.91	92.83	34.35	697.08	672.01	802.48	708.27	11.79	9.87
Men	37.09	24.95	136.84	124.47	415.74	420.01	589.67	569.43	17.31	16.94
International	**1.42**	**0.86**	**3.69**	**11.14**	**326.43**	**500.46**	**331.53**	**512.46**	**0.66**	**1.00**
Women	3.18	2.14	4.50	0.71	452.54	544.61	460.22	547.46	1.32	0.71
Men	0.44	0.00	3.24	18.14	256.31	470.86	259.99	489.00	0.29	1.19

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 number of FTEs increased by 11.6% in the reporting year and regular working hours by 9.0%. These changes affect the calculations and must be taken into account when assessing the above indicators.

The rate of occupational accidents is significantly higher than in the previous year and is due mainly to an electrical accident entailing a long period of absence. Looking at the number of occupational accidents per thousand FTEs, there has been a reduction from 42.1 (occupational accidents/1,000 FTEs) to 39.7 (occupational accidents/1,000 FTEs). Occupational accidents are always analysed (incident investigations) and appropriate measures are taken. There is therefore no need for action despite the higher rate of occupational accidents.

The rate of non-occupational accidents rose by 7.1% due to extended periods of absence for each individual non-occupational accident. At 94.79 per thousand, the number of non-occupational accidents at Axpo is well below the figure of 146.4 non-occupational accidents/1,000 FTEs in the “Energy Supply” sector according to Swiss accident statistics for 2019 (recognised cases in 2018). There is no immediate need for action. However, the issue of safety-conscious behaviour must remain a priority as this also impacts on behaviour during leisure time. Both accident rates are heavily influenced by the number of days of absence per occurrence, meaning that they will continue to fluctuate in future.

The rate of illness fell this year. Reported flu-related GP consultations were down slightly on the previous year according to the seasonal flu report for 2018/19 produced by the Federal Office of Public Health (FOPH). With a reduction of 7.5%, the rate of sickness thus reflects a “normal” average value and there is no need for action due to the cyclical nature of the fluctuations.

The absence rate fell by some 3.5% year on year and thus remains low. It remains heavily influenced by the sickness rate.

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 2018/19, Action field 5, p. 10). Suva’s comparative figures are based on the time series for accidents as per Swiss accident statistics, which comprise the reported cases in accordance with the Swiss Accident Insurance Act (AIA). These case reports are broken down according to the general classification of economic activities (NOGA 2008

of the Swiss Federal Statistical Office). The term “industries” is also used as a synonym for these economic sectors. The data pool for the latest Suva industry comparison figures is the “Energy Supply” industry.
At 39.7, Axpo’s annual rate of occupational accidents (= number of occupational accidents per 1,000 FTEs) is well below the industry average of 56 (Energy Supply, 2019 accident statistics, occupational accident figures for 2018). 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. Clearly, the general environment in terms of processes and organisation is conducive to maintaining the good safety standards. There is no need for urgent action. At 5.7, the number of lost days due to illness (including work-related mental illness such as burnout), occupational and non-occupational accidents per FTE (absence risk) is below the industry average of 6.3 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 2018/19, Occupational health and safety, p. 51

403-4 Health and safety topics covered in formal agreements

Sustainability Report 2018/19, Occupational health and safety, p. 51

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 disclosures
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
Although the commitment to university marketing is paying dividends, its effectiveness is also at the mercy of external factors, such as 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, 108 apprentices started at Axpo in 21 skilled trades. At the end of 2018/19, 390 apprentices and 8 trainees/interns, i.e. a total of 398 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 by each employee and each manager was around 17 hours.

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

	Employees		Management	
	2018/19	2017/18	2018/19	2017/18
Total	**16.74**	**21.98**	**16.84**	**21.17**
Switzerland	**18.53**	**22.71**	**17.18**	**21.30**
Women	11.06	15.74	11.21	23.54
Men	20.17	24.21	17.72	21.11
International	**9.96**	**18.00**	**14.83**	**20.42**
Women	7.18	17.55	11.89	17.71
Men	11.95	18.30	15.22	20.70

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 2018/19, Training and education, p. 54.

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.

Non-discrimination

Management approach: Sustainability Report 2018/19, Compliance, p. 62

406-1 Incidents of discrimination and corrective actions taken

The Complaints Commission dealt with one complaint in the reporting year. Axpo will not be disclosing any details for privacy reasons.

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 disclosures
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. There were successful outcomes in the reporting year to the new concession process for the Klingnau power plant, which was granted to Aarekraftwerk Klingnau AG, and the

Limmern pumped-storage power plant run by Kraftwerke Linth-Limmern AG. Authorities and environmental conservation organisations were regularly invited to visit ongoing projects for updates on the project status.

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 enable 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. 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.

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

Sustainability Report 2018/19, Local communities, p. 56

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:

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 combined-cycle power plants ▪ New energy plants ▪ Electricity grids ▪ Gas infrastructure ▪ Telecommunications facilities	Trading with electricity, gas and other commodities as well as certificates (Green, energy performance and CO_2 certificates) Customer-specific energy products and services for wholesale customers (cantonal and municipal utilities), local distributors and energy producers Grid-related services CO_2 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 and 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 30,000 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 over CHF 100,000 during the reporting year totalled around CHF 370 million in Switzerland and around CHF 140 million abroad.

Management approach disclosures
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.

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 also 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 2018/19, 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 around 70% in the reporting year, meaning that the interim target was reached.

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 pre-steering 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 disclosures
Compared to other countries, Switzerland has very strict official directives when it 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 µT applies, which is considerably more strict than the international standard of 100 µT 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 dosimeters 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 in 2018. 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 2018/19, Customer health and safety, p. 60

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

Sustainability Report 2018/19, Customer health and safety, p. 60

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 disclosures
A corporate business continuity management (BCM[2]) 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 Crisis Manager of the Axpo Group. The Head of Group Safety is in charge of superordinate coordination and controlling.

[1] ENSI-AN-10620 Oversight Report 2018.
[2] Bases or standards: ISO 22301 – "Societal security – Business continuity management systems – Requirements" and ISO 22313 "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 disclosures
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 our 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.

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 Complaints Commission dealt with one complaint in the reporting year. Axpo will not be disclosing any details for privacy reasons.
- 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.
- There were no legal actions for anti-competitive behaviour, anti-trust and monopoly practices during the reporting year.

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

Sustainability Report 2018/19, Compliance, p. 62.

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To the Executive Management of
Axpo Holding AG, Baden

Zurich, 6 December 2019

Report of the independent auditor on the Sustainability Report 2018/19

We have been engaged by Axpo Holding AG to perform a limited assurance engagement on the following information stated in the Sustainability Report 2018/19 (hereafter "report") for the reporting period 1 October 2018 to 30 September 2019, 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 64 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:

- 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 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 2019 does not comply in all material respects with the criteria.

Ernst & Young Ltd

Mathias Zeller (Qualified Signature)
Associate Partner

Mark Veser (Qualified Signature)
Senior Manager

(Translation of the original report in German language)

GRI content index

For the Materiality Disclosures Service, GRI Services reviewed that the GRI content index is clearly presented and the references for Disclosures 102-40 to 102-49 align with appropriate sections in the body of the report. The service was performed on the German version of the report.

Universal Standards

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