

7. Miscellaneous items

7.1. Notes to the cash flow statement

Summary in thousands of €	2017	2018
<i>Operating result (EBIT)</i>	318 062	146 880
<i>Non-cash items added back to operating result (EBIT)</i>	191 541	239 624
EBITDA	509 603	386 504
<i>Other gross cash flows from operating activities</i>	-153 304	-107 956
Gross cash flows from operating activities	356 299	278 548
<i>Changes in operating working capital ¹</i>	-109 544	-28 948
<i>Other operating cash flows</i>	-2 609	-5 880
Cash from operating activities	244 146	243 720
Cash from investing activities	-209 246	-102 375
Cash from financing activities	30 171	-157 293
Net increase or decrease in cash and cash equivalents	65 071	-15 948

¹ The value for 2018 differs from the organic increase reported in note 6.7. 'Operating working capital' due to a reclassification of € -17.6 million for capex related to trade payables balances at year-end.

The cash flow from operating activities is presented using the indirect method, whereas the direct method is used for the cash flows from other activities. The direct method focuses on classifying gross cash receipts and gross cash payments by category.

Cash from operating activities

Details of selected operating items in thousands of €	2017	2018
Non-cash items included in operating result (EBIT)		
<i>Depreciation and amortization ¹</i>	194 952	218 173
<i>Impairment losses on assets</i>	-3 411	21 451
Non-cash items added back to operating result (EBIT)	191 541	239 624
<i>Gains (-) and losses on business disposals (portion retained)</i>	-14 552	-
<i>Employee benefits: set-up / reversal (-) of amounts not used</i>	13 318	10 543
<i>Provisions: set-up / reversal (-) of amounts not used</i>	-10 740	10 814
<i>CTA recycled on business disposals</i>	6 895	599
<i>Equity-settled share-based payments</i>	5 126	6 692
Other non-cash items included in operating result (EBIT)	47	28 648
Total	191 588	268 272
Investing items included in operating result (EBIT)		
<i>Gains (-) and losses on business disposals (portion sold)</i>	-18 149	-1 478
<i>Gains (-) and losses on disposals of intangible assets + PP&E</i>	1 955	-29 783
Total	-16 194	-31 261
Amounts used on provisions and employee benefit obligations		
<i>Employee benefits: amounts used</i>	-35 528	-28 346
<i>Provisions: amounts used</i>	-14 570	-8 025
Total	-50 098	-36 371
Income taxes paid		
<i>Current income tax expense</i>	-69 286	-65 536
<i>Increase or decrease (-) in net income taxes payable</i>	-17 773	-3 436
Total	-87 059	-68 972
Other operating cash flows		
<i>Movements in other current assets and liabilities</i>	-2 101	-3 551
<i>Other</i>	-508	-2 329
Total	-2 609	-5 880

¹ Including € -11.3 million (2017: € -8.6 million) write-downs / (reversals of write-downs) on inventories and trade receivables (see note 6.7. 'Operating working capital').

Gross cash flows from operating activities decreased by € 77.8 million as a result of lower operating performance (€ -123.1 million EBITDA) and lower investing items (€ -15.1 million), offset by lower cash-outs on income taxes (€ +18.1 million), higher add-backs for other non-cash items (€ 28.6 million, mainly provisions and effects of the Sumaré disposal in 2017) and lower usage of provisions (€ 13.7 million). The gain on retained interests in business disposals in 2017 relates to the loss of control in the rubber reinforcement plant in Sumaré (Brazil).

Investing items in 2018 (€ 31.3 million) consist of (1) the cash gain on the disposal of the drying activities and (2) gains and losses on disposals of assets, mainly related to the sale of property as part of the closure of the Huizhou plant (China) and the Shah Alam plant (Malaysia).

Increases in working capital fueled by higher sales generated cash-outs amounting to € -28.9 million in 2018 (2017: € -109.5 million) (see organic increase in note 6.7. 'Operating working capital'). Other operating cash flows mainly relate to swings in other receivables and payables not included in working capital and not arising from investing or financing activities.

Income taxes paid were € 18.1 million lower than in 2017. Less taxes were paid primarily in China (€ 6.2 million), Brazil (€ 5.7 million), Spain (€ 4.6 million), Indonesia (€ 3.4 million), Peru (€ 3.1 million), Czech Republic (€ 2.3 million) and The Netherlands (€ 2.2 million), while more taxes were paid in Turkey (€ -6.8 million).

Cash from investing activities

The net consideration received for the disposal of the drying activities is presented in 'Proceeds from disposals of investments' (see note 7.2. 'Effect of business disposals'). (2017: net consideration received for the disposal of the rubber reinforcement plant in Sumaré (Brazil)). Cash-outs from capital expenditure for property, plant and equipment decreased from € 272.7 million in 2017 to € 181.3 million in 2018.

The following table presents more details on selected investing cash flows:

Details of selected investing items in thousands of €	2017	2018
Other portfolio investments		
Other investments	-342	-411
Total	-342	-411
Proceeds from disposals of fixed assets		
Proceeds from disposals of intangible assets	148	24 297
Proceeds from disposals of property, plant and equipment	1 256	31 791
Total	1 404	56 088

Proceeds from sales of fixed assets relate to the sale of (1) rights to use land and (2) buildings and equipment of the closure of the Huizhou plant (China) and the Shah Alam plant (Malaysia).

Cash from financing activities

New long-term debt issued (€ 468.4 million) mainly related to financing transactions in Belgium and China (2017: € 179.3 million, mainly in Belgium, China and Chile). Repayments of long-term debt (€ -408.8 million) mainly related to BBRG financing (€ -258.3 million), loans in China (€ -41.2 million), in Belgium (€ -100.0 million), in Chile (€ -4.2 million) and in Australia (€ -3.5 million). Last year's repayments of long-term debt (€ -29.8 million) mainly related to BBRG financing (€ -12.3 million), loans in China (€ -8.4 million) and Turkey (€ -6.0 million). Cash-outs from short-term debt amounted to € 62.6 million in 2018, while there was an increase (€ 69.6 million) in short-term debt in 2017. For an overview of the movements in liabilities arising from financing activities, see note 6.17. 'Interest-bearing debt'.

Treasury shares transactions in 2018 (€ -11.3 million vs € 4.0 million in 2017) consisted of share buy-backs (€ -13.0 million vs € -6.3 million in 2017) and proceeds from options being exercised (€ 1.7 million vs € 10.3 million in 2017).

In 2017, 'Sales and purchases of non-controlling interests' mainly consists of the net consideration paid (€ 17.0 million) for the purchase of the 50% non-controlling interest in Bekaert (Chongqing) Steelcord Co Ltd. This year (€ -7.4 million) this mainly relates to the purchase of the non-controlling interest of the BBRG entities.

The following table presents more details about selected financing items:

Details of selected financing items in thousands of €	2017	2018
Other financing cash flows		
New shares issued following exercise of subscription rights	762	576
Capital paid in by non-controlling interestholders	9 870	205
Increase (-) or decrease in current and non-current loans and receivables	9 097	-2 313
Increase (-) or decrease in current financial assets	-45 218	365
Other financial income and expenses	-3 427	-9 067
Total	-28 916	-10 234

As for other financing cash flows, cash-ins resulted from capital increases in the parent company (€ 0.6 million vs € 0.8 million in 2017), minor capital contributions paid by non-controlling interestholders (2017: capital contributions by the Chinese partner in Bekaert (Jining) Steelcord Co Ltd) and net receipts from loans and receivables (€ -2.3 million vs € 9.1 million in 2017). Net investments in short-term deposits amounted to € 0.4 million (2017: net disposals of € 45.2 million). Other financial income and expenses mainly relates amongst others to taxes and bank charges on financial transactions (€ -7.7 million vs € -2.9 million in 2017).

7.2. Effect of business disposals

Disposal of the drying activities

On 9 July 2018 Bekaert and Argynnis Group AB of Sweden signed and closed an agreement regarding the sale of all shares of Solaronics SA to Argynnis. The transaction covers the production facility in Armentières (France) and an international sales & services network. An in-depth analysis showed that the further growth potential of the drying business be best secured by entrusting its future potential to an organization combining the competences of two complementary industry players.

The divestment of the drying activities is a confirmation of Bekaert's strategic focus on steel wire transformation and coating technologies, the Group's core competences.

The Solaronics plant accounted for € 5.9 million in consolidated revenue over the first half of 2018, representing nil in net result. A transaction gain of € 1.2 million was recognized in one-off items, including a loss of € 0.3 million on recycling CTA. The table below presents the net assets disposed by balance sheet caption, the gain recognized on the transaction and the proceeds shown in the consolidated cash flow statement.

in thousands of €	Total disposals
Intangible assets	54
Property, plant and equipment	401
Other non-current assets	141
Deferred tax assets	409
Inventories	3 027
Trade receivables	3 112
Advances paid	102
Other receivables	733
Cash and cash equivalents	4
Other current assets	56
Non-current employee benefit obligations	-518
Non-current provisions	-331
Deferred tax liabilities	75
Current interest-bearing debt	-1 177
Trade payables	-1 302
Advances received	-1 033
Current employee benefit obligations	-1 279
Current provisions	-258
Other current liabilities	-48
Total net assets disposed	2 168
Gain or loss (-) on disposal recognized in income	1 161
CTA recycled on disposal (non-cash loss)	317
Cash disposed	-4
Deferred proceeds	-807
Proceeds from disposals of investments	2 835

7.3. Financial risk management and financial derivatives

Principles of financial risk management

The Group is exposed to risks from movements in exchange rates, interest rates and market prices that affect its assets and liabilities. Financial risk management within the Group aims at reducing the impact of these market risks through ongoing operational and financing activities. Selected derivative hedging instruments are used depending on the assessment of risk involved. The Group mainly hedges the risks that affect the Group's cash flows. Derivatives are used exclusively as hedging instruments and not for trading or other speculative purposes. To reduce the credit risk, hedging transactions are generally only concluded with financial institutions whose credit rating is at least A.

The guidelines and principles of the Bekaert financial risk policy are defined by the Audit and Finance Committee and overseen by the Board of the Group. Group Treasury is responsible for implementing the financial risk policy. This encompasses defining appropriate policies and setting up effective control and reporting procedures. The Audit and Finance Committee is regularly kept informed as to the currency and interest-rate exposure.

Currency risk

The Group's currency risk can be split into two categories: translational and transactional currency risk.

Translational currency risk

A translational currency risk arises when the financial data of foreign subsidiaries are converted into the Group's presentation currency, the euro. The main currencies are Chinese renminbi, US dollar, Czech koruna, Brazilian real, Chilean peso, Russian ruble, Indian rupee and pound sterling. Since there is no impact on the cash flows, the Group usually does not hedge against such risk.

Transactional currency risk

The Group is exposed to transactional currency risks resulting from its investing, financing and operating activities.

Foreign currency risk in the area of investment results from the acquisition and disposal of investments in foreign companies, and sometimes also from dividends receivable from foreign investments. If material, these risks are hedged by means of forward exchange contracts.

Foreign currency risk in the financing area results from financial liabilities in foreign currencies. In line with its policy, Group Treasury hedges these risks using cross-currency interest-rate swaps and forward exchange contracts to convert financial obligations denominated in foreign currencies into the entity's functional currency. At the reporting date, the foreign currency liabilities for which currency risks were hedged mainly consisted of intercompany loans in euro and US dollar.

Foreign currency risk in the area of operating activities arises from commercial activities with sales and purchases in foreign currencies, as well as payments and receipts of royalties. The Group uses forward-exchange contracts to limit the currency risk on the forecasted cash inflows and outflows for the coming three months. Significant exposures and firm commitments beyond that time frame may also be covered.

Currency sensitivity analysis

The reasonably possible changes used in this calculation were based on annualized volatility relating to the daily movement of the exchange rate of the reported year, with a 95% confidence interval.

Currency sensitivity relating to the operating, investing and financing activities

The following table summarizes the Group's net foreign currency positions of operating, investing and financing receivables and payables at the reporting date for the most important currency pairs. The net currency positions are presented before intercompany eliminations. Positive amounts indicate that the Group has a net future cash inflow in the first currency. In the table, the 'Total exposure' column represents the position on the balance sheet, while the 'Total derivatives' column includes all financial derivatives hedging those balance sheet positions as well as forecasted transactions.

Currency pair - 2018

in thousands of €

	Total exposure	Total derivatives	Open position
AUD/USD	4 555	-3 262	1 293
CZK/EUR	10 569	-6 906	3 663
EUR/BRL	-15 031	-	-15 031
EUR/CNY	-117 627	42 191	-75 436
EUR/GBP	-17 789	9 019	-8 770
EUR/INR	-31 591	18 254	-13 337
EUR/MYR	-15 524	15 000	-524
EUR/RON	-48 369	4 787	-43 582
EUR/USD	4 882	-	4 882
HKD/EUR	-7 355	-	-7 355
IDR/USD	11 206	-	11 206
JPY/CNY	6 810	-2 010	4 800
JPY/EUR	2 734	-2 401	334
NOK/GBP	5 817	-	5 817
NZD/USD	-9 687	-778	-10 465
RUB/EUR	28 314	-28 307	7
TRY/EUR	18 885	-	18 885
USD/BRL	-14 105	-	-14 105
USD/CLP	7 460	-	7 460
USD/CNY	-87 148	117 106	29 958
USD/COP	-15 393	21 607	6 213
USD/EUR	358 915	-311 637	47 278
USD/GBP	82 347	-	82 347
USD/INR	-79 818	-	-79 818

Currency pair - 2017

in thousands of €

	Total exposure	Total derivatives	Open position
AUD/USD	9 200	-3 579	5 621
CZK/EUR	5 220	-666	4 554
EUR/BRL	-13 726	-	-13 726
EUR/CAD	-6 907	13	-6 894
EUR/CNY	-69 459	33 310	-36 149
EUR/GBP	-12 990	-2 870	-15 860
EUR/MYR	-18 544	-	-18 544
EUR/RON	-25 120	19 320	-5 801
EUR/USD	-5 952	-	-5 952
HKD/EUR	-6 720	-	-6 720
IDR/USD	8 609	-	8 609
JPY/CNY	4 514	-741	3 774
JPY/EUR	-84	-1 668	-1 752
NOK/GBP	3 670	-	3 670
NZD/USD	-10 110	-839	-10 949
RUB/EUR	27 902	-24 499	3 403
TRY/EUR	15 992	-	15 992
USD/BRL	-10 416	-	-10 416
USD/CAD	230	-	230
USD/CLP	7 738	-	7 738
USD/CNY	-70 962	93 473	22 512
USD/COP	-11 634	15 739	4 105
USD/EUR	248 150	-219 010	29 140
USD/GBP	87 698	-3 550	84 148
USD/INR	-84 082	52 265	-31 817
USD/PEN	4 269	-	4 269
USD/SGD	-21 807	-	-21 807

If rates had weakened/strengthened by reasonably possible changes with all other variables constant, the result for the period before taxes would have been € 3.7 million lower/higher (2017: € 3.8 million).

Currency sensitivity in relation to hedge accounting

At 31 December 2018 the Group does no longer apply hedge accounting. The limited number of cash flow hedges in Bridon International Ltd (UK) have been discontinued. As a consequence, there is no longer an impact of a weakened/strengthened GBP on the hedging reserve at year-end 2018 (2017: € 0.9 million).

Interest-rate risk

The Group is exposed to interest-rate risk, mainly on debt denominated in US dollar, Chinese renminbi and euro. To minimize the effects of interest-rate fluctuations in these regions, the Group manages the interest-rate risk for net debt denominated in the respective currencies of these countries separately. General guidelines are applied to cover interest-rate risk:

- » The target average life of long-term debt is four years.
- » The allocation of long-term debt between floating and fixed interest rates must remain within the defined limits approved by the Audit and Finance Committee.

Group Treasury uses interest-rate swaps and cross-currency interest-rate swaps to ensure that the floating and fixed portions of the long-term debt remain within the defined limits.

The following table summarizes the weighted average interest rates, including the effects of any swaps, at the balance sheet date.

The convertible bond is carried at amortized cost using the effective interest method so as to spread the separate recognition of the conversion option and any transaction fees over time via interest charges. This results in effective interest charges exceeding the nominal interest charges.

2018	Long-term			Short-term	Total
	Fixed rate	Floating rate	Total		
US dollar	4.20%	3.36%	3.50%	3.26%	3.29%
Chinese renminbi	-	4.63%	4.63%	4.56%	4.62%
Euro	1.76%	1.03%	1.72%	0.41%	1.30%
Other	8.52%	-	8.52%	4.92%	5.63%
Total	2.02%	2.85%	2.12%	2.16%	2.14%

2017	Long-term			Short-term	Total
	Fixed rate	Floating rate	Total		
US dollar	9.26%	4.72%	5.64%	3.00%	3.72%
Chinese renminbi	6.00%	4.71%	5.34%	4.57%	4.82%
Euro	2.60%	6.23%	3.20%	2.44%	3.19%
Other	8.54%	-	8.54%	4.10%	5.59%
Total	3.12%	5.63%	3.71%	2.99%	3.57%

Interest-rate sensitivity analysis

Interest-rate sensitivity of the financial debt

As disclosed in note 6.17. 'Interest-bearing debt', the total financial debt of the Group as of 31 December 2018 amounted to € 1 628.7 million (2017: € 1 634.8 million). The following table shows the currency and interest rate profile, i.e. the percentage distribution of the total financial debt by currency and by type of interest rate (fixed, floating), including the effect of any swaps.

Currency and interest rate profile	Long-term		Short-term	Total
	Fixed rate	Floating rate	Floating rate	
2018				
US dollar	0.50%	2.60%	17.70%	20.80%
Chinese renminbi	-	1.40%	0.40%	1.80%
Euro	44.30%	2.20%	22.50%	69.00%
Other	1.60%	-	6.80%	8.40%
Total	46.40%	6.20%	47.40%	100.00%

Currency and interest rate profile	Long-term		Short-term	Total
	Fixed rate	Floating rate	Floating rate	
2017				
US dollar	1.30%	5.40%	18.20%	24.90%
Chinese renminbi	0.60%	0.70%	2.90%	4.20%
Euro	52.60%	10.30%	0.50%	63.40%
Other	2.60%	-	4.90%	7.50%
Total	57.10%	16.40%	26.50%	100.00%

On the basis of the annualized daily volatility of the 3-month Interbank Offered Rate in 2018 and 2017, the reasonable estimates of possible interest rate changes, with a 95% confidence interval, are set out for the main currencies in the table below.

Currency	Interest rate at 31 December 2018	Reasonably possible changes (+/-)
Chinese renminbi ¹	2.72%	0.45%
Euro	0.00%	0.00%
US dollar	2.80%	0.27%

Currency	Interest rate at 31 December 2017	Reasonably possible changes (+/-)
Chinese renminbi ¹	4.25%	0.70%
Euro	0.00%	0.00%
US dollar	1.69%	0.17%

¹ For the Chinese renminbi, the interest rate is the PBOC benchmark interest rate for lending up to six months.

Applying the estimated possible changes in the interest rates to the floating rated debt, with all other variables constant, the result for the period before tax would have been € 1.6 million higher/lower (2017: € 2.3 million higher/lower). Since the EURIBOR was negative and Bekaert has a 0% floor in place, reasonably possible changes in the EURIBOR will not generate any effect.

Interest-rate sensitivity in relation to hedge accounting

At 31 December 2018, the Group does not apply hedge accounting (2017: none) and no sensitivity analysis was done.

Credit risk

The Group is exposed to credit risk from its operating activities and certain financing activities. In respect of its operating activities, the Group has a credit policy in place, which takes into account the risk profiles of the customers in terms of the market segment to which they belong. Based on activity platform, product sector and geographical area, a credit risk analysis is made of customers and a decision is taken regarding the covering of the credit risk. The exposure to credit risk is monitored on an ongoing basis and credit evaluations are made of all customers. In terms of the characteristics of some steel wire activities with a limited number of global customers, the concentration risk is closely monitored and, in combination with the existing credit policy, appropriate action is taken when needed. In accordance with IFRS 8 §34, none of the specified disclosures on individual customers (or groups of customers under common control) are required, since none of the Group's customers accounts for more than 10% of its revenues. At 31 December 2018, 47.4% (2017: 64.5%) of the credit risk exposure was covered by credit insurance policies and by trade finance techniques. In respect of financing activities, transactions are normally concluded with counterparties that have at least an A credit rating. There are also limits allocated to each counterparty which depend on their rating. Due to this approach, the Group considers the risk of counterparty default to be limited in both operating and financing activities.

Liquidity risk

Liquidity risk is the risk that the Group will be unable to meet its obligations as they come due because of an inability to liquidate assets or obtain adequate funding. To ensure liquidity and financial flexibility at all times, the Group, in addition to its available cash, has several uncommitted short-term credit lines at its disposal in the major currencies and in amounts considered adequate for current and near-future financing needs. These facilities are generally of the mixed type and may be utilized, for example, for advances, overdrafts, acceptances and discounting. The Group also has committed credit facilities at its disposal up to a maximum equivalent of € 100 million (2017: € 100 million) at floating interest rates with fixed margins. At year-end, nothing was outstanding under these facilities (2017: nil). In addition, the Group has a commercial paper and medium-term note program available for a maximum of € 123.9 million (2017: € 123.9 million). At the end of 2018, no commercial paper notes were outstanding (2017: nil). At year-end, no external bank debt was subject to debt covenants (2017: € 291 million). The Group has a joint factoring agreement with BNP Paribas Fortis and KBC and has discounted outstanding receivables per 31 December 2018 for a total amount of € 73.9 million (2017: nil). In the course of 2018, the factoring program has been modified and Bekaert transfers substantially all risks and rewards of ownership of the receivables to the factor. As a consequence, at the end of 2018, the factored receivables are derecognized, and the factoring program no longer leads to the recognition of a financial debt.

BBRG has become a wholly-owned group of entities of Bekaert in 2018. On October 12, 2018 the bank syndicated debt and the RCF have been fully repaid and replaced by a new Bridge Financing for 310 million EUR without covenants and hence is no longer ring-fenced. BBRG has entered into separate non-recourse factoring agreements with BNP Paribas Fortis in the UK and Germany. Since Bekaert has transferred substantially all risks and rewards of ownership of the factored receivables, these are derecognized at time of transfer.

As the Senior Facilities Agreement from BBRG has been repaid, BBRG has no longer obligations towards a lending syndicate.

The following table shows the Group's contractually agreed (undiscounted) outflows in relation to financial liabilities (including financial liabilities reclassified as liabilities associated with assets held for sale). Only net interest payments and principal repayments are included.

2018 in thousands of €	2019	2020	2021-2023	2024 and thereafter
Financial liabilities - principal				
<i>Trade payables</i>	-773 751	-	-	-
<i>Other payables</i>	-21 614	-150	-	-
<i>Interest-bearing debt</i>	-942 041	-163 964	-422 953	-125 727
<i>Derivatives - gross settled</i>	-256 452	-13 687	-	-
Financial liabilities - interests				
<i>Trade and other payables</i>	-	-	-	-
<i>Interest-bearing debt</i>	-31 009	-5 618	-5 423	-2 119
<i>Derivatives - net settled</i>	-	-	-	-
<i>Derivatives - gross settled</i>	-7 123	-1 514	-	-
Total undiscounted cash flow	-2 031 989	-184 933	-428 376	-127 846

2017 in thousands of €	2018	2019	2020-2022	2023 and thereafter
Financial liabilities - principal				
<i>Trade payables</i>	-665 196	-	-	-
<i>Other payables</i>	-21 139	-153	-	-
<i>Interest-bearing debt</i>	-454 401	-303 959	-756 982	-180 652
<i>Derivatives - gross settled</i>	-239 568	-4 753	-14 245	
Financial liabilities - interests				
<i>Trade and other payables</i>	-	-	-	-
<i>Interest-bearing debt</i>	-50 135	-38 513	-64 071	-29 398
<i>Derivatives - net settled</i>	228	114	-	-
<i>Derivatives - gross settled</i>	-5 748	-2 093	-1 576	-
Total undiscounted cash flow	-1 435 959	-349 357	-836 874	-210 050

All instruments held at the reporting date and for which payments had been contractually agreed are included. Forecasted data relating to future, new liabilities have not been included. Amounts in foreign currencies have been translated at the closing rate at the reporting date. The variable interest payments arising from the financial instruments were calculated using the applicable forward interest rates.

Hedging

All financial derivatives the Group enters into, relate to an underlying transaction or forecasted exposure. In function of the expected impact on the income statement and if the stringent IFRS 9 criteria are met, the Group decides on a case-by-case basis whether hedge accounting will be applied. The following sections describe the transactions whereby hedge accounting is applied and transactions which do not qualify for hedge accounting but constitute an economic hedge.

Hedge accounting

In 2017, the Group has applied hedge accounting only in a very limited number of cases, notably in Bridon International Ltd, which hedges its currency risk on operating cash flows through foreign-exchange contracts designated as cash flow hedges. These cash flow hedges have expired in 2018.

Fair value hedges

There were no fair value hedges in 2018 and 2017.

Cash flow hedges

The limited number of cash flow hedges have expired in 2018.

Economic hedging and other derivatives

The Group also uses financial instruments that represent an economic hedge but for which no hedge accounting is applied, either because the criteria to qualify for hedge accounting defined in IFRS 9 'Financial Instruments' are not met or because the Group has elected not to apply hedge accounting. These derivatives are treated as free-standing instruments held for trading.

- » The Group uses cross-currency interest-rate swaps and forward-exchange contracts to hedge the currency risk on intercompany loans involving two entities with different functional currencies. Until now, the Group has elected not to apply hedge accounting as defined in IFRS 9. Since nearly all cross-currency interest-rate swaps are floating-to-floating, the fair value gain or loss on the financial instruments is expected to offset the foreign-exchange result arising from the remeasurement of the intercompany loans. The major currencies involved are US dollars, euros and Russian rubles.
- » To manage its interest-rate exposure, the Group uses interest-rate swaps to convert its floating-rate debt to a fixed rate debt. In 2018 the existing interest-rate swaps have been stopped as a result of the refinancing of the BBRG debt (2018: nil - 2017: USD 73.0 million).
- » The Group uses forward exchange contracts to limit currency risks on its various operating and financing activities. For all forward exchange contracts, the fair value change is recorded immediately under other financial income and expenses.
- » In June 2016, a € 380 million convertible bond maturing in 2021 was issued with a zero coupon interest. The characteristics of the convertible bond are such that the conversion option constitutes a non-closely related embedded derivative which, in accordance with IFRS 9, is separated from the host contract. The fair value of the conversion derivative on the bond amounted to € 0.2 million at 31 December 2018 (2017: € 17.6 million), as a result of which a gain of € 17.3 million was recognized in other financial income (2017: a gain of € 17.6 million). The host contract (the plain vanilla debt without the conversion option)

is recognized at amortized cost using the effective interest method; its effective interest expense amounts to € 10.1 million (2017: € 10.4 million).

- » The put option relating to the 2014 business combination with Maccaferri qualifies as a non-current financial liability measured at fair value through profit or loss. The change in fair value recorded in other financial income and expenses amounted to a loss of € 1.9 million (2017: loss of € 0.3 million).

Derivatives

The following table analyzes the notional amounts of the derivatives according to their maturity date. For derivatives designated for hedge accounting as set out in IFRS 9, a distinction is made depending on whether these are part of a fair value hedge (FVH) or cash flow hedge (CFH):

2018 in thousands of €	Due within one year	Due between one and 5 years	Due after more than 5 years
Hedge accounting			
Forward exchange contracts (CFH)	-	-	-
Held for trading			
Forward exchange contracts	252 776	-	-
Interest-rate swaps	-	-	-
Cross-currency interest-rate swaps	341 308	13 687	-
Conversion derivative	-	380 000	-
Total	594 084	393 687	-

2017 in thousands of €	Due within one year	Due between one and 5 years	Due after more than 5 years
Hedge accounting			
Forward exchange contracts (CFH)	12 386	-	-
Held for trading			
Forward exchange contracts	226 441	-	-
Interest-rate swaps	-	60 869	-
Cross-currency interest-rate swaps	273 805	18 998	-
Conversion derivative	-	380 000	-
Total	512 632	459 867	-

The following table summarizes the fair values of the various derivatives carried. For derivatives designated for hedge accounting as set out in IFRS 9, a distinction is made depending on whether these are part of a fair value hedge (FVH) or cash flow hedge (CFH):

Fair value of current and non-current derivatives in thousands of €	Assets		Liabilities	
	2017	2018	2017	2018
Financial instruments				
Hedge accounting				
Forward exchange contracts (CFH)	-	-	468	-
Held for trading				
Forward exchange contracts	518	6 748	6 019	1 507
Interest-rate swaps	432	-	-	-
Interest-rate caps	-	-	24	-
Cross-currency interest-rate swaps	5 208	2 704	303	3 226
Conversion derivative	-	-	17 545	220
Total	6 159	9 452	24 359	4 953
Non-current	-	1 407	17 835	220
Current	6 159	8 045	6 525	4 734
Total	6 159	9 452	24 359	4 954

The Group has no financial assets and financial liabilities that are presented net in the balance sheet due to set-off in accordance with IAS 32. The Group enters into ISDA (International Swaps and Derivatives Association) master agreements with its counterparties for all of its derivatives, allowing the counterparties to net derivative assets with derivative liabilities when settling in case of default. Under these agreements, no collateral is being exchanged, neither in cash nor in securities.

The potential effect of the netting of derivative contracts is shown below:

Effect of enforceable netting agreements in thousands of €	Assets		Liabilities	
	2017	2018	2017	2018
Total derivatives recognized in balance sheet	6 159	9 452	24 359	4 954
Enforceable netting	-14	-1 297	-14	-1 297
Net amounts	6 145	8 155	24 345	3 657

Additional disclosures on financial instruments by class and category

The following tables list the different classes of financial assets and liabilities with their carrying amounts and their respective fair values, analyzed by their measurement category in accordance with IFRS 9 'Financial Instruments'.

Cash and cash equivalents, short-term deposits, trade and other receivables, bills of exchange received, loans and receivables primarily have short terms to maturity; hence, their carrying amounts at the reporting date approximate the fair values. Trade and other payables also generally have short terms to maturity and, hence, their carrying amounts also approximate their fair values. The Group has no exposure to collateralized debt obligations (CDOs).

The following abbreviations are used for the new IFRS 9 categories and last year's IAS 39 categories:

Abbreviation	Category in accordance with IAS 39
L&R	Loans & Receivables
AfS	Available for Sale
HfT	Financial assets or financial liabilities Held for Trading
FLMaAC	Financial Liabilities Measured at Amortized Cost
Hedge accounting	Hedge accounting
FVTPL	Financial liabilities measured as at fair value through profit or loss

Abbreviation	Category in accordance with IFRS 9
AC	Financial assets or financial liabilities at amortized cost
FVTOCI/Eq	Equity instruments designated as at fair value through OCI
FVTPL/Mnd	Financial assets mandatorily measured at fair value through profit or loss
HfT	Financial liabilities Held for Trading
FVTPL	Financial liabilities measured as at fair value through profit or loss

Carrying amount vs fair value in thousands of €	Category in accordance with IAS 39	Category in accordance with IFRS 9	31-Dec-17		31-Dec-18	
			Carrying amount	Fair value	Carrying amount	Fair value
Assets						
Non-current financial assets						
- Financial & other receivables and cash guarantees	L&R	AC	12 326	12 326	10 021	10 021
- Equity investments	AfS	FVTOCI/Eq	16 400	16 400	11 153	11 153
- Derivatives						
- Held for trading	HfT	FVTPL/Mnd	-	-	-	-
Current financial assets						
- Financial receivables and cash guarantees	L&R	AC	8 447	8 447	20 186	20 186
- Cash and cash equivalents	L&R	AC	418 779	418 779	398 273	398 273
- Short term deposits	L&R	AC	50 406	50 406	50 036	50 036
- Trade receivables	L&R	AC	836 809	836 809	772 731	772 731
- Bills of exchange received	L&R	AC	55 633	55 633	57 727	57 727
- Other current assets						
- Other receivables	L&R	AC	20 015	20 015	15 929	15 929
- Derivatives						
- Held for trading	HfT	FVTPL/Mnd	6 159	6 159	8 045	8 045
Liabilities						
Non-current interest-bearing debt						
- Finance leases	FLMaAC	AC	2 564	2 564	1 854	1 854
- Credit institutions	FLMaAC	AC	595 805	595 805	285 176	285 176
- Bonds	FLMaAC	AC	581 978	621 083	399 635	410 729
Current interest-bearing debt						
- Finance leases	FLMaAC	AC	582	582	810	810
- Credit institutions	FLMaAC	AC	353 819	353 819	746 231	746 231
- Bonds	FLMaAC	AC	100 000	103 112	195 000	199 626
Other non-current liabilities						
- Conversion option	HfT	HfT	17 545	17 545	220	220
- Put option	FVTPL	FVTPL	9 133	9 133	11 033	11 033
- Other derivatives	HfT	HfT	290	290	-	-
- Other payables	FLMaAC	AC	153	153	150	150
Trade payables	FLMaAC	AC	665 196	665 196	773 751	773 751
Other current liabilities						
- Other payables	FLMaAC	AC	10 394	10 394	10 355	10 355
- Derivatives						
- Held for trading	HfT	HfT	6 057	6 057	4 734	4 734
- Hedging instruments	Hedge accounting	HfT	468	468	-	-
Aggregated by category in accordance with IFRS 9						
Financial assets						
		AC	1 402 416	1 402 416	1 324 903	1 324 903
		FVTOCI/Eq	16 400	16 400	11 153	11 153
		FVTPL/Mnd	6 159	6 159	8 045	8 045
Financial liabilities						
		AC	2 310 491	2 352 708	2 412 961	2 428 682
		HfT	24 360	24 360	4 954	4 954
		FVTPL	9 133	9 133	11 033	11 033

The fair value of all financial instruments measured at amortized cost in the balance sheet has been determined using level-2 fair value measurement techniques.

Financial instruments by fair value measurement hierarchy

The fair value measurement of financial assets and financial liabilities can be characterized in one of the following ways:

- » 'Level 1' fair value measurement: the fair values of financial assets and liabilities with standard terms and conditions and traded on active liquid markets are determined with reference to quoted market prices in these active markets for identical assets and liabilities. This mainly relates to financial assets at fair value through other comprehensive income such as the investment in Shougang Concord Century Holdings Ltd (see note 6.5. 'Other non-current assets').
- » 'Level 2' fair value measurement: the fair values of other financial assets and financial liabilities are determined in accordance with generally accepted pricing models based on discounted cash flow analysis using prices from observable current market transactions and dealer quotes for similar instruments. This mainly relates to derivative financial instruments. Forward exchange contracts are measured using quoted forward-exchange rates and yield curves derived from quoted interest rates with matching maturities. Interest-rate swaps are measured at the present value of future cash flows estimated and discounted using the applicable yield curves derived from quoted interest rates. The fair value measurement of cross-currency interest-rate swaps is based on discounted estimated cash flows using quoted forward-exchange rates, quoted interest rates and applicable yield curves derived therefrom.
- » 'Level 3' fair value measurement: the fair value of the remaining financial assets and financial liabilities is derived from valuation techniques which include inputs that are not based on observable market data. The share conversion option in the convertible bond issued in June 2016 is a non-closely related embedded derivative that has to be separated from the host debt instrument and measured at fair value through profit or loss. The fair value of the conversion option is determined as the difference between the fair value of the convertible bond as a whole (mid – source: Bloomberg) and the fair value of the host debt contract using a valuation model based on the prevailing market interest rate for similar plain vanilla debt instruments. The main factors determining the fair value of the conversion bond are the Bekaert share price (level 1), the reference swap rate (level 2), the volatility of the Bekaert share (level 3) and the credit spread (level 3). Consequently, the conversion option is classified as a level-3 financial instrument. Similarly, the fair value of the put option relating to non-controlling interests has not been based on observable market data but on an updated business plan as initially agreed between the partners in the business combination with Maccaferri. The fair value was established using discounted cash flows.

Convertible bond issued in 2016	At issue date	At 31 Dec 2017	At 31 Dec 2018
Level 1 inputs			
Share price	€ 37.97	€ 36.45	€ 21.06
Level 2 inputs			
Reference swap rate	0.03%	0.08%	-0.13%
Level 3 inputs			
Volatility	29.00%	26.75%	22.00%
Credit spread	225 bps	80 bps	200 bps

Outcome of the model

in thousands of €

Fair value of the convertible debt	380 000	386 202	363 432
Fair value of the plain vanilla debt	339 509	368 656	363 212
Fair value of the conversion option	40 491	17 545	220

Put option Maccaferri**At 31 Dec 2018**

Level 3 inputs			
Discount rate			10.0%
Terminal value growth			2.0%
Average EBITDA / sales			2.9%

The carrying amount (i.e. the fair value) of the level-3 liabilities has evolved as follows:

Level-3 Financial liabilities

in thousands of €

	2017	2018
At 1 January	44 052	26 678
(Gain) / loss in fair value	-17 375	-15 425
At 31 December	26 678	11 253

Gains and losses in fair value are reported in other financial income and expenses. None of the level-3 financial liabilities were derecognized during the period.

The following table shows the sensitivity of the fair value calculation to the most significant level-3 inputs for the conversion option and the put option.

Sensitivity analysis

in thousands of €

	Change	Impact on conversion option	
Volatility	3.5%	increase by	266
	-3.5%	decrease by	-76
Credit spread	25 bps	increase by	1
	-25 bps	decrease by	19

Sensitivity analysis

in thousands of €

	Change	Impact on put option	
Discount rate	+1%	decrease by	-1 231
Terminal value growth	-0.5%	decrease by	-333
Average EBITDA / sales	-0.5%	decrease by	-1 330

The following table provides an analysis of financial instruments measured at fair value in the balance sheet, in accordance with the fair value measurement hierarchy described above:

2018 in thousands of €	Level 1	Level 2	Level 3	Total
Financial assets mandatorily measured as at fair value through profit or loss				
<i>Derivative financial assets</i>	-	9 452	-	9 452
Equity instruments designated as at fair value through OCI				
<i>Equity investments</i>	5 241	5 913	-	11 154
Total assets	5 241	15 365	-	20 606
Financial liabilities held for trading				
<i>Conversion option</i>	-	-	220	220
<i>Other derivative financial liabilities</i>	-	4 734	-	4 734
Financial liabilities designated as at fair value through profit or loss				
<i>Put option relating to non-controlling interests</i>	-	-	11 033	11 033
Total liabilities	-	4 734	11 253	15 986

2017 in thousands of €	Level 1	Level 2	Level 3	Total
Financial assets at fair value through profit or loss				
<i>Derivative financial assets</i>	-	6 159	-	6 159
Financial assets at fair value through OCI				
<i>Equity investments</i>	6 562	9 838	-	16 400
Total assets	6 562	15 997	-	22 559
Financial liabilities - hedge accounting				
<i>Conversion option</i>	-	-	17 545	17 545
<i>Other derivative financial liabilities</i>	-	6 815	-	6 815
Financial liabilities designated as at fair value through profit or loss				
<i>Put option relating to non-controlling interests</i>	-	-	9 133	9 133
Total liabilities	-	6 815	26 678	33 493

There were no transfers between level 1 and 2 in the period.

Capital risk management

The Group manages its capital to ensure that entities in the Group will be able to continue as a going concern while maximizing the return to shareholders through the optimization of the net debt and equity balance. The Group's overall strategy remains unchanged from 2017.

The capital structure of the Group consists of net debt, as defined in note 6.17. 'Interest-bearing debt', and equity (both attributable to the Group and to non-controlling interests).

Gearing ratio

The Group's Audit and Finance Committee reviews the capital structure on a semi-annual basis. As part of this review, the committee assesses the cost of capital and the risks associated with each class of capital. The Group has a target gearing ratio of 50% determined as the proportion of net debt to equity. To realize this target (excluding the impact of IFRS 16 (Leases)), the Group is following systematically a number of guidelines, a.o. strict cost control to improve profitability, managing working capital levels by operational excellence on the one hand and factoring programs on the other hand, prioritization of capital investment programs and active business portfolio management, including M&A and divestments.

Gearing in thousands of €	2017	2018
Net debt	1 150 857	1 152 878
Equity	1 583 036	1 516 002
Net debt to equity ratio	72.7%	76.0%

7.4. Contingencies and commitments

As at 31 December, the important contingencies and commitments were:

in thousands of €	2017	2018
Contingent liabilities	27 073	704
Commitments to purchase fixed assets	47 080	28 107
Commitments to invest in venture capital funds	6 256	9 437

At year-end 2018, there are no outstanding bank guarantees linked to environmental obligations.

The Group has entered into several rental contracts classified as operating leases mainly with respect to vehicles and buildings, predominantly in Europe. A large portion of the contracts for buildings contain a renewal clause. The assets are not subleased to a third party.

Future payments in thousands of €	2017	2018
Within one year	22 657	21 580
Between one and five years	38 267	41 673
More than five years	29 378	33 318
Total	90 302	96 571

Expenses in thousands of €	2017	2018
Vehicles	9 624	10 823
Industrial buildings	9 878	8 816
Equipment	5 684	5 920
Offices	3 825	4 802
Land	-	156
Other	617	741
Total	29 628	31 258

Weighted average lease term in years	2017	2018
Vehicles	4	4
Industrial buildings	7	7
Equipment	3	4
Offices	3	3
Land	-	1
Other	1	1

7.5. Related parties

Transactions between the Company and its subsidiaries, which are related parties, have been eliminated in the consolidation and are accordingly not disclosed in this note. Transactions with other related parties are disclosed below.

Transactions with joint ventures in thousands of €	2017	2018
Sales of goods	14 735	20 247
Purchases of goods	18 886	29 107
Services rendered	161	193
Royalties and management fees received	7 779	13 172
Dividends received	60 020	19 408

Outstanding balances with joint ventures in thousands of €	2017	2018
Trade receivables	5 507	11 287
Other current receivables	3 347	-
Trade payables	3 588	7 372
Other current payables	51	-

None of the related parties have entered into any other transactions with the Group that meet the requirements of IAS 24 'Related Party Disclosures'.

Key Management includes the Board of Directors, the CEO, the members of the Bekaert Group Executive (BGE) and the Senior Vice Presidents (see last page of the Financial Review).

Key Management remuneration in thousands of €	2017	2018
Number of persons	37	38
Short-term employee benefits		
<i>Basic remuneration</i>	6 912	7 108
<i>Variable remuneration</i>	4 990	3 602
<i>Remuneration as directors of subsidiaries</i>	581	516
Post-employment benefits		
<i>Defined-benefit pension plans</i>	479	524
<i>Defined-contribution pension plans</i>	707	761
Share-based payment benefits	3 989	4 251
Total gross remuneration	17 658	16 762
Average gross remuneration per person	477	441
Number of options and stock appreciation rights granted	210 500	163 750
Number of performance share units granted (cash-settled and equity-settled)	57 750	-
Number of matching share units acquired	17 191	15 251

The disclosures relating to the Belgian Corporate Governance Code are included in the Corporate Governance Statement of this annual report.

7.6. Events after the balance sheet date

- » A grant of 178 233 equity settled performance share units was made on 15 February 2019 under the terms of the PSP 2018-2020 Performance Share Plan. The granted performance share units represent a fair value of € 4.2 million.
- » A grant of 51 995 cash settled performance share units was made on 15 February 2019 under the terms of the PSU 2018-2020 Performance Share Plan. The granted performance share units represent a fair value of € 1.2 million.
- » In line with the organizational changes announced on 1 March 2019, Bekaert's segment reporting will be changed in 2019. The new segmentation will drive transparency into the business dynamics of each reporting unit and replace the previous geographic segmentation, to which Bridon-Bekaert Ropes Group had been added as a separate reporting segment. The Group's business units (BU) are characterized by BU-specific product and market profiles, industry trends, cost drivers, and technology needs tailored to specific industry requirements.

The new reporting segments are:

- The Business Unit Rubber Reinforcement (serving industries that use tire cord, bead wire, hose reinforcement wire and transportation belt reinforcement),
- The Business Unit Steel Wire Solutions (serving industrial, agricultural, consumer and construction markets with a broad range of steel wire products and solutions),
- The Business Unit Specialty Businesses (including building products, fiber technologies, combustion technology and sawing wire), and
- Bridon-Bekaert Ropes Group (BBRG, including the ropes and advanced cords businesses).

7.7. Services provided by the statutory auditor and related persons

During 2018, the statutory auditor and persons professionally related to him performed additional services for fees amounting to € 1 451 580.

These fees essentially relate to further assurance services (€ 280 916), tax advisory services (€ 1 124 438) and other non-audit services (€ 46 226). The additional services were approved by the Audit and Finance Committee.

The audit fees for NV Bekaert SA and its subsidiaries amounted to € 2 303 459.

7.8. Subsidiaries, joint ventures and associates

Companies forming part of the Group as at 31 December 2018

Subsidiaries

<i>Industrial companies</i>	<i>Address</i>	<i>FC¹</i>	<i>%²</i>
EMEA			
Bekaert Advanced Cords Aalter NV	Aalter, Belgium	EUR	100
Bekaert Bohumín sro	Bohumín, Czech Republic	CZK	100
Bekaert Bradford UK Ltd	Bradford, United Kingdom	GBP	100
Bekaert Combustion Technology BV	Assen, Netherlands	EUR	100
Bekaert Figline SpA	Milano, Italy	EUR	100
Bekaert Heating Romania SRL	Negoiesti, Brazi Commune, Romania	RON	100
Bekaert Hlohovec as	Hlohovec, Slovakia	EUR	100
Bekaert Izmit Çelik Kord Sanayi ve Ticaret AS	Izmit, Turkey	EUR	100
Bekaert Kartepe Çelik Kord Sanayi ve Ticaret AS	Kartepe, Turkey	EUR	100
Bekaert Petrovice sro	Petrovice, Czech Republic	CZK	100
Bekaert Sardegna SpA	Assemini, Italy	EUR	100
Bekaert Slatina SRL	Slatina, Romania	RON	80
Bekaert Slovakia sro	Sládkovičovo, Slovakia	EUR	100
Bekintex NV	Wetteren, Belgium	EUR	100
Bridon International GmbH	Gelsenkirchen, Germany	EUR	100
Bridon International Ltd	Doncaster, United Kingdom	GBP	100
Industrias del Ubierna SA	Burgos, Spain	EUR	100
OOO Bekaert Lipetsk	Gryazi, Russian Federation	RUB	100
North America			
Bekaert Corporation	Wilmington (Delaware), United States	USD	100
Bridon-American Corporation	New York, United States	USD	100
Wire Rope Industries Ltd/Industries de Câbles d'Acier Ltée	Pointe-Claire, Canada	CAD	100
Latin America			
Acma SA	Santiago, Chile	CLP	52
Acmanet SA	Talcahuano, Chile	CLP	52
BBRG - Osasco Cabos Ltda	São Paulo, Brazil	BRL	100
Bekaert Costa Rica SA	San José-Santa Ana, Costa Rica	USD	58
BIA Alambres Costa Rica SA	San José-Santa Ana, Costa Rica	USD	58
Ideal Alambrec SA	Quito, Ecuador	USD	58
Industrias Chilenas de Alambre - Inchalam SA	Talcahuano, Chile	CLP	52
Prodinsa SA	Maipú, Chile	CLP	100
Productora de Alambres Colombianos Proalco SAS	Bogotá, Colombia	COP	80
Productos de Acero Cassadó SA	Callao, Peru	USD	38
Vicson SA	Valencia, Venezuela	VES	80
Asia Pacific			
Bekaert Applied Material Technology (Shanghai) Co Ltd	Shanghai, China	CNY	100
Bekaert Binjiang Steel Cord Co Ltd	Jiangyin (Jiangsu province), China	CNY	90
Bekaert (China) Technology Research and Development Co Ltd	Jiangyin (Jiangsu province), China	CNY	100
Bekaert (Chongqing) Steel Cord Co Ltd	Chongqing, China	CNY	100
Bekaert Heating Technology (Suzhou) Co Ltd	Taichang City (Jiangsu province), China	CNY	100
Bekaert (Huizhou) Steel Cord Co Ltd	Huizhou (Guangdong province), China	CNY	100
Bekaert Industries Pvt Ltd	Taluka Shirur, District Pune, India	INR	100
Bekaert Ipoh Sdn Bhd	Kuala Lumpur, Malaysia	MYR	100
Bekaert (Jining) Steel Cord Co Ltd	Jining City, Yanzhou district (Shandong Province), China	CNY	60
Bekaert Jiangyin Wire Products Co Ltd	Jiangyin (Jiangsu province), China	CNY	100
Bekaert Mukand Wire Industries Pvt Ltd	Pune, India	INR	100
Bekaert New Materials (Suzhou) Co Ltd	Suzhou (Jiangsu province), China	CNY	100
Bekaert (Qingdao) Wire Products Co Ltd	Qingdao (Shandong province), China	CNY	100
Bekaert Shah Alam Sdn Bhd	Kuala Lumpur, Malaysia	MYR	100
Bekaert (Shandong) Tire Cord Co Ltd	Weihai (Shandong province), China	CNY	100
Bekaert (Shenyang) Advanced Cords Co Ltd	Shenyang (Liaoning province), China	CNY	100
Bekaert Shenyang Advanced Products Co Ltd	Shenyang (Liaoning province), China	CNY	100
Bekaert Toko Metal Fiber Co Ltd	Tokyo, Japan	JPY	70
Bekaert Vietnam Co Ltd	Son Tinh District, Quang Ngai Province	USD	100
Bekaert Wire Ropes Pty Ltd	Mayfield East, Australia	AUD	100
Bridon (Hangzhou) Ropes Co Ltd	Hangzhou (Zhejiang province), China	CNY	100
China Bekaert Steel Cord Co Ltd	Jiangyin (Jiangsu province), China	CNY	90
PT Bekaert Indonesia	Karawang, Indonesia	USD	100
PT Bekaert Wire Indonesia	Karawang, Indonesia	USD	100
PT Bridon	Bekasi, West Java, Indonesia	USD	100

¹ Functional currency

² Financial interest percentage

Sales offices, warehouses and others	Address	FC¹	%²
EMEA			
Bekaert AS	Hellerup, Denmark	DKK	100
Bekaert Emirates LLC	Dubai, United Arab Emirates	AED	49
Bekaert France SAS	Lille, France	EUR	100
Bekaert Ges mbH	Vienna, Austria	EUR	100
Bekaert GmbH	Neu-Anspach, Germany	EUR	100
Bekaert Maccaferri Underground Solutions BVBA	Aalst (Erembodegem), Belgium	EUR	50
Bekaert Maccaferri Underground Solutions Srl	Zola Predosa, Bologna, Italy	EUR	50
Bekaert Middle East LLC	Dubai, United Arab Emirates	AED	49
Bekaert Norge AS	Oslo, Norway	NOK	100
Bekaert Poland Sp z oo	Warsaw, Poland	PLN	100
Bekaert (Schweiz) AG	Baden, Switzerland	CHF	100
Bekaert Svenska AB	Gothenburg, Sweden	SEK	100
Bridon-Bekaert ScanRope AS	Tonsberg, Norway	NOK	100
Bridon Coatbridge Ltd	Doncaster, United Kingdom	GBP	100
Bridon Ropes NV/SA	Zwevegem, Belgium	EUR	100
Bridon Scheme Trustees Ltd	Doncaster, United Kingdom	GBP	100
British Ropes Ltd	Doncaster, United Kingdom	GBP	100
Leon Bekaert SpA	Milano, Italy	EUR	100
OOO Bekaert Wire	Moscow, Russian Federation	RUB	100
Rylands-Whitecross Ltd	Bradford, United Kingdom	GBP	100
Scheldestroom NV	Zwevegem, Belgium	EUR	100
Twil Company	Bradford, United Kingdom	GBP	100
Latin America			
Bekaert Guatemala SA	Ciudad de Guatemala, Guatemala	GTQ	58
Bekaert Specialty Films de Mexico SA de CV	Monterrey, Mexico	MXN	100
Bekaert Trade Mexico S de RL de CV	Mexico City, Mexico	MXN	100
Inversiones BBRG Lima SA	Lima, Peru	PEN	96
Procables SA	Callao, Peru	PEN	96
Prodac Contrata SAC	Callao, Peru	USD	38
Prodac Selva SAC	Ucayali, Peru	USD	38
Prodalam SA	Santiago, Chile	CLP	52
Prodinsa Ingeniería y Proyectos SA	Santiago, Chile	CLP	100
Specialty Films de Services Company SA de CV	Monterrey, Mexico	MXN	100
Asia Pacific			
Bekaert Advanced Products (Shanghai) Co Ltd	Shanghai, China	CNY	100
Bekaert Japan Co Ltd	Tokyo, Japan	JPY	100
Bekaert Korea Ltd	Seoul, South Korea	KRW	100
Bekaert Management (Shanghai) Co Ltd	Shanghai, China	CNY	100
Bekaert Singapore Pte Ltd	Singapore	SGD	100
Bekaert Taiwan Co Ltd	Taipei, Taiwan	TWD	100
Bekaert (Thailand) Co Ltd	Tambol Pluakdaeng, Amphur Pluakdaeng, Thailand	USD	100
BOSFA Pty Ltd	Port Melbourne, Australia	AUD	100
Bridon Hong Kong Ltd	Hong Kong, China	HKD	100
Bridon New Zealand Ltd	Auckland, New Zealand	NZD	100
Bridon Singapore (Pte) Ltd	Singapore	SGD	100
PT Bekaert Trade Indonesia	Karawang, Indonesia	USD	100

¹ Functional currency² Financial interest percentage

Financial companies	Address	FC¹	%²
Acma Inversiones SA	Maipú, Chile	CLP	100
BBRG Finance (UK) Ltd	Doncaster, United Kingdom	EUR	100
BBRG Holding (UK) Ltd	Doncaster, United Kingdom	EUR	100
BBRG MIPCo Ltd	Bradford, United Kingdom	GBP	100
BBRG Operations (UK) Ltd	Doncaster, United Kingdom	EUR	100
BBRG Production (UK) Ltd	Doncaster, United Kingdom	EUR	100
BBRG (Purchaser) Ltd	Doncaster, United Kingdom	EUR	100
BBRG (Subsidiary) Ltd	Doncaster, United Kingdom	EUR	100
Becare DAC	Dublin, Ireland	EUR	100
Bekaert Building Products Hong Kong Ltd	Hong Kong, China	EUR	100
Bekaert Carding Solutions Hong Kong Ltd	Hong Kong, China	EUR	100
Bekaert Coördinatiecentrum NV	Zwevegem, Belgium	EUR	100
Bekaert do Brasil Ltda	Contagem, Brazil	BRL	100
Bekaert Holding Hong Kong Ltd	Hong Kong, China	EUR	100
Bekaert Ibérica Holding SL	Burgos, Spain	EUR	100
Bekaert Ideal SL	Burgos, Spain	EUR	80
Bekaert Investments NV	Zwevegem, Belgium	EUR	100
Bekaert Investments Italia SpA	Milano, Italy	EUR	100
Bekaert North America Management Corporation	Wilmington (Delaware), United States	USD	100
Bekaert Services Hong Kong Ltd	Hong Kong, China	EUR	100
Bekaert Singapore Holding Pte Ltd	Singapore	SGD	100
Bekaert Specialty Wire Products Hong Kong Ltd	Hong Kong, China	EUR	100
Bekaert Stainless Products Hong Kong Ltd	Hong Kong, China	EUR	100
Bekaert Steel Cord Products Hong Kong Ltd	Hong Kong, China	EUR	100
Bekaert Strategic Partnerships Hong Kong Ltd	Hong Kong, China	EUR	100
Bekaert Wire Products Hong Kong Ltd	Hong Kong, China	EUR	100
Bekaert Wire Rope Industry NV	Aalst (Erembodegem), Belgium	EUR	100
Bridon-Bekaert Ropes Group Ltd	Doncaster, United Kingdom	EUR	100
Bridon-Bekaert Ropes Group (UK) Ltd	Doncaster, United Kingdom	EUR	100
Bridon Holdings Ltd	Doncaster, United Kingdom	GBP	100
Bridon Ltd	Doncaster, United Kingdom	GBP	100
Bridon (South East Asia) Ltd	Hong Kong, China	HKD	100
Industrias Acmanet Ltda	Talcahuano, Chile	CLP	52
Inversiones Bekaert Andean Ropes SA	Santiago, Chile	CLP	100
Inversiones Impala Perú SA Cerrada	Lima, Peru	USD	52
InverVicson SA	Valencia, Venezuela	VES	80
Procables Wire Ropes SA	Maipú, Chile	CLP	100
Procercos SA	Talcahuano, Chile	CLP	52

Joint ventures

Industrial companies	Address	FC¹	%²
Latin America			
Belgo Bekaert Arames Ltda	Contagem, Brazil	BRL	45
BMB-Belgo Mineira Bekaert Artefatos de Arame Ltda	Vespasiano, Brazil	BRL	45
Servicios Ideal AGF Inttegra Cia Ltda	Quito, Ecuador	USD	29

Sales offices, warehouses and others	Address	FC¹	%²
EMEA			
Netlon Sentinel Ltd	Blackburn, United Kingdom	GBP	50
Asia Pacific			
Bekaert Engineering (India) Pvt Ltd	New Delhi, India	INR	40

No items of PP&E of subsidiaries and joint ventures are pledged as securities.

¹ Functional currency

² Financial interest percentage

Changes in 2018

1. New investments

Subsidiaries	Address	%
BBRG MIPCo Ltd	Bradford, United Kingdom	100
Bekaert Heating Romania SRL	Negoiesti, Brazi Commune, Romania	100
Bekaert Heating Technology (Suzhou) Co Ltd	Taicang City (Jiangsu province), China	100
Bekaert (Thailand) Co Ltd	Tambol Pluakdaeng, Amphur Pluakdaeng, Thailand	100
Bekaert Vietnam Co Ltd	Son Tinh District, Quang Ngai Province, Vietnam	100
Joint ventures	Address	%
Servicios Ideal AGF Inttegra Cía Ltda	Quito, Ecuador	29

2. Disposals

Subsidiaries	Address	%
Solaronics SA	Armentières, France	From 100% to 0%

3. Changes in ownership without change in control

Subsidiaries	Address	%
Acma Inversiones SA	Maipú, Chile	From 60% to 100%
BBRG Finance (UK) Ltd	Doncaster, United Kingdom	From 60% to 100%
BBRG Holding (UK) Ltd	Doncaster, United Kingdom	From 60% to 100%
BBRG Operations (UK) Ltd	Doncaster, United Kingdom	From 60% to 100%
BBRG - Osasco Cabos Ltda	São Paulo, Brazil	From 60% to 100%
BBRG Production (UK) Ltd	Doncaster, United Kingdom	From 60% to 100%
BBRG (Purchaser) Ltd	Doncaster, United Kingdom	From 60% to 100%
BBRG (Subsidiary) Ltd	Doncaster, United Kingdom	From 60% to 100%
Bekaert Advanced Cords Aalter NV	Aalter, Belgium	From 60% to 100%
Bekaert Guatemala SA	Ciudad de Guatemala, Guatemala	From 100% to 58%
Bekaert (Shenyang) Advanced Cords Co Ltd	Shenyang (Liaoning province), China	From 60% to 100%
Bekaert Wire Rope Industry NV	Aalst (Erembodegem), Belgium	From 60% to 100%
Bekaert Wire Ropes Pty Ltd	Mayfield East, Australia	From 60% to 100%
Bridon-American Corporation	New York, United States	From 60% to 100%
Bridon-Bekaert Ropes Group Ltd	Doncaster, United Kingdom	From 60% to 100%
Bridon-Bekaert Ropes Group (UK) Ltd	Doncaster, United Kingdom	From 60% to 100%
Bridon-Bekaert ScanRope AS	Tonsberg, Norway	From 60% to 100%
Bridon Coatbridge Ltd	Doncaster, United Kingdom	From 60% to 100%
Bridon (Hangzhou) Ropes Ltd	Hangzhou (Zhejiang province), China	From 60% to 100%
Bridon Holdings Ltd	Doncaster, United Kingdom	From 60% to 100%
Bridon Hong Kong Ltd	Hong Kong, China	From 60% to 100%
Bridon International GmbH	Gelsenkirchen, Germany	From 60% to 100%
Bridon International Ltd	Doncaster, United Kingdom	From 60% to 100%
Bridon Ltd	Doncaster, United Kingdom	From 60% to 100%
Bridon New Zealand Ltd	Auckland; New Zealand	From 60% to 100%
Bridon Ropes NV/SA	Zwevegem, Belgium	From 60% to 100%
Bridon Scheme Trustees Ltd	Doncaster, United Kingdom	From 60% to 100%
Bridon Singapore (Pte) Ltd	Singapore	From 60% to 100%
Bridon (South East Asia) Ltd	Hong Kong, China	From 60% to 100%
British Ropes Ltd	Doncaster, United Kingdom	From 60% to 100%
Inversiones BBRG Lima SA	Lima, Peru	From 58% to 96%
Procables SA	Callao, Peru	From 58% to 96%
Procables Wire Ropes SA	Maipú, Chile	From 60% to 100%
Prodinsa Ingeniería y Proyectos SA	Santiago, Chile	From 60% to 100%
Prodinsa SA	Maipú, Chile	From 60% to 100%
PT Bridon	Bekasi, West Java, Indonesia	From 60% to 100%
Wire Rope Industries Ltd/Industries de Câbles d'Acier Ltée	Pointe-Claire, Canada	From 60% to 100%

4. Mergers / conversions

Subsidiaries	Merged into
BBRG - Macaé Cabos Ltda	BBRG - Osasco Cabos Ltda

5. Closed down

Companies	Address
Bekaert Carding Solutions Inc / Bekaert Solutions de Cardage Inc	Saint John, Canada
Bekaert Ltd	Bradford, United Kingdom
Bekaert Trade Latin America NV	Curaçao, Netherlands Antilles
Bekaert Xinyu Hong Kong Ltd	Hong Kong, China
Bridon Pension Trust (No Two) Ltd	Doncaster, United Kingdom
Gloucester Rope & Tackle Company Ltd	Doncaster, United Kingdom

In accordance with Belgian legislation, the table below lists the registered numbers of the Belgian companies.

Companies	Company number
Bekaert Advanced Cords Aalter NV	BTW BE 0645.654.071 RPR Gent, division Gent
Bekaert Coördinatiecentrum NV	BTW BE 0426.824.150 RPR Gent, division Kortrijk
Bekaert Investments NV	BTW BE 0406.207.096 RPR Gent, division Kortrijk
Bekaert Maccaferri Underground Solutions BVBA	BTW BE 0561.750.457 RPR Gent, division Dendermonde
Bekaert Wire Rope Industry NV	BTW BE 0550.983.358 RPR Gent, division Dendermonde
Bekintex NV	BTW BE 0452.746.609 RPR Gent, division Dendermonde
Bridon Ropes NV/SA	BTW BE 0401.637.507 RPR Gent, division Kortrijk
NV Bekaert SA	BTW BE 0405.388.536 RPR Gent, division Kortrijk
Scheldestroom NV	BTW BE 0403.676.188 RPR Gent, division Kortrijk