

BKW GROUP

Annual Report 2019

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Facts & Figures

Financials

CHF millions	2015	2016	2017	2018	2019
Sales	2,257 ¹	2,434 ¹	2,503	2,675	2,867
EBIT	309 ²	346 ²	368 ²	364 ²	433
Net profit	284	322	271	203	404
Funds from Operations	410	486	465	385	584
Investments in property, plant and equipment and intangible assets	247	304	276	258	234
Acquisition of Group companies and associates	106	495	138	165	245
Balance sheet total	8,007	8,582	9,089	9,053	9,239
Shareholders' equity	2,576	2,941	3,406	3,472	3,735
– as % of balance sheet total	32.2	34.3	37.5	38.4	40.4

1 Adjusted for IFRS 15 impact

2 Adjusted for one-off effects

Sales Energy

CHF millions

2019	1,315
2018	1,326
2017	1,262
2016	1,353
2015	1,428

Sales Grid

CHF millions

2019	527
2018	555
2017	592
2016	600
2015	511

Sales Services

CHF millions

2019	1,107
2018	881
2017	736
2016	565
2015	430

Employees

2019	10,000
2018	7,300
2017	6,400
2016	5,500
2015	4,400

Key figures per share

CHF	2015	2016	2017	2018	2019
Par value	2.50	2.50	2.50	2.50	2.50
Share price					
– Year-end price	38.00	49.25	57.95	68.70	71.40
– Year high	38.95	49.60	62.15	71.60	75.50
– Year low	26.70	36.20	49.00	53.80	62.20
Result (undiluted)	5.71	6.41	4.92	3.56	7.42
Equity per share ¹	51.05	54.39	60.61	60.66	65.59
Market capitalisation in CHF millions	1,843	2,429	3,004	3,623	3,768

1 Attributable to shareholders of BKW AG

Solutions for a future worth living for

Our short commercials show solutions in the areas of energy, buildings and infrastructure. These topics are key to managing major challenges facing society, such as climate change. Our solutions are making an important contribution here: BKW makes it happen.

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LETTER TO SHAREHOLDERS

Ready for new technologies



Dear Shareholders,
Dear Sir/Madam,

The BKW Group¹ earned significantly more in the past financial year than in the previous year and achieved the best result in its history. The operating EBIT increased by 19 percent to CHF 433 million and net profit by 149 percent to CHF 404 million. Sales rose by 7 percent to CHF 2,867 million. Our strategy has proved successful: BKW is continuing on its way to becoming a leading energy and infrastructure service provider.

2019, too, was characterised by transformation and growth. The international network now consists of well over 100 companies and a good 10,000 employees. However, 2019 was also characterised by historically low secured electricity prices. From 2020 onwards, these will increase again. The generally positive business development and successful trading more than compensated for falling electricity prices, thus contributing significantly to the excellent result. BKW's market value is currently over CHF 4 billion. Six years ago it was around CHF 1.5 billion. Our goal is to make BKW even more valuable – more valuable for our shareholders, for our customers and for our employees.

Energy business takes advantage of opportunities in the new energy world

The energy business comprises production, trading and sales. Thanks to optimal integration, BKW has been able to substantially increase profitability in this field. It has taken advantage of the opportunities offered by the transition of the production environment from large power plants to more flexible, often small and decentralised production units. Today BKW market analyses in the trading business also include raw materials such as gas, oil, coal and CO₂. Thanks to its broader scope and the use of advanced data analytics, BKW can predict developments in the market more precisely.

On 20 December 2019, BKW once again assumed its pioneering role by becoming the first Swiss company to take a nuclear power plant off the grid. The shutdown was carried out according to plan and with much public attention. BKW thus achieved its long-term goal and started dismantling the plant immediately after shutdown at the beginning of 2020. The early planning of the decommissioning of the KKM has released forces for the transformation of BKW.

¹ The BKW Group comprises BKW AG and its Group companies. In order to make this report easier to read, the Group will be referred to as BKW. Where the text relates specifically to BKW AG or BKW Energie AG, this is expressly mentioned.

As the first listed Swiss company to do so, BKW launched a CHF 200 million green bond in the middle of the year. The multiple oversubscription of the bond shows that it meets a great investor need.

Networks make a reliable contribution to earnings

The network business made a reliable contribution to earnings in the financial year 2019. As the largest network operator in Switzerland, BKW has again invested over CHF 100 million in the electricity network. The complexity arising from the new decentralised energy world poses great challenges for maintaining a high level of stability and availability. That is why BKW is making great efforts to manage its investments in a cost-effective manner by continuing to digitise the network infrastructure. BKW is a leader in automated and digitised network analysis and planning and is continuing to develop in this area.

Services for buildings and infrastructure

BKW's service business has again grown strongly. In building technology BKW has taken a decisive step in the technology-driven areas of building automation and ICT. Thanks to the takeover of the swisspro Group, BKW now offers a strong Swiss alternative for integrated, intelligent and resource-efficient building solutions.

Demand for such solutions is increasing. BKW thus sees major growth potential in this promising market. Today it is in second place in the building technology sector with a market share of 4 per cent. This market is highly fragmented with a large number of small and very small participants.

In the network services sector BKW has taken an important step with the acquisition of the German LTB Leitungsbau GmbH. Thanks to this takeover, it is now one of the top two German companies in high-voltage line construction. Shortly after acquisition by BKW, LTB secured a large, lucrative contract. It was entrusted with the construction of two sections of the new 380 kV line between Wahle and Mecklar. This major contract confirms BKW's growth strategy in the area of infrastructure services.

BKW Engineering has also continued to grow. The network has been joined by ingenhoven architects, a pioneer in resource and energy-efficient buildings and infrastructures. ingenhoven architects are among the most renowned general planners for international infrastructure projects. The company has been setting standards for ecological building and sustainable architecture for years. Thanks to the varied and complementary competencies of the individual companies, the BKW Engineering network is able to plan and support complex infrastructure, energy and environmental projects consistently and holistically.

Very many thanks

The very successful financial year 2019 encourages us to continue on the path we have set. We would like to thank all those who continue to support us: our shareholders, our customers, our suppliers and our partners. We also wish to express our heartfelt thanks to our employees for their commitment to our company. Together we are a leading provider of solutions for a future worth living in the areas of energy, buildings and infrastructure. These issues are central to tackling the major challenges faced by society such as climate change. With our solutions we are making an important contribution.

Best regards,



Urs Gasche
Chairman of the Board

Dr. Suzanne Thoma
CEO

REVIEW OF THE 2019 RESULTS

Excellent annual performance

BKW posted a marked increase in revenue and profit despite the continuing negative impact of electricity prices. The Services business underwent significant expansion, while trading performance was excellent. Revenue grew by 7% to CHF 2.9 billion. EBIT improved by 19% to CHF 433 million compared with the previous-year's figure adjusted for one-off effects. Net profit doubled to CHF 404 million.

Excellent EBIT – negative effects of electricity prices substantially offset

BKW closed 2019 with an extremely strong EBIT of CHF 433 million (previous year: CHF 417 million), achieving the best result of the last 15 years. Compared with the adjusted previous year's figure, the increase amounted to CHF 69 million or 19%. This easily offset the unchanged negative effects of the trend in the electricity price with historically low hedged electricity prices (CHF –120 million). Contributing to this excellent result, besides the ongoing expansion of the Services business and reduced costs, was the successful trading business.

At CHF 404 million, net profit was twice as high as in the previous year. Adjusted for the one-off effect from the change in benefit plan in the BKW pension fund in 2018, the increase was as much as CHF 242 million (+149%). The increase in net profit was due to the strong EBIT and the significantly better performance of the assets in the decommissioning and waste disposal funds.

Revenue and profitability higher

CHF millions	2018	Adjust- ments ¹	2018 (adjusted)	2019	% change
Sales	2,675.2		2,675.2	2,866.6	7 %
Energy procurement/transport	–938.6		–938.6	–796.0	–15 %
Operating costs	–1,140.3	–52.4	–1,192.7	–1,392.2	17 %
– Material and third-party services	–347.1		–347.1	–422.6	22 %
– Personnel expenses	–589.3	–52.4	–641.7	–767.6	20 %
– Other operating expenses	–203.9		–203.9	–202.0	–1 %
EBITDA	596.3	–52.4	543.9	678.4	25 %
Depreciation, amortisation and impairment	–208.1		–208.1	–280.7	35 %
Income from associates	28.3		28.3	35.7	26 %
EBIT	416.5	–52.4	364.1	433.4	19 %
Financial result	–167.6		–167.6	44.1	
EBT	248.9	–52.4	196.5	477.5	143 %
Income taxes	–45.9	11.5	–34.4	–73.9	115 %
Net profit	203.0	–40.9	162.1	403.6	149 %

1 Adjusted for the effect of the transition from the defined benefit plan of the BKW pension fund to a defined contribution plan under the Swiss Occupational Benefits Act (BVG) as of 1 January 2019.

Revenue increased by 7 % resulting from substantial expansion of the Services business

At CHF 2,867 million, revenue was CHF 192 million higher (+ 7 %) than the previous year's figure. The Services business continued to grow substantially. With a growth rate of 26 %, it exceeded the one billion mark for the first time ever, contributing almost 40 % of BKW's total revenue. In the Grid business, revenue was marginally down (– 5 %) due to lower throughput volumes and reduced costs for the upstream grids. The Energy business area almost compensated for the price-driven decline in revenue thanks to the margin from trading, increased production volumes and higher volumes in the distribution business. Revenue fell by only 1 %. Overall, BKW more than offset the negative impact of electricity prices in the Energy business.

Stable operating costs in established business areas

The further expansion of the Services business resulted in an increase (+ 17 %) in operating costs. In the 2019 financial year, over 2,000 new employees joined BKW as a result of the acquisitions made, representing an increase of over 25 %. The Services business also grew organically. The number of personnel increased by 120. As a result of the consistent cost management, other operating expenses were cut in spite of this growth, so that overall operating costs in the organic business were stable. As at the end of 2019, BKW had over 10,000 employees in total.

The new IFRS standard on leases was implemented on 1 January 2019. The new standard stipulates that almost all assets (right to use the leased asset) and liabilities arising from leases are recognised in the balance sheet. The change in the recognition of lease expenses for operating leases boosted EBITDA in the income statement by CHF 26 million. However, the amount of depreciation on the newly recognised rights of use was similar, which is why there was only a minor impact at the EBIT level.

Positive financial result resulting from a very good performance of the decommissioning and waste disposal funds

In the 2019 financial year BKW posted a financial result of + CHF 44 million (previous year: CHF –168 million). The reason was the strong performance of the state decommissioning and waste disposal funds. After a slightly negative return on investment in the previous year, the funds achieved a very good return in 2019 (+ 12 %). The funds were valued at CHF 1.3 billion as at the end of December.

The income tax expense amounted to CHF 74 million, CHF 40 million higher than the previous year. However, the effective tax rate for the reporting year was reduced to 16 % (previous year 19 %).

Energy: negative impact of electricity prices more than offset

The Energy business area builds, operates and maintains BKW's pool of power plants in Switzerland and abroad. It is also responsible for the sale of and trading in electricity, certificates and raw materials.

CHF millions	2018	2019	% change
Electricity sales Switzerland	481.2	522.0	
Other electricity sales	801.6	741.6	
Other operating income and own work capitalised	42.9	51.8	
Total operating income	1,325.7	1,315.4	-1%
Energy procurement	-832.1	-704.4	
Operating costs	-277.6	-281.2	
– Personnel expenses	-98.1	-106.4	
– Material and third-party services and other operating expenses	-179.5	-174.8	
EBITDA	216.0	329.8	53%
Depreciation, amortisation and impairment	-82.7	-126.8	
Income from associates	8.4	24.2	
EBIT	141.7	227.2	60%

Low electricity prices continued to negatively impact revenue in the Energy business in 2019. Year on year, the average price realised in 2019 on the majority of the electricity sales that were hedged three years ago was lower, resulting in a negative effect of around CHF 120 million in total. But the negative impact of the lower electricity prices was almost completely compensated for by a very successful trading result, higher sales volumes in the distribution business, and additional production volumes of wind farms. At CHF 1,315 million, total operating revenue was just 1% lower than in the previous year. In the regulated Swiss distribution business, weather conditions had a slightly adverse effect on sales. On the other hand, a significant number of business customers were acquired, so that the electricity sales through distribution channels increased by a total of 0.4 TWh to 7.9 TWh. Accordingly, sales revenue rose by 8%. Revenue from other Energy business (market sales, direct sales from power plants) fell by 7% due to the negative impact of prices.

Energy procurement costs were down by CHF 128 million to CHF 704 million. This is due to lower costs for procurement on the market and lower procurement costs at the partner plants. In particular, there was a fall in the procurement prices of Leibstadt nuclear power plant, where production costs were significantly lower due to the very good performance of the decommissioning and waste disposal funds. Total electricity production of the BKW's power plant portfolio rose by 12.4 TWh (+0.7 TWh) in comparison to the previous year. The main reasons for the increase were higher inflows to the hydroelectric power plants in the second half of 2019, the annual outage of Mühleberg nuclear power plant not taking place, and higher volumes from the wind power plants, which saw output go up thanks to good wind volumes and the recent connection of the Norwegian wind farms to the grid. However, the scheduled outage of the Wilhelmshaven coal power plant caused output from fossil-fuel power plants to fall.

At CHF 227 million, EBIT was considerably higher than in the previous year (+60%). The effect of the renewed negative trend in electricity prices was therefore offset substantially, in large part thanks to outstanding trading business.

Grid: stable earnings contribution

The Grid business area builds, operates and maintains BKW's distribution grid.

CHF millions	2018	2019	% change
Distribution grid usage fees	480.4	468.3	
Other operating income and own work capitalised	75.0	59.0	
Sales	555.4	527.3	-5 %
Energy transport expense	-106.7	-91.7	
Operating costs	-195.4	-186.7	
– Personnel expenses	-71.9	-64.8	
– Material and third-party services and other operating expenses	-123.5	-121.9	
EBITDA	253.3	248.9	-2 %
Depreciation, amortisation and impairment	-85.1	-86.7	
Income from associates	21.4	11.5	
EBIT	189.6	173.7	-8 %

At CHF 527 million, total operating revenue from the Grid business was 5% lower than the previous year's figure. Revenue from distribution grid usage fees decreased by 3% to CHF 468 million. This decrease was mainly due to lower throughput volumes and lower costs associated with the upstream grids.

Organisational changes coupled with further rigorous cost management cut operating costs by 4%. The income from associates fell by CHF 10 million. This was due to an expected one-off correction to Swissgrid's 2019 financial statements following conclusion of the ECom proceedings. This had a correspondingly negative impact on the proportionate result for BKW.

Factoring in lower throughput volumes and the one-off effect on the Swissgrid investment, EBIT remained stable overall at CHF 174 million.

Services: strong growth

The Services business area includes Engineering (engineering planning and consulting) for energy, infrastructure and environmental projects, integrated services in the area of Building Solutions (building technology), as well as Infra Services (construction, servicing and maintenance of energy, water and telecommunication networks).

CHF millions	2018	2019	% change
Sales	880.8	1,106.8	26 %
Operating costs	-797.2	-987.0	
– Personnel expenses	-391.7	-503.5	
– Material and third-party services and other operating expenses	-405.5	-483.5	
EBITDA	83.6	119.8	43 %
Depreciation, amortisation and impairment	-25.6	-47.6	
EBIT	58.0	72.2	24 %

The Services business continues to be successfully expanded in 2019. Sales rose by 26% to CHF 1,106.8 million, which is significantly above the CHF 1 billion mark for the first time and accounts for some 40% of BKW's total revenue. The repeated double-digit growth rate was due to acquisitions. BKW made a total of 20 acquisitions in the reporting year, with the major transactions not taking place until the fourth quarter. All three main areas (Engineering, Building Solutions and Infra Services) posted growth. In Germany in particular, the BKW Engineering business is being further expanded and strengthened with skills in testing and construction, supplemented by architectural skills for general planning. The acquisition of the prestigious firm ingenhoven architects in particular significantly bolsters the focus on energy and resource-efficient building design.

BKW Building Solutions is making targeted acquisitions to optimally complement its network of companies across Switzerland both geographically and technically. The acquisition of the swisspro Group in particular puts the company in a strong position as Switzerland's leading provider of integrated solutions in electrical engineering, ICT and building information technology. The range of services is being expanded not only geographically but also in terms of recurring services and for major customers.

By acquiring German firm LTB Leitungsbau, BKW Infra Services has taken a significant step into a new geographical region and in doing so strengthened its growth strategy in this area. BKW expects to see strong growth in the market for construction, upgrades and maintenance of high voltage and peak voltage transmission lines in Germany.

After its acquisitions in 2019, BKW is now one of the leading market players in all three areas: Building Solutions, Infra Services and Engineering.

Operating costs also increased due to the strong growth in sales. The reported EBIT of CHF 72 million (previous year: CHF 58 million) continued to be impacted by acquisition and integration costs. With the major acquisitions only carried out in the fourth quarter, the recorded M&A costs are only offset by a small proportion of the acquired sales, which dilutes the margin somewhat.

Funds from operations at record level

Funds from operations, cash flow before the change in net working capital and income taxes paid, amounted to CHF 584 million (previous year: CHF 385 million) and are at their highest since the IPO more than 15 years ago. Before utilisation of provisions for nuclear decommissioning and waste disposal, funds from operations amounted to CHF 648 million (+50%).

The reported cash flow from operating activities includes not only cash flows from operating activities, but also the utilisation of provisions for nuclear decommissioning and waste disposal. Most of these utilisations lead to refund claims against the state-run decommissioning and waste disposal funds. For ease of comparability and interpretation, BKW therefore uses the key figure "cash flow from operating activities before use of nuclear provisions". This cash flow figure, which is relevant for evaluating cash generation, amounted to CHF 533 million (previous year: CHF 421 million) and was 26% higher than in the previous year. The reported cash flow from operating activities of CHF 469 million is also 26% higher than in the previous year (CHF 373 million).

Investments in expansion of the Services business, in new power plants, and in the grid infrastructure amounted to CHF 575 million in the 2019 financial year (previous year: CHF 485 million). Around two-thirds of this was invested in expanding the Services business further. About CHF 165 million was invested in replacement/maintenance. 75% of this was put into the grid. Acquisitions and investments were financed from the funds generated in 2019. Current liquidity, including current financial assets, remained unchanged at around CHF 0.9 billion at the end of the year.

CHF millions	2018	2019	% change
Funds from operations before utilisation of nuclear provisions	432.4	647.5	50%
Funds from operations	384.5	583.9	52%
Cash flow from operating activities before utilisation of nuclear provisions	421.3	532.5	26%
Utilisation of nuclear provisions with no claim to refunds of state funds	-16.7	-27.3	63%
Utilisation of nuclear provisions with a claim to refunds of state funds	-31.2	-36.3	16%
Cash flow from operating activities	373.4	468.9	26%
Liquidity as at 31.12	1,094.9	910.8	-17%

Equity and financing situation permits further financial and operational flexibility

The balance sheet total rose slightly by 2% to year-end, to CHF 9.2 billion. The main reason for the increase was the first-time application of the new IFRS 16 lease standard, which initially boosted non-current assets by around CHF 140 million and the lease liabilities by the same amount. Mainly as a result of the high net profit and despite the increase in the balance sheet total, the equity ratio rose to 40.4% (end of 2018: 38.4%).

CHF millions	2018	2019
Current assets	2,242.8	2,038.5
Non-current assets	6,810.5	7,200.0
Current liabilities	1,547.0	1,287.1
Non-current liabilities	4,034.0	4,216.2
Shareholders' equity	3,472.3	3,735.2
Balance sheet total	9,053.3	9,238.5

BKW's financing situation remains solid. Net debt (financial liabilities less current financial assets and cash and cash equivalents) was higher by CHF 151 million at year-end, reaching CHF 626 million. The reason for the increase in this metric was the first-time application of the new lease standard IFRS 16. Not adjusted for this accounting effect, net debt would have been on par with the previous year, despite the significant levels of acquisition activity.

In July 2019, the CHF 350 million bond due was repaid. At the same time, BKW successfully issued a 0.25% green bond worth CHF 200 million with a term of eight years. The partial refinancing will produce future interest savings of around CHF 11 million. In addition, BKW continues to have access to an unused syndicated loan totalling CHF 250 million. The financial framework necessary for implementing and safeguarding financial and operational flexibility is sufficient and thus ensured at all times.

Dividend increase

Based on the net profit adjusted for the extraordinarily strong performance of the decommissioning and waste disposal funds, an increased dividend of CHF 2.20 per share (+22% compared with the previous year) will be proposed to the General Meeting. This is equivalent to a payout ratio of around 40% on adjusted net profit. The dividend yield thus amounts to 3.1% of the share price at year's end (previous year: 2.6%). The proposed dividend is based on the stable principles of BKW's dividend policy.

Outlook

For the 2020 financial year, BKW expects a lower operating EBIT year on year (i.e. excluding one-off effects) in the range of CHF 380 million to CHF 400 million. This outlook is based on a normalisation of trading and of returns on the decommissioning and waste disposal funds. However, it also reflects rising electricity prices and further profitable growth in the Services business. It is difficult to assess the effects of coronavirus on the economy in general and on BKW in particular at present. However, BKW's strong position in the Energy and Services business will also be advantageous in these circumstances.

BKW GROUP

BKW Group Consolidated Financial Statements

BKW GROUP CONSOLIDATED FINANCIAL STATEMENTS

Consolidated Income Statement

CHF millions	Note	2018	2019
Net sales	8	2,525.5	2,710.8
Own work capitalised		74.8	71.6
Other operating income		74.9	84.2
Total operating income		2,675.2	2,866.6
Energy procurement/transport	9	-938.6	-796.0
Material and third-party services		-347.1	-422.6
Personnel expenses	10	-589.3	-767.6
Other operating expenses	11	-203.9	-202.0
Total operating expenses		-2,078.9	-2,188.2
Operating profit before depreciation, amortisation and impairment (EBITDA)		596.3	678.4
Depreciation, amortisation and impairment	12	-208.1	-280.7
Income from associates	21	28.3	35.7
Operating profit (EBIT)		416.5	433.4
Financial income	13	10.4	156.6
Financial expenses	13	-178.0	-112.5
Profit/loss before income taxes (EBT)		248.9	477.5
Income taxes	14	-45.9	-73.9
Net profit		203.0	403.6
attributable to:			
– BKW shareholders		186.4	391.2
– Non-controlling interests		16.6	12.4
Earnings per share in CHF (undiluted)	15	3.56	7.42
Earnings per share in CHF (diluted)	15	3.53	7.42

BKW GROUP CONSOLIDATED FINANCIAL STATEMENTS

Consolidated Statement of Comprehensive Income

CHF millions	Note	2018	2019
Net profit		203.0	403.6
Actuarial gains/losses (Group companies)	27		
– Actuarial gains/losses		–39.3	31.6
– Income taxes		5.0	–7.0
Actuarial gains/losses (associates)	21		
– Actuarial gains/losses		17.2	–14.3
– Income taxes		–1.4	1.5
Financial assets at fair value through other comprehensive income	29		
– Value adjustments		–0.2	0.0
Total items that will not be reclassified to income statement, net of tax		–18.7	11.8
Currency translations	29		
– Currency translations		–47.1	–42.0
– Reclassification to the income statement		0.1	0.0
Hedging transactions (Group companies)	29		
– Value adjustments		–0.3	0.0
Hedging transactions (associates)	29		
– Value adjustments		0.0	–4.7
Total items that may be reclassified to income statement, net of tax		–47.3	–46.7
Other comprehensive income		–66.0	–34.9
Comprehensive income		137.0	368.7
attributable to:			
– BKW shareholders		117.6	358.7
– Non-controlling interests		19.4	10.0

BKW GROUP CONSOLIDATED FINANCIAL STATEMENTS

Consolidated Balance Sheet

CHF millions	Note	31.12.2018	31.12.2019
Assets			
Cash and cash equivalents	34	817.4	683.5
Trade accounts receivable and other receivables	16	720.1	687.0
Contract assets	17	93.3	140.6
Current tax receivables		19.6	20.0
Financial assets	20	277.5	227.3
Derivatives	30	197.7	132.4
Inventories	18	43.5	55.9
Prepaid expenses and accrued income	19	73.7	91.8
Total current assets		2,242.8	2,038.5
Financial assets	20	1,279.2	1,302.5
Derivatives	30	35.4	7.0
Investments in associates	21	1,481.7	1,422.6
Property, plant and equipment	22	3,234.8	3,419.9
Intangible assets	23	747.4	1,013.7
Deferred tax receivables	14	32.0	34.3
Total non-current assets		6,810.5	7,200.0
Total assets		9,053.3	9,238.5
Shareholders' equity and liabilities			
Trade accounts payable and other liabilities	24	551.0	551.6
Contract liabilities	17	41.5	72.3
Current tax liabilities		41.2	75.6
Financial liabilities	25	413.3	89.1
Derivatives	30	192.5	106.8
Provisions	26	67.6	193.8
Deferred income and accrued expenses	19	239.9	197.9
Total current liabilities		1,547.0	1,287.1
Financial liabilities	25	1,156.1	1,447.3
Derivatives	30	52.9	22.8
Pension liability	27	195.7	238.8
Other liabilities	28	407.7	410.5
Provisions	26	1,777.2	1,641.1
Deferred tax liabilities	14	444.4	455.7
Total non-current liabilities		4,034.0	4,216.2
Total liabilities		5,581.0	5,503.3
Share capital	29	132.0	132.0
Capital reserves	29	41.3	41.3
Retained earnings	29	3,270.6	3,562.9
Other reserves	29	-240.3	-272.8
Treasury shares	29	-4.8	-1.5
Equity attributable to BKW shareholders		3,198.8	3,461.9
Equity attributable to non-controlling interests		273.5	273.3
Total shareholders' equity		3,472.3	3,735.2
Total shareholders' equity and liabilities		9,053.3	9,238.5

BKW GROUP CONSOLIDATED FINANCIAL STATEMENTS

Changes in Consolidated Equity

CHF millions	Share capital	Capital reserves	Retained earnings	Other reserves	Treasury shares	Attributable to BKW shareholders	Attributable to non-controlling interests	Total
Equity at 01.01.2018	132.0	41.3	3,204.9	-171.7	-65.8	3,140.7	264.0	3,404.7
Net profit			186.4			186.4	16.6	203.0
Other comprehensive income				-68.7		-68.7	2.7	-66.0
Comprehensive income			186.4	-68.7		117.7	19.3	137.0
Dividend			-94.4			-94.4	-8.5	-102.9
Transactions in treasury shares			-31.9		61.0	29.1		29.1
Share-based payments			4.7			4.7		4.7
Acquisition of non-controlling interests			-2.2			-2.2	-1.1	-3.3
Changes in the scope of consolidation						0.0	0.3	0.3
Capital repayment to non-controlling interests						0.0	-0.5	-0.5
Change in liabilities relating to non-controlling interests			3.2			3.2		3.2
Sale of financial assets at fair value through other comprehensive income			-0.1	0.1		0.0		0.0
Equity at 01.01.2018	132.0	41.3	3,270.6	-240.3	-4.8	3,198.8	273.5	3,472.3
Net profit			391.2			391.2	12.4	403.6
Other comprehensive income				-32.5		-32.5	-2.4	-34.9
Comprehensive income			391.2	-32.5		358.7	10.0	368.7
Dividend			-95.0			-95.0	-7.4	-102.4
Transactions in treasury shares			-5.1		3.3	-1.8		-1.8
Share-based payments			5.2			5.2		5.2
Acquisition of non-controlling interests			-0.2			-0.2	-1.5	-1.7
Sale of non-controlling interests			-0.1			-0.1	0.2	0.1
Changes in the scope of consolidation						0.0	-1.0	-1.0
Capital repayment to non-controlling interests						0.0	-0.5	-0.5
Change in liabilities relating to non-controlling interests			-3.7			-3.7		-3.7
Equity at 31.12.2019	132.0	41.3	3,562.9	-272.8	-1.5	3,461.9	273.3	3,735.2

BKW GROUP CONSOLIDATED FINANCIAL STATEMENTS

Consolidated Cash Flow Statement

CHF millions	Note	2018	2019
Profit/loss before income taxes		248.9	477.5
Adjustment for non-cash transactions	34	183.5	170.0
Change in net working capital (excl. financial assets/liabilities and derivatives)		49.6	-67.2
Income taxes paid		-57.4	-45.7
Other financial expenses/income		-3.3	-2.1
Cash flow from operating activities before utilisation of nuclear provisions¹		421.3	532.5
Utilisation of nuclear provisions with a claim to refunds of state funds ¹		-16.7	-27.3
Utilisation of nuclear provisions with no claim to refunds of state funds ¹		-31.2	-36.3
Cash flow from operating activities		373.4	468.9
Investments in property, plant and equipment	22	-228.2	-222.7
Disposal of property, plant and equipment		29.4	11.4
Acquisition of Group companies	7/34	-121.8	-244.6
Disposals of Group companies		-0.9	-2.6
Investments in associates	21	-43.2	0.0
Disposals of associates		35.9	33.4
Payments into decommissioning and waste disposal funds ¹		-43.6	-30.4
Refunds of decommissioning and waste disposal funds ¹		0.0	46.6
Investments in other current and non-current financial assets		-50.9	-22.2
Disposals of other current and non-current financial assets		171.0	161.6
Investments in intangible assets	23	-29.3	-11.7
Disposals of intangible assets		0.5	0.0
Interest received		6.0	3.6
Dividends received		19.9	21.7
Cash flow from investing activities		-255.2	-255.9
Sale/purchase of treasury shares	29	-6.6	-1.9
Acquisition of non-controlling interests		-3.3	-1.7
Sale of non-controlling interests		0.0	0.1
Capital repayment to non-controlling interests		-0.5	-0.5
Increase in current and non-current financial liabilities		214.7	227.2
Decrease in current and non-current financial liabilities		-197.2	-439.3
Increase in other long-term liabilities		25.1	22.8
Decrease in other long-term liabilities		-5.0	-0.4
Interest paid		-46.2	-45.0
Dividends paid		-102.9	-102.4
Cash flow from financing activities		-121.9	-341.1
Translation adjustments on cash and cash equivalents		-4.4	-5.8
Net change in cash and cash equivalents		-8.1	-133.9
Cash and cash equivalents at start of reporting period		825.5	817.4
Cash and cash equivalents at end of reporting period	34	817.4	683.5

1 New items to allow better evaluation of cash flow associated with the decommissioning and disposal of the Mühleberg Nuclear Power Plant. An adjustment has been made to the previous year's figures. The new statement is explained in Note 34.

BKW GROUP CONSOLIDATED FINANCIAL STATEMENTS

Notes to the Financial Statements

1 Business activities

BKW AG, Bern (CH), along with its Group companies (hereinafter “BKW” or the “BKW Group”), is an international energy and infrastructure company. Its company network and extensive expertise allow it to offer its customers a full range of overall solutions. The Group plans, builds and operates infrastructure to produce and supply energy to businesses, households and the public sector, and offers digital business models for renewable energies. The BKW Group portfolio of services comprises everything from engineering consultancy and planning for energy, infrastructure and environmental projects, through integrated offers in the field of building technology, to the construction, servicing and maintenance of energy, telecommunications, transport and water networks.

2 Basis of preparation

2.1 General principles

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS). They provide a true and fair view of the financial position, the results of operations and the cash flows of BKW. The consolidated financial statements also comply with Swiss company law. The closing date for the consolidated financial statements is 31 December. The consolidated financial statements are presented in Swiss francs (CHF).

The consolidated financial statements have been prepared on the historical cost basis. Exceptions are described in the Accounting and valuation principles.

2.2 Adoption of new standards and interpretations

Since 1 January 2019 BKW has applied various new and amended standards and interpretations which, with the exception of the amendments to the new IFRS 16 lease standard described in Note 3, have no material impact on BKW's financial position, results of operations or cash flows.

2.3 Future adoption of new standards and interpretations

The following new and amended standards and interpretations had been published by the balance sheet date, but will not be applied until subsequent financial years. BKW intends to apply the changes from the date on which they enter into force (entry into force for financial years beginning on or after the dates in brackets):

- Amendments to IFRS 3 “Definition of a Business” (1 January 2020)
- Amendments to IAS 1 and IAS 8 – “Definition of Material” (1 January 2020)
- Amendments to IFRS 9, IAS 39 and IFRS 7 – “Interest Rate Benchmark Reform” (1 January 2020)
- Changes in references to the framework in IFRS standards (1 January 2020)
- Amendments to IFRS 10 and IAS 28 – “Sales or Contributions of Assets between an Investor and its Associate or Joint Venture” (to be determined)

No material effects on BKW's consolidated financial statements are expected.

3 Changes to accounting principles

The first-time application of IFRS 16 had a material impact on the consolidated financial statements. The effects of IFRS 16 are explained in more detail below, along with the accounting and measurement principles that have applied since 1 January 2019 or that differ from existing principles.

IFRS 16 – “Leases”

IFRS 16 amends the rules on accounting for leases and replaces the previous standard IAS 17 and related interpretations. The standard provides a single accounting model for lessees, which means that almost all assets (right of use to the leased asset) and liabilities from leases must be recognised in the balance sheet. The distinction between operating and finance leases does not apply to lessees. The right of use is depreciated on a straight-line basis over the shorter of the lease term and the useful life of the leased asset. The lease liability is carried forward using the effective interest method and taking lease payments into account. The lease liability is discounted by applying an incremental borrowing rate specific to maturities and countries, unless the interest rate on which the lease payments are based is available. In the cash flow statement, the depreciation portion of newly recognised leases reduced the cash flow from financing activities. Previously, lease payments from operating leases reduced cash flow from operating activities. Interest payments are reported as cash flow from financing activities.

Lessor accounting is essentially unchanged on the former rules of IAS 17. Lessors continue to classify operating and finance leases on the basis of the distribution of opportunities and risks arising from the asset.

IFRS 16 was applied for the first time in accordance with the transitional rules of the modified retrospective approach. The comparative figures for the 2018 financial year have not been restated.

Using the option provided for in the standard, it was elected to keep the previous assessment under IAS 17 and IFRIC 4 instead of reassessing whether a lease that was concluded before the date of transition was or contained a lease at the date of initial application. BKW has also made use of the simplifications relating to the accounting for short-term and low-value leases. Payments made under leases with a term of no more than 12 months and leases in which the underlying asset is of low value are carried to expenses over the lease term using the straight-line method, as permitted under the option provided. At the date of initial application, leases that expire before 1 January 2020 were classified as current leases regardless of the lease's inception date.

With the transition to IFRS 16, assets for the rights to use the leased assets of CHF 139.7 million ("property, plant and equipment" balance sheet item) and lease liabilities ("financial liabilities" balance sheet item) in the same amount were recognised as at 1 January 2019. The changeover had no effect on equity as at 1 January 2019.

Based on the operating lease liabilities as at 31 December 2018, the following reconciliation was made to the opening balance sheet value of the lease liabilities as at 1 January 2019:

	CHF millions
Operating lease commitments as at 31.12.2018	82.0
Minimum lease payments (notional amount) on finance lease liabilities as at 31.12.2018	36.6
Relief option for short-term leases	-2.0
Relief option for leases of low-value assets	-1.5
Reasonably certain extension and termination options	79.1
Gross lease liabilities as at 01.01.2019	194.2
Discounting	-24.1
Lease liabilities as at 01.01.2019	170.1
Present value of finance lease liabilities as at 31.12.2018	-30.4
Additional lease liabilities as a result of the initial application of IFRS 16 as at 01.01.2019	139.7

The additional lease liabilities shown in the balance sheet were discounted using the incremental borrowing rate as at 1 January 2019. The weighted average interest rate was 2.3%.

Payments from prior operating leases will no longer be recorded under "Operating expenses". In the income statement, this reduced the operating result before depreciation, amortisation and impairment by CHF 26.3 million. However, the amount of depreciation on the newly recognised rights of use was similar, which is why there was only a minor impact on operating profit.

4 Consolidation

4.1 Consolidation principles

The consolidation is based on the financial statements of the individual Group companies, which have been drawn up according to uniform principles of valuation and presentation. Intercompany balances, transactions, profits and expenses are eliminated in full.

With one exception, all Group companies use 31 December as their closing date. The closing date for some associates and one joint arrangement differs from that of BKW since these companies close their accounts on 30 September in line with the hydrological year. The closing date for consolidation of these companies is set at 30 September. Adjustments are made for material transactions that occur between the closing date of the companies and the closing date of BKW.

4.2 Scope of consolidation

Group companies

Group companies are included in the consolidated financial statements in their entirety. There are no material restrictions on the transfer of funds from subsidiaries to the parent company.

Joint arrangements

Companies over which there is joint control are treated as joint ventures or joint operations. Joint operations are accounted for in the consolidated financial statements by recognising the Group's share of the assets and liabilities and of the revenues and expenses. The Group's joint ventures are accounted for using the equity method.

Associates

Investments in companies in which BKW is able to exercise significant influence but not overall control are classified as associates and accounted for using the equity method. A significant influence is generally held to be a share of voting rights of between 20 and 50%. Rights agreed in contract may in some circumstances mean that a significant influence can be exerted even though the share of voting rights is smaller than 20%. This applies in particular in the case of partner plants.

Partner plants comprise companies that build and operate power plants or that manage energy procurement rights and plan nuclear storage facilities. The energy produced by these companies is purchased at production cost (including interest and repayment of borrowed funds) in line with contractual agreements. Partner plants are assigned to the Energy business area.

4.3 Acquisition and sale of Group companies

Companies acquired by BKW during the year are consolidated as from the effective date of acquisition. Net assets acquired are measured at fair value and integrated using the acquisition method. The excess of the cost of acquisition over the fair value of net assets acquired is classified as goodwill. Any negative difference is immediately recognised in income.

Group companies that BKW ceases to control are excluded from consolidation as of the date on which control ceases. The difference between the proceeds from the sale and the net assets disposed of is recognised in the income statement on the effective date. Attributable goodwill and accumulated foreign currency translation differences and revaluations of financial instruments recognised in other comprehensive income are derecognised in income as a component of the gain or loss on sale.

In the course of acquisitions, non-controlling interests are sometimes granted put options, with BKW receiving call options under the same conditions. If this should cause BKW to receive economic ownership, the transaction is represented as though the shares in question had also been acquired. Otherwise, the non-controlling interest is recognised.

Acquisition-related transaction costs are recorded as "Other operating expenses".

4.4 Foreign currency translation

The reporting currency is the Swiss franc (CHF). BKW records transactions in foreign currencies at the prevailing exchange rates on the transaction date. Exchange rate gains and losses arising from such transactions and the translation of foreign currency balances on the balance sheet date are charged to the financial result.

Foreign-currency financial statements of Group companies outside Switzerland are converted to Swiss francs according to the following principles:

- Balance sheet, at the prevailing exchange rates on 31 December;
- Income statement, at average exchange rates for the reporting year;
- Cash flow, at average exchange rates for the reporting year.

	Closing date 31.12.2018	Closing date 31.12.2019	Average 2018	Average 2019
CHF/EUR	1.1269	1.0854	1.1550	1.1127

Goodwill and adjustments to fair value made in the apportionment of purchase prices to the carrying amounts of identified net assets of companies in foreign currency are carried in the foreign currency.

Differences arising from the translation of the financial statements of Group companies, associates and joint arrangements in foreign currencies are accounted for in other comprehensive income.

5 Accounting policies and valuation

5.1 Revenue recognition

BKW generates revenue in its three business segments: Energy, Grid and Services.

Energy

Sales in the Energy business segment mainly comprise income from the sale of energy to end customers and distribution partners in Switzerland, income from the sale of electricity, certificates and raw materials on the wholesale market, income from the direct feed-in of energy from power plants with feed-in remuneration and income from the production of heat.

In the energy sector, "own use" transactions ("own use exemption" under IFRS 9) fall under the provisions of IFRS 15. Sales from these business activities must be recognised over the duration of the agreed performance. However, since the energy is consumed at the same time as the delivery, the sale of energy immediately gives rise to a right to payment that is directly equivalent to the value to the customer of the energy delivered. Thus, in these cases, an exemption under IFRS 15 is applied to revenue recognition and revenue is recognised in the amount that can be invoiced. Thus, the income is considered to be realised and recognised as revenue when delivery has taken place.

Energy-trading revenue is presented according to the purpose of the underlying transaction. Energy transactions are conducted either for the purpose of actively managing the power plant portfolio or to ensure physical coverage of energy supply or purchase contracts. Such management transactions can be broken down into "own-use" and "hedging" transactions. The revenue from own-use transactions falls under the provisions of IFRS 15 and is recorded as gross in revenue at the time of delivery.

Hedging transactions result from extended activities to manage the production portfolio, comprising additional transactions undertaken to hedge BKW's own production. These additional hedging transactions qualify as financial instruments under IFRS 9. Other energy transactions are conducted with the sole intention of achieving a trading margin. Such transactions also qualify as financial instruments under IFRS 9.

Energy transactions defined as financial instruments are measured at fair value at the closing date; realised and unrealised gains and losses from these transactions are recorded as net figures in "Income from energy hedging" and "Income from proprietary energy trading" (see Note 38.2). The income from such transactions consists of two components: on the one hand, the effective realised gains or losses from transactions in progress is recorded. On the other hand, the unrealised valuation gains and losses from measurement at fair value of the open contracts are included.

Grid

The Grid business segment mostly generates income from charging distribution grid usage fees for the distribution grid. Income from the transmission of energy must be recognised over the duration of the agreed performance. When energy is transmitted, there is a direct entitlement to remuneration which corresponds directly to the value to the customer of the energy transmitted. This performance falls under the exemption in IFRS 15 for revenue recognition. BKW applies this exemption and books revenue in the amount that can be invoiced. Thus, the income is considered to be realised and recognised as revenue when delivery has taken place.

Fees charged to customers for compensatory feed-in remuneration (KEV) and grid usage fees of third-party grid operators are not recognised as revenue owing to the provisions governing principal-agent relationships, but are shown net against the corresponding energy procurement/transport costs.

Services

In the Services segment, revenues are generated mainly through the provision of engineering planning and consulting services for energy, infrastructure and environmental projects, planning and installation services in the field of building technology, and the construction, servicing and maintenance of energy, telecommunications, transport and water networks. These are principally customer-specific construction contracts. Owing to the contractual provisions governing these services, which grant BKW the right to compensation for the performance, revenue is recognised over a certain period. The extent of performance is measured using the cost-to-cost method. The costs incurred to obtain customer contracts are not capitalised if these costs are amortised within one year.

5.2 Trade accounts receivable/payable, prepaid/accrued expenses and deferred/accrued income

Trade accounts receivable/payable are recognised as financial instruments at amortised cost in accordance with IFRS 9. The forward-looking expected credit loss model is used to calculate the loss allowance of receivables. Depending on the amount, trade accounts receivable are subjected to an impairment test and, if necessary, individual writedowns are made.

For trade accounts receivable in energy trading, probabilities of default are calculated on the basis of externally or internally calculated counterparty ratings and corresponding impairments are recognised for expected losses occurring within the next 12 months. The simplified impairment model is applied to the remaining trade receivables. Assets are assessed here on the basis of being in arrears and grouped into various categories. Different impairment rates for the expected losses over the entire residual term are allocated to these groups based on historical values.

Prepaid/accrued expenses and deferred/accrued income cover the periodic adjustment of expenses and income and are also recorded at nominal value and broken down into financial and other accruals. Financial accruals consist of goods and services provided or purchased on a contractual basis but not billed by the balance sheet date. In the case of financial accruals and deferrals, a general impairment is recognised in accordance with the simplified impairment model pursuant to IFRS 9.

5.3 Assets/liabilities from customer orders

“Assets from customer orders” (contract assets) exists in connection with the provision of engineering planning and consulting services for energy, infrastructure and environmental projects, planning and installation services in the field of building technology, and the construction, servicing and maintenance of energy, telecommunications, transport and water networks. These are primarily customer-specific construction contracts for which a right to consideration exists for goods or services that are transferred to the customer. If consideration is received before goods or services are transferred to the customer, a contract liability “Liabilities from customer orders” is recognised.

BKW evaluates the extent of performance for the purposes of valuing customer orders. The extent of performance is measured using the cost-to-cost method. Customer orders are assessed for credit risk and valued using the simplified impairment model under IFRS 9. Anticipated losses are immediately recorded in their entirety.

5.4 Inventories

5.4.1 Stock materials

Materials held in stock for grid construction and the electrical installation business are recorded at the lower of acquisition/manufacturing cost or net realisable value. The acquisition/manufacturing cost of raw and auxiliary materials is measured at the weighted moving average. Semi-finished and finished products include the directly assignable cost and the share of overall construction costs. Stock materials with an unsatisfactory turnover are written off in full or in part.

5.4.2 Emission rights and green certificates

For emission rights held under national or international emissions allowance schemes for the purpose of compliance with carbon emission allowances, the net liability method is used. These emission rights are recorded at the lower of acquisition cost or net realisable value. A provision is recognised as soon as the carbon output exceeds the emission allowances originally allocated and still held. The value of the emission rights and certificates is realised when they are sold or returned to the authorities as compensation for emissions.

Green certificates certify the generation of electricity from renewable energies and can be sold separately from the delivery of electricity. Income from green certificates from BKW's own production is accrued at the time the energy is produced based on the expected proceeds from the sale. Purchased green certificates are carried in the balance sheet at acquisition cost.

For transactions in emission rights and certificates conducted with the sole intention of achieving a trading margin, BKW applies the brokerage exemption for traders in raw materials and commodities. The brokerage exemption stipulates that these may be recognised at fair value, less costs to sell. Changes in value on the balance sheet date as well as realised purchases and sales are recorded in the income statement. Transactions in derivatives on emission rights that are conducted with the intention of achieving a trading margin are treated in the same way as energy-trading derivatives (see Note 5.6.1).

5.5 Financial assets

Financial assets cover holdings, securities, loans, term deposits and other financial assets. Interests in state funds that are not recognised in accordance with the provisions of IFRIC 5 and do not therefore fall under the scope of IAS 32, IFRS 7 and IFRS 9 are also included as financial assets.

Financial assets are recorded and derecognised on the trade date.

Stock exchange-listed securities that constitute part of a portfolio of financial instruments, that are jointly managed and that are regularly purchased and sold are categorised as "Assets at fair value through profit or loss" and recorded under current assets. Other holdings and securities are allocated to the "Financial assets at fair value through other comprehensive income" category and reported under non-current assets. Term deposits, loans and other financial assets are valued at amortised cost. Pursuant to IFRS 9, in the case of term deposits and loans, probabilities of default are calculated on the basis of externally or internally calculated counterparty ratings, and corresponding impairments are recognised for expected losses occurring within the next 12 months.

Nuclear power plant operators are required by law to make annual payments to state funds (Federal Decommissioning and Waste Disposal Funds). The operators will be paid the future costs for disposal and decommissioning by these state funds according to the statutory requirements. Such payments are regarded as reimbursements and are capitalised as interests in state funds pursuant to IFRIC 5. Changes in fund valuations are recorded in the financial result for the period in question.

5.6 Derivatives

5.6.1 Energy derivatives

BKW trades in contracts in the form of forwards with fixed and flexible profiles, and futures on electricity, gas, oil, coal and certificates. Contracts concluded with the sole intention of achieving a trading margin, as well as hedging transactions resulting from extended production portfolio management, are treated as financial instruments and designated as energy derivatives.

Transactions that are open on the balance sheet date are measured at fair value. BKW receivables in respect of counterparties are recorded under assets as positive replacement values (under Derivatives), while payables are recorded under liabilities as negative replacement values (under Derivatives). Positive replacement values correspond to the costs that BKW would incur to replace all transactions that represent benefits for BKW if all counterparties were simultaneously unable to pay and the transactions could be immediately replaced. Negative replacement values correspond to the costs that counterparties would incur to replace all transactions that represent benefits for them if BKW were no longer able to meet its obligations. Ongoing transactions with positive or negative replacement values are netted if the respective contract terms provide for this, and settlement is legally enforceable and intended.

Realised and unrealised gains and losses from energy derivatives are recorded as income from proprietary energy trading or as income from energy hedges as applicable within net revenue.

5.6.2. Hedge accounting

Financial instruments can be used to hedge fluctuations in the fair value of an asset or liability (fair value hedge), to hedge exposure to variability in cash flows (cash flow hedge) and to hedge exposure of net investments in business operations abroad (net investment hedge). This is done in accordance with the existing guidelines governing BKW's hedging and credit risk policy.

Realised and unrealised changes in the value of financial instruments that serve economically and according to Group guidelines to hedge against exchange rate and interest rate risks related to ongoing business activities, but which do not qualify as hedging transactions, are charged to income as financial income/expenses.

5.7 Property, plant and equipment

Property, plant and equipment are recorded at acquisition or manufacturing cost less accumulated depreciation and recognised impairment losses. Depreciation is calculated systematically using the straight-line method and based on the useful lives of the assets. The useful lives and indications of impairment are reviewed annually. Impairments in respect of property, plant and equipment are determined according to the principles set out in Note 5.9. Property, plant and equipment dependent on concessions that will revert without compensation are written down at most over the expected term of the concession.

The present values of estimated dismantling, decommissioning and disposal costs are charged to the balance sheet together with acquisition or manufacturing costs (see also Note 5.13). Fuel elements produced specifically for the nuclear power plant are disclosed in the balance sheet under property, plant and equipment. They are written down on the basis of wear and tear (burn-up).

For long-term investment projects, the borrowing interest is charged to the balance sheet during the set-up phase. Land is valued at acquisition cost. Corrections of the acquisition cost are recorded only in the event of impairment.

The costs of repairs and maintenance that do not add value are charged to the income statement as they are incurred. They are carried as assets only if the costs extend the original useful life or give rise to other significant economic benefits (cost reduction, increase in earnings). Costs incurred due to legal requirements that generate no direct future benefit are capitalised only if and when this enables other assets to generate benefits. The estimated useful lives of property, plant and equipment lie within the ranges listed below and are unchanged compared with the previous year:

Buildings	50 years
Power plants	12 to 80 years
Distribution grid	20 to 60 years
IT systems	10 to 30 years
Operating facilities and vehicles	3 to 20 years
Fuel rods	according to burn-up

Assets from rights to use leased assets are reported in the balance sheet item "Property, plant and equipment". See Note 5.15.

5.8 Intangible assets

Intangible assets include rights of use, contractual or legal rights acquired as a result of acquisitions, brands, customer relationships, software and goodwill.

Rights of use comprise contractually agreed one-off amounts to a contractual partner for the use of its operating installations as well as licences for the construction and operation of BKW's own installations.

Intangible assets are amortised over the period of use, or at most the contract period, using the straight-line method. Goodwill and brands are not written down but assigned to the relevant cash-generating unit and subjected to annual impairment tests or ad hoc tests whenever impairment is indicated.

Rights of use

Licences	60 to 80 years
Energy procurement rights	36 to 60 years
Installation utilisation rights	7 to 50 years
Transit rights	25 to 60 years

Other

Software	3 to 8 years
Customer lists, technologies	4 to 10 years
Brands	indefinite

5.9 Impairment of non-financial non-current assets

On each balance sheet date, assets are tested for impairment or improvement in value. If indications of impairment or improvement are identified, the recoverable amount of the asset is measured. Assets with an indefinite useful life are assessed for impairment irrespective of whether there are any indications.

The value of assets with a carrying value that exceeds the recoverable amount is adjusted in the income statement. If the amount estimated for an impairment loss is greater than the carrying value of the asset, a liability is recognised only if the requirements for a provision or other obligation are met. An impairment loss recognised in previous years for an asset other than goodwill is reversed if no impairment or only a reduced impairment exists. Impairment losses for assets subject to depreciation are reversed to the value that would have been determined had the acquisition value been depreciated on a systematic basis. The reverse posting is also charged to income.

Energy produced by partner plants is billed to shareholders on the basis of existing agreements – irrespective of the current market prices – at the cost of production. Provisions for onerous energy procurement contracts are formed if the cost of production is above the future expected market price due to the contractual obligation to pay energy production costs. Based on the obligation of the shareholders to pay production costs, it is assumed that the holdings in partner plants measured at the proportionate equity value are recoverable.

5.10 Financial liabilities

Financial liabilities comprise interest-bearing financial obligations, namely bonds, loans and lease liabilities. Bonds and loans are carried at amortised cost using the effective interest method. Lease liabilities are accounted for in accordance with IFRS 16.

5.11 Assigned rights of use

Assigned rights of use are recognised under other non-current liabilities. They consist of third-party payments for transit rights to transmission systems, plant usage rights and contributions to grid costs (connection contributions). Such assigned rights are recognised in the balance sheet at the nominal value of the cash inflow less any reversed amounts charged to income. The liability is reversed on a straight-line basis over the useful life of the facility but for no longer than the life of the relevant assigned right.

5.12 Pension plans

BKW operates various pension plans in accordance with legal requirements. The majority of employees are covered by the Pensionskasse BKW. This is a legally autonomous defined benefit scheme compliant with the terms of IAS 19. In addition, employees are also members of other pension funds, which are similarly classed as defined benefit plans.

5.13 Provisions

Provisions cover all obligations on the balance sheet date arising from past transactions and events where it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, the amount of which is not known but can be reliably measured. If an outflow of resources is no longer probable or determinable, a provision is charged to contingent liabilities. If the effect of the time value of the cash outflow is material, the amount of the provision is measured at the present value of the expected cash outflow.

As the operator of Mühleberg Nuclear Power Plant, BKW is required by law to decommission the plant after the operating phase ending on 20 December 2019 and to dispose of the nuclear waste. The expected costs were capitalised and the corresponding provision was recognised on the date on which the plant went into operation. Furthermore, the additional disposal costs incurred by power plant operation were capitalised annually and written down over the average useful life of the fuel elements using the straight-line method, and the corresponding provision was recognised. The decommissioning and waste disposal costs are subject to regular review. The present value of estimated decommissioning and disposal costs is provisioned and adjusted annually subject to interest. The same amount was carried during operations together with the acquisition/manufacturing costs of the plant and written down over the useful life using the straight-line method.

For calculating provisions for decommissioning and disposal, the following assumptions were made, having changed since the previous year:

- Average inflation rate of 1.0% (previously 1.5%).
- rate of 2.75% (previously 3.5%).

Due to the short-term timeframe (to 2024), 0.5 % is now used for both the interest rate and for inflation for the post-operational phase.

The assumptions used no longer correspond to the parameters defined in the Decommissioning and Waste Disposal Funds Ordinance (SEFV), as BKW no longer considers them appropriate due to the adjustments made. BKW has instead made its own estimates and based them on these (for explanation see Note 6.2). The adjustment of these parameters led to a one-off increase in provisions of CHF 13.9 million.

BKW holds non-controlling interests in power plant companies, under the terms of which it is committed to purchasing the energy generated by these plants at production cost. Provisions are recognised for obligations to purchase energy at production costs that exceed the expected future realisable sales prices. The calculations are made using the discounted cash flow method.

5.14 Income taxes

Income taxes include current taxes based on profit and deferred taxes based on valuation differences. Current income taxes are determined based on local tax regulations. Deferred taxes account for the income tax effects between internal and local tax valuation guidelines for assets and liabilities according to the liability method. This is based on the actual tax rates or the tax rates expected to apply when this difference is adjusted.

Deferred tax liabilities are generally recognised in the balance sheet. Deferred tax assets are recognised only if it appears probable on the basis of future anticipated gains that they can be realised.

Changes in deferred taxes are recorded in the income statement except when the origin of temporary differences is recognised as not affecting income. In this case, deferred taxes are recorded in other comprehensive income or, where appropriate, directly under equity.

5.15 Leasing

The accounting rules for leases stipulate that almost all assets (right to use the leased asset) and liabilities arising from lessee arrangements are recognised in the balance sheet. More information on the first-time adoption of IFRS 16 can be found in Note 3.

If the evaluation at the inception of a contract indicates that it qualifies as, or contains, a lease, a right to use the leased asset and a lease liability are recognised. The right of use is depreciated on a straight-line basis over the shorter of the lease term and the useful life of the leased asset. The lease liability is carried forward using the effective interest method and taking lease payments into account. The lease liability is discounted by applying an incremental borrowing rate specific to maturities and countries, unless the interest rate on which the lease payments are based is available. Lease liabilities are presented in the balance sheet under current and non-current financial liabilities.

Under the accounting standards, lessor arrangements are divided into operating leases and finance leases. A finance lease is a leasing arrangement in which the lessor essentially transfers to the lessee all risks and opportunities associated with the ownership of an asset. Other lessor arrangements are classified as operating leases and are not recorded in the balance sheet.

5.16 Segment reporting

Segments and segment results are defined on the basis of the management approach. The reportable segments correspond to the business areas of BKW: Energy, Grid and Services. The CEO, who has prime decision-making authority, uses the operating result (EBIT) as the basis for allocating resources and measuring performance.

6 Measurement uncertainties

Preparation of the consolidated financial statements in accordance with the applicable accounting standards necessitates the use of estimates and assumptions that affect the reported amounts of assets, provisions, liabilities and contingent liabilities on the balance sheet date, and the reported amounts of revenues and expenses during the reporting period. These estimates and assumptions are based both on past findings and on the best possible assessment of future developments. Actual results may differ from these estimates. Estimates and assumptions are regularly reviewed, and changes are recognised in the period in which they were identified.

6.1 Impairment testing of non-current assets

The recoverable amount calculated for the purposes of impairment testing of non-current assets is the higher of the fair value minus sale costs and value in use (present value of estimated future cash flows). The calculation of the recoverable amount is reliant to a significant extent on estimates of the expected future cash flows from use, long-term growth rates, useful life of assets and discounting rates or estimates of the potential net sale price of the asset. The actual results may differ significantly from these estimates.

6.2 Mühleberg Nuclear Power Plant/provisions for nuclear waste disposal

Measurement of the provision for nuclear waste disposal and the inherent value of property, plant and equipment (power plant and equipment, fuel rods, including present disposal value) is material for the purposes of assessing BKW's balance sheet and income statement. Detailed costs for decommissioning nuclear power plants and nuclear waste disposal are jointly calculated by the industry and updated every five years in accordance with the Ordinance on the Decommissioning and Waste Disposal Funds for Nuclear Power Plants (SEFV). These cost calculations are reviewed by independent cost specialists and the Swiss Federal Nuclear Safety Inspectorate (ENSI). The last scheduled estimate of decommissioning and disposal costs (KS16) took place in 2016. The adjustment was carried out at the request of and in accordance with the strict requirements of the Administrative Commission for the Decommissioning Fund for Nuclear Facilities and Waste Disposal Fund for Nuclear Power Plants (AC STENFO) and in collaboration with swissnuclear. The KS16 estimates the overall costs (overnight costs) in the baseline variant for the Mühleberg Nuclear Power Plant to be CHF 3.06 billion. On this basis, BKW assumes overnight costs of CHF 3.0 billion for calculating its provisions. BKW considers it most likely that the "combination repository" (cost-reducing) and "conventional dismantling" (cost-increasing) scenarios envisaged in KS16 will be implemented. In addition, BKW takes plant-specific costs into account. The difference between BKW's estimated overnight costs and the provisions recorded on the balance sheet as at 31 December 2019 in the amount of CHF 1.5 billion is due to costs of around CHF 899 million that had already been paid by the end of 2019 and to discounting effects of CHF 554 million.

After reviewing the KS16, AC STENFO increased its cost estimates, including through flat safety surcharges, and the Federal Department of the Environment, Transport, Energy and Communications (DETEC) also ordered additional costs. The cost adjustments made by AC STENFO and DETEC are not operationally justified from BKW's perspective. For this reason, BKW adheres to the cost estimates submitted by the industry association swissnuclear and to its own estimates for recognition of nuclear provisions on the balance sheet.

Work in connection with decommissioning is expected to last until 2034. Costs for operations related to the repository and monitoring of stored nuclear materials are expected to be incurred until 2126.

On 6 November 2019, the Federal Council approved the revised SEFV with new parameters for inflation and investment returns which will determine the size of contributions. Inflation was decreased from 1.5% to 0.5%, and the return on investment from 3.5% to 2.1%. This will theoretically mean additional payments of around CHF 100 million by 2022. Because of the excellent performance of the decommissioning and waste disposal funds in 2019, the annual contributions for contribution years 2020 – 2022 will be lower than previously expected. Compared with the contributions provisionally assessed to date, BKW's annual contributions to the decommissioning fund will be CHF 7.9 million lower, while contributions to the waste disposal fund will be CHF 4 million higher.

BKW believes it is not appropriate to calculate the provisions to be created over a long-term horizon by adjusting the parameters based on the current market situation observable over the short term. Hence the parameters defined in the SEFV are no longer used as the basis for accounting for provisions. No macroeconomic studies are available for the time horizons up to 2126, so BKW has to estimate the relevant parameters. A rate of 1% is applied to long-term inflation, based on the Swiss National Bank's target range of 0–2%. Based on historical actual yields on long-term government bonds, an expected real interest rate of 1.75% has been estimated, producing a nominal discount rate of 2.75%. Due to the short-term timeframe (to 2024), 0.5% is now used for both the interest rate and for inflation for the post-operational phase. The adjustment of these parameters led to a one-off increase in provisions of CHF 13.9 million.

Changes to cost calculations and the statutory requirements for nuclear waste disposal may have a material effect on the Group's financial position and results of operations. The inflation and discount rate parameters are also particularly relevant for determining the level of provisions for decommissioning (expected costs up to 2034) and nuclear waste disposal (expected costs up to 2126). In the event of an increase/decrease in the assumptions shown below, provisions as at 31 December 2019 would vary as follows (+ increase in provisions/– decrease in provisions):

CHF millions	Inflation +0.5%	Inflation –0.5%	Discount rate +0.5%	Discount rate –0.5%
Decommissioning	30.7	–29.4	–21.6	22.9
Waste disposal	111.7	–89.5	–87.9	110.3
Total	142.4	–118.9	–109.5	133.2

6.3 Provision for onerous energy procurement contract Wilhelmshaven

BKW holds a 33% stake in the Wilhelmshaven coal power plant. The partners are under an obligation to take on the energy produced according to their stake. Due to the higher estimated production costs compared with the expected electricity market prices a provision for the obligation to purchase energy had to be made in the past.

In January 2020, the German government enacted the Coal Phase-Out Act, which set a timetable for phasing out coal by 2038. The Coal Phase-Out Act provides for compensation to lignite and coal power plant operators. BKW believes that operators of coal power plants will receive compensation payments comparable to those made to lignite power plant operators. Therefore, a compensation payment by the German Government was included in determining the provision. The estimate of future income and expenses depends largely on the estimation of future energy prices, the estimation of the power plants' production costs, the assumed discount rates and the estimated size of the compensation payment. These estimations and assumptions constitute uncertainties and can deviate significantly from actual results. As at the end of 2019, the carrying amount of the investment was CHF 454.8 million and the provision was CHF 254.6 million.

6.4 Pension plans

The pension liabilities arising from defined benefit pension plans are calculated based on actuarial assumptions that may not reflect reality and hence may have an impact on BKW's results of operations and cash flows. The actuarial assumptions used in the calculation and a corresponding sensitivity analysis are disclosed in Note 27.

6.5 ECom proceedings

The tariffs that BKW is permitted to charge to its customers for grid usage and energy are reviewed in part by the Federal Electricity Commission (ECom). At present, there are several proceedings awaiting decisions by various bodies. The main object of the proceedings is to rule on the chargeable capital and operating costs. Decisions issued by the court of last instance may have implications for BKW's future cash flows.

7 Business combinations

Business combinations in 2019

CHF millions	ingenhoven architects	LTB Leitungsbau GmbH	swisspro	Miscellaneous	Total
Cash and cash equivalents	1.2	12.7	19.5	12.4	45.8
Trade accounts receivable and other receivables	21.6	7.1	54.5	11.5	94.7
Other current assets	11.8	22.4	21.1	11.6	66.9
Financial assets	0.0	0.1	3.9	0.6	4.6
Property, plant and equipment	4.5	28.1	20.8	13.3	66.7
Intangible assets	11.0	1.0	23.8	16.2	52.0
Deferred tax assets	0.0	0.0	6.4	2.0	8.4
Current liabilities	-9.3	-19.8	-48.0	-13.2	-90.3
Financial liabilities	-4.1	-10.1	-20.7	-10.6	-45.5
Provisions	-1.1	-1.6	-3.5	-0.9	-7.1
Deferred tax liabilities	-12.4	0.0	-4.5	-2.9	-19.8
Pension liability	0.0	-15.5	-45.8	-8.8	-70.1
Fair value of acquired net assets	23.2	24.4	27.5	31.2	106.3
Non-controlling interests		-2.4			-2.4
Goodwill	62.4	23.6	102.2	64.0	252.2
Purchase price	85.6	45.6	129.7	95.2	356.1
Cash and cash equivalents acquired	-1.2	-12.7	-19.5	-12.4	-45.8
Deferred and contingent purchase price liabilities	-19.4		-10.0	-18.3	-47.7
Deferred and uncontingent purchase price liabilities	-2.8	-3.9	-8.5	-8.1	-23.3
Liabilities incurred	-19.1				-19.1
Cash outflow	43.1	29.0	91.7	56.4	220.2

Unless stated otherwise, the values for the transactions listed are provisional as the purchase price allocations have not been finalised.

ingenhoven architects

In the engineering sector, BKW acquired 100% of the shares in ingenhoven architects GmbH, based in Düsseldorf (D), at the end of September 2019. The ingenhoven architects Group is assigned to the Services segment.

The contingent purchase price liabilities recognised on the acquisition date are due depending on the future economic growth of the companies. The goodwill recognised is mainly attributable to the expected synergies and the acquisition of a qualified workforce. The transaction costs amounted to CHF 0.5 million.

Had the company been acquired at the start of the current year, total operating revenue for 2019 would have been CHF 15.4 million higher and net profit CHF 5.1 million higher. Between the point at which the company was fully consolidated and 31 December 2019, the acquired company recorded a total operating income of CHF 10.0 million and a net profit of CHF 4.2 million.

LTB Leitungsbau GmbH

In the infra services sector, BKW acquired 90% of the shares in LTB Leitungsbau GmbH at the end of October 2019. Based in Radebeul (D), the company is active in transmission line construction and is assigned to the Services segment.

The goodwill recognised is mainly attributable to the expected synergies and the acquisition of a qualified workforce. The transaction costs amounted to CHF 0.8 million.

Had the company been acquired at the start of the current year, total operating revenue for 2019 would have been CHF 85.3 million higher and net profit CHF 1.7 million higher. Between the point at which the company was fully consolidated and 31 December 2019, the acquired company recorded a total operating income of CHF 22.8 million and a net profit of CHF 0.8 million.

swisspro

In the building solutions sector, BKW acquired 100% of the shares in swisspro group AG, based in Oberkirch, in October 2019. The swisspro Group is active in ICT and building automation solutions and electrical installation and is assigned to the Services segment.

The contingent purchase price liabilities recognised on the acquisition date are due depending on the future economic growth of the companies. The goodwill recognised is mainly attributable to the expected synergies and the acquisition of a qualified workforce. The transaction costs amounted to CHF 0.4 million.

Had the company been acquired at the start of the current year, total operating revenue for 2019 would have been CHF 169.7 million higher and net profit CHF 7.5 million higher. Between the point at which the company was fully consolidated and 31 December 2019, the acquired company recorded a total operating income of CHF 62.2 million and a net profit of CHF 3.1 million.

Miscellaneous

In the 2019 financial year, BKW conducted a number of other corporate acquisitions. All of the businesses acquired have been assigned to the Services segment. Due to the number of acquisitions, their key financial figures and their allocation to the same segment, aggregated figures are shown with no separate presentation of individual business combinations.

In the infrastructure engineering sector in Germany, BKW acquired 100% of the shares in Institut Gauer GmbH, Dr.-Ing. Gauer Ingenieurgesellschaft mbH, KMT Planungsgesellschaft mbH, KMT Port Consult GmbH, and osd GmbH. It also acquired 100% of the shares in the Austrian company Daninger + Partner Engineering GmbH, and the Swiss companies Kindschi Ingenieure und Geometer AG and Flotron AG. In Germany, Hascher Jehle Architektur, KFP Ingenieure and hydrodat were also acquired.

In the building solutions sector, 100% of the shares in WAB Technique S.à.r.l., Jaggi & Rieder AG, TECPLAN AG, Hensel AG Elektrotechnische Unternehmungen, ASAG Air System AG, b+s Elektro Telematik AG, Gebr. Bräm AG, pi-System GmbH, Monnet Holding Management SA and 70% of the shares in R. Monnet & Cie SA were acquired in Switzerland.

The contingent purchase price liabilities recognised on the acquisition date are due depending on the future economic growth of the companies.

The transactions generated total goodwill of CHF 64.0 million. The goodwill recognised is mainly attributable to the expected future synergies and the acquisition of a qualified workforce. The transaction costs amounted to CHF 1.6 million.

Had the companies already been acquired as at 1 January 2019, total operating revenue for the current year would have been CHF 48.1 million higher and the net profit CHF 5.6 million higher. Between the point at which the individual companies were fully consolidated and 31 December 2019, the acquired companies recorded cumulative total operating revenue of CHF 50.1 million and a total net profit of CHF 4.7 million.

CHF 12.6 million was paid for conditional purchase price liabilities and CHF 11.8 million for unconditional purchase price liabilities for acquisitions made in the reporting year and previous years.

Business combinations in 2018

CHF millions	Total
Cash and cash equivalents	15.5
Trade accounts receivable and other receivables	27.2
Other current assets	20.8
Financial assets	2.5
Property, plant and equipment	6.6
Intangible assets	30.5
Current liabilities	- 26.1
Financial liabilities	- 2.0
Provisions	- 3.1
Deferred tax liabilities	- 7.8
Pension liability	- 7.3
Fair value of acquired net assets	56.8
Non-controlling interests	- 0.2
Goodwill	114.7
Purchase price	171.3
Cash and cash equivalents acquired	- 15.5
Deferred and contingent purchase price liabilities	- 35.2
Deferred and uncontingent purchase price liabilities	- 12.6
Cash outflow	108.0

In 2018 BKW acquired various companies and assigned them to the Services segment. The values for the transactions conducted in the previous year are provisional since the purchase price allocations had not been finalised. The purchase price allocations are now final and only resulted in very minor changes.

In the infrastructure engineering sector in Germany, BKW acquired 90% of the shares in Michael Thillmann GmbH and KHP Architekten Planungsgesellschaft mbH and 100% of the shares in Kulla, Herr + Partner GbR, WALD + CORBE GmbH & Co. KG, WALD + CORBE Consulting GmbH, WALD + CORBE Infrastrukturplanung GmbH, Climaplan GmbH, Igr AG, emutec GmbH and emutec energy link GmbH, IHB GmbH Ingenieurdienstleistungen, Ingenieurbüro Prof. Dr. Ing. Vogt Planungsgesellschaft mbH, the Swiss company IWM AG and the Austria-based IKK Group GmbH. Podufal-Wiehofsky Architektin und beratender Ingenieur PartmbB was also taken over.

In the building technology sector, electrical installation companies Michel Rime AG, Elektro Winter AG, Werner Electro AG, MORA Holding AG with its 100% subsidiary Elektro Naegelin AG, and also E3 HLK AG, and Kurz Heizungen AG were acquired in Switzerland.

The German company TSS Technischer Strahlenschutz e.K. was acquired and integrated into DfN Dienstleistungen für Nukleartechnik GmbH.

The transactions generated total goodwill of CHF 114.7 million. The goodwill recognised is mainly attributable to the expected future synergies and acquisition of a qualified workforce. There are no material value adjustments in trade accounts receivable.

At the acquisition date, there were contingent purchase price liabilities amounting to CHF 35.2 million in relation to the acquisition of these companies. The final amount due will depend on the future business performance of the companies and on unconditional purchase price liabilities of CHF 12.6 million. The transaction costs amounted to CHF 1.7 million.

Had the companies already been acquired as at 1 January 2018, total operating revenue in 2018 would have been CHF 83.3 million higher, with net profit CHF 8.3 million higher. Between the point at which the individual companies were fully consolidated and 31 December 2018, the acquired companies recorded cumulative total operating income of CHF 76.3 million and a total net profit of CHF 9.7 million.

CHF 6.4 million was paid for conditional purchase price liabilities and CHF 7.4 million for unconditional purchase price liabilities for acquisitions made before 2018.

8 Segment reporting

Segments and segment results are defined on the basis of the management approach. In accordance with the strategy, BKW's reporting lines are structured around the business areas Energy, Grid and Services.

BKW operates the following three reportable business segments:

- The Energy segment builds, operates and maintains BKW's pool of power plants in Switzerland and abroad. It is also responsible for the sale of energy in Switzerland and for trading in electricity, certificates and commodities.
- The Grid segment builds, operates and maintains BKW's distribution grid.
- The Services business segment comprises planning and engineering consultancy for energy, infrastructure and environmental projects, integrated services in the area of building technology, as well as the construction, servicing and maintenance of energy, telecommunication, transport and water networks.

The column "Other" covers activities that are centrally managed within the Group; these largely consist of Group financing, real estate, fleet management, procurement, financial assets and tax. Some of the costs that arise in conjunction with the expansion of the business areas (acquisition/integration costs, technology development costs, etc.) are borne centrally.

Segment figures are determined in accordance with the same accounting and valuation principles that are applied for the Group-level presentation of consolidated figures. The prices for inter-company transactions (transfer prices) are based on the market price on the transaction date.

Information by business segment

2019 CHF millions	Energy	Grid	Services	Other	Consoli- dation	Total
External revenue	1,289.2	519.5	1,005.6	18.8	33.5	2,866.6
– Net sales	1,247.7	484.5	978.0	0.6	0.0	2,710.8
– Own work capitalised	4.9	32.1	0.3	1.1	33.2	71.6
– Other operating income	36.6	2.9	27.3	17.1	0.3	84.2
Internal revenue	26.2	7.8	101.2	152.5	–287.7	0.0
– Net sales	15.9	0.7	91.6	0.0	–108.2	0.0
– Other operating income	10.3	7.1	9.6	152.5	–179.5	0.0
Total operating income	1,315.4	527.3	1,106.8	171.3	–254.2	2,866.6
Total operating expenses	–985.6	–278.4	–987.0	–185.0	247.8	–2,188.2
Operating profit before depreciation, amortisation and impairment (EBITDA)	329.8	248.9	119.8	–13.7	–6.4	678.4
Depreciation, amortisation and impairment	–126.8	–86.7	–47.6	–22.7	3.1	–280.7
Income from associates	24.2	11.5	0.0	0.0	0.0	35.7
Operating profit/loss (EBIT)	227.2	173.7	72.2	–36.4	–3.3	433.4
Financial result						44.1
Profit/loss before income taxes (EBT)						477.5

2018 CHF millions	Energy	Grid	Services	Other	Consoli- dation	Total
External revenue	1,296.1	536.4	788.4	19.9	34.4	2,675.2
– Net sales	1,266.5	495.6	762.1	1.3	0.0	2,525.5
– Own work capitalised	3.4	34.4	0.1	2.5	34.4	74.8
– Other operating income	26.2	6.4	26.2	16.1	0.0	74.9
Internal revenue	29.6	19.0	92.4	127.6	–268.6	0.0
– Net sales	16.3	1.0	90.1	0.0	–107.4	0.0
– Other operating income	13.3	18.0	2.3	127.6	–161.2	0.0
Total operating income	1,325.7	555.4	880.8	147.5	–234.2	2,675.2
Total operating expenses	–1,109.7	–302.1	–797.2	–98.0 ¹	228.1	–2,078.9
Operating profit before depreciation, amortisation and impairment (EBITDA)	216.0	253.3	83.6	49.5	–6.1	596.3
Depreciation, amortisation and impairment	–82.7	–85.1	–25.6	–17.5	2.8	–208.1
Income from associates	8.4	21.4	0.0	–1.5	0.0	28.3
Operating profit/loss (EBIT)	141.7	189.6	58.0	30.5	–3.3	416.5
Financial result						–167.6
Profit/loss before income taxes (EBT)						248.9

1 Operating expenses were positively influenced by the one-off effect of CHF 52.4 million from the change to the benefit plan of the BKW pension fund.

Net sales per business segment are broken down as follows between Switzerland and abroad:

CHF millions	Switzerland		Foreign countries	
	2018	2019	2018	2019
Energy	719.5	644.2	547.0	603.5
Grid	495.6	484.5	0.0	0.0
Services	561.6	685.0	200.5	293.0
Other	1.3	0.6	0.0	0.0
Total net sales	1,778.0	1,814.3	747.5	896.5

Of net sales, CHF 2,603.4 million or 96% (previous year: CHF 2,479.1 million or 98%) relates to revenues from contracts with customers in accordance with IFRS 15. In the Energy business segment, certain transactions come under the provisions of IFRS 9.

Information by country

Net sales to external customers by country are broken down by the delivery location for the respective product. Non-current assets cover property, plant and equipment, intangible assets and investments in associates in the respective countries.

CHF millions	Switzerland		Germany		Italy		France		Other countries		Total	
	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019
Net sales	1,778.0	1,814.3	557.4	645.5	32.2	95.8	86.7	47.4	71.2	107.8	2,525.5	2,710.8
Non-current assets	3,791.6	4,086.1	807.9	949.7	562.1	511.6	138.3	135.6	164.0	173.2	5,463.9	5,856.2

Information on significant customers

There are no transactions with individual external customers that generate revenue accounting for 10% or more of net sales.

9 Energy procurement/transport

CHF millions	2018	2019
Cost of energy procurement from third parties and associates	913.5	739.2
Provision for onerous energy procurement contracts		
– Provisions used	–39.6	–35.8
– Provisions added	0.0	10.2
– Provisions released	–42.3	–9.7
Total energy procurement expenses	831.7	703.9
Energy transport expenses	106.9	92.1
Total	938.6	796.0

Expenses for energy transport include expenses for system services and municipal taxes, while expenses for water rates are included in energy procurement costs.

10 Personnel expenses

CHF millions	2018	2019
Salaries and wages	533.9	629.1
Social security contributions and other personnel expenses ¹	55.4	138.5
Total	589.3	767.6

1 In 2018 social security expenses were positively affected by the one-off effect of CHF 52.4 million from the change to the benefit plan of the BKW pension fund on 1 January 2019.

11 Other operating expenses

CHF millions	2018	2019
Charges, levies and other taxes	19.8	21.2
Rent and maintenance of real estate and other property, plant and equipment	36.9 ¹	19.3
Miscellaneous operating expenses	147.2	161.5
Total	203.9	202.0

1 In 2018 including expense from operating leases.

12 Depreciation, amortisation and impairment

CHF millions	2018	2019
Depreciation		
– Property, plant and equipment	172.6	219.2
– Intangible assets	34.5	36.5
Impairment		
– Property, plant and equipment	15.1	25.5
– Intangible assets	0.7	0.5
Reversal of impairments		
– Property, plant and equipment	–14.8	–1.0
Total	208.1	280.7

The impairments in the reporting year and the previous year relate to wind farms and hydroelectric plants in the Energy business area. Existing impairments in the Energy business area were simultaneously reversed in both financial years.

13 Financial result

CHF millions	2018	2019
Interest income	7.7	5.1
Dividend income	0.1	0.2
Value adjustment on state funds	0.0	147.7
Gains from the disposal of financial assets	0.0	1.1
Other financial income	2.6	2.5
Financial income	10.4	156.6
Interest expenses	–48.1	–42.9
Capitalised borrowing costs	0.0	0.2
Interest on provisions	–63.3	–61.4
Value adjustment on state funds	–57.1	0.0
Losses from the disposal of financial assets	–1.0	–0.2
Value adjustment on financial instruments held for trading	–0.6	–0.3
Currency translations	–3.0	–2.9
Other financial expenses	–4.9	–5.0
Financial expenses	–178.0	–112.5
Financial result	–167.6	44.1

14 Income taxes

CHF millions	2018	2019
Current income taxes	43.2	80.1
Deferred taxes	2.7	-6.2
Total	45.9	73.9

Reconciliation with reported income taxes

CHF millions	2018	2019
Profit/loss before income taxes	248.9	477.5
Tax expenses at anticipated rate of 23.4% (2018: 25.3%)	63.0	111.7
Effects of changes in tax rate	0.0	-14.8
Participation reduction and non-taxable income	-17.2	-10.9
Use/capitalisation of uncapitalised tax losses	-3.0	-4.3
Non-tax-deductible expenses	7.4	2.9
Uncapitalised or partially capitalised tax losses	2.9	0.4
Taxes in respect of previous years	-3.8	-5.8
Write-down/reversal of write-down of participations	-5.1	-5.6
Other items	1.7	0.3
Total income taxes	45.9	73.9
Effective tax rate	18.4%	15.5%

The anticipated tax rate is determined annually as a weighted average (based on the pre-tax earnings of individual Group companies and the applicable local tax rate). The decrease on the previous year was due to the tax rate cuts in Switzerland arising from the STAF tax reform and the higher proportion of the overall result of the companies in Switzerland.

Changes in deferred tax assets/liabilities

CHF millions	2018	2019
Net deferred tax liabilities at 01.01.	-413.3	-412.4
Changes in the scope of consolidation	-7.9	-11.1
Addition/release in the income statement	-2.7	6.2
Change in value of cash flow and net investment hedges in other comprehensive income	0.0	0.0
Taxes on actuarial gains/losses	5.0	-7.0
Transactions in treasury shares	2.7	0.0
Currency translations	3.8	2.9
Net deferred tax liabilities at 31.12.	-412.4	-421.4

Deferred tax assets/liabilities by origin of temporary difference

CHF millions	31.12.2018		31.12.2019	
	Assets	Liabilities	Assets	Liabilities
Current assets	2.2	-13.9	24.4	-19.0
Financial assets and holdings	0.7	-50.4	1.8	-58.7
Property, plant and equipment	16.5	-266.5	16.8	-289.6
Intangible assets	0.4	-37.5	1.9	-39.5
Current liabilities	3.7	-2.6	9.0	-38.0
Provisions	1.3	-120.6	2.6	-125.9
Other non-current liabilities	55.1	-6.5	94.0	-10.0
Capitalised loss carry-forwards	5.7	0.0	8.8	0.0
Credit/liability for gross deferred taxes	85.6	-498.0	159.3	-580.7
Netting of assets and liabilities	-53.6	53.6	-125.0	125.0
Credit/liability for deferred taxes according to balance sheet	32.0	-444.4	34.3	-455.7

The change in temporary differences resulted in deferred tax revenue of CHF 3.1 million recorded in the income statement (previous year: tax revenue of CHF 0.7 million).

As in the previous year, on 31 December 2019 no deferred tax liabilities were recognised in respect of temporary differences relating to associates. No deferred taxes are recognised for Group companies, joint arrangements or partner plants at which a dividend payment is contractually agreed, since BKW is able to monitor the reversal of the temporary difference and such a difference is not probable in the foreseeable future. The temporary differences for which no deferred tax liabilities have been recognised in this respect amount to CHF 2,378.0 million in total (previous year: CHF 2,309.7 million).

Tax loss carry-forwards

As at 31 December 2019, there were tax loss carry-forwards of CHF 5.5 million (previous year: CHF 16.6 million) for which deferred taxes were not capitalised. These were not capitalised since their charge against future taxable earnings is not regarded as probable within the permissible tax period. The average applicable tax rate on tax loss carry-forwards would be 19.7% (previous year: 21.1%).

These loss carry-forwards fall due in the following periods:

in CHF millions	31.12.2018	31.12.2019
Expiry within 1 year	0.0	0.0
Expiry within 2 to 5 years	2.6	1.1
Expiry after 5 years	9.1	2.5
Valid indefinitely	4.9	1.9
Total	16.6	5.5

15 Earnings per share

The undiluted earnings per share is calculated based on the weighted average number of outstanding shares. The diluted earnings per share in the previous year includes the dilution effect arising from the convertible bond still outstanding at the end of June 2018. When calculating the diluted earnings per share, it is assumed that the outstanding conversion rights had already been exercised at the beginning of the year. The net profit attributable to the shareholders is adjusted according to the corresponding interest expense for the convertible bond after accounting for tax.

Earnings per share

	2018	2019
Net profit attributable to BKW shareholders, in CHF millions	186.4	391.2
Number of shares issued (weighted average)	52,800,000	52,800,000
Less treasury shares (weighted average)	- 379,568	- 66,666
Number of outstanding shares (weighted average)	52,420,432	52,733,334
Earnings per share in CHF	3.56	7.42

Diluted earnings per share

	2018	2019
Net profit attributable to BKW shareholders, in CHF millions	186.4	391.2
Tax-adjusted interest expense on convertible bonds	0.1	0.0
BKW shareholders' portion of net profit, adjusted for dilution effect	186.5	391.2
Number of outstanding shares (weighted average)	52,420,432	52,733,334
Adjustment for theoretical conversion of convertible bonds	338,382	0
Number of shares in circulation, adjusted for dilution effect	52,758,814	52,733,334
Diluted earnings per share in CHF	3.53	7.42

Dividend per share

The dividend of CHF 2.20 per share for the 2019 financial year (previous year: CHF 1.80) corresponds to the proposal by the Board of Directors to the General Meeting and must be approved by shareholders at this meeting. Based on the shares in circulation on the balance sheet date, the proposed dividend amounts to CHF 116.1 million.

16 Trade accounts receivable and other receivables

CHF millions	31.12.2018	31.12.2019
Trade accounts receivable ¹	595.5	579.3
Other financial receivables	70.0	69.6
Other receivables	54.6	38.1
Total	720.1	687.0

1 Of which, an amount of CHF 491.4 (previous year: CHF 452.8 millions) stems from contracts with customers pursuant to IFRS 15

The following table shows the ageing of trade accounts receivable:

CHF millions	31.12.2018			31.12.2019		
	Gross carrying amount	Loss allowance	Net carrying amount	Gross carrying amount	Loss allowance	Net carrying amount
Trade accounts receivable	612.8	-17.3	595.5	603.8	-24.5	579.3
of which:						
– not past due	507.2	-0.6	506.6	438.5	-1.5	437.0
– 1–30 days past due	51.0	-0.8	50.2	41.1	-2.0	39.1
– 31–360 days past due	27.5	-3.3	24.2	94.4	-4.3	90.1
– over 360 days past due	27.1	-12.6	14.5	29.8	-16.7	13.1

Most of the trade accounts receivable are due for payment between 30 and 60 days. The business combinations in the current year increased trade accounts receivable by CHF 68.2 million.

The loss allowance for trade accounts receivable, other financial receivables, and loans are as follows:

CHF millions	Trade receivables	Other financial receivables	Loans
Loss allowances at 31.12.2017	16.2	2.9	8.2
Initial application of IFRS 9	0.4	0.3	0.2
Addition/release	2.6	-0.5	
Derecognition of uncollectable receivables	-1.8		
Currency translations	-0.1		
Loss allowances at 31.12.2018	17.3	2.7	8.4
Addition/release	10.1	0.7	
Derecognition of uncollectable receivables	-2.7	-1.8	
Currency translations	-0.2		
Loss allowances at 31.12.2019	24.5	1.6	8.4

There is no material loss allowance for other financial assets. The other balance sheet items contain no material overdue but unimpaired financial assets.

17 Contract assets and contract liabilities

Contract assets and contract liabilities as at 31 December 2019 included a writedown of CHF 0.1 million for expected defaults on receivables in accordance with the provisions of IFRS 9 (previous year: CHF 0.1 million).

CHF millions	31.12.2018		31.12.2019	
	Contract assets	Contract liabilities	Contract assets	Contract liabilities
Services provided (cumulative costs and gains)	421.1	260.3	907.8	383.5
Partial payments received/advance payments	-327.8	-301.8	-767.2	-455.8
Contract assets/liabilities	93.3	-41.5	140.6	-72.3

Recognised revenue from contract liabilities included at the start of the reporting period amounted to CHF 39.1 million (previous year: CHF 45.7 million).

CHF millions	2018	2019
Expected future income from existing contracts	731.3	1,015.3
thereof:		
– expected within the next 12 months	469.3	725.7
– expected after 12 months	262.0	289.6

18 Inventories

CHF millions	31.12.2018	31.12.2019
Goods and materials	21.8	29.1
Valuation adjustment on goods and materials	-0.2	-0.8
Certificates (proprietary trading)	0.7	10.2
Certificates (own use)	21.2	17.4
Total	43.5	55.9

19 Accrued/deferred income and prepaid/accrued expenses

CHF millions	31.12.2018	31.12.2019
Financial accruals	57.4	75.5
Other prepaid expenses and accrued income	16.3	16.3
Total prepaid expenses and accrued income	73.7	91.8
Financial accruals	167.6	139.6
Other deferred income and accrued expenses	72.3	58.3
Total deferred income and accrued expenses	239.9	197.9

20 Financial assets

CHF millions	Financial assets at fair value through other comprehensive income	Financial assets at fair value through profit or loss	Loans	Term deposits	Interest in state funds	Other non-current assets	Total
At 01.01.2018	8.6	176.1	69.8	191.4	1,183.3	100.3	1,729.5
Changes in the scope of consolidation	0.2	0.4				1.9	2.5
Additions	0.5	13.2	18.1	105.1	43.6	1.6	182.1
Disposals	-1.7	-52.2	-15.4	-190.0		-36.9	-296.2
Currency translations	0.1		-1.3	-0.2		-0.1	-1.5
Value adjustment in the income statement		-0.6			-57.1	-1.8	-59.5
Value adjustment in other comprehensive income	-0.3			0.1			-0.2
At 31.12.2018	7.4	136.9	71.2	106.4	1,169.8	65.0	1,556.7
Changes in the scope of consolidation	0.2		3.4	0.1		0.9	4.6
Additions	0.2	9.7	12.9	95.3	30.4	0.1	148.6
Disposals	-0.6	-115.6	-35.0	-105.0	-46.6	-23.5	-326.3
Currency translations			-1.2	-0.1		-0.1	-1.4
Value adjustment in the income statement		-0.1			147.7		147.6
At 31.12.2019	7.2	30.9	51.3	96.7	1,301.3	42.4	1,529.8
of which:							
– Current financial assets		30.9	15.8	95.9	84.7		227.3
– Non-current financial assets	7.2		35.5	0.8	1,216.6	42.4	1,302.5
of which:							
– Financial assets according to IAS 32 and IFRS 9	7.2	30.9	51.3	96.7		42.4	228.5
– Other assets					1,301.3		1,301.3

The state funds are managed by the Federal Government; BKW has no access to the managed assets. As at 31 December 2019, "Other non-current assets" no longer include any credit balances with pension plans (previous year: CHF 4.0 million), see Note 27.

In November 2016, BKW sold a Swissgrid convertible loan totalling CHF 97.2 million to Credit Suisse. The loan was sold without the associated conversion right. As certain conditions transpire, Swissgrid can or must convert the loan into equity, and BKW undertakes to acquire the resulting share of Swissgrid equity. Thus, although BKW sold the loan, it entered into a directly linked obligation at the same time. The loan could therefore not be derecognised. By the end of the 2019 financial year, the loan had been amortised to CHF 38.8 million. As at 31 December 2019, CHF 38.9 million was still reported under "Other non-current assets" and CHF 19.5 million under "Other receivables". The liabilities are listed as CHF 38.9 million under non-current and CHF 19.5 million under current liabilities (see Notes 24 and 28).

21 Investments in associates

CHF millions	Total
At 31.12.2017	1,439.6
Additions	79.9
Disposals	-35.9
Dividends	-19.8
Pro rata income	28.3
Currency translations	-26.2
Actuarial gains/losses	15.8
At 31.12.2018	1,481.7
Changes in the consolidation method	-0.6
Disposals	-33.4
Dividends	-21.5
Pro rata income	35.7
Currency translations	-21.8
Actuarial gains/losses	-12.8
Hedging transactions	-4.7
At 31.12.2019	1,422.6

The change to the consolidation method affected Wärme Mittelland AG. This company no longer qualifies as an associate, and is now listed as a joint operation instead.

The disposals include capital reductions at ENGIE Kraftwerk Wilhelmshaven GmbH & Co. KG (CHF 26.5 million) and at EP Produzione Livorno Ferraris S.p.A. (CHF 4.3 million).

Pro rata key figures for associates at 31.12.2019

The table below gives the pro rata key figures for associates by business area. In addition, the Energy business area is broken down by type of power plant.

BKW share CHF millions	Hydro	Nuclear	Fossil-fuel	New renewable energy	Other	Total Energy	Grid	Services	Total
Current assets	40.1	65.0	36.5	14.8	5.2	161.6	126.1	2.6	290.3
Non-current assets	1,017.5	790.8	493.7	175.9	26.6	2,504.5	974.8	2.4	3,481.7
Current liabilities	-111.2	-77.1	-20.0	-9.8	-1.9	-220.0	-248.5	-0.3	-468.8
Non-current liabilities	-666.0	-641.3	-9.9	-94.5	-17.6	-1,429.3	-450.4	-0.9	-1,880.6
Shareholders' equity	280.4	137.4	500.3	86.4	12.3	1,016.8	402.0	3.8	1,422.6
Income	148.2	136.0	117.4	18.1	8.3	428.0	265.4	2.7	696.1
Expenses	-141.9	-129.1	-107.5	-16.8	-8.5	-403.8	-253.9	-2.7	-660.4
Net profit/loss	6.3	6.9	9.9	1.3	-0.2	24.2	11.5	0.0	35.7
Other comprehensive income	-4.0	-3.4	0.0	-4.8	0.0	-12.2	-5.3	0.0	-17.5
Comprehensive income	2.3	3.5	9.9	-3.5	-0.2	12.0	6.2	0.0	18.2

All associates are valued using the equity method.

Of the total pro rata assets and liabilities, CHF 1,360.6 million (previous year: CHF 1,396.0 million) relate to net financial debt (financial liabilities less cash and cash equivalents and current financial assets).

Associates in the Energy segment are, in particular, partner plants. For these, BKW is obliged to pay the annual costs due on its share (including interest and repayment of borrowed funds). The pro rata annual costs for BKW for the purchase of energy in 2019 amounted to CHF 392.9 million (previous year: CHF 428.6 million). These are included in the energy procurement expense. CHF 773.3 million of the total pro rata assets and liabilities of partner plants (previous year: CHF 797.0 million) relate to net financial debt.

Pro rata key figures for associates at 31.12.2018

The table below gives the pro rata key figures for associates by business area. In addition, the Energy business area is broken down by type of power plant.

BKW share CHF millions	Hydro	Nuclear	Fossil-fuel	New renewable energy	Other	Total Energy	Grid	Total
Current assets	47.3	79.6	56.4	16.4	5.6	205.3	210.0	415.3
Non-current assets	1,031.2	740.4	544.8	143.5	26.5	2,486.4	961.7	3,448.1
Current liabilities	-133.5	-81.8	-39.6	-10.5	-2.4	-267.8	-142.0	-409.8
Non-current liabilities	-662.6	-599.3	-20.8	-52.2	-17.1	-1,352.0	-619.9	-1,971.9
Shareholders' equity	282.4	138.9	540.8	97.2	12.6	1,071.9	409.8	1,481.7
Income	158.1	114.7	140.6	15.5	8.1	437.0	296.7	733.7
Expenses	-148.2	-111.5	-144.5	-16.3	-8.2	-428.7	-276.7	-705.4
Net profit/loss	9.9	3.2	-3.9	-0.8	-0.1	8.3	20.0	28.3
Other comprehensive income	6.2	5.8	0.0	0.0	0.0	12.0	5.2	17.2
Comprehensive income	16.1	9.0	-3.9	-0.8	-0.1	20.3	25.2	45.5

Key figures for major associates

The table below gives the key figures for the major associates. The holdings ENGIE Kraftwerk Wilhelmshaven and Kraftwerke Oberhasli are part of the Energy business area. The interest in Swissgrid is assigned to the Grid business area.

The reported figures are provisional and come from the respective companies, with the exception of Swissgrid, which has bonds listed on the SIX Swiss Exchange. BKW has no final figures for Swissgrid. The key figures as at 31.12 and the income statement including the net profit will be estimated by BKW on the basis of Swissgrid's business reports from the previous year, as well as relevant press releases issued in the current financial year and transferred to IFRS. Deviations from Swissgrid's actual figures will be captured in profit and loss calculations for the following year.

The company ENGIE Kraftwerk Wilhelmshaven GmbH & Co. KG is a limited partnership under German law. In companies with this legal form, the effective share of profit and capital of the partners may differ from their share of investment.

100 % key figures	ENGIE Kraftwerk Wilhelmshaven GmbH & Co. KG		Kraftwerke Oberhasli AG		Swissgrid AG	
	31.12.2018	31.12.2019	31.12.2018	31.12.2019	31.12.2018	31.12.2019
CHF millions						
Current assets	73.1	25.5	44.3	34.1	553.9	345.3
Non-current assets	1,547.3	1,408.9	812.4	809.2	2,623.2	2,679.6
Current liabilities	-75.4	-32.7	-72.6	-102.2	-386.0	-687.2
Non-current liabilities	-56.9	-23.6	-588.7	-543.1	-1,692.1	-1,246.5
Shareholders' equity	1,488.1	1,378.1	195.4	198.0	1,099.0	1,091.2
Shareholding in % as at 31.12.	33.0%	33.0%	50.0%	50.0%	36.4%	36.1%
Goodwill	0.0	0.0	0.0	0.0	6.0	5.9
Reported carrying amount of the investment	491.1	454.8	97.7	99.0	406.0	400.0
Income	201.9	146.6	145.1	143.6	762.0	677.8
Expenses	-218.7	-123.4	-133.1	-137.0	-704.4	-646.0
Net profit/loss	-16.8	23.2	12.0	6.6	57.6	31.8
Other comprehensive income	0.0	0.0	-4.9	-4.1	-13.6	-14.8
Comprehensive income	-16.8	23.2	7.1	2.5	44.0	17.0
Goodwill impairment	0.0	0.0	0.0	0.0	0.0	0.0
Recognised proportionate result from associates	-5.5	7.7	6.0	3.3	21.0	11.5
Dividend received	0.0	0.0	0.0	0.0	10.7	11.9

22 Property, plant and equipment

CHF millions	Power plants	Mühleberg Nuclear Power Plant	Distribution grid	Buildings and land	Other property, plant and equipment	Construction in progress	Right-of-Use Assets	Total
Gross values at 31.12.2018	2,205.8	1,468.3	3,174.7	225.5	264.0	256.4		7,594.7
Effect of initial application of IFRS 16	-126.7				-2.3		268.7	139.7
At 01.01.2019 (restated)	2,079.1	1,468.3	3,174.7	225.5	261.7	256.4	268.7	7,734.4
Changes in the scope of consolidation	2.1			14.3	20.0	1.4	31.8	69.6
Additions	18.9	19.6	4.9	0.1	8.2	195.4	14.4	261.5
Disposals	-3.4	-185.2	-30.2	-6.9	-18.5	-1.3	-3.7	-249.2
Reclassifications	77.3	4.1	140.2	6.7	26.3	-253.4	-1.2	-0.0
Contract modifications							-0.1	-0.1
Currency translations	-37.6			-0.2	-0.8	-0.3	-7.7	-46.6
Gross values at 31.12.2019	2,136.4	1,306.8	3,289.6	239.5	296.9	198.2	302.2	7,769.6
Accumulated depreciation and impairments at 31.12.2018	1,010.3	1,468.3	1,582.7	118.6	178.3	1.7		4,359.9
Effect of initial application of IFRS 16	-56.1				-0.8		56.9	0.0
At 01.01.2019 (restated)	954.2	1,468.3	1,582.7	118.6	177.5	1.7	56.9	4,359.9
Changes in the scope of consolidation					-0.2			-0.2
Depreciation	58.4	23.7	74.9	5.0	26.1		31.1	219.2
Impairment	18.7			0.3			6.5	25.5
Disposals	-2.3	-185.2	-30.2	-2.5	-17.2		-0.6	-238.0
Reversal of impairment						-1.0		-1.0
Reclassifications					0.4		-0.4	0.0
Currency translations	-12.8				-0.3		-2.6	-15.7
Accumulated depreciation and impairments at 31.12.2019	1,016.2	1,306.8	1,627.4	121.4	186.3	0.7	90.9	4,349.7
Net values at 31.12.2019	1,120.2	0.0	1,662.2	118.1	110.6	197.5	211.3	3,419.9
– thereof pledged for liabilities	19.0			10.8	0.1			29.9

The effect of the first-time application of IFRS 16 includes the reclassification of former finance leases to right-of-use assets and the recognition of newly capitalised leases as at 1 January 2019 in the amount of CHF 139.7 million (see Note 3).

Changes in the scope of consolidation relate to business combinations to the amount of CHF 66.7 million (previous year: CHF 6.6 million), to the change in the consolidation method of Wärme Mittelland AG in the amount of CHF 3.3 million (see Note 21) and to disposals of companies in the amount of CHF -0.4 million (previous year: CHF -0.2 million).

The column “Mühleberg Nuclear Power Plant” covers all relevant property, plant and equipment including nuclear fuels. The entries for the Mühleberg Nuclear Power Plant do not include non-cash provision increases totalling CHF 19.6 million (previous year: CHF 5.8 million) due to the additional disposal costs caused by plant operations up to the point of decommissioning as well as the adjustment in parameters for inflation and return on investment associated with the

revised SEFV on 6 November 2019 (see Note 6.2). The disposals relate to the nuclear fuel which was derecognised after the decommissioning of the power plant (net value: CHF 0).

Further non-cash additions for power plants are the supply of provision restoration obligation for wind farms of CHF 4.9 million as well as entries of CHF 14.4 million for rights of use arising from leases.

Borrowing costs amounting to CHF 0.2 million were capitalised in the reporting year (previous year: none). In the year under review, compensation of CHF 2.9 million for property, plant and equipment that was impaired, lost or decommissioned was recognised in the income statement (previous year: CHF 1.0 million).

The following table contains information on the rights of use under leases per asset class.

CHF millions	Power plants	Distribution grid	Buildings and land	Other property, plant and equipment	Total
Gross values at 31.12.2018	0.0	0.0	0.0	0.0	0.0
Effect of initial application of IFRS 16	126.7	6.0	129.8	6.2	268.7
At 01.01.2019 (restated)	126.7	6.0	129.8	6.2	268.7
Changes in the scope of consolidation			29.2	2.6	31.8
Additions			9.6	4.8	14.4
Disposals			-3.3	-0.4	-3.7
Reclassifications				-1.2	-1.2
Contract modifications			-0.1		-0.1
Currency translations	-4.7		-2.9	-0.1	-7.7
Gross values at 31.12.2019	122.0	6.0	162.3	11.9	302.2
Accumulated depreciation and impairments at 31.12.2018	0.0	0.0	0.0	0.0	0.0
Effect of initial application of IFRS 16	56.1			0.8	56.9
At 01.01.2019 (restated)	56.1	0.0	0.0	0.8	56.9
Depreciation	5.5	1.6	21.5	2.5	31.1
Impairment	6.5				6.5
Disposals			-0.5	-0.1	-0.6
Reclassifications				-0.4	-0.4
Currency translations	-2.3		-0.2	-0.1	-2.6
Accumulated depreciation and impairments at 31.12.2019	65.8	1.6	20.8	2.7	90.9
Net values at 31.12.2019	56.2	4.4	141.5	9.2	211.3
– of which land lease for wind parks			38.6		

CHF millions	Power plants	Mühleberg Nuclear Power Plant	Distribution grid	Buildings and land	Other property, plant and equipment	Construction in progress	Total
Gross values at 31.12.2017	2,256.8	1,461.4	3,069.2	233.9	264.4	199.5	7,485.2
Changes in the scope of consolidation				0.4	4.1	1.9	6.4
Additions	1.4	8.6	6.2		8.0	209.8	234.0
Disposals	-17.5	-2.3	-32.0	-9.2	-22.2	-2.7	-85.9
Reclassifications	6.5	0.6	131.3	0.5	10.3	-149.2	0.0
Currency translations	-41.4			-0.1	-0.6	-2.9	-45.0
Gross values at 31.12.2018	2,205.8	1,468.3	3,174.7	225.5	264.0	256.4	7,594.7
Accumulated depreciation and impairments at 31.12.2017	968.1	1,461.4	1,539.4	117.7	175.6	1.6	4,263.8
Changes in the scope of consolidation					-0.1		-0.1
Depreciation	65.7	6.9	71.3	5.0	23.7		172.6
Impairment	14.1			0.4		0.6	15.1
Disposals	-9.8		-28.1	-4.5	-20.6		-63.0
Reversal of impairment	-14.3					-0.5	-14.8
Reclassifications			0.1		-0.1		0.0
Currency translations	-13.5				-0.2		-13.7
Accumulated depreciation and impairments at 31.12.2018	1,010.3	1,468.3	1,582.7	118.6	178.3	1.7	4,359.9
Net values at 31.12.2018	1,195.5	0.0	1,592.0	106.9	85.7	254.7	3,234.8
– thereof in financial leasing	70.6				1.5		72.1
– thereof pledged for liabilities	20.3						20.3

23 Intangible assets

CHF millions	Rights of use	Goodwill	Other	Total
Gross values at 31.12.2018	174.3	621.5	297.8	1,093.6
Changes in the scope of consolidation	0.1	250.6	51.0	301.7
Additions from acquisitions	0.5		5.1	5.6
Additions from internally generated intangible assets			6.1	6.1
Disposals			-2.9	-2.9
Currency translations	-3.2	-8.8	-2.6	-14.6
Gross values at 31.12.2019	171.7	863.3	354.5	1,389.5
Accumulated depreciation and impairments at 31.12.2018	131.3	93.9	121.0	346.2
Changes in the scope of consolidation		-0.3	-0.3	-0.6
Depreciation	2.4		34.1	36.5
Impairment			0.5	0.5
Disposals			-2.9	-2.9
Currency translations	-3.1		-0.8	-3.9
Accumulated depreciation and impairments at 31.12.2019	130.6	93.6	151.6	375.8
Net values at 31.12.2019	41.1	769.7	202.9	1,013.7

Changes in the scope of consolidation relate to business combinations in the amount of CHF 304.2 million (previous year: CHF 145.2 million) and disposals of companies in the amount of – CHF 1.9 million (previous year: CHF –2.9 million).

CHF millions	Rights of use	Goodwill	Other	Total
Gross values at 31.12.2017	172.7	517.2	248.7	938.6
Changes in the scope of consolidation		111.7	30.3	142.0
Additions from acquisitions	5.2		17.9	23.1
Additions from internally generated intangible assets			6.2	6.2
Disposals	0.2		-3.1	-2.9
Currency translations	-3.8	-7.4	-2.2	-13.4
Gross values at 31.12.2018	174.3	621.5	297.8	1,093.6
Accumulated depreciation and impairments at 31.12.2017	132.3	94.1	91.7	318.1
Changes in the scope of consolidation		-0.2	-0.1	-0.3
Depreciation	2.6		31.9	34.5
Impairment			0.7	0.7
Disposals			-2.6	-2.6
Currency translations	-3.6		-0.6	-4.2
Accumulated depreciation and impairments at 31.12.2018	131.3	93.9	121.0	346.2
Net values at 31.12.2018	43.0	527.6	176.8	747.4

On the balance sheet date, goodwill was distributed among the following cash-generating units:

CHF millions	31.12.2018	31.12.2019
Energy	108.3	107.9
Services	419.3	661.8
Total	527.6	769.7

The goodwill carried in the balance sheet was tested for impairment by comparing the carrying value with the realisable value of the cash-generating units. The realisable value corresponds to the value in use. The calculations were made on the basis of estimated cash flows from business projections approved by management over a period of four years. Cash flows beyond this period were extrapolated using an estimated growth rate. The impairment test on goodwill disclosed in the balance sheet did not identify any need for impairment.

The value in use is measured on the basis of the following material assumptions:

%	WACC (before tax)		WACC (after tax)		Long-term growth rate	
	31.12.2018	31.12.2019	31.12.2018	31.12.2019	31.12.2018	31.12.2019
Energy	7.2	7.2	5.9	5.9	1.0	1.0
Services	8.1	6.5	6.5	6.5	1.0	1.0

Based on the findings of a sensitivity analysis, realistic changes in the material assumptions do not suggest that the recoverable amount could fall below the carrying amount.

24 Trade accounts payable and other liabilities

CHF millions	31.12.2018	31.12.2019
Trade accounts payable	327.5	334.5
Other financial liabilities	186.9	165.4
Other liabilities	27.5	39.2
Pension plans	9.1	12.5
Total	551.0	551.6

Other financial liabilities include the short-term portion of the sold Swissgrid convertible loan in the amount of CHF 19.5 million (previous year: CHF 19.5 million) (see Note 20).

25 Financial liabilities

CHF millions	31.12.2018	31.12.2019
Bonds	1,043.4	891.9
Registered bonds	294.4	284.4
Lease liabilities	30.4	180.1
Bank liabilities	119.3	86.6
Other financial liabilities	81.9	93.4
Total	1,569.4	1,536.4
of which:		
– Current financial liabilities	413.3	89.1
– Non-current financial liabilities	1,156.1	1,447.3

In July 2019, the CHF 350 million bond due was repaid. At the same time, BKW issued a 0.25% green bond worth CHF 200 million with a term of eight years.

	31.12.2018	Effect of initial application of IFRS 16	01.01.2019	Cash flows	Foreign exchange movement	Changes in fair values	Other	31.12.2019
CHF millions								
Current financial liabilities	413.3	22.3	435.6	-383.9	-1.9	0.0	39.3	89.1
– Bonds	349.5		349.5	-350.0			0.5	0.0
– Lease liabilities	4.9	22.3	27.2	-28.9	-0.6		35.2	32.9
– Bank liabilities	18.8		18.8	-15.4	-0.1		2.9	6.2
– Other financial liabilities	40.1		40.1	10.4	-1.2		0.7	50.0
Non-current financial liabilities	1,156.1	117.4	1,273.5	171.8	-15.1	-2.9	20.0	1,447.3
– Bonds	693.9		693.9	200.0		-2.9	0.9	891.9
– Registered bonds	294.4		294.4		-10.8		0.8	284.4
– Lease liabilities	25.5	117.4	142.9	0.0	-3.3		7.6	147.2
– Bank liabilities	100.5		100.5	-22.9	-1.0		3.8	80.4
– Other financial liabilities	41.8		41.8	-5.3			6.9	43.4
Other non-current liabilities	407.7		407.7	22.4	-0.9		-18.7	410.5
Total liabilities from financing activities	1,977.1	139.7	2,116.8	-189.7	-17.9	-2.9	40.6	1,946.9

	31.12.2017	Cash flows	Foreign exchange movement	Changes in fair values	Other	31.12.2018
CHF millions						
Current financial liabilities	211.8	-172.0	-1.5	0.0	375.0	413.3
– Bonds	149.8	-150.0			349.7	349.5
– Finance leasing liabilities	8.9	-8.5	-0.2		4.7	4.9
– Bank liabilities	7.9	-5.2	-0.1		16.2	18.8
– Other financial liabilities	45.2	-8.3	-1.2		4.4	40.1
Non-current financial liabilities	1,387.6	189.5	-13.6	-3.1	-404.3	1,156.1
– Bonds	845.5	198.8		-3.1	-347.3	693.9
– Convertible bond	33.8	-0.1			-33.7	0.0
– Registered bonds	304.9		-11.4		0.9	294.4
– Finance leasing liabilities	44.1	-12.9	-1.1		-4.6	25.5
– Bank liabilities	117.3	1.2	-1.1		-16.9	100.5
– Other financial liabilities	42.0	2.5			-2.7	41.8
Other non-current liabilities	416.8	20.1			-29.2	407.7
Total liabilities from financing activities	2,016.2	37.6	-15.1	-3.1	-58.5	1,977.1

26 Provisions

CHF millions	Nuclear waste disposal	Onerous contracts, energy procurement	Other provisions	Total
At 31.12.2017	1,517.2	354.6	57.3	1,929.1
Changes in the scope of consolidation			3.1	3.1
Provisions added	5.8		3.1	8.9
Interest	53.1	9.5	0.7	63.3
Provisions used	-47.8	-39.6	-7.0	-94.4
Provisions released	-14.6	-42.3	-7.1	-64.0
Currency translations			-1.2	-1.2
At 31.12.2018	1,513.7	282.2	48.9	1,844.8
Changes in the scope of consolidation			7.0	7.0
Provisions added	5.7	10.2	13.4	29.3
Interest	53.0	7.7	0.7	61.4
Provisions used	-63.6	-35.8	-5.3	-104.7
Provisions released		-9.7	-6.0	-15.7
Change in estimate for nuclear disposal	13.9			13.9
Currency translations			-1.1	-1.1
At 31.12.2019	1,522.7	254.6	57.6	1,834.9
of which:				
– Current provisions	150.4	34.5	8.9	193.8
– Non-current provisions	1,372.3	220.1	48.7	1,641.1

Nuclear waste disposal

As at 31 December 2019, the provision for nuclear waste disposal comprised the following:

- CHF 829.4 million (previous year: CHF 838.2 million) is set aside for decommissioning of the nuclear power plant. This covers the costs of the post-operational phase after shutdown of the power operation, as well as the costs of dismantling and disposing of the plant and rehabilitation of the surrounding area. Payments are anticipated from the end of commercial operation in 2019 until completion of the decommissioning work after approximately 15 years. The costs for disposal of decommissioning waste will fall due on an ongoing basis until the waste is put into the final storage depot for weak to medium-active nuclear waste (scheduled for 2061).
- A further CHF 693.3 million (previous year: CHF 675.5 million) is set aside for the disposal of spent fuel elements and radioactive waste outside the plant compound. These payments will fall due on an ongoing basis until the final storage depot for highly active nuclear waste is sealed off. This is currently scheduled for the year 2126.

The current year saw an allocation of CHF 5.7 million (previous year: CHF 5.8 million) owing to the annual additional disposal costs of operating the power plant. This allocation increased the acquisition cost for nuclear fuels in the same amount without affecting income.

Due to the adjustment in the parameters of inflation and return on investment in connection with the revised SEFV (see Note 6.2), an estimate adjustment of CHF 13.9 million was carried out. The adjustment increased the acquisition costs for the power plants in the same amount without affecting income.

In addition, CHF 63.6 million (previous year: CHF 47.8 million) was used for planning and preparatory work for post-operation and decommissioning.

BKW is required to make regular payments to the state funds for decommissioning and nuclear waste disposal. These funds pay the costs of decommissioning and disposal on behalf of operators following shutdown of the plants. The state fund receivables are disclosed under non-current financial assets (see Note 20).

Onerous contracts, energy procurement

The provisions for onerous energy procurement contracts cover the future purchase of energy from partner plants at production costs that exceed the expected realisable selling prices. These provisions are associated with the energy procurement contracts agreed with the fossil-fuel power stations at Livorno Ferraris in Italy and Wilhelmshaven in Germany. Due to updated expectations regarding future electricity price trends, the strong Swiss franc and, in particular, the decision to phase out coal in Germany (see Note 6.3), provisions of CHF 0.5 million net were set aside in the reporting year (previous year: CHF 42.3 million reversed).

The cash outflow from provisions results from BKW's obligation to take the electricity produced at production cost and extends over a period of eight years.

Other provisions

The provision for restructuring, which covers future expenses for defined restructuring measures, stood at CHF 0.4 million as at 31 December 2019 (previous year: CHF 0.4 million).

Other provisions include guarantee obligations, obligations related to personnel, estimations of probable payments in respect of legal disputes, provisions for impending losses from customer orders and various minor operating obligations. Cash outflows in respect of these provisions are largely anticipated over the next three years. There are also provisions for the dismantling and break-up of power plants and for rehabilitation of the environment. These costs will be incurred at the end of the useful life of the respective power plants; the cash outflow is anticipated within the next 20 to 25 years.

Interest on provisions calculated at present value is charged through financial expenses.

27 Pension plans

Pension funds are regulated by the Federal Act on Occupational Retirement, Survivors' and Invalidity Pension (BVG). This requires pension funds to be managed by independent, legally autonomous bodies. Employees and their survivors are insured through the pension plan against the economic consequences of old age, invalidity and death. All actuarial risks are borne by the BKW pension fund (Pensionskasse BKW). The pension plan is financed through contributions and revenue from the assets. The member companies and insured persons pay the premium contributions to the pension scheme, as a percentage of the insured salary of the insured person. Responsibility for investing the pension assets is held by the Board of the foundation.

Employees of BKW in Switzerland are covered by Pensionskasse BKW and other autonomous pension funds, which are classed as defined benefit plans under IAS 19. Outside of Switzerland, some employees are also covered by defined pension plans in accordance with IAS 19. Independent pensions experts carry out annual assessments in line with the terms of IAS 19, based on the projected-unit-credit method.

Pensionskasse BKW

The majority of employees working in Switzerland are covered by the Pensionskasse der Bernischen Kraftwerke (Pensionskasse BKW) pension fund. At the end of April 2018, the Board of the BKW pension fund decided to change the benefit plan with a view to improving long-term financial stability. The existing benefit plan was converted into a defined contribution plan under the Swiss Occupational Pensions Act (BVG) on 1 January 2019.

In the 2018 annual financial statements, the conversion resulted in a one-off, non-cash effect in the amount of CHF 52.4 million. Operating expenses for 2018 fell by that amount. The reason for the one-off effect was the new pension scheme commitment based on a defined contribution plan, which by virtue of its configuration is lower than for a defined benefit plan. Despite the changeover to a defined contribution plan under Swiss law, the BKW pension fund's pension plan continues to qualify as a defined benefit plan under IAS 19.

Pensionskasse BKW takes the form of a pension fund organised as a foundation established under private law. The supreme governing body of the Pensionskasse BKW foundation is the Board of Trustees, which is composed of an equal number of representatives of the employer and the employees. The benefits and financing of Pensionskasse BKW are stipulated in pension regulations. These are issued by the Board of the foundation. The Board delegates the management of the business to the executive management. The foundation is subject to supervision by the relevant authority of the Canton of Bern.

The pension plan assets are invested in a widely diversified portfolio in Switzerland and abroad in line with the statutory requirements and the guidelines issued by the Board. Assets are invested to guarantee security and an appropriate return on the investment, with a balanced distribution of risks and coverage of the forecast requirement of cash and cash equivalents. The occupational pensions expert prepares the annual actuarial valuation and verifies the financial and actuarial situation of Pensionskasse BKW. The unaudited actuarial coverage rate of Pensionskasse BKW in accordance with BVG at 31 December 2019 with an actuarial interest rate of 1.75% (previous year: 2.0%) was 112.9% (previous year: 106.4%). In the event of a coverage shortfall according to BVG, the Board must, in agreement with the occupational pensions expert, agree suitable recovery measures (such as increasing the ordinary contributions or collecting recovery contributions). The contribution made by the employer must be at least equivalent to the total contributions paid by the employee.

27.1 Pension liability recorded in the balance sheet

CHF millions	31.12.2018	31.12.2019
Present value of defined benefit obligations	-2,007.6	-2,398.3
Fair value of plan assets	1,815.9	2,159.5
Net pension liability recorded in the balance sheet	-191.7	-238.8
of which amount disclosed as credit	4.0	0.0
of which amount disclosed as liability	-195.7	-238.8

27.2 Pension expense according to IAS 19

CHF millions	2018	2019
Current service cost (employer)	38.6	36.4
Past service cost (employer)	-52.4	0.0
Interest expenses on defined benefit obligation	13.3	14.7
Interest income from plan assets	-12.0	-13.3
Administration costs excluding costs for management of plan assets	1.0	0.9
Pension plan expenses	-11.5	38.7

27.3 Remeasurement of pension plans

CHF millions	2018	2019
Actuarial gains/losses		
– Change in financial assumptions	-4.3	119.7
– Change in demographic assumptions	-4.9	0.0
– Adjustments based on experience	-5.2	19.6
Return on plan assets (excluding interest based on discount rate)	53.7	-170.9
Total revaluation reported in other comprehensive income	39.3	-31.6

27.4 Change in present value of defined benefit obligation

CHF millions	2018	2019
Present value of defined benefit obligation at 01.01.	2,023.2	2,007.6
Interest expenses on defined benefit obligation	13.3	14.7
Current service cost (employer)	38.6	36.4
Contributions paid/benefits paid out	-77.6	-62.2
Employee contributions	22.9	22.8
Past service cost (employer)	-52.4	0.0
Business combination	53.6	237.6
Administration costs (excluding asset management costs)	1.0	0.9
Actuarial gains/losses	-15.0	140.5
Present value of defined benefit obligations at 31.12.	2,007.6	2,398.3

At the balance sheet date, the active members' share of the defined benefit obligation was CHF 1,410.9 million (previous year: CHF 1,052.6 million). The share of those drawing a pension in the defined benefit obligation was CHF 987.4 million (previous year: CHF 955.0 million).

27.5 Change in fair value of plan assets

CHF millions	2018	2019
Fair value of plan assets at 01.01.	1,828.3	1,815.9
Interest income from plan assets	12.0	13.4
Employer contributions	37.0	31.2
Employee contributions	22.9	22.9
Contributions paid/benefits paid out	-77.6	-62.3
Business combination	47.0	167.5
Return on plan assets (excluding interest based on discount rate)	-53.7	170.9
Fair value of plan assets at 31.12.	1,815.9	2,159.5

27.6 Asset structure of plan assets

CHF millions	31.12.2018	%	31.12.2019	%
Cash and cash equivalents	60.3	3.3	80.8	3.7
Equity instruments	572.2	31.5	710.4	32.9
Debt instruments	651.7	35.9	751.7	34.8
Other instruments	169.6	9.3	200.7	9.3
Properties	362.1	20.0	415.9	19.3
Total plan assets	1,815.9	100.0	2,159.5	100.0
– thereof own transferrable financial instruments	3.3		3.4	
– thereof properties used by BKW	16.8		19.1	

Equity capital instruments include investments in shares and are generally listed at their market price in an active market. As a percentage of the total assets, the proportion of Swiss shares at the end of the reporting period was 15.4% (previous year: 13.5%) and that of foreign shares was 17.6% (previous year: 17.9%). Investments in Swiss and foreign shares are made directly (through external asset managers) and through investment foundations and funds.

The composition of debt instruments as a percentage of total assets on 31 December 2019 was 16.3% (previous year: 14.5%) for Swiss bonds, 8.4% (previous year: 9.5%) for foreign bonds with currency hedging and 9.6% (previous year: 11.9%) for mortgage loans and mortgage bonds. The bonds and mortgage bonds are listed in an active market at their market price, whereas there is no market price listing in an active market for the mortgage loans.

Most of the other instruments are listed in an active market at their market price.

On 31 December 2019, the proportion of property as a percentage of total assets was split between 10.1% (previous year: 12.4%) for properties (direct investments in Switzerland) and 7.0% (previous year: 7.6%) for property funds listed in active markets (of which almost half involved foreign properties).

The effective return from the plan assets was 11.2% in the current year (previous year: -2.4%).

27.7 Actuarial assumptions

	Switzerland 2018	Germany 2018	Switzerland 2019	Germany 2019
Discount rate	0.80 %	n/a	0.25 %	1.11 %
Expected rate of future salary increases	0.50 %	n/a	0.50 %	2.75 %
Expected rate of future pension increases	0.00 %	n/a	0.00 %	1.75 %
Mortality table	BVG 2015 GT	n/a	BVG 2015 GT	Heubeck 2018 G

The weighted average term of the employee pension plan obligation amounted to 14.8 years (previous year: 14.0 years).

Sensitivities of the major actuarial assumptions

The discount rate, changes in salaries and pensions, and life expectancy constitute significant actuarial assumptions and were therefore subjected to a sensitivity analysis. In the event of an increase/decrease in the assumptions shown below, the employee pension plan obligation will vary as follows:

31.12.2019 CHF millions	Defined benefit obligation	
	Increase	Decrease
Discount rate (0.25% change)	-80.9	86.5
Salary increase (0.25% change)	4.7	-4.8
Changes in pensions (+0.20% change)	69.0	-
Life expectancy (1 year change)	76.8	-78.0

31.12.2018 CHF millions	Defined benefit obligation	
	Increase	Decrease
Discount rate (0.25% change)	-61.6	65.8
Salary increase (0.25% change)	3.3	-3.3
Changes in pensions (+0.20% change)	54.0	-
Life expectancy (1 year change)	61.7	-62.8

The sensitivity analysis was conducted on the basis of a method that extrapolates the impact on the employee pension plan obligation through changes in the above assumptions at the end of the reporting period.

27.8 Estimated contributions for the next period

CHF millions	2018	2019
Expected employer contributions	29.7	35.7
Expected employee contributions	22.0	26.9

28 Other non-current liabilities

CHF millions	31.12.2018	31.12.2019
Assigned rights of use	295.2	306.1
Other non-current financial liabilities	112.1	104.1
Other non-current liabilities	0.4	0.3
Total	407.7	410.5

Liabilities resulting from the sale of the Swissgrid convertible loan in November 2016 are recorded at CHF 38.9 million under "Other non-current liabilities". The transaction is detailed in Note 20.

29 Share capital and reserves

29.1 Share capital

The issued and fully paid-in share capital of BKW AG amounting to CHF 132.0 million consists of 52,800,000 registered shares at a par value of CHF 2.50 each.

Major shareholders and treasury shares

To BKW's knowledge, the following shareholders held more than 3% of the shares as at 31 December.

	31.12.2018	31.12.2019
Canton of Bern	52.54%	52.54%
Groupe E Ltd.	10.00%	10.00%

Transactions in treasury shares

	Number	Carrying amount CHF millions	Cash-relevant proportion CHF millions
31.12.2017	955,921	65.8	
Purchases	400,735	26.0	26.0
Sales	-1,286,562	-87.0	-19.4
31.12.2018	70,094	4.8	6.6
Purchases	466,915	32.2	32.2
Sales	-515,985	-35.5	-30.3
31.12.2019	21,024	1.5	1.9

29.2 Reserves

Capital reserves

Capital reserves include reserves paid in by shareholders.

Retained earnings

Retained earnings consist of legal and statutory reserves (excluding capital reserves), retained earnings from previous years and gains/losses on the sale of treasury shares.

Treasury shares

BKW shares held by BKW or its Group companies are deducted from equity at acquisition cost.

As at 31 December 2019, 21,024 shares (previous year: 70,094) were held by BKW AG and its Group companies.

Other reserves

CHF millions	Currency translations	Valuation reserve of financial assets measured at fair value	Hedging	Actuarial gains/losses	Total
At 31.12.2017	-254.8	0.0	2.1	81.0	-171.7
Currency translations					
– Currency translations	-47.4				-47.4
– Reclassification to the income statement	0.1				0.1
Financial assets at fair value through other comprehensive income					
– Value adjustments		-0.2			-0.2
– Reclassification to retained earnings		0.1			0.1
Hedging transactions					
– Value adjustments of Group companies			-0.3		-0.3
Actuarial gains/losses					
– of Group companies				-39.3	-39.3
– of associates				14.0	14.0
Income taxes				4.4	4.4
At 31.12.2018	-302.1	-0.1	1.8	60.1	-240.3
Currency translations					
– Currency translations	-42.3				-42.3
Hedging transactions					
– Value adjustments of associates			-4.7		-4.7
Actuarial gains/losses					
– of Group companies				31.6	31.6
– of associates				-10.9	-10.9
Income taxes				-6.2	-6.2
At 31.12.2019	-344.4	-0.1	-2.9	74.6	-272.8

Currency translations

Reserves for currency translations contains currency differences arising from the translation of the financial statements drawn up in foreign currencies of foreign Group companies and associates.

Valuation reserve of financial assets at fair value through other comprehensive income

This valuation reserve includes changes in the value of financial assets at fair value through profit or loss until their realisation. When these financial assets are sold, the valuation reserve is reclassified to retained earnings.

Hedging

The hedging reserve comprises unrealised adjustments in the value of financial instruments as a hedge of payment streams (cash flow hedge) and as a hedge of net investment in a foreign business operation (net investment hedge) in the amount of the effective portion of the hedge, as well as the realised gains and losses from completed hedging transactions that have not yet been recognised in profit or loss since the underlying transaction has not yet been recognised in income.

Actuarial gains/losses

The reserve for actuarial gains and losses recognises the effect of periodic actuarial recalculations.

29.3 Capital management

BKW pursues a strategy aimed at the sustainable increase and retention of corporate value. The aim of BKW capital management is to ensure the Group's long-term capital market standing and financing capability by maintaining a balance sheet structure that is compatible with the defined target rating, and to keep the potential impact of fluctuations in the value of the entire financial and risk portfolio within narrow boundaries. BKW is committed to a consistent dividend payout based on a ratio of 40% to 50% of adjusted net profit. BKW's financial resources primarily serve the core business and provide the requisite scope for action in accordance with the requirements of the Group strategy. There were no changes in capital management in 2019.

30 Derivatives

The following table provides information on replacement values and contract volumes for derivative financial instruments open on the balance sheet date in respect of energy trading, and of interest and exchange rate hedging. Derivatives that qualify as hedging instruments under IFRS 9 and are treated according to hedge accounting provisions are disclosed separately.

Derivatives are recorded at fair value in the balance sheet, as positive replacement values (receivables) or negative replacement values (liabilities). The contract volume corresponds to the basic value or contract volume of the underlying derivative financial instrument.

The replacement value for futures is zero, since price fluctuations are offset daily compared with the agreed closing prices. Forward energy trading contracts include forwards with fixed and flexible profiles.

CHF millions	Positive replacement value		Negative replacement value		Contract volume	
	31.12.2018	31.12.2019	31.12.2018	31.12.2019	31.12.2018	31.12.2019
Futures (energy trading)					189.1	367.7
Forward contracts (energy trading)	230.8	138.5	242.0	124.5	1,826.7	2,091.6
Swaps			3.4	3.8	25.0	15.0
Exchange rate hedging	0.4	0.9		0.1	175.1	228.7
Hedge accounting						
– Swaps	1.9			1.2	110.0	100.0
– Exchange rate hedging			0.0		5.6	
Total	233.1	139.4	245.4	129.6	2,331.5	2,803.0
of which:						
– Current derivatives	197.7	132.4	192.5	106.8		
– Non-current derivatives	35.4	7.0	52.9	22.8		

31 Hedge accounting

The following hedging transactions were open on 31 December 2019:

Fair value hedge

The interest rate swap to convert fixed interest rates into variable rates/to hedge fluctuations in the fair value of a portion of the issued bonds expired in the third quarter of 2019. The hedge qualified as a fair value hedge and was classified as highly effective. The change in the fair value of the underlying portion of the bonds amounted to CHF 1.9 million (previous year: CHF 3.1 million).

In the reporting year, a new interest rate swap was concluded. This is used to convert fixed interest rates into variable rates/to hedge against fluctuations in the fair value of a portion of the newly issued green bonds. This hedging relationship is assessed as highly effective and qualifies as a fair value hedge. The change in the fair value of the green bond amounted to CHF 1.0 million in the reporting year.

No ineffective portion of hedging relationships was reported in the financial result either in 2019 or in 2018.

Cash flow hedge

There were no hedges relating to outstanding investment obligations on the balance sheet date. All hedging instruments expired in the previous year. In the previous year the hedging instrument qualified as a cash flow hedge and was assessed as highly effective. The gain/loss on measurement in the previous year (CHF 0.0 million) was recorded under other comprehensive income. In 2018, no ineffective portion of hedging relationships was reported in the financial result.

Net investment hedge

In previous years, BKW placed three registered bonds with nominal amounts of EUR 275.0 million in total. The registered bonds were placed in Germany and hedge a part of its investment projects in that country. The registered bonds have been designated as a net investment hedge. Foreign exchange gains or losses on the registered bonds are recognised in other comprehensive income and correspondingly offset the gains or losses from currency conversion of the designated net investments. In the current year, no ineffective portion of hedging relationships was reported in the financial result.

32 Related parties

The following financial relationships between BKW and related parties existed in the periods reported. Unless stated otherwise, all transactions were conducted under the same terms and conditions as with independent third parties:

CHF millions	Parent		Associates		Pension funds	
	2018	2019	2018	2019	2018	2019
Income						
– Energy sales	3.3	2.7	43.2	39.3		
– Other sales and services	6.3	5.4	21.3	21.3	1.3	1.3
– Interest and dividends	2.2	2.3	21.7	23.3		
Expenses						
– Energy purchases			276.5	218.0		
– Water charges	19.0	19.0				
– Other purchases and services	0.4	0.4	108.8	95.1	37.1	32.0
– Taxes and charges	5.6	2.5				
– Interest and dividends	50.1	50.1	0.1	0.1		
– Income taxes	4.8	20.5				
Assets						
– Cash and cash equivalents	33.9	23.1				
– Receivables and accruals	4.5	1.5	15.9	40.9		
– Current financial assets			32.8	14.3		
– Loans			26.2	24.8		
– Rights of use			11.6	9.2		
Liabilities						
– Liabilities and accruals	5.5	19.9	51.1	23.1	9.2	11.7
– Loans	0.8	3.7				
– Rights of use			0.4	0.6		

Transactions with the parent

The Canton of Bern is the majority shareholder of BKW. As such, it has a controlling influence on all decisions at the Annual General Meeting, including the election of members of the Board of Directors and the appropriation of retained earnings. The relationship with the Canton of Bern, its authorities, public-law institutions and the private-law companies it controls takes place on many levels: BKW delivers energy and other services, purchases material and services, and pays taxes, water rates and other levies and charges. In addition, financial transactions are conducted with Berner Kantonalbank, in which the Canton of Bern holds a majority interest.

Transactions with associates

Reported transactions consist of energy deliveries, energy transports, dividends, engineering services (income), operational management and maintenance/servicing (income), energy purchases, material/third-party services and other services (expense). Energy produced by partner plants is billed to shareholders at production cost (including interest and repayment of borrowed funds) on the basis of existing partner contracts. In the 2019 financial year, associates borrowed CHF 10.8 million in loans from BKW (previous year: CHF 17.4 million in loans granted). Repayments reduced loans in the current year by CHF 28.5 million (previous year: repayments CHF 8.3 million). Furthermore, loans were reduced by CHF 1.4 million in the reporting year owing to changes in the scope of consolidation. In the current year, BKW capitalised services and materials from associates worth CHF 18.8 million (previous year: CHF 14.8 million).

Transactions with pension funds

Transactions with pension funds are conducted as part of the occupational pension plan and consist of employer contributions, administrative charges (personnel, operational and administrative costs), real estate services (management of properties) and financial transactions (liquidity management including interest).

Transactions with the Board of Directors and Group Executive Board

Remuneration

CHF millions	2018	2019
Short-term benefits	3.9	4.5
Contributions to pension plans	1.2	0.9
Share-based payments	1.5	1.5
Total	6.6	6.9

The performance-related payments contained in short-term benefits reflect the variable profit shares for the corresponding financial year.

Detailed information on the remuneration paid to the Board of Directors and the Group Executive Board can be found in the Remuneration Report, which is published in accordance with the Ordinance against Excessive Compensation in Listed Stock Companies.

Transactions with companies in which members of the Board of Directors and Group Executive Board have significant influence

In the 2019 financial year, BKW supplied companies in which members of the Board of Directors and the Group Executive Board have significant influence with energy amounting to CHF 2.8 million (previous year: CHF 1.7 million) and provided services amounting to CHF 0.5 million (previous year: CHF 1.3 million). At the balance sheet date, there were outstanding receivables from these companies in the amount of CHF 0.7 million (previous year: CHF 0.6 million).

33 Leasing

The lessee arrangements relate to wind farms, leases for land and distribution facilities, easements on land, vehicles and other movable property, plant and equipment.

Information on the rights of use under lessee arrangements is provided in Note 22. The terms of the lease liabilities are disclosed in Note 39.3.

CHF millions	2019
Leases in the consolidated income statement	
Income from operating leases	0.8
Expense relating to short-term leases	2.4
Expense relating to low-value assets	0.7
Expense relating to variable lease payments not included in the measurement of lease liabilities	0.4
Interest expense on lease liabilities	2.3
Leases in the consolidated cash flow statement	
Total cash outflows from lessee arrangements	34.8

The lessor arrangements mainly concern heating systems under heat contracting. The future undiscounted lease payments as at the balance sheet date were:

CHF millions	31.12.2018	31.12.2019
Up to 1 year	1.0	0.7
Later than 1 year and not later than 2 years	0.7	0.7
Later than 2 years and not later than 3 years	0.7	0.6
Later than 3 years and not later than 4 years	0.6	0.5
Later than 4 years and not later than 5 years	0.5	0.4
More than 5 years	4.1	4.0
Total	7.6	6.9

34 Additional disclosures on the cash flow statement

Cash and cash equivalents covers cash on hand, bank account balances and cash invested with financial institutes for a maximum period of three months.

CHF millions	31.12.2018	31.12.2019
Bank and cash balances	602.9	668.6
Term deposits	214.5	14.9
Total cash and cash equivalents	817.4	683.5

Adjustments to the operating cash flow for non-cash transactions are composed as follows:

CHF millions	2018	2019
Depreciation, amortisation and impairment	208.1	280.7
Income from associates	-28.3	-35.7
Financial result	167.6	-44.1
Gains/losses from sale of non-current assets	-4.2	-1.5
Change in non-current provisions (excl. interest and excl. utilisation of nuclear provisions)	-97.0	-1.3
Change in assigned rights of use	-11.9	-12.5
Change from the valuation of energy derivatives	3.3	-25.2
Other non-cash positions	-54.1	9.6
Total adjustment for non-cash transactions	183.5	170.0

Details on acquisitions of Group companies in the current year are provided in Note 7. The cash flow arising from the acquisition of Group companies amounting to CHF 244.6 million corresponds to the purchase price of CHF 356.1 million less the acquired cash and cash equivalents of CHF 45.8 million, the acquired obligations of CHF 19.1 million, and the deferred, contingent purchase price payments of CHF 71.0 million at the time of acquisition, plus the payment of CHF 24.4 million that had been made in respect of deferred and contingent consideration payments in 2019.

Sub-total "Cash flow from operating activities before utilisation of nuclear provisions"

To ensure better interpretability and comparability of the effective operating cash flow, the "Cash flow from operating activities" item now includes a sub-total of the cash flow before utilisation of provisions for nuclear decommissioning and waste disposal.

This is because the costs for nuclear decommissioning and waste disposal have already been incurred in connection with the decommissioning of the Mühleberg Nuclear Power Plant and will continue to be incurred in the future. These costs represent the utilisation of existing provisions and are therefore charged to "cash flow from operating activities" determined in accordance with IAS 7. However, the nuclear decommissioning is not related to BKW's actual operating performance, and reported "cash flow from operating activities" is therefore not a suitable metric for assessing operating cash generation in BKW's view.

Most of the costs for nuclear decommissioning and waste disposal are borne by the state-run decommissioning and waste disposal funds. BKW is thus entitled to a refund of the costs incurred, although the costs incurred and the refund do not coincide chronologically. Both payments into and refunds from the state funds are classified in the cash flow statement as part of "cash flow from investing activities". This means there is therefore a discrepancy in the presentation of these directly related cash flows. To adequately interpret cash flow, the corresponding individual items presented separately in the cash flow statement should be considered together. Therefore, the utilisation of provisions with and without claim to refunds is now reported separately in "cash flow from operating activities".

35 Share-based payment

BKW employees have the opportunity to purchase BKW AG share capital on preferential terms. Full-time employees of BKW and members of the Board of Directors (except the Group Executive Board and senior management) are offered a limited number of BKW shares every year at a fixed preferential price, set for that year, subject to a blocking period. In the current year, employees had the opportunity to acquire up to 348,650 shares in BKW (previous year: 327,450 shares) at a preferential price. In the 2019 financial year, 79,148 shares (previous year: 77,701 shares) were purchased at a price of CHF 45.45 per share (previous year: CHF 40.75). The underlying present value per share was CHF 68.30 (previous year: CHF 60.00). The personnel expense for this share-based payment was CHF 1.8 million (previous year: CHF 1.5 million). No purchase rights remained open on the balance sheet date.

In addition, a performance-related bonus has been allocated to members of the Group Executive Board and senior management in the form of BKW shares as part of their fixed annual base salary. The allocation of shares to members of the Group Executive Board is decided on an annual basis for the current financial year. The shares are subject to a blocking period. In the 2019 financial year, 28,608 shares (previous year: 26,546 shares) with an underlying fair price of CHF 69.70 per share (previous year: CHF 71.60) were allocated. As part of the performance management process, BKW shares are allocated to senior management in March of the following year. In the 2019 financial year, 22,314 shares (previous year: 21,213 shares) with an underlying fair price of CHF 67.00 per share (previous year: CHF 63.60) were allocated. The shares are subject to a blocking period. The total personnel expense booked for profit-sharing to the Group Executive Board and senior management amounted to CHF 3.5 million (previous year: CHF 3.2 million). No purchase rights remained open on the balance sheet date.

Allocation of shares to employees is not subject to any other conditions in either of the aforementioned cases, hence there is no vesting period and the compensation is recorded on the grant date. Fair value is measured on the basis of the share price. The corresponding expense is recognised in personnel expenses at the time of the grant being made. In relation to the share purchase programme, the personnel expense corresponds to the difference between the fair value and the preferential price paid by employees.

36 Group companies with material non-controlling interests

With BKW Netzbeteiligung Ltd., which is headquartered in Switzerland, BKW holds a Group company with material non-controlling interests. BKW Netzbeteiligung Ltd. holds interests in Swissgrid Ltd.

The financial information of BKW Netzbeteiligung Ltd. is disclosed separately in the table below. The breakdown is before the elimination of inter-company transactions.

CHF millions	BKW Netzbeteiligung Ltd.	
	31.12.2018	31.12.2019
Non-controlling interests in %	49.9%	49.9%
Carrying amount of non-controlling interests	180.6	180.6
Net income allocated to non-controlling interests	5.3	5.9
Dividends on non-controlling interests	5.6	5.9
Balance sheet		
Non-current assets	361.7	361.7
Current assets	0.3	0.3
Non-current liabilities	0.0	0.0
Current liabilities	0.0	0.0
Income statement		
Financial income	10.7	11.8
Net profit	10.7	11.8
Cash flow statement		
Cash flow from operating activities	10.6	11.8
Cash flow from investing activities	0.0	0.0
Cash flow from financing activities	-11.3	-11.8

37 Assets and liabilities measured at fair value

Assets and liabilities measured at fair value are classified according to the following hierarchy:

- Level 1: valuations based exclusively on listed prices in active markets for identical assets or liabilities. BKW currently classifies listed securities and energy trading futures under this level.
- Level 2: valuations, the inputs to which are based on directly or indirectly observable market data. The inputs have a material impact on the recognised fair value. At this hierarchy level, BKW includes over-the-counter derivatives (all forward energy trading contracts, interest rate swaps and forward currency contracts) and the proportional share of net assets of the state funds (federal decommissioning and waste disposal funds). The assets of the state funds are managed by the Federal Government; BKW has no access to the managed assets. These assets are invested in accordance with the defined investment strategy, generally in products that have listed prices on active markets. To a limited extent, investments may also be made in assets for which there are no listed prices on active markets. Such investments are valued by the global custodian. BKW has no influence on the valuation method used. The annual statement of the funds is audited by external auditors each year and published by the federal offices responsible.
- Level 3: valuations that apply inputs with a material impact on fair value that are not based on observable market data. BKW mainly classifies unlisted equity instruments, contingent purchase price payments and liabilities relating to non-controlling interests under this level. Valuation of such assets requires management estimates of non-observable input factors. The fair values of Level 3 financial assets were determined using the discounted cash flow method and discounted based on a WACC of 5.3% (previous year: 5.3%). A real constant margin was applied to the valuation models (the annual growth in the margin corresponds to inflation). The contingent purchase price payments and liabilities relating to non-controlling interests result from business combinations. The fair values take into account expected cash flows, sales forecasts and other performance criteria. The effect of a change of 10% in the most important non-observable input factors would have no material impact on comprehensive income and the equity of BKW.

There were no transfers between the different levels during the year under review or during the previous year.

CHF millions	Carrying amount at 31.12.2019	Level 1	Level 2	Level 3
Financial assets at fair value through profit or loss				
Current financial assets				
– Debt instruments	30.9	1.0	29.9	
Inventories				
– Certificates (proprietary trading)	10.2	10.2		
Derivatives (current and non-current)	139.4		139.4	
Non-current financial assets				
– Interest in state funds	1,301.3		1,301.3	
Financial assets at fair value through other comprehensive income				
Non-current financial assets				
– Equity instruments	7.2			7.2
Financial liabilities at fair value through profit or loss (FVPL)				
Derivatives (current and non-current)	129.6		129.6	
Other financial liabilities				
– Contingent purchase price liabilities in relation to business combinations	79.0			79.0
– Liabilities relating to non-controlling interests	10.8			10.8

CHF millions	Carrying amount at 31.12.2018	Level 1	Level 2	Level 3
Financial assets at fair value through profit or loss				
Current financial assets				
– Debt instruments	136.9	106.9	30.0	
Inventories				
– Certificates (proprietary trading)	0.7	0.7		
Derivatives (current and non-current)	233.1		233.1	
Non-current financial assets				
– Interest in state funds	1,169.8		1,169.8	
Financial assets at fair value through other comprehensive income				
Non-current financial assets				
– Equity instruments	7.4			7.4
Financial liabilities at fair value through profit or loss (FVPL)				
Derivatives (current and non-current)	245.4		245.4	
Other financial liabilities				
– Contingent purchase price liabilities in relation to business combinations	56.8			56.8
– Liabilities relating to non-controlling interests	8.1			8.1

In addition, the liabilities on 31 December 2019 include the following at fair value:

- Bonds in the amount of CHF 99.0 million (previous year: CHF 111.8 million) as part of a fair-value hedge (Level 2).

The Level 3 debts and assets measured at fair value developed as follows during the period under review:

CHF millions	Equity instruments liabilities		Contingent purchase price liabilities		Liabilities to non-controlling interests	
	2018	2019	2018	2019	2018	2019
At 01.01.	8.6	7.4	41.4	56.8	11.7	8.1
Additions	0.7	0.5	35.2	47.6		5.0
Disposals	-1.7	-0.7	-6.4	-11.2	-3.4	-1.5
Value adjustment						
– Transfer to income statement	n/a	n/a	-12.2	-13.1	-0.2	-0.8
– Changes in value included in other comprehensive income	-0.2	0.0	-1.2	-1.1	0.0	0.0
At 31.12.	7.4	7.2	56.8	79.0	8.1	10.8

38 Disclosure of financial assets and liabilities

38.1 Carrying amount by balance sheet item and allocation to measurement categories in accordance with IFRS 9

Financial assets

CHF millions	Note	Financial assets at amortised cost		Financial assets at fair value through profit or loss		Financial assets at fair value through other comprehensive income		Total	
		2018	2019	2018	2019	2018	2019	2018	2019
Cash and cash equivalents	34	817.4	683.5					817.4	683.5
Trade accounts receivable	16	595.5	579.3					595.5	579.3
Other current financial receivables	16	70.0	69.6					70.0	69.6
Current financial assets	20	140.6	111.7	136.9	30.9			277.5	142.6
Derivatives (current and non-current)	30			233.1	139.4			233.1	139.4
Financial accruals	19	57.4	75.5					57.4	75.5
Non-current financial assets	20	96.4	78.7			7.4	7.2	103.8	85.9
Total		1,777.3	1,598.3	370.0	170.3	7.4	7.2	2,154.7	1,775.8

Financial liabilities

CHF millions	Note	Financial liabilities at amortised cost		Financial liabilities at fair value through profit or loss		Lease liabilities		Total	
		2018	2019	2018	2019	2018	2019	2018	2019
		Trade accounts payable	24	327.5	334.5				
Other current financial liabilities	24	157.4	120.8	29.5	44.6			186.9	165.4
Current financial liabilities	25	408.6	56.2			4.7	32.9	413.3	89.1
Derivatives (current and non-current)	30			245.4	129.6			245.4	129.6
Financial accruals	19	167.6	139.6					167.6	139.6
Non-current financial liabilities	25	1,018.6	1,201.1	111.8	99.0	25.7	147.2	1,156.1	1,447.3
Other non-current financial liabilities	28	66.2	40.0	45.9	64.1			112.1	104.1
Total		2,145.9	1,892.2	432.6	337.3	30.4	180.1	2,608.9	2,409.6

Due to short residual terms to maturity, the carrying amounts of loans and receivables and financial liabilities at amortised cost correspond approximately to the fair value. On 31 December 2019, a difference existed between these values in respect of the debenture bonds, which are included under non-current financial liabilities. The price of the bonds (fair value Level 1) as at year-end amounted to CHF 983.0 million (previous year: CHF 1,118.9 million) with a carrying amount of CHF 891.9 million (previous year: CHF 1,043.4 million).

38.2 Net results of financial assets and liabilities by measurement category in accordance with IFRS 9

Net result

CHF millions	Financial assets at amortised cost		Financial assets and liabilities at fair value through profit or loss		Financial assets at fair value through other comprehensive income		Financial liabilities at amortised cost		Total	
	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019
	Included in net sales:									
– Income from proprietary energy trading			5.5	87.3					5.5	87.3
– Income from energy hedging			21.0	20.1					21.0	20.1
Included in other operating revenue			12.2	15.9					12.2	15.9
Included in operating expenses	-2.5	-10.1		-1.7					-2.5	-11.8
Included in financial result	3.1	-0.2	-3.2	-1.4	-0.2	0.2	-46.5	-40.9	-46.8	-42.3
Included in other comprehensive income			-0.3	1.1	-0.2	0.0	11.3	10.9	10.8	12.0
Total	0.6	-10.3	35.2	121.3	-0.4	0.2	-35.2	-30.0	0.2	81.2

In the financial years shown, no financial instruments were designated as being measured "At fair value through profit or loss".

38.3 Netting arrangements

BKW concludes reciprocal transactions with a range of contractual partners in the scope of its business activities. Where contractually agreed netting procedures have been agreed and the prerequisites for netting balance sheet items have been met, the resulting receivables and liabilities due and owed are reported as net items in the balance sheet.

The following amounts are netted off in the balance sheet on the balance sheet date:

CHF millions	2018			2019		
	Gross values	Netting off	Net values	Gross values	Netting off	Net values
Trade accounts receivable	1,332.3	-736.8	595.5	1,230.1	-650.8	579.3
Trade accounts payable	-1,064.3	736.8	-327.5	-985.3	650.8	-334.5
Positive replacement values	1,239.7	-1,008.9	230.8	692.8	-554.3	138.5
Negative replacement values	-1,250.9	1,008.9	-242.0	-678.8	554.3	-124.5

39 Financial risk management

39.1 Principles of risk management

Risk management is viewed as a supporting function for senior management. Its purpose is to provide decision makers with a transparent representation of the risks associated with individual business activities. The core element is the risk management process, which systematically identifies, assesses and manages risks and monitors the implementation of risk mitigation measures. It is integrated into the financial management process.

The defined risk management principles govern the management of operational risks as well as market price, share price, currency, liquidity, interest rate and credit risks. Principles have also been laid down governing the management of cash and cash equivalents and short- and long-term cash deposits. The Group monitors and controls these risks. Risk Management reports directly to the Head of Finance and Controlling, defines Group-wide requirements for measuring risk, and aggregates risks at Group level.

The risk spectrum monitored by the Group Executive Board covers risks related to operating activities, as well as to strategy and its implementation in projects. A Risk Committee at Group Executive Board level prepares guidelines and risk reports as a decision-making basis for the Group Executive Board. The Risk Committee is an advisory body that submits independent recommendations on risk issues to the Group Executive Board in predefined processes. The Board of Directors last assessed the risks related to operating activities at its meeting on 5 December 2019.

39.2 Credit risks

Credit risk is defined as the potential loss that may arise due to a possible deterioration in creditworthiness or the insolvency of business partners or the non-fulfilment of contractual obligations. Credit risk comprises replacement value, receivables and advance performance risks. The credit risks are managed centrally by Risk Management. The risk management process comprises credit appraisals of counterparties, rating and limit allocations, exposure monitoring and reporting.

Credit risks are managed using credit limits. Credit appraisal involves the use of an internal rating system which assigns credit ratings to counterparties. Under the system, a rating above BBB – corresponds to an investment grade. The appraisal also takes into account external ratings by recognised rating agencies. A credit limit is allocated to each counterparty based on the defined credit rating category and the reported equity, and this is monitored daily. If a credit limit is breached, measures are initiated in cooperation with operational areas. To assess the risk of the overall portfolio, risk weights are calculated using the Basel II internal ratings-based approach.

The following table indicates the credit risk related to trade accounts receivable, to derivatives with a positive replacement value, and to current accounts and term deposits with credit institutions on the balance sheet date, broken down by credit rating. The standardised rating process covers trading, bank and sales counterparties, as well as other counterparties above a certain credit risk threshold. The monitoring of other counterparties is carried out on a decentralised basis using individual approaches.

CHF millions	31.12.2018	31.12.2019
Rating AAA to AA-	285.9	214.0
Rating A+ to BBB-	1,102.1	876.0
Rating BB+ and lower	38.6	8.1
Other counterparties	325.3	400.0
Total	1,751.9	1,498.1
Included under:		
– Trade accounts receivable	595.5	579.3
– Derivatives (current and non-current)	233.1	139.4
– Current financial assets (term deposits only)	105.9	95.9
– Cash and cash equivalents	817.4	683.5

The maximum credit risk (excluding guarantees granted) corresponds to the amount of outstanding monetary financial assets on the balance sheet date. As at 31 December 2019, the maximum credit risk for BKW was CHF 1,768.8 million (previous year: CHF 2,147.3 million) and represents the carrying amount of all financial assets in accordance with Note 38.1, with the exception of the equity instruments contained there. The maximum loss presented is based on the assumption that all counterparties simultaneously become unable to discharge their payment obligations and that existing collateral and netting arrangements cannot be utilised.

As at the balance sheet date, there were issued guarantees of CHF 38.3 million (previous year: CHF 79.4 million), which increase the maximum credit risk accordingly.

Collateral is required primarily for counterparties in the energy trading business, with the credit-worthiness of the collateral issuer being subject to assessment and rating. Investment grade customers may be granted a higher limit than defined for the assigned credit category if collateral is provided. A business relation with non-investment grade counterparties is normally permissible only if collateral is provided. These securities can cover both billed and unbilled items. Collateral amounting to CHF 123.8 million was held for trade accounts receivable and derivatives recorded on the balance sheet as at 31 December 2019 (previous year: CHF 131.8 million).

A cluster risk would arise if excessive credit were granted to an individual customer. The potential loss and the resultant write-down would be disproportionately high if the counterparty were to default. For this reason, care is taken to ensure risks are adequately distributed, with a maximum limit (maximum permissible loan amount) set for each counterparty or group.

In geographical terms, the credit risks are primarily concentrated in Switzerland. On the balance sheet date, counterparties in Switzerland accounted for 75% of the credit risk (previous year: 77%).

39.3 Liquidity risks

Liquidity is defined as the ability to cover cash outflow requirements at any time without restrictions.

At Group level, liquidity management is based on the Group's mid-term planning, budget and forecast. Rolling liquidity plans with a 12-month horizon are drawn up for the entire Group on the basis of these documents and current findings. These plans are used to examine the rationale behind long-term measures in light of the latest information, as well as to identify potential liquidity shortfalls and formulate tactics to optimise the financial result.

Residual terms to maturity of financial liabilities

The following tables provide information on the residual terms to maturity and cash flows of financial liabilities:

CHF millions	Note	Carrying amount at 31.12.2019	Due within 1 year	Due between 1 and 2 years	Due between 2 and 3 years	Due between 3 and 5 years	Due after 5 years
Non-derivative financial liabilities							
Trade accounts payable	24	334.5	334.5				
Other current financial liabilities	24	165.4	165.4				
Financial accruals	19	139.6	139.6				
Financial liabilities	25	1,536.4	118.9	78.3	278.8	127.0	1,265.9
– of which lease liabilities	25	180.1	36.9	34.6	32.8	46.0	51.8
Other non-current financial liabilities	28	104.1	0.0	49.5	48.1	2.3	4.2
Total non-derivative liabilities		2,280.0	758.4	127.8	326.9	129.3	1,270.1
Derivative financial assets and liabilities							
Energy derivatives/options							
– Positive replacement values	30	138.5	130.4	17.6	2.8		
– Negative replacement values	30	–124.5	–105.7	–23.5	–7.6		
Net replacement values		14.0	24.7	–5.9	–4.8	0.0	0.0
Currency forwards and swaps							
– Positive replacement values	30	0.9	0.9				
– Negative replacement values	30	–5.1	–1.3				–3.8
Net replacement values		–4.2	–0.4	0.0	0.0	0.0	–3.8
Gross cash flows related to derivatives							
– Gross outflow			–8,041.9	–1,161.7	–480.5	–13.0	–102.1
– Gross inflow			8,229.9	1,147.2	362.8	5.6	100.8

Amounts in foreign currencies are converted at the exchange rate on the balance sheet date. The table shows the cash flows for interest-bearing liabilities including the corresponding interest rate payments. The cash flows for derivative financial instruments do not take netting arrangements into account.

CHF millions	Note	Carrying amount at 31.12.2018	Due within 1 year	Due between 1 and 2 years	Due between 2 and 3 years	Due between 3 and 5 years	Due after 5 years
Non-derivative financial liabilities							
Trade accounts payable	24	327.5	327.5				
Other current financial liabilities	24	186.9	186.9				
Financial accruals	19	167.6	167.6				
Financial liabilities	25	1,569.4	431.9	56.6	55.5	303.2	1,062.7
Other non-current financial liabilities	28	112.1		78.3	18.9	6.7	8.2
Total non-derivative liabilities		2,363.5	1,113.9	134.9	74.4	309.9	1,070.9
Derivative financial assets and liabilities							
Energy derivatives/options							
– Positive replacement values	30	230.8	197.2	42.7	10.3		
– Negative replacement values	30	–242.0	–192.3	–52.8	–16.3		
Net replacement values		–11.2	4.9	–10.1	–6.0	0.0	0.0
Currency forwards and swaps							
– Positive replacement values	30	2.3	2.3				
– Negative replacement values	30	–3.4				–1.9	–1.5
Net replacement values		–1.1	2.3	0.0	0.0	–1.9	–1.5
Gross cash flows related to derivatives							
– Gross outflow			–7,369.8	–727.4	–264.0	–7.4	
– Gross inflow			7,601.6	712.5	250.1	11.3	

39.4 Market risks

Market risks arise from price and exchange rate fluctuations on unsecured positions of the energy and financial business. In accordance with BKW's risk policy, the procedure for measuring, managing and monitoring risk positions has been defined. Energy and certificate price risks are managed centrally in Trading. When placing effect limits on overall risk, market correlations and market liquidity are considered using the value-at-risk-based market risk-capital ratio. BKW's interest rate, share price risk and exchange rate risk are aggregated in a Group-level risk portfolio. The VaR and position limits required for management purposes are approved by the Group Executive Board. Risk management ensures risks are continuously monitored and reported.

39.4.1 Share price risk

BKW is exposed to a share price risk for financial assets at fair value through other comprehensive income and financial assets at fair value through profit and loss, as well as for interests in state funds (see Note 20). Receivables from state funds do not come under the definition of a financial instrument under the terms of IAS 32 and consequently are not covered by the following statements on risk measurement.

39.4.2 Interest rate risks

The production of power and operation of transmission and distribution grids are capital-intensive. They are financed over the long term with phased due dates. This minimises the impact of interest rate changes on earnings performance. In addition, interest rate hedging instruments are used where necessary. Cash is invested over the short to medium term, primarily in variable-interest positions.

39.4.3 Currency risks

Energy trading is largely conducted in euros. Exchange rate fluctuations have an impact on the results of operations and cash flow positions stated in Swiss francs. To the extent considered necessary, foreign currency positions are secured by means of forward exchange transactions or currency swaps.

39.4.4 Energy price risks/CO₂ certificate price risks

Energy and certificate positions are taken in asset management and proprietary trading. Non-hedged material energy and CO₂ positions are permitted in the current year and in up to six subsequent years.

39.4.5 Risk measurement

The market risks of energy and certificate products are measured using the market risk capital ratio (MRC), while interest rate, exchange rate and share price risks are measured using a value-at-risk (VaR). For the VaR calculation BKW uses a confidence level of 99% with a one-year (interest rate products and equities) or one-day (currencies) holding period. For the MRC, a confidence level of 97.5% and maximum holding period of six months is used in accordance with BASEL III rules.

Value at risk

CHF millions	31.12.2018	31.12.2019
Interest	5.3	0.1
Share price ¹	3.1	2.2
Currencies	3.2	1.6

1 Related to "Financial assets at fair value through other comprehensive income".

The value at risk shows value fluctuation risk based on individual risks that, given no change, could occur in a twelve-month (interest rates, share price)/one-day (currencies) period respectively, taking into account the defined confidence level. The values shown would impact the results and equity.

In the absence of any impairments, fluctuations in the value of assets at fair value through other comprehensive income not affecting results have no influence on the annual results but are recorded directly in Other comprehensive income.

The risk of unfavourable price movements for unsecured positions in electricity, gas, CO₂, coal and oil is determined using the market risk capital ratio (MRC) method. As a supplement to the VaR approach, the MRC ratio indicates the minimum risk capital that should be available to ensure trading losses arising from adverse market developments do not cause a liquidity bottleneck. The calculations are based on a Monte Carlo method, which considers both market correlations and market liquidity. The model parameters are estimated based on a rolling 512-day observation period. Risk management is based on MRC, position and trading volume limits. Proprietary trading is additionally subject to loss limits. As at 31 December 2019, the MRC for proprietary trading amounted to CHF 21.6 million (previous year: CHF 21.1 million).

40 Contingent liabilities and investment obligations

CHF millions	31.12.2018	31.12.2019
Guarantees		
– in favour of associates	0.7	1.2
– in favour of third parties	78.7	37.1
Investment obligations	27.3	11.8
Total	106.7	50.1

Contingent liabilities

CHF 16.5 million of the guarantees granted (previous year: CHF 45.0 million) have a term to maturity of up to twelve months. Guarantees amounting to CHF 6.0 million (previous year: CHF 5.7 million) are granted for an unlimited term.

Nuclear power plant operators are under a limited obligation to make supplementary contributions to the decommissioning and disposal funds in the event that an individual contributor is unable to pay.

Due to existing partner contracts, shareholders in partner plants are obliged to pay the annual costs due on their shares (including interest and repayment of borrowed funds).

Investment obligations

The investment obligations relate to two Norwegian wind farm projects with several wind farm sites under construction. One wind farm site was connected to the grid in 2019. The remaining wind farms are expected to be connected to the grid by 2020. The expected investment costs for BKW amount to a total of EUR 141.7 million. EUR 130.8 million was invested up to 31 December 2019.

41 Events after the balance sheet date

Approval of the consolidated financial statements

The Board of Directors of BKW authorised the approval of these consolidated financial statements on 13 March 2020. The consolidated financial statements are subject to the approval of the BKW General Meeting on 15 May 2020.

Group companies and Associates

	Energy	Grid	Services	Other	Domicile	Share/basic capital in millions	Currency	% direct holding	Company law closing date
Group companies									
Switzerland									
A. Dietrich Kälte Klima Lüftung AG			●		Beringen	0.2	CHF	100.0	31.12.
A1 Elektro AG			●		Urdorf	0.1	CHF	100.0	31.12.
AEK Build Tec AG			●		Rickenbach	0.1	CHF	100.0	31.12.
AEK Elektro AG			●		Solothurn	0.5	CHF	100.0	31.12.
AEK Energie AG	●	●	●	●	Solothurn	6.0	CHF	97.2	31.12.
AEK onyx AG	●	●	●	●	Solothurn	1.0	CHF	100.0	31.12.
AEK Pellet AG	●				Klus-Balsthal	9.0	CHF	100.0	31.12.
ahochn AG			●		Dübendorf	0.3	CHF	100.0	31.12.
Aicher, De Martin, Zweng AG			●		Lucerne	0.1	CHF	100.0	31.12.
antec group AG			●		Dübendorf	0.4	CHF	100.0	31.12.
antec operations AG			●		Dübendorf	0.1	CHF	100.0	31.12.
Arnold AG			●		Wangen an der Aare	0.5	CHF	100.0	31.12.
Arpe AG			●		Buckten	0.1	CHF	100.0	31.12.
ASAG Air System AG			●		Langenthal	0.1	CHF	100.0	31.12.
b+s Elektro Telematik AG			●		Ormalingen	0.1	CHF	100.0	31.12.
Balzer Ingenieure AG			●		Chur	0.1	CHF	100.0	31.12.
Baumeler Leitungsbau AG			●		Buchrain	0.1	CHF	100.0	31.12.
BEBAG Bioenergie Bätterkinden AG	●				Bätterkinden	0.1	CHF	56.0	31.12.
Biomassekraftwerk Otelfingen AG	●				Otelfingen	0.5	CHF	50.0	31.12.
BKW AEK Contracting AG	●				Solothurn	0.2	CHF	100.0	31.12.
BKW Building Solutions AG			●		Ostermundigen	0.2	CHF	100.0	31.12.
BKW Energie AG	●	●	●	●	Bern	132.0	CHF	100.0	31.12.
BKW Grid Switzerland Ltd.		●			Bern	0.1	CHF	100.0	31.12.
BKW Netzbeteiligung Ltd.		●			Bern	25.2	CHF	50.1	31.12.
BKW Wallis AG			●		Visp	0.1	CHF	100.0	31.12.
BPU Ingenieurunternehmung AG			●		Burgdorf	0.1	CHF	100.0	31.12.
cc energie sa			●		Murten	1.0	CHF	66.7	31.12.
ceed Ltd.			●		Solothurn	0.1	CHF	68.0	31.12.
Corell Technologies Sàrl			●		Martigny	0.02	CHF	100.0	31.12.
Curea Elektro AG			●		Landquart	0.2	CHF	100.0	31.12.
Darnuzer Ingenieure AG			●		Davos	0.4	CHF	100.0	31.12.
E3 HLK AG			●		Kriens	0.1	CHF	100.0	31.12.
Electricité G. Bugnard SA			●		Bulle	0.1	CHF	100.0	31.12.
Elektrizitätswerke Wynau AG, Langenthal	●				Langenthal	3.0	CHF	100.0	31.12.
Elektro Feuz AG			●		Grindelwald	0.1	CHF	100.0	31.12.
Elektro Naegelin AG			●		Frenkendorf	0.1	CHF	100.0	31.12.
Elektro Winter AG			●		Rapperswil-Jona	0.3	CHF	100.0	31.12.
Emeltec Sàrl			●		Martigny	0.04	CHF	100.0	31.12.
enerpeak ag			●		Dübendorf	0.1	CHF	100.0	31.12.
engytec AG			●		Risch	0.3	CHF	60.0	31.12.
Flotron AG			●		Meiringen	0.3	CHF	100.0	31.12.
Frey + Gnehm Ingenieure AG			●		Oltten	0.1	CHF	100.0	31.12.
Gebr. Bräm AG			●		Zürich	0.2	CHF	100.0	31.12.
Gesellschaft Mont-Soleil	●				Bern	–	CHF	65.0	31.12.
GRIAG Holding AG			●		Burgdorf	0.1	CHF	100.0	31.12.
Grunder Ingenieure AG			●		Rüegsau	0.1	CHF	100.0	31.12.
Guggisberg Kurz AG			●		Bern	0.2	CHF	100.0	31.12.

	Energy	Grid	Services	Other	Domicile	Share/basic capital in millions	Currency	% direct holding	Company law closing date
Group companies (continued)									
Hensel AG Elektrotechnische Unternehmungen			●		Zürich	0.2	CHF	100.0	31.12.
Hertig Haustechnik AG			●		Wohlen (AG)	0.1	CHF	100.0	31.12.
Hertli & Bertschy AG, elektrische Anlagen			●		Tafers	0.1	CHF	70.0	31.12.
Hinni AG			●		Biel-Benken	0.2	CHF	100.0	31.12.
Holzwärme Grindelwald AG	●				Grindelwald	2.5	CHF	93.4	31.12.
Inag-Nievergelt AG			●		Zurich	0.7	CHF	85.0	31.12.
inelectro sa			●		Porrentruy	0.5	CHF	100.0	31.12.
ISP Electro Solutions AG			●		Ostermundigen	0.9	CHF	100.0	31.12.
IWM AG			●		Monthey	0.1	CHF	100.0	31.12.
Jaggi & Rieder AG			●		Saanen	0.1	CHF	100.0	31.12.
Jermann Ingenieure und Geometer AG			●		Arllesheim	0.1	CHF	100.0	31.12.
Juvent SA	●				Saint-Imier	6.0	CHF	70.0	31.12.
Karl Waechter AG			●		Zurich	0.1	CHF	100.0	31.12.
Kindschi indschegners e geometers SA			●		Scuol	0.1	CHF	100.0	31.12.
Kraftwerk Gohlhaus AG	●				Lützelflüh	1.3	CHF	59.9	31.12.
Kraftwerk Lauenen AG	●				Lauenen	2.0	CHF	85.0	31.12.
Kraftwerk Spiggebach AG	●				Reichenbach i.K.	3.8	CHF	51.0	31.12.
Kraftwerke Fermelbach AG	●				St. Stephan	4.5	CHF	80.0	31.12.
Kraftwerke Kander Alp AG	●				Kandersteg	2.5	CHF	60.0	31.12.
Kraftwerke Milibach AG	●				Wiler (Lötschen)	1.0	CHF	80.0	31.12.
Kraftwerke Ragn d'Err AG	●				Surses	6.0	CHF	80.0	31.12.
Kull Elektro AG			●		Birmensdorf	0.1	CHF	100.0	31.12.
Lami SA, bureau d'études et atelier de dessins			●		Martigny	0.2	CHF	100.0	31.12.
Lutz Bodenmüller AG			●		Beringen	0.1	CHF	100.0	31.12.
Marcel Rieben Ingenieure AG			●		Köniz	0.1	CHF	100.0	31.12.
Marzolo & Partner AG			●		Uster	0.1	CHF	100.0	31.12.
Michel Rime SA			●		Echallens	0.2	CHF	100.0	31.12.
Mollet Energie AG			●		Solothurn	0.2	CHF	66.3	31.12.
Monnet Holding Management SA			●		Buchillon	0.1	CHF	100.0	31.12.
MORA Holding AG			●		Frenkendorf	0.2	CHF	100.0	31.12.
Neukom Installationen AG			●		Rafz	0.2	CHF	100.0	31.12.
Onyx Energie Dienste AG	●		●		Langenthal	2.0	CHF	100.0	31.12.
Onyx Energie Mittelland AG				●	Langenthal	10.5	CHF	100.0	31.12.
Onyx Energie Netze AG		●	●		Langenthal	10.5	CHF	100.0	31.12.
OSTAG Ingenieure AG			●		Burgdorf	0.1	CHF	100.0	31.12.
pi-System GmbH			●		Oberkirch	0.02	CHF	100.0	31.12.
R. Monnet & Cie SA			●		Lausanne	0.2	CHF	100.0	31.12.
Raboud Energie SA			●		Bulle	0.1	CHF	100.0	31.12.
Regionaler Wärmeverbund AG Heimberg-Steffisburg (REWAG)	●				Heimberg	2.5	CHF	51.0	31.12.
Ruefer Ingenieure AG			●		Langnau im Emmental	0.1	CHF	100.0	31.12.
Schmid, Amrhein AG			●		Lucerne	0.3	CHF	100.0	31.12.
Schönenberger & Partner AG Sanitäre Anlagen			●		Tobel-Tägerschen	0.1	CHF	100.0	31.12.
Securon AG			●		Solothurn	0.1	CHF	100.0	31.12.
Simmentaler Kraftwerke AG	●				Erlenbach i.S.	7.3	CHF	84.2	31.12.
Société des Forces Électriques de la Goule SA	●	●			Saint-Imier	3.5	CHF	84.3	31.12.
sol-E Suisse AG				●	Bern	0.1	CHF	100.0	31.12.
swisspro group AG			●		Oberkirch	0.1	CHF	100.0	31.12.

	Energy	Grid	Services	Other	Domicile	Share/basic capital in millions	Currency	% direct holding	Company law closing date
Group companies (continued)									
swisspro Ltd.			●		Urdorf	0.5	CHF	100.0	31.12.
swisspro NW Ltd.			●		Allschwil	0.3	CHF	100.0	31.12.
swisspro PM Ltd.			●		Urdorf	0.1	CHF	100.0	31.12.
swisspro Solutions AG			●		Urdorf	0.1	CHF	100.0	31.12.
swisspro SR Ltd.			●		Renens	0.1	CHF	100.0	31.12.
TECPLAN AG			●		Saanen	0.1	CHF	100.0	31.12.
TID Technische Informationen & Dienstleistungen									
P. Tschannen GmbH			●		Schüpfen	0.1	CHF	100.0	31.12.
TopoFlight AG			●		Meiringen	0.2	CHF	100.0	31.12.
uhub.io ag				●	Bern	0.1	CHF	100.0	31.12.
WAB Technique S.à.r.l.			●		Marly	0.02	CHF	100.0	31.12.
Weber AG, Stäfa			●		Stäfa	0.1	CHF	100.0	31.12.
Werner Electro AG			●		Brig-Glis	0.1	CHF	100.0	31.12.
Wind Energy Trading WET AG	●				Lausanne	0.1	CHF	60.0	31.12.
Winkelmann Elektro AG			●		Kerzers	0.1	CHF	100.0	31.12.
Wiserock AG			●		Meiringen	0.1	CHF	100.0	31.12.
Austria									
AEP Planung und Beratung Gesellschaft mbH			●		Schwaz	0.04	EUR	100.0	31.12.
Daninger + Partner Engineering GmbH			●		Graz	0.04	EUR	100.0	31.12.
Hydroconsult GmbH			●		Graz	0.03	EUR	100.0	31.12.
IKK Engineering GmbH			●		Graz	0.04	EUR	100.0	31.12.
IKK Group GmbH			●		Graz	0.04	EUR	100.0	31.12.
Ingenieurgemeinschaft DI Anton Bilek und DI Gunter Krischner GmbH									
TBH Ingenieur GmbH			●		Graz	0.04	EUR	100.0	31.12.
TBH Ingenieur GmbH			●		Seiersberg-Pirka	0.04	EUR	100.0	31.12.
Croatia									
igr d.o.o.			●		Zagreb	0.02	HRK	100.0	31.12.
France									
BKW France SAS	●	●			Paris	4.0	EUR	100.0	31.12.
Ferme Eolienne de St. Germier SAS	●				Paris	3.0	EUR	100.0	31.12.
Ferme Eolienne St. Julien du Terroux SAS	●				Paris	2.8	EUR	100.0	31.12.
Hydronext SAS	●				Neuilly-sur-Seine	0.2	EUR	100.0	31.12.
Parc Eolien de Fresnoy Brancourt SAS	●				Paris	0.04	EUR	100.0	31.12.
RAZ Energie 3 SAS	●				Paris	3.9	EUR	100.0	31.12.
Saméole Bois du Goulet SAS	●				Paris	2.3	EUR	100.0	31.12.
Germany									
Assmann Beraten + Planen AG			●		Berlin	0.6	EUR	100.0	31.12.
Bajuenergy Wind GmbH			●		Eberswalde	0.03	EUR	100.0	31.12.
BKW Bippen Wind GmbH	●				Berlin	0.03	EUR	100.0	31.12.
BKW Borkum West II Beteiligungs-GmbH	●				Berlin	0.03	EUR	100.0	31.12.
BKW Deutschland GmbH	●		●		Berlin	0.1	EUR	100.0	31.12.
BKW Dubener Platte Wind GmbH	●				Berlin	0.03	EUR	100.0	31.12.
BKW Energie Dörpen Beteiligungs-GmbH	●				Berlin	0.03	EUR	100.0	31.12.
BKW Energie Wilhelmshaven Beteiligungs-GmbH	●				Berlin	0.03	EUR	100.0	31.12.
BKW Engineering SE			●		Berlin	0.1	EUR	100.0	31.12.
BKW Erneuerbare Energien GmbH	●				Berlin	0.03	EUR	100.0	31.12.
BKW Europa SE			●		Berlin	0.1	EUR	100.0	31.12.

	Energy	Grid	Services	Other	Domicile	Share/basic capital in millions	Currency	% direct holding	Company law closing date
Group companies (continued)									
BKW Holleben Wind GmbH	●				Berlin	0.03	EUR	100.0	31.12.
BKW Innovation GmbH			●		Berlin	0.03	EUR	100.0	31.12.
BKW Landkern Wind GmbH	●				Berlin	0.1	EUR	100.0	31.12.
BKW Wind Service GmbH	●		●		Berlin	0.03	EUR	100.0	31.12.
CLIMAPLAN GmbH, Ingenieure für Versorgungstechnik			●		Munich	0.1	EUR	100.0	31.12.
DfN Dienstleistungen für Nukleartechnik GmbH	●				Heidelberg	0.03	EUR	100.0	31.12.
EMUTEK GmbH			●		Norderstedt	0.03	EUR	100.0	31.12.
EWIS GmbH			●		Speyer	0.1	EUR	100.0	31.12.
Hascher Jehle Assoziierte GmbH			●		Berlin	0.03	EUR	100.0	31.12.
Hascher Jehle Berlin GmbH			●		Berlin	0.03	EUR	100.0	31.12.
Hascher Jehle Design GmbH			●		Berlin	0.03	EUR	100.0	31.12.
Hascher Jehle Generalplanungsgesellschaft mbH			●		Berlin	0.03	EUR	100.0	31.12.
Hascher Jehle Objektplanung GmbH			●		Berlin	0.03	EUR	100.0	31.12.
Hascher Jehle Planen und Beraten GmbH			●		Berlin	0.03	EUR	100.0	31.12.
IFB Eigenschenk + Partner GmbH			●		Freital	0.1	EUR	100.0	31.12.
IFB Eigenschenk GmbH			●		Deggendorf	0.03	EUR	100.0	31.12.
igr Aktiengesellschaft			●		Rockenhausen	1.9	EUR	100.0	31.12.
IHB GmbH Ingenieurdienstleistungen			●		Leipzig	0.1	EUR	100.0	31.12.
ingenhoven architects gmbh			●		Düsseldorf	0.3	EUR	100.0	31.12.
ingenhoven architects international gmbh & co. kg			●		Düsseldorf	0.02	EUR	100.0	31.12.
ingenhoven architects international participation gmbh			●		Düsseldorf	0.03	EUR	100.0	31.12.
Ingenieurbüro Prof. Dr.-Ing. Vogt Planungsgesellschaft mbH			●		Leipzig	0.03	EUR	100.0	31.12.
Institut Dr.-Ing. Gauer Ingenieurgesellschaft mbH			●		Regenstauf	0.03	EUR	100.0	31.12.
Institut Gauer GmbH			●		Regenstauf	0.3	EUR	100.0	31.12.
ITS Ingenieurgesellschaft mbH			●		Gotha	0.03	EUR	100.0	31.12.
KAE Kraftwerks- & Anlagen-Engineering GmbH			●		Hausen	0.03	EUR	100.0	31.12.
KFP Ingenieure GmbH			●		Buxtehude	0.03	EUR	100.0	31.12.
KMT Planungsgesellschaft mbH			●		Hamburg	0.1	EUR	100.0	31.12.
KMT Port Consult GmbH			●		Hamburg	0.03	EUR	100.0	31.12.
Lindschulte + GGL Ingenieurgesellschaft mbH			●		Krefeld	0.03	EUR	85.0	31.12.
Lindschulte Ingenieurgesellschaft mbH			●		Nordhorn	0.03	EUR	100.0	31.12.
Lindschulte Ingenieurgesellschaft mbH			●		Münster	0.03	EUR	87.5	31.12.
Lindschulte Ingenieurgesellschaft mbH			●		Erfurt	0.03	EUR	75.0	31.12.
Lindschulte Ingenieurgesellschaft mbH			●		Düsseldorf	0.03	EUR	60.0	31.12.
Lindschulte Ingenieurgesellschaft mbH			●		Burgwedel	0.03	EUR	75.0	31.12.
Lindschulte Ingenieur-Holding GmbH			●		Nordhorn	0.1	EUR	100.0	31.12.
Lindschulte KHP Planungsgesellschaft mbH			●		Oldenburg	0.03	EUR	90.0	31.12.
Lindschulte Sachverständigen und Gutachter GmbH			●		Nordhorn	0.03	EUR	75.0	31.12.
Lindschulte Thillmann GmbH			●		Koblenz	0.03	EUR	90.0	31.12.
LTB Leitungsbau GmbH			●		Radebeul	1.0	EUR	90.0	31.12.
osd GmbH			●		Frankfurt	0.03	EUR	100.0	31.12.
PALATIA Ingenieur- und Städtebau GmbH			●		Rockenhausen	0.04	EUR	100.0	31.12.
Podufal-Wiehofsky Generalplanung GmbH			●		Löhne	0.03	EUR	100.0	31.12.
Propertunities Immobilien Consulting GmbH			●		Düsseldorf	0.03	EUR	80.0	31.12.
Proxima Solutions GmbH			●		Berlin	0.03	EUR	100.0	31.12.
QSB Holding GmbH			●		Lübbecke	0.03	EUR	100.0	31.12.
Solare Datensysteme GmbH			●		Geislingen	0.03	EUR	100.0	31.12.

	Energy	Grid	Services	Other	Domicile	Share/basic capital in millions	Currency	% direct holding	Company law closing date
Group companies (continued)									
STKW Energie Dörpen Verwaltungs-GmbH	●				Berlin	0.03	EUR	100.0	31.12.
Wald + Corbe Consulting GmbH			●		Hügelsheim	0.1	EUR	100.0	31.12.
Wintecs GmbH			●		Lingen	0.03	EUR	100.0	30.06.
Italy									
BKW Hydro Italia S.r.l.	●				Milan	25.4	EUR	100.0	31.12.
BKW Italia S.p.A.	●		●	●	Milan	13.4	EUR	100.0	31.12.
Green Castellana S.p.A.	●				Milan	0.1	EUR	100.0	31.12.
Proxima S.r.l.			●		Milan	0.01	EUR	100.0	31.12.
Tamarete Energia S.r.l.	●				Ortona	3.6	EUR	60.0	31.12.
Traital S.r.l.			●		Milan	0.04	EUR	100.0	31.12.
Volturino Wind S.r.l.	●				Milan	0.03	EUR	100.0	31.12.
Wind Farm Buglia S.r.l.	●				Milan	0.03	EUR	100.0	31.12.
Wind Farm S.r.l.	●				Milan	0.02	EUR	100.0	31.12.
Wind International Italy S.r.l.	●				Milan	52.2	EUR	100.0	31.12.
Montenegro									
igr consult d.o.o.			●		Tivat	0.001	EUR	100.0	31.12.
Norway									
BKW Norway NWP AS	●				Oslo	0.1	CHF	100.0	31.12.
Marker Vindpark AS	●				Oslo	0.003	EUR	100.0	31.12.
Proxima Scandinavia AS			●		Oslo	0.1	NOK	60.0	31.12.
Singapore									
ingenhoven LLP			●		Singapore	–	SGD	100.0	31.12.
Joint operations									
Switzerland									
Bielensee Kraftwerke AG BIK	●				Biel	20.0	CHF	50.0	31.12.
Kraftwerk Sanetsch AG (KWS)	●				Gsteig	3.2	CHF	50.0	30.09.
Wärme Mittelland AG	●				Solothurn	1.0	CHF	50.0	31.12.
Germany									
Lindschulte Ingenieurgesellschaft mbH, Emsland			●		Meppen	0.03	EUR	50.0	31.12.
Associates									
Switzerland									
Abonax AG	●				St. Gallen	1.0	CHF	34.0	31.12.
EDJ, Energie du Jura SA			●		Delémont	7.4	CHF	41.0	30.09.
Electra-Massa AG	●				Naters	20.0	CHF	16.1	31.12.
Electricité de la Liénne SA	●				Sion	24.0	CHF	33.3	30.09.
Erdgas Thunersee AG	●				Interlaken	6.9	CHF	33.3	31.12.
ETRANS Ltd.		●			Baden	7.5	CHF	11.5	31.12.
EVTL Energieversorgung Talschaft Lötschen AG	●				Wiler (Lötschen)	1.3	CHF	49.0	31.12.
Externes Lager der Kernkraftwerke Schweiz	●				Baden	–	CHF	25.0	31.12.
Forces Motrices de Mauvoisin SA	●				Sion	100.0	CHF	19.5	30.09.
GEBNET AG	●				Buchegg	7.0	CHF	40.9	31.12.
Grande Dixence SA	●				Sion	300.0	CHF	13.3	31.12.
Kernkraftwerk Leibstadt AG	●				Leibstadt	450.0	CHF	14.5	31.12.
Kernkraftwerk-Beteiligungsgesellschaft AG (KBG)	●				Bern	150.0	CHF	33.3	31.12.
Kraftwerk Berschnerbach AG	●				Walenstadt	4.5	CHF	49.0	31.12.

	Energy	Grid	Services	Other	Domicile	Share/basic capital in millions	Currency	% direct holding	Company law closing date
Associates (continued)									
Kraftwerk Wannenfluh AG	●				Rüderswil	0.3	CHF	31.9	31.12.
Kraftwerke Hinterrhein AG	●				Thusis	100.0	CHF	7.7	30.09.
Kraftwerke Mattmark AG	●				Saas-Grund	90.0	CHF	11.1	30.09.
Kraftwerke Oberhasli AG	●				Innertkirchen	120.0	CHF	50.0	31.12.
Kraftwerke Wiler-Kippel AG	●				Kippel	6.0	CHF	34.0	31.12.
Metanord SA	●				Bellinzona	18.0	CHF	33.3	31.12.
Nagra, National Cooperative for the Disposal of Radioactive Waste	●				Wettingen	–	CHF	14.3	31.12.
NIS AG		●			Sursee	1.0	CHF	25.0	31.12.
Oberland Energie AG	●				Thun	9.1	CHF	49.0	31.12.
Officine Elettriche dell'Engadina SA	●				Zernez	140.0	CHF	30.0	30.09.
Officine Idroelettriche della Maggia SA	●				Locarno	100.0	CHF	10.0	30.09.
Officine idroelettriche di Blenio SA	●				Blenio	60.0	CHF	12.0	30.09.
Société des Forces Motrices du Châtelot SA	●				Les Planchettes	6.0	CHF	11.7	31.12.
Solutions Renouvelables Boudry SA	●				Boudry	0.9	CHF	49.0	31.12.
Swisseldex Ltd.		●			Bern	1.0	CHF	21.4	31.12.
Swissgrid Ltd.		●			Aarau	320.4	CHF	36.1	31.12.
Thermosource AG	●				Biel	2.0	CHF	50.0	31.12.
Trinkwasserkraftwerk Saas-Grund AG	●				Saas-Grund	1.2	CHF	40.0	31.12.
Zwilag Zwischenlager Würenlingen AG	●				Würenlingen	5.0	CHF	10.7	31.12.
France									
Centrale Electrique de la Plaine	●				Drémil Lafage	0.001	EUR	33.3	31.12.
Germany									
ENGIE Kraftwerk Wilhelmshaven GmbH & Co. KG	●				Wilhelmshaven	–	EUR	33.0	31.12.
HelveticWind Deutschland GmbH	●				Berlin	0.03	EUR	29.0	31.12.
Italy									
EP Produzione Livorno Ferraris S.p.A.	●				Rome	10.0	EUR	25.0	31.12.
HelveticWind Italia S.r.l.	●				Milan	0.01	EUR	29.0	31.12.
Norway									
Nordic Wind Power DA	●				Oslo	–	EUR	28.1	31.12.

Statutory auditor's report on the audit of the consolidated financial statements



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To the General Meeting of
BKW AG, Bern

Bern, 13 March 2020

Statutory auditor's report on the audit of the consolidated financial statements



Opinion

We have audited the consolidated financial statements of BKW AG and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at 31 December 2019 and the consolidated income statement, consolidated statement of comprehensive income, changes in consolidated equity and consolidated cash flows statement for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements (pages 16 to 97) give a true and fair view of the consolidated financial position of the Group as at 31 December 2019, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with International Financial Reporting Standards (IFRS) and comply with Swiss law.



Basis for opinion

We conducted our audit in accordance with Swiss law, International Standards on Auditing (ISAs) and Swiss Auditing Standards. Our responsibilities under those provisions and standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report.

We are independent of the Group in accordance with the provisions of Swiss law and the requirements of the Swiss audit profession, as well as the IESBA Code of Ethics for Professional Accountants, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

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



Key audit matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context. We have fulfilled the responsibilities described in the Auditor's responsibilities for the audit of the consolidated financial statements section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the consolidated financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the consolidated financial statements.



Classification and valuation of energy trading contracts

– Risk

As disclosed in the valuation principles in 5.1 Presentation of revenue and 5.6.1 Energy derivatives, BKW enters into energy supply and purchase contracts with third parties. Depending on the motive for entering into these contracts, they either qualify as own-use transactions or as financial instruments (hedges or trading). This distinction between own-use transaction and financial instrument has far-reaching implications, since own-use transactions are not recognized on the balance sheet, but recorded as energy procurement and revenue on a gross basis. Financial instruments are recorded on a net basis at fair value at each balance sheet date and income resulting therefrom is presented under net sales. BKW has defined clear rules for categorizing, measuring and recognizing contracts on the balance sheet.

– Our audit response

Our audit procedures based on internal controls and included interviews with the persons responsible to confirm that there were no reclassifications of contracts initially classified as own-use transactions or financial instruments, and the accounting treatment applied corresponds to the original motive of the contract. Furthermore, we tested the existing internal controls with regard to the reconciliation of the contracts entered into with counterparties and assessed these controls on the basis of representative samples. At year end, we involved our valuation specialists in performing sample testing to assess balance sheet recognition of the contracts qualifying as financial instruments.

Our audit procedures did not lead to any reservations concerning classification and valuation of energy trading contracts.

Valuation of nuclear provision

– Risk

BKW operated the Mühleberg nuclear power plant until 20 December 2019 and is legally required to pay for the future decommissioning of the power plant and the disposal of its nuclear waste. As it is material, this provision is a key element of our audit. As described in Note 6.2, every five years an updated cost study is prepared which is subsequently assessed by the Swiss Federal Nuclear Safety Inspectorate (ENSI). In accordance with Note 26, the provisions are adjusted for every reassessment as well as in each business year using this cost estimate.

– Our audit response

To assess the provision, among other things we gained an understanding of the different assumptions and of the recorded amounts and compared them with the calculations and records of BKW. In addition, we compared the recorded amounts with the latest available cost study and examined the cause and extent of the changes as well as of the adjustments to estimates based on internal and external documents of BKW. Moreover, we assessed the recording of the adjustments.

Our audit procedures did not lead to any reservations concerning valuation of the nuclear provision.



Valuation of onerous contracts (price curves)

– Risk

According to the list of shareholdings, BKW holds investments in various associates. With regard to the so-called partner power plants, BKW has committed itself to purchase energy at production costs plus a margin. Depending on the cost structure of the partner power plant as well as the current and expected development of prices, this can result in an onerous contract. BKW does not recognize such losses as an impairment on the investment but records a provision under “Onerous contracts energy procurement” in accordance with Notes 6.3 and 26. Various assumptions concerning future values are made in connection with onerous contracts; these assumptions can have a significant impact on the valuation of onerous contracts. In addition, the provisions for onerous contracts are also material.

– Our audit response

Among other things, we enquired of management about the process for identifying onerous contracts. To assess the calculation of the onerous contracts, we involved internal valuation specialists, who reviewed the calculation as well as the assumptions. The price curves were compared with external studies.

Our audit procedures did not lead to any reservations concerning the Valuation of onerous contracts (price curves).

Recognition of acquisitions

– Risk

According to Note 7, BKW acquired several companies during the current business year. Acquisitions are complex transactions, as they include fair value measurement of assets and liabilities, including identification of intangible assets that have previously not been recognized on the balance sheet. Various transactions involve so-called earn-out models, for which purchase prices to be paid at a later date must also be estimated at the time of acquisition. Depending on the significance of the transaction, these valuations are performed by BKW or by involving external specialists. The residual value, in the form of the difference between purchase price and acquired net assets, is goodwill. Goodwill is not systematically amortized but reviewed for impairment at least annually.

– Our audit response

Our work included, among other things, comparing the purchase prices with the underlying contracts and, if applicable, taking into account contingent-purchase price payments expected at a later date. Based on the interim or annual financial statements, we evaluated the reconciliation of carrying amounts to the fair values. With regard to material intangible assets in particular, we involved internal valuation specialists to evaluate the completeness and valuation. Finally, we also assessed the disclosure of the newly acquired companies in Note 7.

Our audit procedures did not lead to any reservations concerning the recognition of acquisitions.



Other information in the annual report

The Board of Directors is responsible for the other information in the annual report. The other information comprises all information included in the annual report, but does not include the consolidated financial statements, the stand-alone financial statements, the remuneration report and our auditor's reports thereon.

Our opinion on the consolidated financial statements does not cover the other information in the annual report and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information in the annual report and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.



Responsibility of the Board of Directors for the consolidated financial statements

The Board of Directors is responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with IFRS and the provisions of Swiss law, and for such internal control as the Board of Directors determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the Board of Directors is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Board of Directors either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.



Auditor's responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Swiss law, ISAs and Swiss Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

A further description of our responsibilities for the audit of the consolidated financial statements is located at the website of EXPERTsuisse: <http://www.expertsuisse.ch/en/audit-report-for-public-companies>. This description forms part of our auditor's report.



Report on other legal and regulatory requirements

In accordance with article 728a para. 1 item 3 CO and the Swiss Auditing Standard 890, we confirm that an internal control system exists, which has been designed for the preparation of consolidated financial statements according to the instructions of the Board of Directors.

We recommend that the consolidated financial statements submitted to you be approved.

Ernst & Young Ltd

Rico Fehr
Licensed audit expert
(Auditor in charge)

Philippe Wenger
Licensed audit expert

ANNUAL REPORT 2019

Financial Statements of BKW AG

FINANCIAL STATEMENTS OF BKW AG

Income Statement

CHF millions	2018	2019
Dividend income	121.4	116.6
Interest income	41.4	36.7
Other operating income	0.4	0.4
Total earnings	163.2	153.7
Interest expense	-38.6	-33.9
Other financial expenses	-1.0	-1.0
Other operating expenses	-4.7	-4.6
Direct taxes	-0.9	-1.0
Total expenses	-45.2	-40.5
Net profit	118.0	113.2

FINANCIAL STATEMENTS OF BKW AG

Balance Sheet

CHF millions	31.12.2018	31.12.2019
Assets		
Cash and cash equivalents	5.8	6.8
Receivables		
– with third parties	0.1	0.8
– with shareholdings	172.1	189.3
Loans	350.0	0.0
Prepaid expenses and accrued income	4.0	2.5
Total current assets	532.0	199.4
Loans	994.4	1,184.4
Other financial assets		
– with third parties	8.8	7.5
Investments	1,490.5	1,490.0
Total non-current assets	2,493.7	2,681.9
Total assets	3,025.7	2,881.3
Liabilities		
Trade accounts payable		
– with third parties	0.6	0.4
Short-term interest-bearing liabilities		
– Bonds	350.0	0.0
Other current liabilities	1.8	1.0
Deferred income and accrued expenses	13.2	8.4
Total current liabilities	365.6	9.8
Non-current interest-bearing liabilities		
– Bonds	700.0	900.0
– Loans payable	294.4	284.4
Total non-current liabilities	994.4	1,184.4
Total liabilities	1,360.0	1,194.2
Share capital	132.0	132.0
Statutory capital reserves		
– Reserves from capital contributions	26.1	26.1
Statutory retained earnings	1,155.0	1,155.0
Voluntary retained earnings		
– Profit carried forward	239.4	262.3
– Net profit	118.0	113.2
Unappropriated retained earnings	357.4	375.5
Treasury shares	–4.8	–1.5
Total shareholders' equity	1,665.7	1,687.1
Total liabilities and shareholders' equity	3,025.7	2,881.3

FINANCIAL STATEMENTS OF BKW AG

Notes to the Financial Statements

Accounting Policies and Valuation

The financial statements were prepared in accordance with the requirements of Swiss law, in particular the articles on commercial accounting and financial reporting of the Swiss Code of Obligations (Articles 957 to 962).

Receivables

Receivables are stated at their nominal value minus operationally necessary impairments. The receivables stated in the balance sheet are mainly current account receivables from BKW Energie AG.

Non-current assets

The holdings retained by BKW AG have been valued individually at acquisition cost minus any necessary impairments.

Finance loans exist in respect of BKW Energie AG and are valued at the nominal value.

Non-current liabilities

The bonds include the convertible bonds in the previous year and the regular bonds. The registered bonds are stated as loans payable. Non-current liabilities are valued at nominal value.

Shareholdings

Company name, legal form, headquarters	Purpose	Share capital	Quote
		CHF	%
BKW Energie AG, Bern	Energy, Grid, Services	132,000,000	100.0
BKW Netzbeteiligung Ltd., Bern	Grid	25,200,000	50.1
BKW Grid Switzerland Ltd., Bern	Grid	100,000	100.0
sol-E Suisse AG, Bern	Energy	100,000	100.0

In all cases, the holding corresponds to the percentage of shares and voting rights. The companies in which BKW AG holds indirect interests are listed on pages 92 to 97.

Bonds

CHF millions	31.12.2018	31.12.2019
3.375% debenture bond 2009–2019	350.0	n/a
3% debenture bond 2007–2022	200.0	200.0
0.75% debenture bond 2018–2025	200.0	200.0
2.5% debenture bond 2010–2030	300.0	300.0
0.25% green bond 2019–2027	n/a	200.0
Total	1,050.0	900.0

In July, BKW successfully issued a green bond in the amount of CHF 200 million with an interest rate of 0.25% and a term of eight years to refinance the expired CHF 350 million bond.

Share capital

The BKW AG share capital as at 31 December 2019 amounted to CHF 132 million and is divided into 52,800,000 registered shares at a nominal value of CHF 2.50 each.

Major shareholders and treasury shares

To BKW's knowledge, the following shareholders held more than 3% of the shares as at 31 December:

	31.12.2018	31.12.2019
Canton of Bern	52.54%	52.54%
Groupe E Ltd.	10.00%	10.00%

Treasury shares

	BKW AG		Group companies		Total	
	CHF millions	Number	CHF millions	Number	CHF millions	Number
At 31.12.2017	31.5	955,921	0.0	0	31.5	955,921
Additions	20.8	320,280	5.2	80,455	26.0	400,735
Transfer	-2.4	-45,005	2.4	45,005	0.0	0
Disposals	-45.1	-1,161,102	-7.6	-125,460	-52.7	-1,286,562
At 31.12.2018	4.8	70,094	0.0	0	4.8	70,094
Additions	26.4	382,915	5.9	84,000	32.3	466,915
Transfer	-3.2	-46,070	3.2	46,070	0.0	0
Disposals	-26.5	-385,915	-9.1	-130,070	-35.6	-515,985
At 31.12.2019	1.5	21,024	0.0	0	1.5	21,024

Contingent liabilities

CHF millions	31.12.2018	31.12.2019
Guarantees for consolidated companies in favour of third parties	503.7	466.2

Shares held by members of the Board of Directors and Group Executive Board

Members of the Board of Directors

Number of shares		31.12.2018	31.12.2019
Urs Gasche	Chairman	4,547	4,697
Hartmut Geldmacher	Deputy Chair	4,920	5,520
Dr. Carole Ackermann	Member (since 18.05.2018)	0	600
Roger Bailod	Member	4,000	4,600
Rebecca Guntern	Member (since 01.09.2018)	0	600
Andreas Rickenbacher	Member (since 18.05.2018)	0	100
Kurt Schär	Member	2,800	1,800
Total		16,267	17,917

In 2019, the members of the Board of Directors acquired a total of 3,250 shares in the scope of the BKW share purchase programme (previous year: 3,600 shares). The share-based payments from the purchase amount to CHF 38,000 (previous year: CHF 36,000) and comprise the benefit in fair value of the preferential purchase of BKW shares on the basis of its tax value.

Members of the Group Executive Board

Number of shares		31.12.2018	31.12.2019
Dr. Suzanne Thoma	CEO	33,708	40,716
Hermann Ineichen	Head of Production	19,693	24,693
Dr. Roland K�pfer	Head of Power Grid	5,341	9,941
Ronald Tr�chsel	CFO	14,870	19,870
Dr. Antje Kanngiesser	Head of Group Markets & Services (since 01.01.2019)	n/a	8,311
Total		73,612	103,531

Individual shares held by members of the Board of Directors and Group Executive Board are subject to a blocking period of up to three years.

APPROPRIATION OF RETAINED EARNINGS

Proposal to the General Meeting

CHF	
Profit carried forward	262,355,233
Net profit	113,190,478
Unappropriated retained earnings	375,545,711

The Board of Directors proposes that retained earnings be appropriated as follows:

CHF	
Dividend of CHF 2.20 per share entitled to a dividend ¹	116,113,747
Balance carried forward	259,431,964
Total	375,545,711

1 Dividends are not paid on treasury shares held by BKW AG. The number of shares that are entitled to receive a dividend at the time of preparation of the financial statements amounts to 52,778,976. The last trading day on which a right to receive dividends is granted is 18 May 2020. From 19 May 2020, the shares will be traded ex-dividend. Had all shares been entitled to receive a dividend, the dividend payment would have amounted to CHF 116,160,000 and the balance carried over would have been CHF 259,385,711.

Subject to approval by the General Meeting, the following will be paid out:

CHF	
Dividend per share	2.20
Minus 35% withholding tax	0.77
Net dividend	1.43

Bern, 13 March 2020

In the name of the Board of Directors
Chairman of the Board
Urs Gasche

Report of the statutory auditor on the financial statements



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To the General Meeting of
BKW AG, Bern

Bern, 13 March 2020

Report of the statutory auditor on the financial statements

As statutory auditor, we have audited the financial statements of BKW AG, which comprise the income statement, balance sheet and notes to the financial statements (pages 104 to 108), for the year ended 31 December 2019.



Board of Directors' responsibility

The Board of Directors is responsible for the preparation of the financial statements in accordance with the requirements of Swiss law and the company's articles of incorporation. This responsibility includes designing, implementing and maintaining an internal control system relevant to the preparation of financial statements that are free from material misstatement, whether due to fraud or error. The Board of Directors is further responsible for selecting and applying appropriate accounting policies and making accounting estimates that are reasonable in the circumstances.



Auditor's responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Swiss law and Swiss Auditing Standards. Those standards require that we plan and perform the audit to obtain reasonable assurance whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers the internal control system relevant to the entity's preparation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control system. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of accounting estimates made, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.



Opinion

In our opinion, the financial statements for the year ended 31 December 2019 comply with Swiss law and the company's articles of incorporation.



Report on key audit matters based on the circular 1/2015 of the Federal Audit Oversight Authority

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period. We have determined that there are no key audit matters to communicate in our report.



Report on other legal requirements

We confirm that we meet the legal requirements on licensing according to the Auditor Oversight Act (AOA) and independence (article 728 CO and article 11 AOA) and that there are no circumstances incompatible with our independence.

In accordance with article 728a para. 1 item 3 CO and Swiss Auditing Standard 890, we confirm that an internal control system exists, which has been designed for the preparation of financial statements according to the instructions of the Board of Directors.

We further confirm that the proposed appropriation of available earnings complies with Swiss law and the company's articles of incorporation. We recommend that the financial statements submitted to you be approved.

Ernst & Young Ltd

Rico Fehr
Licensed audit expert
(Auditor in charge)

Philippe Wenger
Licensed audit expert

ANNUAL REPORT 2019

BKW Green Bond

Reporting on allocation and impact



Dear Investors,
Dear Sir/Madam,

Topics such as climate change and a renewable energy supply have been driving our company for years. With our BKW Building Solutions, we are targeting the growing services business where a significant proportion of CO₂ emissions are generated, specifically in building stock. In 2019 BKW Engineering also significantly strengthened its focus on energy and resource-efficient building planning, concentrating on the highest standards for ecological construction and sustainable architecture.

In the Energy Division, BKW has been investing exclusively in renewable energies for new power plants since 2013. In addition, our Group has committed itself to the 17 sustainability goals of UN Agenda 2030.

As CFO, I am of course delighted that in summer 2019 BKW became the first listed company in Switzerland to issue a green bond in the amount of CHF 200 million. We wanted to explicitly target investors who are looking for purely green investment opportunities on the market. Such investments are increasingly in demand, after all. That our bond was greatly oversubscribed proves this fact.

The launch of our first green bond represents a milestone for our company. After the shutdown of our Nuclear Power Plant in Mühleberg the expansion of renewable energies in Switzerland and abroad will play an even bigger role for BKW. Thanks to this bond we will be able to refinance wind turbines in Norway (CHF 115 million) and France (CHF 60 million) and small hydroelectric power plants in the Canton of Bern (CHF 17 million) and the rest of Switzerland (CHF 8 million). With these steps we are helping to decarbonise energy supply in Europe.

We are pleased to provide you with details below about the allocation of the net proceeds and the impact we have achieved through the projects financed by the green bond since it was issued.

Best regards,

A handwritten signature in black ink, appearing to read 'Ronald Trächsel', is written over a horizontal line.

Ronald Trächsel
CFO

Solutions for a future worth living for

BKW is committed to Agenda 2030 and associated Sustainable Development Goals (SDG) and strives to make an active contribution towards achieving these goals. The 17 SDGs are closely interlinked. BKW has identified 10 of these SDGs that are especially important to us given our wide range of business activities. This is where we can create added value.

Solutions for a future worth living for



The current green bond projects focus on SDGs 7 "Ensure access to affordable, reliable, sustainable and modern energy for all" and 13 "Take urgent action to combat climate change and its impacts". Thanks to hydro and wind technologies, our projects are making a contribution to the desired energy transition in Switzerland and Europe. Furthermore, these projects are supporting the decarbonisation of electricity generation. In this context, we have set the goal that 75% of our production capacity consists of renewable energy technologies by 2023.

BKW's first green bond

In the past, BKW has played a pioneering role in renewable energies and has decided to take the lead with green bonds as well: BKW was the first listed Swiss company to launch a green bond for trading on the Swiss exchange, expanding the existing range of green bonds on the Swiss capital market. The key details of BKW's inaugural green bond are:

Issuer	BKW AG
Status	Senior Unsecured
Issue amount	CHF 200,000,000
Interest rate	0.25 %
Issue date	1. July 2019
Payment	29 July 2019
Maturity	29 July 2027
ISIN	CH048708729
Proceeds of issue	CHF 200,010,000

The BKW Green Bond Framework, including BKW's sustainability approach and the (re)financed projects, were audited by ISS oekom. The Framework and the projects have been given a positive assessment. The submitted projects' contribution to SDGs 7 and 13 were rated as significant.

The 117.3 GWh of electricity produced in 2019 and attributable to the green bond corresponds to the annual consumption of 26,000 households¹ in Switzerland. The associated CO₂ emissions avoided by the green bond amounted to 1,904.9 tonnes in 2019.

Reporting on allocation and impact

To ensure the transparency and quality of the green bonds issued, BKW reports annually on the allocation of net proceeds and impact. The following reporting principles have been defined for quality assurance purposes:

Green bond reporting principles

Installed capacity (MW)

In the case of projects in operation, installed capacity in megawatts (MW) indicates the installed capacity attributable to the green bond based on the commissioning documentation. In the case of projects under construction, the capacity shows the planned capacity attributable to the green bond based on the manufacturer's type certificate or the hydroelectric concession.

Production (GWh)

Production in gigawatt hours (GWh) indicates production based on production data (energy statistics) for 2019 attributable to the green bond. In the first report, production includes the energy generated since the payment date for the green bond on 29 July 2019.

Greenhouse gas emissions in CO₂e or CO₂ (t) avoided

The green bond projects generate renewable electricity in Norway, France and Switzerland. When calculating the emissions avoided, we assume that the electricity generated by the green bond projects would otherwise have been generated using the country's typical production mix.

The emission factors for these production mixes form our baseline accordingly. For Switzerland, data from treeze² indicates CO₂ equivalents in grams per kilowatt hour. For Norway and France we use data from the International Energy Agency (IEA)³. As the IEA only considers CO₂ and not CO₂ equivalents as a greenhouse gas, the final calculation of the saving is conservative. The following values are used for the calculations:

- Switzerland: 29.8 g CO₂e/kWh
- France: 40.9 g CO₂/kWh
- Norway: 8.3 g CO₂/kWh

¹ Calculation is based on the consumption of a household with a five-room apartment of 4,500 kWh/year based on <https://www.strompreis.elcom.admin.ch/BaseDataSelection.aspx>

² treeze Ltd. (Messmer, A., Frischknecht R.) (2016): Umweltbilanz Strommix Schweiz 2014 (German only)

³ IEA data 2014, CO₂ emission factors from electricity and heat generation for world countries, <http://wds.iea.org/>

The direct emissions based on treeze are used for the projects. These are 0 g CO₂e/kWh each for the small hydropower and wind onshore technologies.

The CO₂ in tonnes (t) avoided is calculated by multiplying the production quantity of a project attributable to the green bond by the CO₂ emission factor of the production mix of the country in which the project is located.

Allocation (CHF millions)

The allocation in millions of Swiss francs (CHF millions) corresponds to the amount of the net proceeds from the green bond allocated to the respective technology.

Allocation (%)

The allocation in % corresponds to the share of the net proceeds from the green bond allocated to the respective technology.

Reporting on allocation and impact

Technology	Project	Country	Status	Year	MW	Production 2019 GWh	Attributable to the Green Bond ...		Allocation ¹	
							Comission- ing	Installed production	CO ₂ or CO ₂ e avoided 2019 t	CHF millions
Small hydro	Ragn d'Err ²	Switzerland	Operation	2016	2.3	3.4		101.9		
	Schattenhalb			2017	1.4	2.1		63.0		
	Spiggebach			2017	0.8	0.9		26.9		
	Sousbach			2023	0.0	0.0		0.0		
Subtotal small hydro					4.5	6.4	191.8	20.0	10.0%	
Wind	Saint Germier	France	Operation	2017	7.0	10.1		412.8		
	St. Julien du Terroux			2017	6.1	4.9		199.0		
	RAZ Energie 3			2017	13.3	9.3		382.2		
	Roan			2018	23.9	32.5		269.8		
	Marker	Norway	Operation	2019	40.5	49.9		414.5		
	Hitra II			2019	7.5	4.2		34.8		
	Harbaksfjellet			2020	11.3	0.0		0.0		
	Geitfjellet			2020	16.3	0.0		0.0		
	Kvenndalsfjellet		Construction	2020	10.1	0.0		0.0		
Subtotal wind					136.0	110.9	1,713.1	175.0	87.5%	
Not allocated								5.0	2.5%	
Total					140.5	117.3	1,904.9	200.0	100.0%	

1 The allocation only includes refinancing of projects under construction or in operation.

2 Ragn d'Err: According to the Green Bond Framework, the lookback period of 36 months may be exceeded. The excess must be disclosed transparently. In the case of the Ragn d'Err project, this period was slightly exceeded at 38 months. Due to the project's long term, the project was refinanced with the green bond, despite the short overrun.

Report of the independent auditor on allocation and impact



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To the management of
BKW AG, Bern

Bern, 13 March 2020

Independent assurance report

We have undertaken a limited assurance engagement of the following information and metrics disclosed in the BKW AG annual report 2019 in the chapter "BKW Green Bond" for the reporting period from 29 July 2019 to 31 December 2019:

- Allocation of proceeds and impact metrics (hereafter "the KPIs") as disclosed in the table "Reporting on allocation and impact" on page 117.

Our engagement was limited to the KPIs listed above. We have not assessed the following KPIs or information disclosed in the report:

- Information other than the KPIs indicated above
- Qualitative statements



Responsibility of BKW AG's management

The management of BKW AG is responsible for the preparation of the information and KPIs disclosed in the table on page 117 in the chapter "BKW Green Bond" of the annual report in accordance with the applicable criteria. This responsibility includes the design, implementation and maintenance of internal controls relevant to the preparation of KPIs that are free from material – intentional or unintentional – misstatement, whether due to fraud or error. Management is further responsible for the selection and application of the applicable criteria and maintaining appropriate records.



Applicable criteria

BKW AG defined the following as applicable criteria (hereafter "applicable criteria"):

- "Green Bond reporting principles" presented on pages 116/117
- BKW Green Bond Framework (online accessible on BKW's homepage: www.bkw.ch)

We believe that these criteria are a suitable basis for our review.

The quantification of greenhouse gases (GHG) is subject to inherent uncertainty because of incomplete scientific knowledge used to determine emission factors and the values needed to combine emissions of different gases.



Independence and quality control

We have complied with the independence and other ethical requirements of the International Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants (IESBA), which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

The firm applies the International Standard on Quality Control 1 and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.



Our responsibility

Our responsibility is to express a limited assurance conclusion on the above-mentioned KPIs based on the procedures we have performed and the evidence we have obtained. We conducted our limited assurance engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 "Assurance Engagements Other than Audits or Reviews of Historical Financial Information", issued by the International Auditing and Assurance Standards Board. This standard requires that we plan and perform this engagement to obtain limited assurance about whether the KPIs, in all material respects, were prepared in accordance with the applicable criteria.

Based on risk and materiality consideration we have undertaken procedures to obtain sufficient appropriate evidence. The procedures selected depend on the auditor's judgment. This includes the assessment of the risks of material misstatements in the report with regard to the applicable criteria. The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in scope than for, a reasonable assurance engagement. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement.

The procedures we performed included inquiries, observation of processes performed, inspection of documents, analytical procedures, evaluating the appropriateness of quantification methods and reporting policies, and agreeing or reconciling with underlying records.



Summary of work performed

Our limited assurance procedures included, amongst others, the following work:

- Assessment of the suitability of the underlying criteria and their consistent application
- Inquiries of company's representatives responsible for collecting, consolidating and calculating the KPIs in order to assess the process of preparing the data, the reporting system, the data capture and compilation methods as well as internal controls to the extent relevant for the limited assurance engagement
- Inspection of the relevant documentation of the systems and processes for compiling, analyzing, and aggregating data and testing such documentation on a sample basis
- Analytical procedures and inspection of documents on a sample basis with respect to the compilation and reporting of quantitative data
- Critical review of the report regarding plausibility and consistency of the KPIs with the information in the report

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



Our conclusion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the KPIs in the report are not prepared, in all material respects, in accordance with the applicable criteria.

Ernst & Young Ltd

Matthias Zeller
Associate Partner

Mark Veser
Senior Manager

ANNUAL REPORT 2019

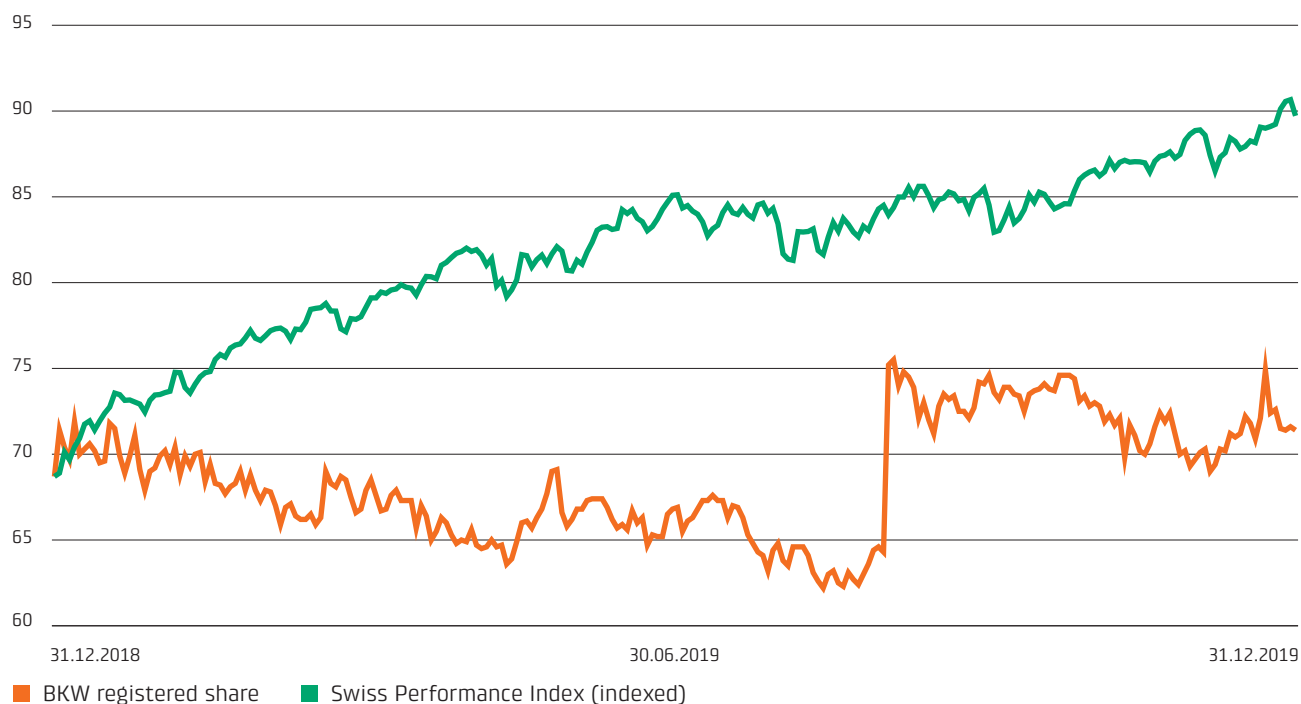
Investor Information

INVESTOR INFORMATION

Important Information on the Share, Bonds and Financial Calendar

Performance of the BKW share

31.12.2018 – 31.12.2019



In 2019, the BKW share movement was slightly positive. The share increase of +4% in the 2019 financial year fell short of the SPI (+30%), despite the highly positive results that BKW presented. The strong 2018 results were communicated in March, and the outstanding results for the half-year 2019 in September. Both sets of results exceeded market expectations and led to positive share price reaction. In particular, the 2019 half-year results managed to significantly exceed market expectations in a challenging business environment. At the same time, BKW increased its outlook for the 2019 financial year. On the day of publication, this led to a striking share price increase of +17%. The BKW share closed the year at CHF 71.40 (+ CHF 2.70).

The shares of BKW AG are listed on the main segment of the SIX Swiss Exchange.

Ticker symbol on SIX	BKW
Securities number	13.029.366
ISIN code	CH0130293662

The BKW share is included in the Swiss Performance Index (SPI).

Appropriation of profit

The Board of Directors proposes to the General Meeting a dividend of CHF 2.20 per share for the 2019 financial year. The dividend will be paid out on 22 May 2020.

Restrictions on share transferability

The Company may refuse to register an acquirer of shares in the register of voting shareholders for the following reasons:

- a) If the acquisition results in a natural person, a legal entity or a partnership holding (directly or indirectly) more than 5% of the entire share capital. The same restriction applies to legal entities, partnerships, groups of persons or joint ownerships that are bound by capital or voting rights, shared management or otherwise linked. It also applies to all natural persons, legal entities or partnerships acting jointly or in concert in order to acquire shares;
- (b) Unless the acquirer expressly declares that they have acquired the shares in their own name and on their own account.

Major shareholders and treasury shares

To BKW's knowledge, the following shareholders held more than 3% of the shares as at 31 December:

	31.12.2018	31.12.2019
Canton of Bern	52.54%	52.54%
Groupe E Ltd.	10.00%	10.00%

The free float amounts to 37.5%.

The market capitalisation of BKW at the close of 2019 was CHF 3.8 billion.

Key figures per share

CHF	31.12.2018	31.12.2019
Result	3.56	7.42
Equity	60.66	65.59
Dividend	1.80	2.20
Dividend yield (in %) ¹	2.6	3.0
Price/earnings ratio ¹	19.3	9.6
Year-end	68.70	71.40
Year high	71.60	75.50
Year low	53.80	62.20

1 Based on year-end closing price

Bonds

At 31 December 2019, BKW had the following bonds outstanding:

	Nominal amount	Term	Due	ISIN code
3 % debenture bond	CHF 200 million	2007–2022	27.04.2022	CH0030356718
0.75 % debenture bond	CHF 200 million	2018–2025	25.10.2025	CH0435590358
2.5 % debenture bond	CHF 300 million	2010–2030	15.10.2030	CH0117843745
0.25 % green bond	CHF 200 million	2019–2027	29.07.2027	CH0487087295

In July, BKW became the first listed Swiss company to launch a green bond. BKW's fixed-interest senior green bond worth CHF 200 million has a coupon of 0.25 % and a term of eight years. The payment of the bond took place on 29 July 2019. BKW is thus refinancing the construction of various Swiss small hydroelectric power stations and wind farms in Norway and France.

Financial calendar

General Meeting	15 May 2020
Ex-dividend date	19 May 2020
Dividend payment	22 May 2020
Publication of 2020 half-year results	1 September 2020

Contact: investor.relations@bkw.ch

Production Facts and Figures

	Energy portion ¹ %	Installed production, BKW portion MW	2018 BKW purchases GWh	2019 BKW purchases GWh	Change %
Own power plants and Group companies					
Hydroelectric plants					
Aarberg	100.0	15.0	83.4	85.1	2.0
Bannwil	100.0	27.0	144.0	140.2	-2.6
Kallnach	100.0	8.1	61.1	57.8	-5.4
Kandergrund	100.0	18.8	105.5	95.9	-9.1
Mühleberg	100.0	45.0	162.3	157.4	-3.0
Niederried-Radelfingen	100.0	15.0	82.3	78.1	-5.1
Spiez	100.0	18.6	103.4	103.4	0.0
Simmentaler Kraftwerke AG	100.0	29.1	90.1	84.4	-6.3
Isch	100.0	1.4	5.3	5.7	7.5
Société des forces électriques de la Goule SA	100.0	5.2	20.2	17.9	-11.4
Elektrizitätswerke Wynau AG	100.0	20.2	75.1	85.4	13.7
Total hydroelectric plants		203.4	932.7	911.3	-2.3
Nuclear power plants					
Mühleberg	100.0	373.0	2,940.4	3,078.2	4.7
Fossil-fuel power plants					
Tamarete Energia S.r.l.	60.0	62.4	100.7	160.3	59.2
New renewable energy					
Fotovoltaik Schweiz	100.0	9.8	11.5	8.3	-27.6
Biomasse Schweiz	100.0	1.4	19.0	10.9	-42.5
Kleinwasser Schweiz	100.0	33.3	139.2	138.3	-0.6
BKW Hydro Italia S.r.l.	100.0	59.8	188.1	192.7	2.4
Juvent S.A.	100.0	24.2	67.0	82.9	23.8
Parc Eolien Fresnoy Brancourt SAS	100.0	13.8	32.1	34.5	7.4
Sameole Bois du Goulet SAS	100.0	10.0	22.5	22.6	0.3
Ferme Eolienne St Julien du Terroux SAS	100.0	10.3	19.1	18.3	-4.1
Ferme Eolienne de Saint Germier SAS	100.0	10.0	29.3	31.7	8.2
RAZ Energie 3 SAS	100.0	18.4	39.4	40.4	2.5
BKW Erneuerbare Energien GmbH	100.0	15.0	17.3	19.4	11.9
BKW Holleben Wind GmbH	100.0	25.5	35.9	39.8	11.0
BKW Bippen Wind GmbH	100.0	27.6	37.9	41.0	8.3
BKW Dubener Platte Wind GmbH	100.0	40.0	61.4	64.3	4.6
BKW Landkern Wind GmbH	100.0	8.0	12.5	14.4	14.8
Wind Farm S.r.l.	100.0	41.4	51.2	55.6	8.6
Wind Farm Buglia S.r.l.	100.0	20.0	27.9	31.8	13.9
Wind International Italy S.r.l.	100.0	81.9	124.6	136.6	9.7
Volturino Wind S.r.l.	100.0	25.2	59.4	67.7	14.0
Green Castellaneta S.p.A.	100.0	56.0	123.7	131.2	6.1
Marker Vindpark AS	100.0	54.0	0.0	131.3	
Total new renewable energy		585.6	1,118.9	1,313.7	17.4
Total own power plants and Group companies		1,224.4	5,092.7	5,463.5	7.3

1 Due to special energy supply agreements, the energy portion may deviate from the capital shareholding.

	Energy portion ¹ %	Installed production, BKW portion MW	2018 BKW purchases GWh	2019 BKW purchases GWh	Change %
Holdings and purchasing rights					
Hydroelectric plants					
Bielensee Kraftwerke AG BIK	50.0	18.9	56.8	76.0	33.9
Officine idroelettriche di Blenio SA	12.0	50.0	91.7	118.1	28.8
Electra-Massa AG	16.1	54.8	131.2	125.0	-4.7
Electricité de la Lienne SA	25.0	24.9	59.8	62.4	4.3
Engadiner Kraftwerke AG	29.7	121.8	360.6	446.8	23.9
Grande Dixence SA	13.3	206.0	313.6	313.6	-0.0
Kraftwerke Hinterrhein AG	7.6	50.0	91.5	118.8	29.8
Kraftwerke Mattmark AG	11.1	29.3	71.8	83.9	16.9
Forces Motrices de Mauvoisin SA	19.5	82.2	212.2	220.1	3.7
Kraftwerke Oberhasli AG	50.0	659.8	951.1	1,096.4	15.3
Kraftwerk Sanetsch AG (KWS)	50.0	9.0	18.8	19.8	5.0
Officine idroelettriche della Maggia SA	10.0	57.2	89.0	156.4	75.7
Flumenthal	37.9	9.5	50.7	52.0	2.6
Société des Forces Motrices du Châtelot SA	11.7	4.6	10.0	9.4	-6.0
Argessa AG	63.0	20.8	57.2	44.2	-22.7
Total hydroelectric plants		1,398.9	2,566.0	2,942.9	14.7
Nuclear power plants					
Kernkraftwerk Leibstadt AG	14.5	179.3	1,153.2	1,284.3	11.4
Cattenom	3.0	155.0	979.6	980.5	0.1
Total nuclear power plants		334.3	2,132.8	2,264.8	6.2
New renewable energy					
HelveticWind Sendenhorst GmbH	100.0	4.2	21.7	20.7	-4.7
HelveticWind Lüdersdorf Parstein GmbH	100.0	6.5	38.0	43.3	13.9
HelveticWind Wulkow GmbH	100.0	2.9	19.8	22.0	11.0
HelveticWind Prötzel GmbH	100.0	5.2	22.3	25.0	12.3
HelveticWind Gross Welle GmbH	100.0	5.8	29.6	32.3	9.3
Ventisei S.r.l.	100.0	16.0	35.9	34.1	-5.0
Mont-Soleil solar power plant	100.0	0.2	0.6	0.5	-16.7
Total new renewable energy		40.8	167.9	177.9	6.0
Fossil-fuel power plants					
EP Produzione Livorno Ferraris S.p.A.	25.0	192.0	752.3	1,029.7	36.9
ENGIE Kraftwerk Wilhelmshaven GmbH & Co. KG	33.0	239.6	963.1	354.7	-63.2
Total fossil-fuel power plants		431.6	1,715.4	1,384.4	-19.3
Unmanaged energy from financial interests		28.9	17.0	148.2	771.8
Total holdings and purchasing rights		2,234.6	6,599.1	6,918.2	4.8
Total production including purchases		3,459.0	11,691.8	12,381.7	5.9

1 Due to special energy supply agreements, the energy portion may deviate from the capital shareholding.

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Corporate Governance

Corporate Governance

BKW's Board of Directors and the Group Executive Board attribute great importance to good corporate governance in the interests of its shareholders and other stakeholders such as customers, public corporations and employees. In addition to the relevant legal provisions, the basic principles and rules relating to corporate governance at BKW are embodied in BKW's articles of incorporation, organisational regulations, Code of Conduct and regulations governing the BKW Board Committees.

BKW guarantees the required level of transparency and allows its shareholders and other stakeholders to make their investment decisions on the basis of sound facts. With the implementation of the recognised corporate governance principles as well as a balanced combination of management and controls, BKW also manages the company in a value-driven, sustainable manner according to statutory requirements. To this end, BKW also integrates material sustainability aspects in its corporate strategy. It is based on regional and global challenges and integrates various stakeholders across dialogue processes.

The management structure of BKW is designed so that responsibilities are clearly assigned and unilateral concentration of powers and conflicts of interest are avoided. In line with this, the functions of Chairman of the Board of Directors and CEO are separate. Furthermore, no member of the Board of Directors has an executive function. All members of the Board of Directors, with the exception of Andreas Rickenbacher who was delegated by the Canton of Bern, were nominated for election individually at the General Meeting in May 2019. For many years, the Board of Directors has included both male and female members. The Board of Directors thereby also ensures the diversity of its membership.

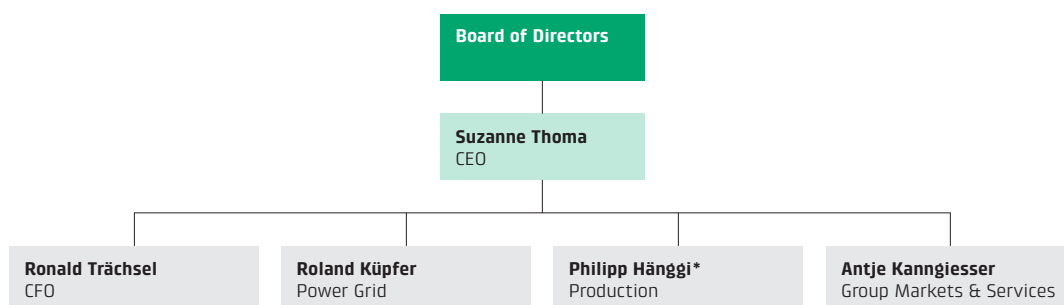
The information below is presented in accordance with the current requirements of the corporate governance guidelines of the SIX Swiss Exchange and the Swiss Code of Best Practice for Corporate Governance 2016 produced by *economiesuisse*. Remuneration of the top-level management of the company is reported in the Remuneration Report contained on pages 145 to 155. The information disclosed in this report reflects the situation at 31 December 2019. Any material changes that have been agreed or have occurred between this date and the printing of the report are listed in Note 10 of this report. The articles of incorporation of BKW AG at www.bkw.ch/statutes, the organisational structure of the Group Executive Board at www.bkw.ch/organisation, the Code of Conduct at www.bkw.ch/codeofconduct, sustainability reports at www.bkw.ch/sustainability and a range of other useful information can be found on the BKW website.

1 Group structure and shareholders

1.1 Group structure

The operational Group structure of BKW can be derived from the following illustration and the segment reporting under item 8 on pages 42 to 44 of the BKW Group's consolidated financial statements.

The entire organisation of the BKW Group can be viewed at www.bkw.ch/organisation.



* Member of the Group Executive Board as of 1 January 2020

Listed Group companies

The shares of BKW AG, which has its headquarters in Bern, have been listed on the SIX Swiss Exchange since 12 December 2011. On 31 December 2019, BKW's stock market capitalisation amounted to CHF 3,768 million.

About the BKW share

Securities code	BKW
Securities number	13.029.366
ISIN	CH0130293662
Trading currency	CHF
Type of security	Registered share

Scope of consolidation of the BKW Group

With the exception of BKW itself, BKW's consolidation group only includes companies that are not listed separately on the stock exchange. The individual holdings of BKW in companies that are fully consolidated in the consolidated financial statements are listed on pages 92 to 97 of the consolidated financial statements. In all cases, the holding corresponds to the percentage of shares and voting rights.

1.2 Major shareholders

in %	Holding at 31.12.2018	Holding at 31.12.2019
Canton of Bern	52.54	52.54
Groupe E Ltd.	10.00	10.00
BKW AG and Group companies	0.13	0.04

No other shareholders registered more than 3% of the voting rights of BKW during the reporting year in accordance with Article 120 of the Federal Act on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading (FMIA).

The disclosures pursuant to Art. 120 FMIA that were published by BKW in the reporting year

2019 on the electronic publication platform of SIX Exchange Regulation can be viewed at the link <https://www.six-exchange-regulation.com/en/home/publications/significant-shareholders.html>.

1.3 Cross shareholdings

BKW has no cross shareholdings of more than 5% in a company outside of the BKW Group.

2 Capital structure

2.1 Capital

The share capital of BKW as of 31 December 2019 amounts to CHF 132,000,000.00 and is divided into 52,800,000 fully paid-up registered shares, each with a par value of CHF 2.50.

2.2 Authorised and conditional share capital

As of 31 December 2019, BKW has no authorised share capital or conditional share capital.

2.3 Changes in equity for the last three years

The share capital of BKW remained unchanged from 2017 to 2019.

2.4 Shares and participation certificates

All 52,800,000 registered shares in BKW with a par value of CHF 2.50 each are fully paid up. All shares carry equal voting rights. Every share represented at the General Meeting is entitled to one vote. The company does not print or provide certificates for registered shares. However, any shareholder may request that certification of their shareholding be issued free of charge.

BKW has not issued any participation certificates.

2.5 Dividend rights certificates

BKW has not issued any dividend rights certificates.

2.6 Restrictions on transferability and nominee registration

Registered BKW shares can only be transferred by assignment or according to the provisions of the Swiss Intermediated Securities Act. BKW must be notified of the assignment. The Board of Directors may refuse to enter a purchaser in the share register as a shareholder with voting rights if the purchaser:

- controls, directly or indirectly, more than 5% of the total share capital as a result of the entry, or
- did not acquire the shares in his own name and for his own account.

For details on the entry restriction, see Art. 5 of the articles of incorporation: www.bkw.ch/statutes

Nominal entries, i.e. entries of shareholders who acquire shares in their own name but for the account of a third party, are possible, but these shares have no voting rights.

See Section 6.2 of this report for the procedure and conditions for lifting the restriction on transferability.

2.7 Convertible securities and options

BKW has no outstanding convertible bonds and has not issued any options.

3 Board of Directors

According to the articles of incorporation, the Board of Directors shall consist of between seven and 10 members. There are currently seven members, all of whom are non-executive and independent. One member is appointed to

the Board of Directors by the Canton of Bern in accordance with Article 762 of the Swiss Code of Obligations (OR) and Article 19 of the articles of incorporation.

3.1 Members

Composition	Role	Held office since
	Chairman	
Urs Gasche	Chairman of the Remuneration and Nomination Committee	2011
	Deputy Chair of the Board	
Hartmut Geldmacher	Member of the Remuneration and Nomination Committee	2011
	Member	
Dr. Carole Ackermann	Member of the Audit and Risk Management Committee	2018
	Member	
Roger Bailod	Chairman of the Audit and Risk Management Committee	2013
Rebecca Guntern	Member	2018
	Member	
Andreas Rickenbacher ¹	Member of the Remuneration and Nomination Committee	2018
	Member	
Kurt Schär	Deputy Chairman of the Audit and Risk Management Committee	2012

¹ Delegate of the Canton of Bern

This means that no member of the Board of Directors is also a member of the BKW Group Executive Board or of the management body of any Group company. Nor was any member of the Board of Directors also a member of the BKW

Group Executive Board or of the management body of any Group company in the past three financial years. Nor does any member have significant business relationships with BKW or a Group company.

3.2 Activities and vested interests

Urs Gasche (1955, CH)

Lawyer

Professional background, career

Since 2018 Consultant to the attorneys-at-law and business consultants firm Markwalder Emmenegger, lawyer without forensic activity, mainly working on the boards of companies, foundations and associations in the energy sector (BKW), in the health sector and in cultural institutions

2011–2017 Member of the Swiss National Council

2010–2017 Partner in the attorneys-at-law and business consultants firm Markwalder Emmenegger, lawyer without forensic activity, mainly working on the boards of companies, foundations and associations in the energy sector (BKW), in the health sector and in cultural institutions

2002–2010 Finance Minister of the Canton of Bern, Member of the Executive Council and Representative of the Canton of Bern on the Board of Directors of BKW FMB Energie AG, Bern

Significant mandates

– Member of the Board of sitem-insel AG, Bern

Hartmut Geldmacher (1955, D)

MBA

Professional background, career

Since 2011 Independent businessman

2002–2011 Member of the Board of Management and Employee Relations Director at E.ON Energie AG, Munich

Significant mandates

– Member of the Supervisory Board and Chairman of the Accounts, Finance and Audit Committee of Bayernwerk AG, Regensburg

Carole Ackermann (1970, CH, A)

Dr. oec. HSG

Professional background, career

Since 2007 CEO and co-founder of Diamondscull AG, Zug

2004–2007 Member of the Executive Board of Ionbond AG, Olten, CEO Ionbond China

1999–2004 Director of Saurer Group AG, Arbon

Significant mandates

– Member of the Board of BVZ Holding AG

– Member of the Board of Allianz Suisse Insurance Company Ltd, Wallisellen

– Member of the Board of Allianz Suisse Life Insurance Company Ltd, Wallisellen

– Senior Lecturer BWL/Integration Project at the University of St. Gallen

Roger Baillod (1958, CH)

Degrees in business studies and auditing

Professional background, career

Since 2017 Professional director and management consultant

1996–2016 Chief Financial Officer (to 09/2016) and Member of the Group Executive Board of Bucher Industries AG in Niederweningen, Zurich (to 12/2016)

Significant mandates

– Member of the Board of Rieter Holding AG, Winterthur

– Member of the Board of Klingelberg AG, Zurich

– Member of the Board of Migros-Genossenschafts-Bund, Zurich

– Deputy Chair of the Board of Ed. Geistlich Sons, Limited Company for Chemical Industry, Schlieren

Rebecca Guntern Flückiger (1972, CH)
Degree in pharmaceutical sciences from the University of Basel, Bachelor of Business Administration

Professional background, career

- Since 2018 Head of Cluster Europe, Sandoz Pharmaceuticals AG
- 2015–2018 Head of Cluster BACH, Sandoz Pharmaceuticals AG
- 2013–2015 Head of Strategic Accounts & Commercial Excellence WEMEA, Sandoz Pharmaceuticals AG
- 2011–2013 Country Head of Spain & Cyprus, Sandoz Pharmaceuticals AG
- 2008–2011 Country Head of Switzerland, Sandoz Pharmaceuticals AG

Significant mandates

- Member of the Board of Sandoz Pharmaceuticals AG, Risch
- Director of the Board of Sandoz Limited UK
- Member of the Board of Société Suisse des Explosifs SA, Brig-Glis

Andreas Rickenbacher (1968, CH)
Lic. rer. pol, business economist

Professional background, career

- Since 2016 Board of Directors, entrepreneur, management consultant
- 2016–2018 Cantonal representative on the Board of Directors of Swissgrid Ltd. (05.2016 to 05.2018)
- 2006–2016 Executive Council of the Canton of Bern, Minister of Economic Affairs (to 06.2016); cantonal representative on the Board of Directors of Gebäudeversicherung des Kantons Bern (GVB) (2006–2010, ex officio)
- 2004–2006 Owner of Rickenbacher Projekte GmbH (marketing and communication consulting; board of directors mandates)
- 1998–2004 Project manager at a small corporate consulting company

Significant mandates

- Member of the Board of Bernexpo Holding AG as well as various subsidiaries (Group structure), Bern
- Member of the Board of Aebi Schmidt Holding AG, Frauenfeld
- Member of the Board of HRS Holding AG as well as various subsidiaries (Group structure), Frauenfeld
- Deputy Chair of the Switzerland Innovation Foundation, Bern

Kurt Schär (1965, CH)
Radio/TV electronics engineer, marketing planner and board training Swiss Board School

Professional background, career

- Since 2014 Owner of Sunnsite Management AG, BoD mandates
- 2001–2014 CEO of Biketec AG, manufacturer of the Flyer electric bicycle in Huttwil

Significant mandates

- Member of the Board of IE Engineering Group AG, Zurich
- Member of the Board of Boss Info Holding AG, Farnern

3.3 Number of permitted activities

The members of the Board of Directors may hold no more than 10 senior managerial and governing body mandates in for-profit companies outside of the BKW Group, no more than five of which may be stock-exchange listed companies, and no more than 10 mandates with other legal entities such as foundations and associations that are required to be entered in the commercial register. Exceptions and further information can be found in Art. 21 of the articles of incorporation at www.bkw.ch/statutes.

3.4 Election and term of office

With the exception of the representative appointed by the Canton of Bern, the members of the Board of Directors are elected individually by the General Meeting. Members may be re-elected subject to an age limit of 70 years. The term of office for members appointed by the Canton of Bern in accordance with Art. 762 Swiss Code of Obligations (OR) shall be determined by the cantonal government.

The Chairman of the Board of Directors and members of the Remuneration and Nomination Committee are also elected individually by the General Meeting.

3.5 Internal organisation

3.5.1 Division of roles in the Board of Directors

The Board of Directors is responsible for the overall management of the company and supervision of its corporate bodies. No special functions are defined other than Chairman and Deputy Chair. The Secretary need not be a member of the Board. The Board of Directors is a collective body in which the Chairman is responsible for management and coordination duties as well as monitoring the implementation of the decisions of the Board of Directors and coordination with the CEO. Apart from the specific decisions of the Board of Directors, its members have no personal authority in respect of the company and therefore cannot issue instructions.

The Board of Directors may decide to delegate some of its activities and responsibilities to committees from among its own members. The Board of Directors is supported by two standing committees, the Audit and Risk Management Committee and the Remuneration and Nomination Committee. The function, organisation and responsibilities of these two committees are defined in detail in the regulations, which have been approved by the Board of Directors. The Board of Directors may also establish ad hoc committees at any time for matters such as major investments, alliances and cooperations. In the case of ad hoc committees, the Board of Directors will elect the members from among its

own members at the first meeting following the General Meeting.

3.5.2 Board committees

Audit and Risk Management Committee

The Audit and Risk Management Committee is composed of three members elected by the Board of Directors. The Chairman of the Audit and Risk Management Committee is also elected by the Board of Directors, while the Deputy Chair is elected by the Audit and Risk Management Committee.

Members of the Audit and Risk Management Committee

Roger Baillod	Chairman
Kurt Schär	Deputy Chair
Dr. Carole Ackermann	Member

The Audit and Risk Management Committee supports the Board of Directors in supervising the financial management of the company and submits appropriate decision proposals.

Tasks

- Discussion concerning the consolidated financial statements and the half-yearly consolidated financial statements with the internal and external auditors
- Oversight of the subordinate internal auditor and assessment of the activities of the external auditor and its collaboration with the internal auditor
- Preparation for the appointment or discharge of the external auditor and the Head of Internal Audit
- Assessment of the quality of accounting and financial reporting to the Board of Directors based on an assessment by the internal and external auditors
- Assessment of the organisation and effectiveness of the internal control system
- Assessment of compliance and the associated organisational structure
- Assessment of the risk situation in the context of the financial statements, the budget and medium-term planning of the Board of Directors

- Regular and timely reporting to the Board of Directors on the Committee's activities and results

Responsibilities

- Authorising accounts involving credit approved by the Board of Directors, with the proviso that any extraordinary credit overdrafts are reported to the Board of Directors
- Awarding audit contracts
- Fostering direct contact through the Chairman and members of the Committee with the internal and external auditors and with the CEO and CFO
- Setting the amount of compensation paid to the Head of Internal Audit and the external auditor

Remuneration and Nomination Committee

In accordance with Article 24 of the articles of incorporation, the Remuneration and Nomination Committee comprises three members who are each elected from the Board of Directors by the General Meeting for a term of one year. These members may be re-elected. The Remuneration and Nomination Committee decides how to organise all other matters regarding its operation.

Members of the Remuneration and Nomination Committee

Urs Gasche	Chairman
Hartmut Geldmacher	Member
Andreas Rickenbacher	Member

The Remuneration and Nomination Committee is responsible for developing principles for the selection of candidates for the Board of Directors and the Group Executive Board and, in particular, at top corporate level, for the remuneration strategy and performance targets and criteria of the BKW Group. It assists the Board of Directors in establishing and reviewing the remuneration system and remuneration principles, and in preparing the proposals to the General Meeting in respect of the total amount of remuneration to be paid to the Board of Directors and the Group Executive Board. The Remuneration and Nomination Committee submits motions to the Board of

Directors in respect of all transactions negotiated under its responsibility.

The role and responsibilities of the Remuneration and Nomination Committee are described on pages 148 and 149 of the Remuneration Report.

3.5.3 The work of the Board of Directors and its committees

The Board of Directors meets at the invitation of the Chairman of the Board, or the Deputy Chair acting in place of the Chair, as often as business requires; in general, there are six meetings per financial year. In addition, any member may ask the Chairman of the Board to convene a meeting by submitting their reasons in writing. The dates of the ordinary meetings shall be agreed at an early stage so that all members may attend in person. Before the Board of Directors meetings, each member receives documents that they can use to prepare for the items on the agenda. The CEO and other members of the Group Executive Board participate in each meeting of the Board of Directors in an advisory capacity, unless instructed otherwise by the Chairman of the Board of Directors. Senior company management, members of the BKW Audit Department and other experts may also be invited to the meetings in an advisory capacity. The Secretary of the Board of Directors, Stefan Emmenegger, attends the meetings of the Board of Directors. The Board of Directors adopts its resolutions at meetings and in telephone or video conferences. It is quorate when the majority of its members are present at the meeting or participating in the telephone or video conference. Resolutions are adopted by a simple majority of members. In the event of parity of votes, the Chairman has a casting vote. Minutes shall be taken of the discussions and resolutions. The minutes shall be approved by the Chairman before being distributed to the other members of the Board and being accepted at the next meeting of the Board of Directors. In 2019, there were six meetings of the Board of Directors with the CEO and the other members of the Group Executive Board in attendance, with the average meeting lasting 3.5 hours.

In accordance with its regulations, the Audit and Risk Management Committee convenes at least four ordinary meetings each year. Meetings are normally attended by the CEO, the CFO, the Head of Accounting and Tax, and the Head of Internal Audit. If required, the Chairman may call upon the external auditor, further members of the Group Executive Board, the extended Group Executive Board, senior management or external experts to attend and provide information. The Committee convened four ordinary meetings during the 2019 financial year, with the meetings lasting an average of 3.5 hours.

According to its regulations, the Remuneration and Nomination Committee meets as often as business requires, but at least three times a year. The CEO participates in the meetings of the Remuneration and Nomination Committee in an advisory capacity and has the right to submit motions. The CEO does not attend meetings during which her own remuneration and/or performance are discussed. If required, the Chairman may call upon further members of the Group Executive Board, the extended Group Executive Board, or external experts to attend and provide information. The Remuneration and Nomination Committee convened three ordinary meetings during the 2019 financial year, with the meetings lasting an average of three hours.

Both the Audit and Risk Management Committee and the Remuneration and Nomination Committee are authorised to negotiate and adopt resolutions provided that a majority of their members are present; resolutions are adopted by simple majority of votes. In the event of parity of votes, the Chairman has a casting vote.

3.6 Roles and responsibilities

In law, the Board of Directors is responsible for the overall management and supervision of the BKW Group. In accordance with Article 716a para. 1 of the Swiss Code of Obligations (OR), this responsibility is both non-transferable and inalienable. In addition, the Board of Directors is authorised to adopt a resolution on all matters that have not been reserved for the General Meeting by law or in the articles of incorporation.

Pursuant to Article 20 of the articles of incorporation, the Board of Directors delegates the full operational business management to the CEO and defines her responsibilities in the organisational regulations. The CEO is the Chairman of the Group Executive Board and is supported by its members. She is responsible for the operational management of the Group and represents the Group externally.

The Group Executive Board consists of the CEO, the CFO and the heads of the Power Grid, Production and Group Markets & Services divisions. Decisions of the Group Executive Board are made by the CEO in consultation with the other members of the Group Executive Board. The other members of the Group Executive Board have a right to a voice and may submit motions. The Group Executive Board generally met every two weeks during the 2019 financial year. The meetings last an average of three to five hours. The Group Executive Board supports the CEO in her responsibility for the operational management of the BKW Group. The business divisions are managed directly by their respective division heads. The Group Executive Board may delegate tasks and authorisations within its remit. It also performs preparatory work on matters that are within the remit of official bodies at a higher level.

Competences of the Board of Directors

In addition to its statutory duties and the business reserved to it in the articles of incorporation, the Board of Directors has the following particular roles and competences:

- Definition of the *raison d'être*
- Definition of the overarching company strategy
- Approval of highly strategic business, based on the *raison d'être* and potential economic consequences, or of individual projects that could foreseeably have significant negative consequences for the public image of BKW
- Approval of business that is not planned for in the budget or medium-term planning, where BKW's investment exceeds an amount of CHF 25 million
- Approval of the expansion of geographical coverage into new countries

- Approval of the legal organisation and top-level management structure (Group Executive Board)
- Approval of financial matters such as budgets and planning, financial statements, the BKW Annual Report and accounting standards, and establishing the BKW Group's financing and investment policy
- Approval of the principles for operation of the internal control system and risk management of the BKW Group, and assessment of the significant risks
- Ensuring compliance with applicable standards
- Creation of the performance assessment and preparation of the remuneration review and assessment for the members of the Group Executive Board to be submitted to the Remuneration and Nomination Committee
- Supervision of the Group Executive Board and creation of suitable supervisory bodies to ensure that the company remains on target to reach the defined objectives, meets basic commercial requirements and acts in accordance with the measures adopted by the Board of Directors
- Coordinating between the Group Executive Board and Board of Directors to ensure that the Board of Directors is provided with accurate information at an early stage
- Ensuring compliance with the *raison d'être*, regulations and codes of conduct, and with applicable requirements of legislation and the articles of incorporation
- Representing the company to employees and third parties, in particular ensuring effective communication with shareholders and stakeholders, including representatives of governments, regulators and organisations
- Supporting the Chairman in his role of leading the Board of Directors and preparing for meetings of the Board of Directors
- Implementation of the decisions of the Board of Directors and its committees

Competences of the CEO

The CEO has the following particular roles and competences:

- Integration of company strategy and operational business management by:
 - (I) Ensuring the commercial success of the company in the context of the overall economic and industry conditions
 - (II) Developing the main aspects of the implementation of the overall company strategy, including financing, for the attention of the Board of Directors
 - (III) Ensuring the strategic direction set by the Board of Directors
 - (IV) Leading the operational management of the company
 - (V) Reporting on the success of highly strategic business transactions that have been authorised by the Board of Directors, generally around two years after their approval
- Preparation of the financial plans of the company and responsibility for the overall financial results in accordance with the targets set by the Board of Directors
- Making decisions on the organisational structure and the roles and competences of members of the Group Executive Board within the context of the instructions of the Board of Directors
- Appointment of other employees of the BKW Group, particularly the heads of business units for their areas of responsibility as members of the extended Group Executive Board
- Management of the Group Executive Board and personnel under the CEO

The CEO has delegated her roles and competences to qualified subordinate positions that she instructs and monitors accordingly.

Competences of the Group Executive Board

The Group Executive Board has the following particular roles and competences:

- Contributing significantly to the process of ensuring commercial success within the context of the Group strategy and instructions of the CEO
- Actively participating in the leadership, planning and implementation of the company strategy

- Coordinating and harmonising the activities and business actions of the individual divisions from the perspective of the BKW Group's overarching interests through close cooperation with the other members of the Group Executive Board
- Contributing proposals for strategic planning and its execution, introduction and monitoring
- Defining and implementing the principles for cooperation within the BKW Group
- Determining the central risks and risk management
- Promoting ethical behaviour and compliance with internal and external rules and regulations
- Responsibility for leadership of the assigned divisions
- Making decisions on the entry of the purchaser of shares in the register of BKW AG shares with voting rights, unless the decision falls under the remit of the Board of Directors. This authorisation may be delegated in full or in part to subordinate organisational units
- Preparation, implementation and creation of the annual plans and budget

The Group Executive Board may resolve to delegate part of its role and competences or the preparation, execution and monitoring of decisions of the Group Executive Board to committees. The composition, organisation, roles and competences of permanently staffed committees shall be defined in separate regulations. The roles and organisation of ad hoc committees shall be determined in the resolution adopted to create them. In respect of the decommissioning of the Mühleberg Nuclear Power Plant, the Group Executive Board has delegated some of its roles to the Group Executive Board Committee for the KKM Decommissioning Project.

Additional information about the Group Executive Board is provided in Section 4 below, pages 140 to 142.

3.7 Information and monitoring instruments in relation to the Group Executive Board

The Board of Directors assumes responsibility for supervision of its own committees and monitors the work of the CEO and the Group Executive Board by means of a range of reporting processes and rights to inspect business processes and business transactions.

At each of its meetings, the Board of Directors is informed by the CEO and the other members of the Group Executive Board about current business and key business transactions. The Board of Directors is provided with detailed information regarding the course of business at least semi-annually when the semi-annual and annual reports are published. The BKW Group has a comprehensive electronic management information system (MIS). The Chairman of the Board of Directors is also informed of current business at regular meetings and discussions outside of the meetings of the Board of Directors. In the case of extraordinary events, the CEO shall inform the Chairman of the Board of Directors without delay. Comprehensive information about risk management is provided in conjunction with the planning and financial statements.

Business that must be dealt with by the Board of Directors is first discussed in a meeting of the Presiding Board. The participants in this meeting are the Chairman of the Board of Directors, the CEO and the other members of the Group Executive Board.

Monitoring instruments of the Board of Directors in relation to the Group Executive Board

The Board of Directors is responsible for setting up and monitoring the risk management, compliance and internal audit processes within the BKW Group.

Risk management

The Group Executive Board is responsible for implementing the risk management process as specified by the Board of Directors. The Board of Directors and the Group Executive Board are supported by the Risk Management division, which reports to the CFO. Risk Management is responsi-

ble for the Group's strategic risk management, credit risk management and the operational risk management of trading and treasury. The Group Executive Board and the CFO are advised by the committee and a professional risk organisation.

Risk Management continuously identifies and assesses risks to which the entire BKW Group is exposed, and formulates risk reduction measures. The ISO 31000 standard is used as the basis for the integrated risk management process. It takes account of internal and external events, and analyses and controls the risks of potential threats to people and the environment, risks relating to the safe operation of infrastructure, risks to BKW's reputation and to its liquidity, equity capital and results. The Group's risk bearing ability is also assessed. The risks associated with the energy business continue to be a central focus. However, the expansion of the services business has led to an increase in risk management: the gradual integration of new subsidiaries also requires the implementation of a uniform and binding company-wide risk policy. We will continue to focus on digitalisation: the aim is to use centralised reporting and optimised and automated data processing and data analysis to increase the level of transparency regarding business processes and thus to make operational risk control easier. A cybersecurity programme was established and implemented due to the heightened requirements in the digital realm. The aim is to ensure the maximum security for the infrastructure, data, brand and employees in IT.

A system of limits applies to market, credit and liquidity risks. Individual measures are taken to counter the risks arising in relation to extraordinary market situations as well as operational and strategic risks. Implementation of, and compliance with, the measures required for control purposes are monitored on a regular basis. Areas of trading and finance/treasury that are prone to higher risk are subject to more in-depth controls.

Compliance

The Board of Directors is responsible for ensuring compliance with applicable standards through its approval and regular inspection of the governance principles and Code of Conduct. The CEO ensures that an appropriately organised system is set up and that controls of compliance with applicable standards are implemented in all areas of the BKW Group. She provides the Board of Directors with a report to this effect at least once a year. In addition, she undertakes an annual comprehensive risk assessment and informs the Board of Directors of the results. For compliance risks, the focus is on identifying and assessing any violations of mandatory legal requirements and prohibitions. Measures include risk-based training, ad hoc information on new developments, updated regulations, maintenance of whistleblower systems as well as clear consultation.

The Board of Directors and Group Executive Board are supported by the Compliance team.

Audit

Internal Audit submits a quarterly report on its auditing activities to the Audit and Risk Management Committee. In particular, the report covers audits of the internal control system of BKW, transaction and business processes for the whole Group. Internal Audit reports once annually on the implementation of the audit plan formulated by the Audit and Risk Management Committee, and on the implementation of the recommendations made to management on the basis of the audits that were conducted. In the event of serious shortcomings such as the detection of criminal acts or serious breaches of fundamental duties of care, the Internal Audit team will also provide the Audit and Risk Management Committee with a report.

BKW's external auditor is Ernst & Young Ltd., Bern. In its comprehensive report to the Board of Directors each year, it includes information about the audit of the annual financial statements as well as its findings regarding the internal control system.

4 Group Executive Board

4.1 Members



From left to right: Philipp Hänggi, Ronald Trächsel, Suzanne Thoma, Antje Kanngiesser, Roland Küpfer

Group Executive Board

Composition	Role	Since
Dr. Suzanne Thoma	CEO, Member of the Group Executive Board since 2010	2013
Ronald Trächsel	CFO, Deputy to the CEO	2014
Dr. Roland Küpfer	Head of Power Grid	2017
Dr. Antje Kanngiesser	Head of Group Markets & Services	2019
Dr. Philipp Hänggi	Head of Production	2020 ¹

¹ The Board of Directors elected Dr. Philipp Hänggi as a member of the Group Executive Board on 29 August 2019 with effect as of 1 January 2020. He succeeds Hermann Ineichen, who left BKW at the end of 2019.

Departures

Hermann Ineichen, Head of Production, left BKW at the end of the 2019 financial year.

4.2 Activities and vested interests

Suzanne Thoma (1962, CH) PhD in chemical engineering

Professional background, career

Since 2013 CEO
 2010–2013 Head of Networks
 2007–2009 Head of the Automotive division of the WICOR Group in Rapperswil
 2002–2007 CEO of Rolic Technologies Ltd
 1990–2002 Various roles in a variety of countries for Ciba Spezialitätenchemie AG (now BASF AG)

Significant mandates

- Member of the Board of OC Oerlikon, Pfäffikon
- Deputy Chair of Avenir Suisse

Mandates held on the instruction of BKW

- Chairman of the Board of BKW Building Solutions AG, Ostermundigen

Hermann Ineichen (1957, CH) Degree in electrical engineering and MSc in Energy Management

Professional background, career

Since 2013 Head of Production
 2001–2013 Head of Energy Switzerland

Significant mandates

- None

Mandates held on the instruction of BKW

- Member of the Board of Kraftwerke Oberhasli AG, Innertkirchen
- Member of the Administrative Commission of the Decommissioning and Waste Disposal Fund, Bern

Ronald Trächsel (1959, CH) Lic. rer. pol

Professional background, career

Since 2014 CFO
 2008–2014 CFO of the globally active Sika Group
 2000–2008 CEO and CFO of the globally active Vitra

Significant mandates

- Member of the Board and Head of the Audit Committee of ContourGlobal PLC, London

Mandates held on the instruction of BKW

- Chairman of the Board of AEK Onyx AG, Solothurn
- Member of the Board of Swissgrid Ltd., Laufenburg
- Member of the Board of Kraftwerke Oberhasli AG, Innertkirchen

Roland Küpfer (1958, CH) PhD in economics, MBA, degrees in electrical engineering, computer engineering

Professional background, career

Since 2017 Head of Power Grid
 2013–2017 CEO of technology company Multiple Dimensions
 2009–2013 CEO of Cicor Group
 2007–2009 Member of the Executive Board of ASCOM Security Communications, Internationalisation
 2001–2009 Division Head, Schaffner Components, Member of Group Management

Significant mandates

- Member of the Board of Balluff AG, Bellmund

Mandates held on the instruction of BKW

- Chairman of the Board of Arnold AG, Wangen an der Aare
- Member of the Board of cc energie sa, Murten

Antje Kanngiesser (1974, CH) Dr. EMBA

Professional background, career

- Since 2019 Member of the Group Executive Board of BKW AG
- Since 2017 Head of Group Markets & Services division, BKW AG
- 2014–2017 Head of the Group Management division, member of the expanded Group Executive Board, BKW AG
- 2007–2014 Various functions, Energie Quest Suisse/Alpiq Group
- 2005–2007 Lawyer, Schnutenhaus & Koll, Berlin
- 2003–2005 Lawyer, Gassner, Groth, Siederer & Coll, Berlin
Director, EnergieVerein e.V., Berlin

Significant mandates

- None

Mandates held on the instruction of BKW

- Chair of the Board of cc energie SA, Murten
- Member of the Board of Société des Forces Electriques de la Goule SA, St. Imier

4.3 Number of permitted activities

The members of the Group Executive Board may hold no more than six senior managerial and governing body mandates in for-profit companies outside of the BKW Group, no more than three of which may be stock-exchange listed companies, and no more than five mandates with other legal entities such as foundations and associations that are required to be entered in the commercial register. Before accepting such new mandates, the members of the Group Executive Board are obliged to obtain the permission of the Chairman of the Board of Directors. Exceptions and further information can be found in Art. 21 of the articles of incorporation at www.bkw.ch/statutes.

4.4 Management contracts

BKW has not delegated any management responsibilities to third parties outside the Group.

5 Remuneration and shareholdings

All information on remuneration of the members of the Board of Directors and the Group Executive Board can be found in the Remuneration Report on pages 145 to 155. The information about shareholdings is on page 108 of the Notes to the Financial Statements.

6 Shareholders' participation rights

The following provisions are taken from the BKW articles of incorporation. These can be accessed at www.bkw.ch/statutes.

6.1 Voting-right restrictions and representation

Shareholders' rights may only be exercised by persons listed in the share register as a shareholder with voting rights. There are no limitations on voting rights for BKW shareholders attending the General Meeting.

Every shareholder with a voting right can attend the General Meeting in person or be represented by another shareholder or an independent designated representative. Shareholders may also assign their proxy and voting instructions electronically; the Board of Directors shall determine the details by which this is done. The independent proxy is obliged to exercise the assigned voting rights as instructed by the shareholder. If instructions were not provided, the vote must be withheld.

Public corporations, legal entities and trading companies are represented by their corporate bodies, partners or legal representatives, or by representatives with special written power of attorney.

Every share listed in the share register with voting rights is entitled to one vote at the BKW General Meeting. Shareholders who have participated in the management of the Company in any form shall not be entitled to vote on the resolution to grant discharge of the Board of Directors.

The Chairman shall have full power to determine the procedure for voting and elections. He may, in particular, order that an open vote or election be repeated at any time by means of a written or electronic ballot or election if he is in doubt about the result, or order a secret ballot.

6.2 Statutory quorum

Decisions at the General Meeting require a simple majority of votes unless otherwise provided by law. A simple majority of votes also applies to decisions concerning the relaxation or lifting of restrictions on transferability of registered shares.

6.3 Convening the General Meeting and setting the agenda

Notice of the General Meeting is to be given by the Board of Directors at least 20 days prior to the date of the meeting. A meeting may also be called by one or more shareholders whose combined shareholding represents at least 10% of the share capital. This must be requested in writing, stating the agenda items and motions.

Shareholders representing shares with a par value of at least CHF 1 million may ask for items to be included on the agenda. This request must be submitted no later than 50 days before the date of the General Meeting.

6.4 Entries in the share register

The right to attend or to be represented at the General Meeting is determined on the basis of the shareholders with voting rights who are entered in the share register on the fifteenth day before the General Meeting.

7 Changes of control and defensive measures

Under the terms of Article 6 of the articles of incorporation, BKW has opted to increase the threshold for a mandatory takeover offer to 49% in accordance with Article 135 of the Financial Market Infrastructure Act (FMIA).

There are no agreements or plans for the benefit of members of the Board of Directors and/or the Group Executive Board or other members of senior management in the event of changes of control.

8 Auditors

Term of office

BKW's auditors are appointed on an annual basis. The current auditors are Ernst & Young Ltd.; the firm has acted as BKW's auditor since 1990. The auditor in charge changes regularly, at least once every seven years in accordance with legal requirements. Rico Fehr has been auditor in charge since 2018; for 2017, it was Bernadette Koch and from 2012 to 2016, Roland Ruprecht.

Fees

The auditors' fees for expenditures incurred by statutory audits of BKW and its consolidated Group companies amounted to CHF 905,000 for the reporting year. The fees for other services including non-mandatory audits, audits in accordance with special laws and consulting in financial reporting amounted to CHF 141,000.

Information instruments of the external auditors

Oversight and control of the external auditor is a key responsibility of the Audit and Risk Management Committee (cf. Sections 3.5.1 and 3.5.2, pages 134 and 135, under Audit and Risk Management Committee/Responsibilities). The Audit and Risk Management Committee convenes four ordinary meetings per year, in which the auditors sometimes participate. The external auditors attended for parts of the agenda at two ordinary meetings of the Audit and Risk Management Committee during the 2019 reporting year.

On behalf of the Audit and Risk Management Committee, the external auditors examine the annual financial statements according to the Swiss Code of Obligations (OR) as well as the consolidated annual financial statements. Towards the end of the year, the external auditors must advise the Audit and Risk Management Committee of the audit priorities they have set for the forthcoming year and the rationale for these priorities. The Audit and Risk Management Committee must approve this audit plan and may commission the external auditors to conduct additional specific audits.

The performance of the external auditors and their independence are assessed annually by the Audit and Risk Management Committee. This assessment is based on the quality of the reports, implementation of the audit plans approved by the Committee and collaboration with the internal auditors. With regard to independence, the Committee examines the relationship between the budgeted audit fee and the fee for other services provided by the auditing company, and what these additional services include.

9 Information policy

BKW is committed to the timely dissemination of transparent and comprehensive information to its shareholders and clients as well as its employees and the general public. It regularly informs the media about important events related to its business activities. Information on share prices is published in compliance with the applicable legal requirements for disclosure (ad hoc notifications). These ad hoc notifications can be accessed at the same time as the report to the SIX Swiss Exchange and for a further two years at www.bkw.ch/media

There is also the option of directly receiving free and up-to-date information that may affect share prices from BKW via an email distribution list. This service is offered at www.bkw.ch/pressrelease

BKW provides information on the annual results in the Annual Report, which is available in electronic form. The Annual Report can be downloaded at www.bkw.ch/annualreport19.

BKW also presents its annual results at the yearly Annual Report and Financial Analyst Conference, as well as at the General Meeting. You can find the exact dates for the current and following year at www.bkw.ch/financialcalendar

The Half-Year Report as well as the half-year results from 30 June are available electronically at www.bkw.ch/halfyearreport19.

The Investor and Media Relations managers can be contacted via the website, email, telephone or post. Their contact details can be found in the editorial information on page 156, and the address of the headquarters is listed on the back cover of this report.

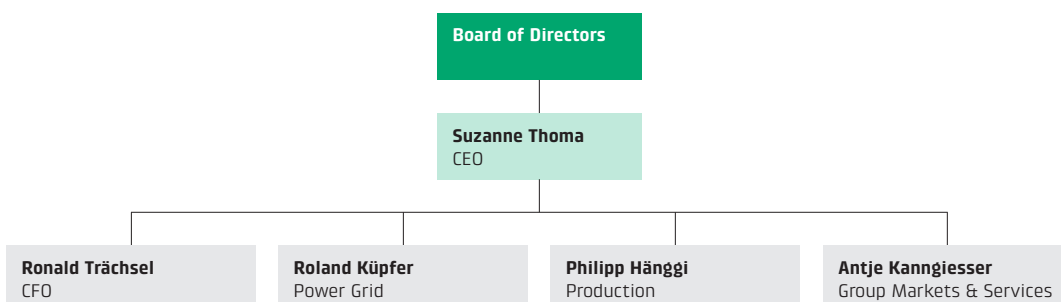
10 Significant changes since 31 December 2019

Organisational changes

No significant changes

Changes in personnel

The Board of Directors of BKW elected Dr. Philipp Hänggi to be a member of the Group Executive Board with effect as of 1 January 2020. He succeeds Hermann Ineichen, who left BKW AG at the end of 2019.



ANNUAL REPORT 2019

Remuneration Report

Remuneration Report

Dear Shareholders,
Dear Sir/Madam,

This Remuneration Report provides you with an overview of BKW's salary policy and system of remuneration. It contains detailed information about the remuneration paid to the Board of Directors and the Group Executive Board during the 2019 financial year.

BKW concluded an eventful 2019 successfully. At 35%, it came in well over the EBIT target set by the Board of Directors. The implementation of the company's strategy continued with the acquisition of various companies, including Swisspro AG in the building solutions area and LTB Leitungsbau GmbH in Germany in the infra services area. The transformation process that was started continued to be implemented at a rapid pace. The organisation is even better positioned as a result and, on the whole, has begun the new year even stronger. Intensive discussions – both positive and negative – took place regarding compensation, which proved to be somewhat contentious. The Board of Directors determined that the remuneration of the CEO and Group Executive Board was justified in view of the Group's extraordinary performance in recent years. It is in line with the wage policy presented in the Remuneration Report for the past several years. However, the performance of the share price – which has proven sustainable – was among the factors that led the Board of Directors to review the remuneration system in collaboration with a well-known consultancy.

The Group Executive Board's remuneration system is to be modernised and adjusted in line with the prevailing standards. The aim will continue to be securing the Group's long-term success. The review will be carried out in 2020 and the changes implemented the following year. As a transitional solution, it was decided to change the way the long-term remuneration of the CEO is calculated for the 2019 financial year. This change only applies to the CEO.

A rough review of the remuneration system carried out for the Board of Directors revealed that the compensation is below the market level for comparable companies with similarly strong performance. For this reason, the focus is not on a revision of the remuneration paid to the Board of Directors. The members will continue to receive mainly a fixed base salary and attendance fees. The compensation of the Board of Directors remained constant in 2019.

The compensation of the Group Executive Board is comprised of a high base salary, a relatively low short-term performance-related component paid in cash (bonus) and substantial long-term profit sharing in the form of shares. As part of the gradual alignment of the remuneration paid to members of the Group Executive Board with the market level, the compensation paid to the Group Executive Board increased slightly, while the overall remuneration of the CEO fell by 13%, even though the objectives set by the Board of Directors were once again exceeded significantly. The main reasons for the reduction were the lack of the one-off effect of the additional payment to the pension fund this year and the fact that the allocation of the long-term remuneration in shares was revalued as a result of the transitional solution.

At the 2020 General Meeting, we will present this Remuneration Report for approval within the scope of a consultative vote. You will note that the remuneration paid to the Board of Directors and Group Executive Board are within the maximum remuneration amounts set by the General Meeting.

Kind regards,



Urs Gasche
Chairman of the Board of Directors

1 BKW salary policy

The BKW salary policy defined by the Board of Directors is derived directly from the BKW strategy and is intended, in particular, to promote the long-term interests of the company. BKW strives to provide market-rate compensation for all functions, irrespective of gender, age, nationality and other demographic characteristics. It rewards competency and responsibility as well as performance, with a focus on the implementation of the strategy and the company's results. In order to ensure that overall compensation is in line with the market and performance, BKW regularly reviews the salary bands of the individual professional groups to make sure they correspond to the market median.

The BKW remuneration system for the Board of Directors and Group Executive Board is simple and geared towards stability. It ensures that the interests of the Board of Directors, the members of the Group Executive Board and the shareholders are aligned. It is also intended to ensure that the best people available in the free market can be recruited for these crucial functions.

In the framework of this wage policy, BKW also reviews its remuneration system for the Board of Directors and Group Executive Board on a regular basis. BKW tasked specialised consultancy HCM International AG with the review of its remuneration of the Group Executive Board. The results will be presented in 2020 and included in the remuneration of the Group Executive Board and CEO starting in 2021.

In view of the review of the wage system, a market survey of the compensation of CEOs was carried out (benchmark year: 2018). In order to take account of the specific features of BKW, the compensation was assessed on the basis of various benchmark groups comprised of companies listed on the stock exchange:

- Industrial companies (excluding companies in the high-wage financial and pharmaceutical sectors) with a comparable market capitalisation (a total of 14 companies ranging from CHF 2,600 million to CHF 9,800 million) and comparable revenue figures (a total of 16

companies ranging from CHF 1,560 million to CHF 4,300 million)

- Energy groups
- Companies with majority stakes held by the public sector

As there are few energy groups and companies with majority stakes held by the public sector that can be compared in terms of size, stock exchange listing, areas of activity and available information, only one company in each of these two categories was included in the review. On the whole, both companies had a similar level of compensation. However, compared with the energy group, BKW has a relatively higher proportion of restricted shares. As a result, the related price risk is higher and the realisation period for the CEO of BKW is much longer. Compared with the exchange-listed companies with a majority stake by the public sector, there are substantial differences in terms of the composition of the individual remuneration elements. While the base salary is at a similar level, the short-term variable remuneration of the BKW CEO is much lower and the long-term remuneration in restricted shares is more substantial. The market comparison with industrial companies shows that the overall remuneration of the CEO of BKW is in the middle of the range, but well below the median. If the performance of the benchmark companies is taken into account (measured in terms of total shareholder return and total share revenue), the CEO's compensation appears low because of the above-average performance of BKW.

BKW also conducted a comparison of the compensation of the chairs of the board of directors for the above companies with the overall compensation of the Chair of BKW (benchmark year: 2018). Compared with the industrial companies with a wide range from CHF 150,000 to CHF 6,150,000, the compensation of the Chair of BKW at CHF 387,000 is at the lower end and also well below the compensation of the chairs of the boards of directors of the energy group and the company controlled by the public sector.

2 Setting remuneration: organisation and responsibilities

The broad outlines of the remuneration system as well as the corporate bodies involved in the determination of the compensation are defined in Art. 26 to 28 of the articles of incorporation.

These can be found on the BKW website under www.bkw.ch/statutes.

The table below shows how the responsibilities and competences are divided between the General Meeting, the Board of Directors and the Remuneration and Nomination Committee.

Overview of roles and responsibilities

Object	Remuneration and Nomination Committee	Board of Directors	General Meeting
Maximum total amount of remuneration of the Board of Directors and the Group Executive Board	PS ¹	S ²	R ³
Additional amount for the remuneration of newly nominated members of the Group Executive Board ⁴	R ^{4, 5}		
BKW's salary policy and remuneration system	PS	R	
Remuneration principles and system for the Board of Directors and Group Executive Board	PS	R	
Performance criteria for remuneration of the CEO and the members of the Group Executive Board	R ⁵		
Individual remuneration of the Board of Directors	PS	R ⁶	
Performance assessment and individual remuneration of the CEO	R ^{5, 6}		
Performance assessment and individual remuneration of the members of the Group Executive Board (excluding the CEO)	R ^{4, 5, 6}		
Remuneration Report	PS	R	CV ⁷
Principles governing the selection of candidates for election or re-election to the Board of Directors	PS	R	
Treatment of elections and succession planning for the Board of Directors and the Group Executive Board	PS	R	

1 PS means preparation and submission to Board of Directors

2 S means submission to the General Meeting

3 R means ratification

4 CEO's proposal

5 Within the scope of the articles of incorporation

6 Within the scope of the maximum total amount approved by the General Meeting

7 CV means consultative vote

The overall amounts approved by the General Meeting for the remuneration of the Board of Directors relate to the period from the current General Meeting until the next General Meeting. By contrast, the overall amount of remuneration of the Group Executive Board relates to the full financial year that follows the General Meeting.

Remuneration and Nomination Committee

According to Art. 25 of the articles of incorporation, the Remuneration and Nomination Committee is concerned at senior company management level with the remuneration strategy and with the company's objectives and performance criteria. In

addition, it is authorised to develop criteria for the selection of candidates to the Board of Directors and the Group Executive Board. The Committee is comprised of the following members:

Urs Gasche	Chairman of the Board of Directors, Chairman
Hartmut Geldmacher	Deputy Chair of the Board of Directors, Member
Andreas Rickenbacher	Member of the Board of Directors, Member

The attendance of the Chair at the meetings of the Remuneration and Nomination Committee is in the interest of the company and its shareholders. The Chair works most closely with the CEO and the Group Executive Board and is therefore optimally positioned to make an in-depth assessment of the work they perform. In addition, the Remuneration and Nomination Committee is responsible for personnel planning for the Board of Directors and the Group Executive Board, which is a strategic element of corporate management. The risk of a conflict of interests – in particular when defining compensation – is also excluded as the Chair withdraws when these matters are discussed in the Remuneration and Nomination Committee and by the Board of Directors.

3 Remuneration of the Board of Directors

3.1 Remuneration elements for the Board of Directors

In particular, the BKW remuneration system aims to ensure the independence of the Board of Directors in its oversight of the Group Executive Board. For this reason, the main compensation element for the Board of Directors is fixed – performance-based components are not paid to the Board of Directors.

a) Fixed payment (base salary)

The base salary of the Board of Directors comprises a fixed Board member fee. The level of the fee depends on the particular role (Chair or Deputy Chair), and the membership and roles pertaining to Board committees.

b) Attendance allowance

A fixed attendance allowance is paid for each meeting of the Board of Directors or committee in which the Board member participates. The Chairman of the Board of Directors does not receive an allowance for meetings.

c) Share-based remuneration

The members of the Board of Directors have the option once each year to invest in the share capital of BKW on preferential conditions. Unless there is an exceptional situation, the maximum

number of shares available at preferential conditions is 600. The discount is equal to 30% of the average share price over the last quarter of the previous financial year.

Participation in the share purchase programme for the members of the Board of Directors is an incentive to ensure the long-term increase of the value of the company. The shares acquired through this arrangement are subject to a three-year blocking period on their sale. This is taken into account when calculating the remuneration disclosed in this report for the deduction specified in Section 3.3 of Circular no. 37 of the Federal Tax Administration of 22 July 2013 on the taxation of employee shareholdings.

d) Other remuneration

Other remuneration paid to the members of the Board of Directors encompasses payments by BKW to the national social security funds and any withholding taxes.

3.2 Remuneration paid in 2019

The remuneration amounts paid to the Board of Directors are disclosed in the financial year in which they are recognised in the annual financial statements. The details about the remuneration paid to members of the Board of Directors for the financial years 2019 and 2018 are below.

During the 2019 financial year, the fixed remuneration of the members of the Board of Directors and the attendance allowances stayed the same. The attendance fees paid depend on the number of meetings attended by the Board member. No attendance fees are paid to the Chair. For individual members of the Board, payment is made in whole or in part to their employers. Share-based payments comprise the benefit in fair value of the preferential purchase of BKW shares. In 2019, each member of the Board of Directors was offered the opportunity to purchase 600 BKW shares (2018: 600 shares) at a preferential price of CHF 45.45 per share (2018: CHF 40.75). The underlying market value was CHF 68.30 per share (2018: CHF 60.00).

Remuneration of members of the Board of Directors in 2019

CHF thousands		Fixed remuneration	Attendance allowance	Share-based payments ¹	Other remuneration	Total
Urs Gasche	Chairman	336	0	2	47	385
Hartmut Geldmacher	Deputy Chair	62	35	7	39	143
Dr. Carole Ackermann	Member	48	24	7	1	80
Roger Bailod	Member	60	24	7	1	92
Rebecca Guntern	Member	48	12	7	10	77
Andreas Rickenbacher	Member	48	35	1	13	97
Kurt Schär	Member	48	24	7	1	80
Total		650	154	38	112	954

AUDITED

1 The share-based remuneration is recognised at its tax value.

Remuneration of members of the Board of Directors in 2018

CHF thousands		Fixed remuneration	Attendance allowance	Share-based payments ¹	Other remuneration	Total
Urs Gasche	Chairman	336	0	2	49	387
Hartmut Geldmacher	Deputy Chair	62	17	6	47	132
Dr. Carole Ackermann	Member (from 18.05.2018)	32	19	0	0	51
Marc-Alain Affolter	Member (until 18.05.2018)	20	5	6	3	34
Roger Bailod	Member	60	24	6	1	91
Dr. Georges Bindschedler	Member (until 18.05.2018)	20	5	6	0	31
Barbara Egger-Jenzer ²	Member (until 18.05.2018)	20	5	4	1	30
Rebecca Guntern	Member (from 01.09.2018)	32	7	0	4	43
Andreas Rickenbacher	Member (from 18.05.2018)	32	17	0	5	54
Kurt Schär	Member	48	24	6	1	79
Total		662	123	36	111	932

AUDITED

1 The share-based remuneration is recognised at its tax value.

2 All remuneration, including attendance allowances, was paid to the Canton of Bern.

3.3 Compliance with the maximum overall remuneration ratified by the General Meeting in respect of the 2018/2019 term of office

The General Meeting ratifies the maximum overall amount of remuneration of the Board of Directors for its term of office, i.e. from the General Meeting (each May) until the next General Meeting (the following April). By contrast, this Remuneration Report is based on the financial year and, thus, the information published as of 31 December 2019; the amount disclosed in this report has therefore been adjusted to a period of eight months (May to December 2019).

The 2019 General Meeting ratified a proposal for a maximum overall amount of CHF 1,200,000 in respect of remuneration of the Board of Direc-

tors for the 2019/2020 term of office. Calculated for the period of eight months to 31 December 2019, the payments to members of the Board of Directors amounted to CHF 636,000. The amounts yet to be paid in 2020 (from January to April 2020), which were not yet known when this report was prepared, will comply with the maximum overall amount ratified by the General Meeting. A report on the entire remuneration period (General Meeting 2019 to General Meeting 2020) will be provided at the General Meeting 2020.

In respect of the previous 2018/2019 term of office, the General Meeting ratified a maximum overall remuneration of CHF 1,200,000. As reported at the General Meeting 2019, this amount was observed, with total remuneration of CHF 936,000 paid during the term of office.

4 Remuneration of the Group Executive Board

4.1 Remuneration of the Group Executive Board

The remuneration system for the Group Executive Board is intended to create incentives for ensuring the long-term development of the company. For this reason, the remuneration includes a substantial base remuneration and a high share of long-term profit sharing in the form of restricted shares. The short-term variable remuneration, by contrast, is set relatively low.

a) Fixed annual base remuneration

The base remuneration provides recompense for the role held within the organisation. This takes into account the person's experience, scope of responsibility and influence on the company's success. The base remuneration is paid in cash.

b) Short-term variable remuneration

The short-term variable remuneration takes account of the achievement of the goals set by the Remuneration and Nomination Committee for the Group Executive Board and the CEO. On the one hand, it is based on the financial results that are achieved, including the EBIT budgeted for the BKW Group. As this amount is set without reserves, this is a "stretch" EBIT target. In addition, the Remuneration and Nomination Committee assesses the progress in implementing the strategy, as well as the achievement of other quantitative or qualitative objectives. For each member of the Group Executive Board, the personal contribution is measured against the individual's role and influence. The annual targets are agreed in December of each year for the following financial year.

The short-term variable remuneration is paid out in cash during the calendar year following the year for which it is awarded. The short-term variable remuneration ranges from 0 to 30 percent of the base remuneration for the CEO and from 0 to 20 percent of the base remuneration for the members of the Group Executive Board. If the budgeted EBIT is achieved, this equates to maximum target performance. Even if the target EBIT is significantly exceeded, this does not

result in the maximum bonus being exceeded. Consequently, there is a maximum limit to the variable remuneration. Extraordinary, unforeseeable events such as the removal of the CHF/EUR cap are taken into account in assessing the level of target performance. The Remuneration and Nomination Committee prepare an overall assessment, taking into account the general economic situation and industry-specific environment in which the company is operating.

The short-term variable remuneration may be reduced or revoked in exceptional circumstances, even if the individual targets are met. Such a situation may arise if the company's existence is under threat and the payment of dividends and/or any variable components due to employees is cancelled. In this case, there is no claim to short-term variable remuneration. Any reductions in the dividend payment made to finance investment projects shall have no impact on the calculation of the variable remuneration.

c) Remuneration in restricted shares

Remuneration in restricted shares is aimed at securing long-term success and is linked directly to the opportunities and risks associated with the share price performance. Because of the positive performance of the share price, it has become a central element of the total compensation of the Group Executive Board. The issued shares are subject to a blocking period of three years.

Long-term profit sharing in restricted shares amounts – except in exceptional circumstances – to 30 percent of the base salary for the current year for the members of the Group Executive Board. It is first calculated in Swiss francs and then paid out in the form of blocked shares of BKW AG. The share allocation for the Group Executive Board is calculated by taking a share price of CHF 33.00 as the basis, which is the average share price for the years 2014 and 2015. By contrast, the Board of Directors – as part of the transitional solution until the new remuneration system is in place – no longer used the average share price for the years 2014 and 2015 for the allocation of shares to the CEO, but instead defined a fixed amount for the long-term profit sharing, which was then allocated in shares on

the basis of the daily price. The shares were allocated on 27 November 2019. As part of the revision of the remuneration system, a general adjustment of the allocation of shares for the Group Executive Board is being reviewed. This review is necessary because the share price has, we are pleased to note, risen sharply and consistently since 2014.

d) Pension contributions and social security contributions

Pension contributions include the employer contributions to the pension fund. The BKW pension fund (Pensionskasse BKW) has operated a defined contribution pension plan since 2019 in accordance with the statutory requirements for occupational pensions (BVG). The specified pension benefits also include the employer contributions to national social security funds due on the total remuneration.

4.2 Remuneration paid in 2019

The remuneration amounts paid to the Group Executive Board are disclosed in the financial year in which they are recognised in the annual financial statements.

The remuneration of all members of the Group Executive Board rose by five percent compared with the 2018 financial year. This was mainly due to the increase in the number of the members to five as a result of the appointment of Dr. Antje Kanngiesser as Head of the Group Markets & Services division. In addition, the remuneration of individual members of the Group Executive Board was adjusted in line with their experience, and this increase brought it more in line with the market median. The measurement of the short-term variable remuneration and long-term profit sharing in shares remained the same. In financial year 2019, a total of 25,608 (2018: 24,796) shares were transferred to the Group Executive Board.

The overall remuneration of the CEO was 13% lower in 2019 than in the previous year. This was mainly due to two factors: because the defined benefit plan was eliminated at the end of 2018, there were no additional payments for any increases to remuneration. As a result, the pension benefits were lower than in the previous year. Furthermore, the above-mentioned transitional solution resulted in a substantial reduction to the remuneration system. The long-term remuneration defined by the Board of Directors in the form of restricted shares led to a decrease in the number of shares allocated: 7,008 shares compared with 9,455 shares in 2018. By contrast, the fixed basic remuneration and thus the basis for calculating the short-term variable remuneration rose slightly. As in 2018, the short-term variable remuneration for the CEO amounted to 30 percent and was paid out in full on the basis of the excellent performance of BKW.

Measurement of the short-term variable remuneration

BKW significantly exceeded its short-term financial targets, which were especially challenging in view of the very low forward prices on the wholesale market for 2019. The negative effects of the revenue from electricity production were more than offset thanks to very good operating business and the excellent results in energy trading. However, the major challenge continues to be the unclear relationship regarding the integration of Switzerland in the European energy market. The growth in the service network continued to be driven forward at a rapid pace, especially as a result of the acquisition of large companies, such as Swisspro AG in the building technology area, LTB Leitungsbau GmbH in the infra services area and ingenhoven architects GmbH in the engineering area in Germany. For these reasons, the CEO was allocated a short-term variable remuneration of 30 percent and the other members of the Group Executive Board 20 percent of their fixed remuneration.

Remuneration of members of the Group Executive Board and the highest-earning member in 2019

CHF thousands	Dr. Suzanne Thoma CEO	Group Executive Board ¹ (including CEO)
	2019	2019
Fixed basic remuneration	858	2,882
Short-term variable remuneration	257	746
Long-term profit sharing (share-based payments) ²	410	1,498
Pension benefits	239	837
Total	1,764	5,963

AUDITED

1 The Group Executive Board was comprised of five members for the year as a whole.

2 The share-based remuneration is recognised at its tax value.

Remuneration of members of the Group Executive Board and the highest-earning member in 2018

CHF thousands	Dr. Suzanne Thoma CEO	Group Executive Board ¹ (including CEO)
	2018	2018
Fixed basic remuneration	780	2,520
Short-term variable remuneration	234	563
Long-term profit sharing (share-based payments) ²	568	1,491
Pension benefits	449	1,097
Total	2,031	5,671

AUDITED

1 With the abolition of the Renewables and Efficiency division following the merger of the wind business with the traditional energy business, one member left the Group Executive Board on 31 May 2018.

2 The share-based remuneration is recognised at its tax value.

4.3 Compliance with the maximum overall remuneration for the 2019 financial year ratified by the General Meeting 2019

In summary, the remuneration paid fully complies with the maximum amount ratified by the 2018 General Meeting of CHF 8,000,000 for remuneration of the Group Executive Board for the 2019 financial year.

5 Shareholdings

The shares held by members of the Board of Directors and the Group Executive Board of BKW and their associates as of 31 December 2019 and 2018 can be found in the annex to the annual financial statements on page 108.

6 Employment contracts with members of the Group Executive Board and contracts with members of the Board of Directors

Contracts between the company and members of the Board of Directors or the Group Executive Board that include compensation of these members must only be concluded for a period of less than one year or with a notice period of maximum 12 months in accordance with Art. 29 of the articles of incorporation.

Fixed-term or permanent mandate agreements may be concluded with members of the Board of Directors; however, the effectiveness of the mandate is subject solely to the annual election to the Board of Directors by the General Meeting. No employment contracts exist between BKW and members of the Board of Directors. The members of the Board of Directors are independent and their rights and obligations are based on the norms of company law and the provisions of the articles of incorporation, regulations and mandate agreements.

The employment contracts of the members of the Group Executive Board have been drafted in accordance with the Ordinance against Excessive Remuneration in Listed Companies Limited by Shares. During the reporting period, all Group Executive Board members had permanent employment contracts with a termination period of six months. The employment contracts do not provide for any severance payments.

Report of the statutory auditor on the remuneration report



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To the General Meeting of
BKW AG, Bern

Bern, 13 March 2020

Report of the statutory auditor on the remuneration report

We have audited the remuneration report of BKW AG for the year ended 31 December 2019. The audit was limited to the information according to articles 14–16 of the Ordinance against Excessive Compensation in Stock Exchange Listed Companies (Ordinance) contained in the tables and sections labeled “audited” on pages 149 to 153 of the remuneration report.



Board of Directors' responsibility

The Board of Directors is responsible for the preparation and overall fair presentation of the remuneration report in accordance with Swiss law and the Ordinance. The Board of Directors is also responsible for designing the remuneration system and defining individual remuneration packages.



Auditor's responsibility

Our responsibility is to express an opinion on the remuneration report. We conducted our audit in accordance with Swiss Auditing Standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the remuneration report complies with Swiss law and articles 14–16 of the Ordinance.

An audit involves performing procedures to obtain audit evidence on the disclosures made in the remuneration report with regard to compensation, loans and credits in accordance with articles 14–16 of the Ordinance. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatements in the remuneration report, whether due to fraud or error. This audit also includes evaluating the reasonableness of the methods applied to value components of remuneration, as well as assessing the overall presentation of the remuneration report.

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



Opinion

In our opinion, the remuneration report for the year ended 31 December 2019 of BKW AG complies with Swiss law and articles 14–16 of the Ordinance.

Ernst & Young Ltd

Rico Fehr
Licensed audit expert
(Auditor in charge)

Philippe Wenger
Licensed audit expert

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This report contains statements that constitute expectations and forward-looking statements. Because these statements are subject to risks and uncertainties, actual future results may differ materially from those expressed or implied by the expectations and statements. This report is published in German, French and English. The German version is authoritative.

Legal Notice

Editing and design

Finance & Controlling,
Corporate Communications, Bern

Photography

Fabian Hugo, Bern
www.fabianhugo.ch

