



Full year 2019 Financial report

Inside / regulated information

Published on February 26, 2020, at 7:00 a.m.

Forenote

IFRS 16 has been implemented in the Group's financial statements since January 1, 2019. Comparative information for 2018 in the business review is presented on an unaudited pro forma basis as if the implementation had taken place on January 1, 2018. This information is labelled "pro forma" or "PF". The balance sheet evolution is compared with January 1, 2019, which includes the IFRS 16 impact versus December 31, 2018.

Besides IFRS accounts, Solvay also presents alternative performance indicators to provide a more consistent and comparable indication of the Group's underlying financial performance and financial position, as well as cash flows. These indicators provide a balanced view of the Group's operations and are considered useful to investors, analysts and credit rating agencies as these measures provide relevant information on the Group's past or future performance, position or cash flows. These indicators are generally used in the sector it operates in and therefore serve as a useful aid for investors to compare the Group's performance with its peers. The underlying performance indicators adjust IFRS figures for the non-cash Purchase Price Allocation (PPA) accounting impacts related to acquisitions, for the coupons of perpetual hybrid bonds, classified as equity under IFRS but treated as debt in the underlying statements, and for other elements that would distort the analysis of the Group's underlying performance. The comments on the results made on pages 3 to 12 are on an underlying basis, unless otherwise stated.

UNDERLYING BUSINESS REVIEW^[1]

- Underlying EBITDA was stable over the year, in line with expectations. Positive forex impact offset a modest decrease on an organic ^[2] basis.
- Double digit volume growth in Composites, higher pricing in Performance Chemicals and strong focus on cost discipline helped mitigate demand headwinds in the automotive, electronics and oil & gas markets throughout the year.
- Underlying EBITDA margin maintained at 23% for 2019, reflecting the resilience of Solvay's businesses in a challenging market environment.

—

- Underlying EPS ^[3] from continuing operations reflects the lower EBITDA, higher depreciation and tax rate, partly offset by lower financial charges following debt optimization measures.

—

- Strong free cash flow, driven by the Company's renewed focus on cash and disciplined working capital management.
- Record total cash generation led to operational deleveraging of net financial debt of €414 million, and provisions of €157 million.
- The free cash flow conversion ^[5] improvement reflects higher than forecast cash generation.

—

- Stable returns largely reflect sustained investments for future growth.

—

- Stable total dividend recommended of €3.75 gross per share. This leads to a final gross dividend of €2.25 payable on May20, 2020, following the payment of the interim gross dividend of €1.50 per share in January 2020.

FY key figures

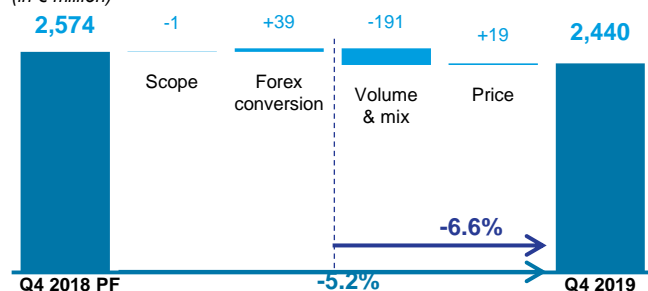
(in € million)	IFRS			Underlying		
	FY 2019	FY 2018 PF	% yoy	FY 2019	FY 2018 PF	% yoy
Net sales	10,244	10,257	-0.1%	10,244	10,257	-0.1%
EBITDA	2,222	2,030	+9.5%	2,322	2,330	-0.4%
<i>EBITDA margin</i>				22.7%	22.7%	-0.1pp
EBIT	316	994	-68%	1,503	1,554	-3.2%
Net financial charges [6]	(242)	(210)	-15%	(332)	(342)	+2.8%
Income tax expenses	(153)	(73)	n.m.	(305)	(303)	-0.6%
<i>Tax rate</i>				27.8%	26.1%	+1.6pp
Profit from discontinued operations	236	201	+18%	247	216	+14%
(Profit) / loss attributable to non-controlling interests	(38)	(39)	-2.9%	(39)	(40)	-2.5%
Profit / (loss) attributable to Solvay shareholders	118	871	-86%	1,075	1,085	-1.0%
Basic earnings per share (in €)	1.15	8.43	-86%	10.41	10.51	-0.9%
of which from continuing operations	(1.14)	6.49	n.m.	8.02	8.42	-4.7%
Dividend	3.75	3.75	-	3.75	3.75	-
Capex in continuing operations				(826)	(794)	-4.0%
FCF to Solvay shareholders from continuing operations				606	566	+7.1%
FCF to Solvay shareholders				801	726	+10%
FCF conversion ratio				28%	26%	+1.8%
Net financial debt [7]	(3,586)	(2,605)	-38%	(5,386)		
<i>Underlying leverage ratio</i>				2.0		
CFROI				6.5%	6.8%	-0.3pp
ROCE				8.1%	8.2%	-0.1pp

Q4 key figures

(in € million)	IFRS			Underlying		
	Q4 2019	Q4 2018 PF	% yoy	Q4 2019	Q4 2018 PF	% yoy
Net sales	2,440	2,574	-5.2%	2,440	2,574	-5.2%
EBITDA	516	486	+6.1%	525	531	-1.0%
<i>EBITDA margin</i>				21.5%	20.6%	+0.9pp
EBIT	202	236	-14%	306	325	-5.7%
Net financial charges [6]	(67)	(61)	-10.0%	(86)	(82)	-4.2%
Income tax expenses	(146)	42	n.m.	(74)	(73)	-1.5%
Profit from discontinued operations	28	43	-35%	24	47	-49%
(Profit) / loss attributable to non-controlling interests	(7)	(10)	-28%	(8)	(10)	-18%
Profit / (loss) attributable to Solvay shareholders	9	250	n.m.	163	208	-21%
Basic earnings per share (in €)	0.08	2.42	n.m.	1.58	2.01	-21%
of which from continuing operations	(0.18)	2.01	n.m.	1.34	1.55	-13%
Capex in continuing operations				(255)	(243)	-4.9%
FCF to Solvay shareholders from continuing operations				261	438	-40%
FCF to Solvay shareholders				274	454	-40%
Net financial debt [7]	(3,586)			(5,386)		
<i>Underlying leverage ratio</i>				2.0		

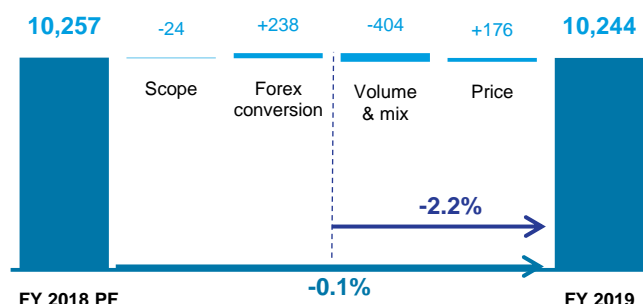
Net sales

(in € million)



Fourth quarter net sales were down -5.2%, with forex conversion effects compensating for -6.6% organic^[2] growth, as a result of lower volumes.

- **Forex** conversion had a positive effect, primarily related to the appreciation of the U.S. dollar.
- **Volumes** were down -7.4%. Demand from automotive and electronic applications continued to be low, while the strong performance of aerospace softened with the expected lower production rate for the 737MAX aircraft. Sales to the North American shale oil & gas sector continued to be impacted by further weakening demand in a very competitive market.
- **Prices** rose by +0.7%, benefiting from increased pricing for soda ash and peroxides.

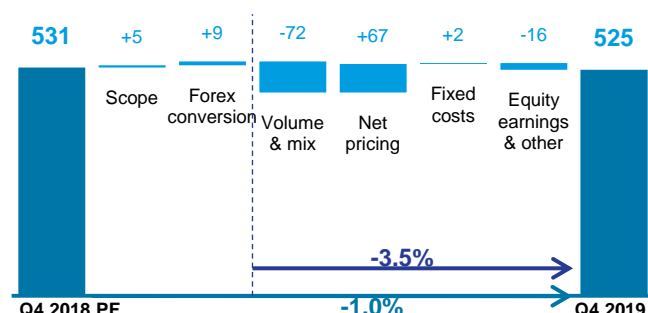


Full year net sales were stable, supported by positive forex conversion effects. Organically^[2], net sales were down -2.2%, with lower volumes being partly compensated by higher prices.

- The slight reduction in **scope**^[8] is mainly related to the divestment of remaining soda ash related activities in Egypt in October 2018.
- **Volumes** were down -3.9%, as demand fell in the automotive, electronics and oil & gas markets, which represents about 25% of Solvay's sales. This was partly offset by the strong demand for composite materials in aerospace applications. Demand for soda ash and peroxide proved resilient.
- **Prices** increased by +1.7%, benefiting from higher prices for soda ash and peroxides.

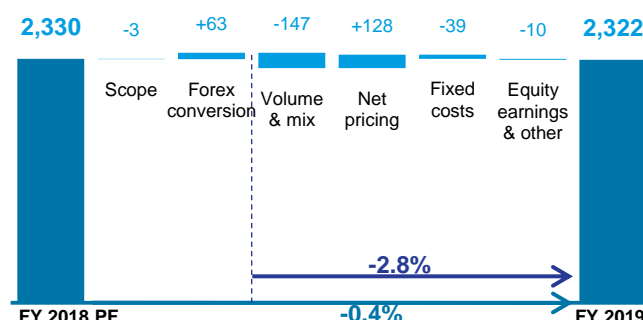
Underlying EBITDA

(in € million)



Fourth quarter underlying EBITDA was down -1.0%, and -3.5% organically^[2] excluding forex conversion. Positive net pricing effects compensated for lower volumes, while fixed costs were kept stable. The underlying EBITDA margin was slightly up by +0.9pp at 22%.

- **Net pricing** was up +12%, including price increases, lower raw material and energy prices in the quarter.
- **Fixed costs** were stable due to acceleration of the simplification and productivity measures, especially in Performance Chemicals and Advanced Formulations. Corporate costs were lower year on year.
- **Equity earnings & other elements** consisted mainly of the lower contribution from the PVC and Peroxide joint ventures, and some small non-repeating events.

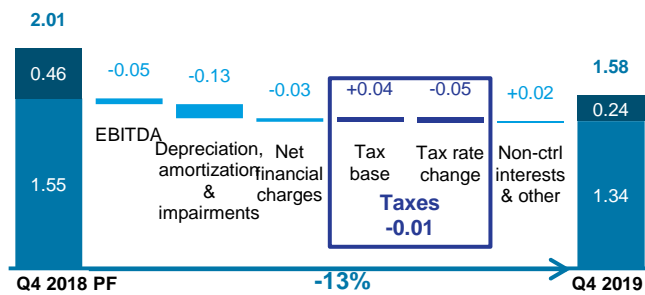


Full year underlying EBITDA was down -0.4%, and -2.8% organically^[2], mostly on lower volumes.

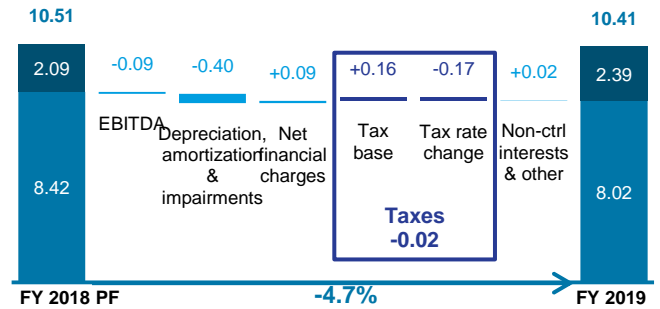
- **Net pricing** contributed +5.5%. Higher prices and cost measures more than compensated for higher raw material and energy prices, which were up primarily in the first half.
- **Fixed costs** were up reflecting the expanded production capabilities in Composite Materials for aerospace, as well as the accounting impact of destocking in response to lower demand in other markets, especially in Specialty Polymers. Inflation was compensated by cost containment measures and lower corporate costs. The simplification plan delivered over €100 million of savings since its launch in 2018.
- **Equity earnings & other elements** reflect the positive contribution from the PVC and peroxide joint ventures and the -0.6% net impact of one-time events. These include a €12 million gain on an energy-related settlement in the second quarter of 2019 versus a €23 million pension-related synergy benefit booked in the same period in 2018.

Underlying earnings per share

(in €)



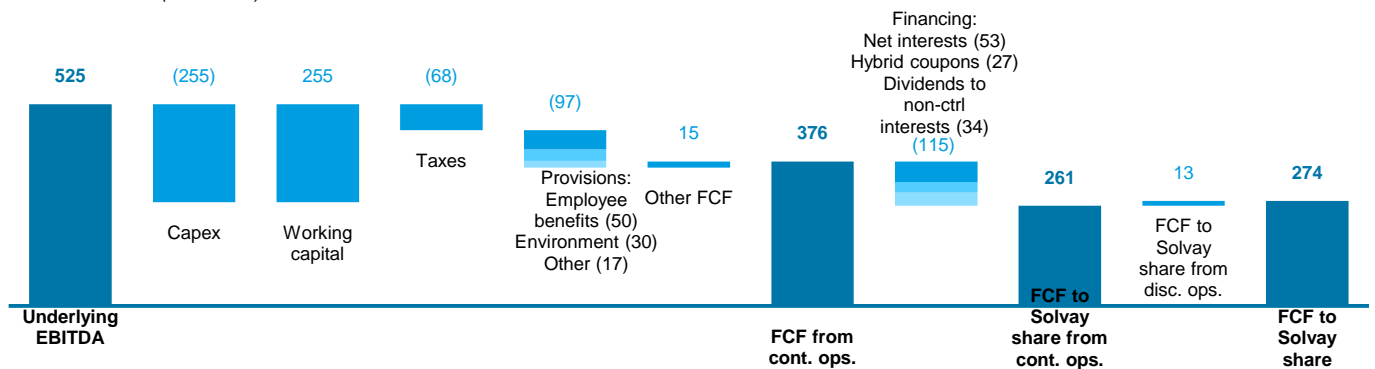
Fourth quarter 2019 underlying earnings per share ^[3] from continuing operations were down 13% at €1.34, primarily due to higher depreciation and amortization charges, as investments for future growth were sustained.



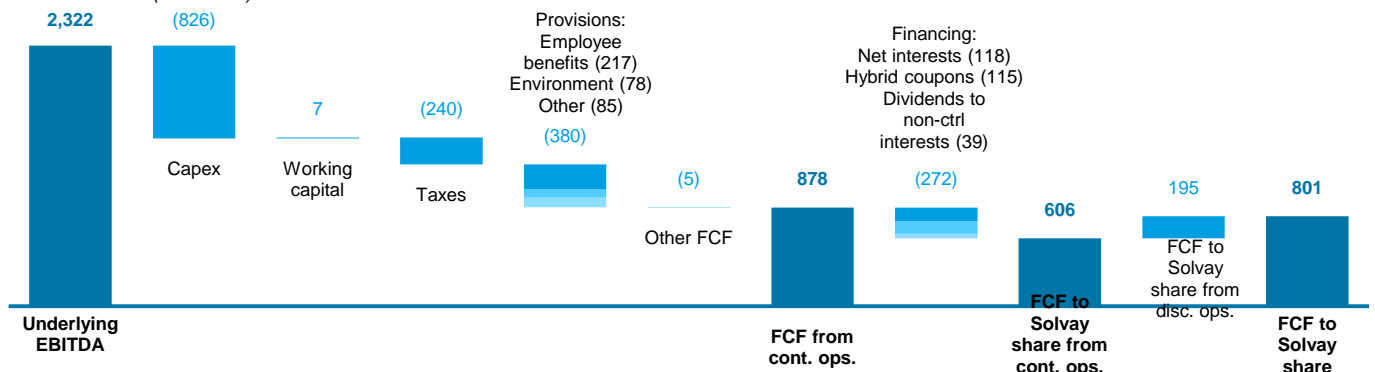
Full year underlying earnings per share ^[3] from continuing operations were down -4.7% at €8.02. Higher depreciation and amortization charges and the slightly lower EBITDA were mitigated by lower net financial charges, following the repayment of higher interest-yielding debt in June 2018 and May 2019. Total underlying earnings per share in the full year was modestly down thanks to a higher contribution from the discontinued polyamide operations.

Free cash flow (FCF)

Q4 evolution (in € million)



FY evolution (in € million)



Fourth quarter free cash flow to Solvay shareholders from continuing operations was €261 million. This is lower than the same quarter last year, mainly as a result of improved phasing of working capital, whereas in 2018 the cash inflow was concentrated in the fourth quarter, with €366 million (versus €255 million in the fourth quarter of 2019). Total Free Cash Flow to Solvay shareholders was €274 million.

Full year free cash flow to Solvay shareholders ^[5] from continuing operations was €606 million, up €40 million year on year. Working capital was positive at €7 million, resulting from more disciplined management.

Capex from continuing operations increased by +5.4% compared to €794 million in 2018. Provision payments were largely in line with last year, and taxes were up €(29) million, as expected.

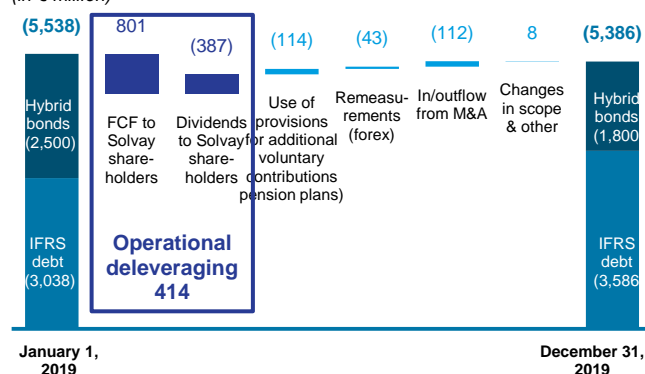
Discontinued operations contributed €195 million, €35 million more than in 2018. These operations consist of the Polyamide activities sold on January 31, 2020 to BASF and Domo.

As a consequence, total free cash flow to Solvay shareholders amounted to €801 million in 2019.



Net financial debt

(in € million)

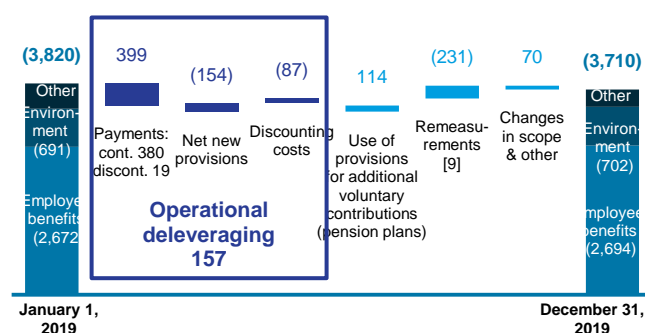


Underlying net financial debt^[7] was €(5.4) billion. Strong operational cash flow of €801 million funded dividends of €387 million as well as an additional voluntary pension contribution of €114 million. Taking into account other factors such as forex and M&A impact, net financial debt was reduced by €152 million and the underlying leverage ratio improved to 2.0x.

Solvay called a €0.70 billion hybrid bond at 4.20% in May 2019, which was partly pre-financed by a €0.30 billion hybrid bond at 4.25% issued in November 2018. In September 2019 Solvay also redeemed the outstanding US\$800 million 3.400% notes due 2020, and partly replaced it by the issuance of a €600 million new bond at 0.50% in August. These steps contribute to a reduction in financial charges; full effects will be visible in 2020.

Provisions

(in € million)



Provisions decreased from €(3.8) billion to €(3.7) billion. Strong operational cash deleveraging of €157 million were supplemented by an additional voluntary pension contribution of €114 million. These largely offset a €231 million increase in post-employment provisions related to the net effect of lower discount rates and higher returns from plan assets.

Discontinued operations

In 2019, discontinued operations mainly consisted of the Performance Polyamides activities to be sold to BASF and Domo Chemicals.

The contribution of discontinued operations to the profit of Solvay amounted to €236 million (+18% compared to 2018).

Free cash flow from discontinued operations in 2019 amounted to €195 million.

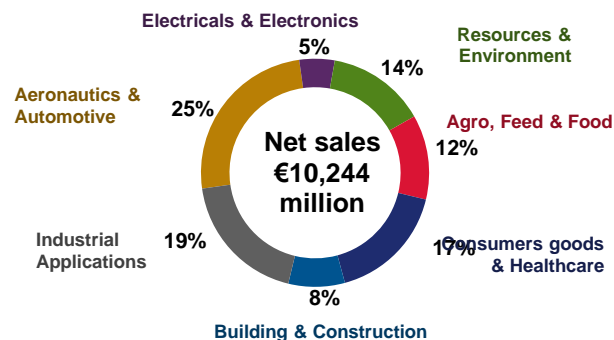
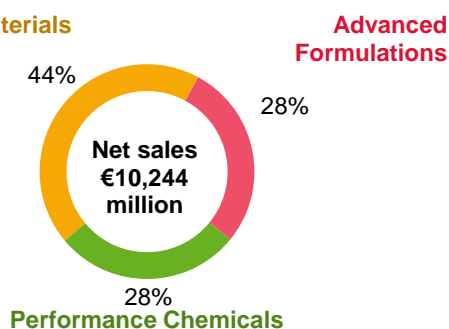
The transaction has been completed on January 31, 2020. The transaction is based on an enterprise value of €1.6 billion and the net cash proceeds to be received on the combined transaction are estimated to be around €1.2 billion, subject to customary post-closing purchase price adjustments.

Following the closing of the transaction, the net proceeds have been already partly used to improve the balance sheet. €380 million have been used to voluntarily reduce the pension provisions, on top of the €114 million already paid in the fourth quarter of 2019.

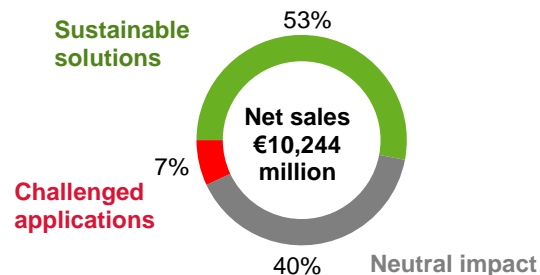
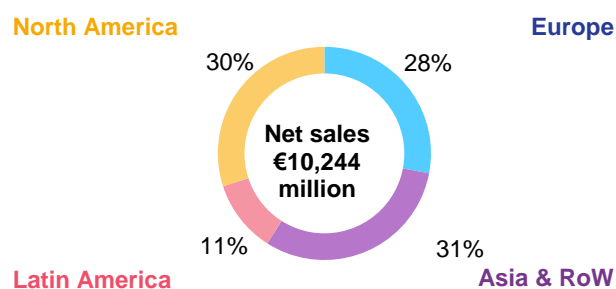
SEGMENT REVIEW ^[10]

Net sales FY 2019

Advanced Materials

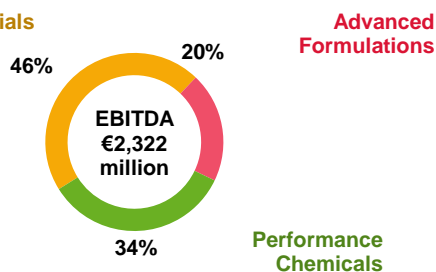


North America

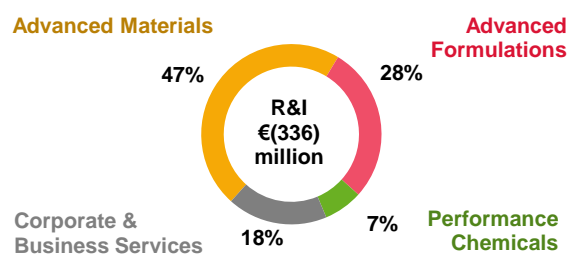


Key figures FY 2019 per segment

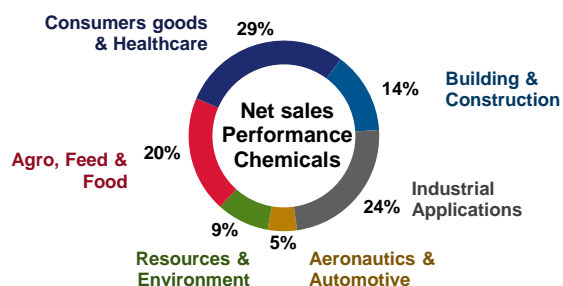
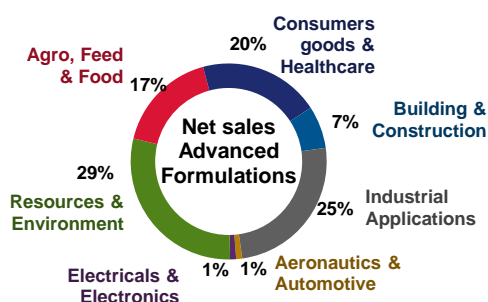
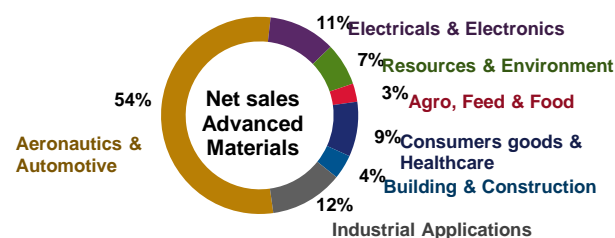
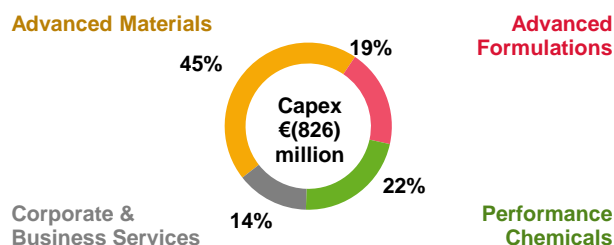
Advanced Materials



Advanced Materials



Advanced Materials



Segment review (in € million)	Underlying					
	Q4 2019	Q4 2018 PF	% yoy	FY 2019	FY 2018 PF	% yoy
Net sales	2,440	2,574	-5.2%	10,244	10,257	-0.1%
Advanced Materials	1,069	1,093	-2.2%	4,512	4,385	+2.9%
Advanced Formulations	663	764	-13%	2,846	3,057	-6.9%
Performance Chemicals	707	716	-1.3%	2,879	2,808	+2.5%
Corporate & Business Services	1	1	-3.5%	6	7	-14%
EBITDA	525	531	-1.0%	2,322	2,330	-0.4%
Advanced Materials	252	282	-11%	1,143	1,225	-6.7%
Advanced Formulations	102	122	-17%	490	533	-8.1%
Performance Chemicals	207	180	+15%	852	761	+12%
Corporate & Business Services	(35)	(53)	+34%	(163)	(189)	+14%
EBIT	306	325	-5.7%	1,503	1,554	-3.2%
Advanced Materials	161	192	-16%	801	897	-11%
Advanced Formulations	54	82	-35%	322	381	-15%
Performance Chemicals	152	127	+19%	639	556	+15%
Corporate & Business Services	(61)	(77)	+20%	(259)	(280)	+7.5%
Capex in continuing operations	(255)	(243)	-4.9%	(826)	(794)	-4.0%
Advanced Materials				(375)	(379)	+1.0%
Advanced Formulations				(155)	(158)	+1.5%
Performance Chemicals				(177)	(175)	-0.9%
Corporate & Business Services				(119)	(82)	-44%
Cash conversion	51.5%	54.2%	-2.8pp	64.4%	65.9%	-1.5pp
Advanced Materials				67.2%	69.1%	-1.9pp
Advanced Formulations				68.3%	70.4%	-2.1pp
Performance Chemicals				79.3%	77.0%	+2.3pp
CFROI				6.5%	6.8%	-0.3pp
Advanced Materials				8.9%	9.9%	-1.1pp
Advanced Formulations				5.9%	6.8%	-0.9pp
Performance Chemicals				8.5%	8.1%	+0.5pp
Research & innovation				(336)	(352)	-4.7%
Advanced Materials				(157)	(171)	+8.5%
Advanced Formulations				(94)	(97)	+2.7%
Performance Chemicals				(25)	(27)	+5.9%
Corporate & Business Services				(60)	(58)	-3.9%
Research & innovation intensity				3.3%	3.4%	-0.2pp
Advanced Materials				3.5%	3.9%	-0.4pp
Advanced Formulations				3.3%	3.2%	+0.1pp
Performance Chemicals				0.9%	1.0%	-0.1pp

CORPORATE & BUSINESS SERVICES

Key figures (in € million)	Underlying					
	Q4 2019	Q4 2018 PF	% yoy	FY 2019	FY 2018 PF	% yoy
Net sales	1	1	-3.5%	6	7	-14%
EBITDA	(35)	(53)	+34%	(163)	(189)	+14%
EBIT	(61)	(77)	+20%	(259)	(280)	+7.5%
Capex in continuing operations				(119)	(82)	-44%
Research & innovation				(60)	(58)	-3.9%

Fourth quarter underlying EBITDA costs were €(35) million, €18 million better than in 2018. Continued focus on cost discipline and lower provisions for bonuses, more than offset inflation.

Full year underlying EBITDA was €(163) million, €26 million better, reflecting cost reductions and austerity measures, favorable conditions on the energy market and lower provisions for bonuses.

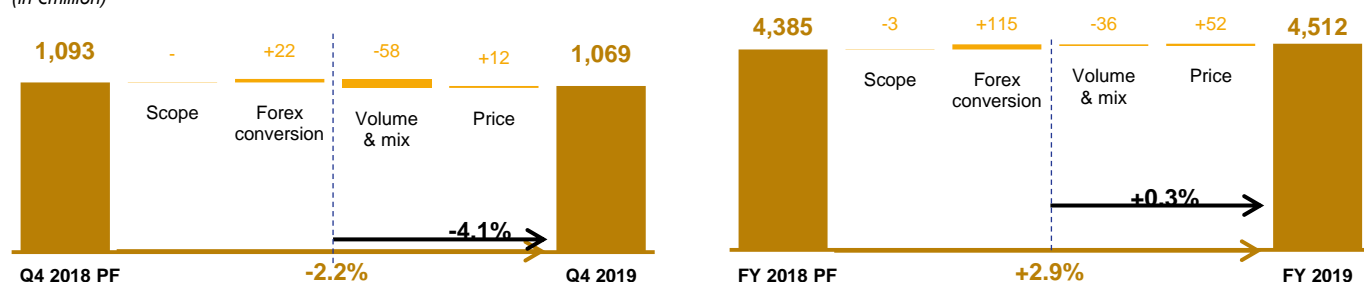
ADVANCED MATERIALS

- Strong demand for composites from aerospace customers contributed to delivery of a record performance in 2019, despite an anticipated slowdown in the fourth quarter due to reduced 737MAX build rates.
- Specialty Polymers significantly impacted by market headwinds, particularly in automotive and electronics; despite headwinds, maintained leading position across all key markets.

Key figures (in € million)	Underlying					
	Q4 2019	Q4 2018 PF	% yoy	FY 2019	FY 2018 PF	% yoy
Net sales	1,069	1,093	-2.2%	4,512	4,385	+2.9%
Specialty Polymers	449	476	-5.6%	1,927	2,009	-4.1%
Composite Materials	298	288	+3.8%	1,272	1,082	+18%
Special Chem	213	220	-3.2%	864	852	+1.4%
Silica	109	110	-0.9%	449	442	+1.5%
EBITDA	252	282	-11%	1,143	1,225	-6.7%
<i>EBITDA margin</i>	23.6%	25.8%	-2.2pp	25.3%	27.9%	-2.6pp
EBIT	161	192	-16%	801	897	-11%
Capex in continuing operations				(375)	(379)	+1.0%
<i>Cash conversion</i>				67.2%	69.1%	-1.9pp
CFROI				8.9%	9.9%	-1.1pp
Research & innovation				(157)	(171)	+8.5%
Research & innovation intensity				3.5%	3.9%	-0.4pp

Yoy net sales bridge

(in €million)



Q4 2019 and FY 2019 performance

Fourth quarter net sales were down -2.2%, of which -4.1% on an organic^[2] basis excluding forex conversion effects. Double-digits volume growth in Composite Materials partly offset the decline in Specialty Polymers. Prices benefited the segment in the quarter.

- **Specialty Polymers** sales were down -5.6% on lower volumes. Electronics sales were down due to lack of investments in the semiconductor fabs, while smart device demand improved sequentially in a soft market. Lower demand in automotive continued against a stronger fourth quarter in 2018. Battery materials performed strongly again, supported by the electrification trend. Prices were up.
- **Composite Materials** sales were up +3.8%. Volumes were slightly down, mainly driven by the anticipated decrease of 737MAX production in the quarter as well as normal seasonality.
- **Special Chem** sales decreased by -3.2% on volumes, partly offset by prices. Auto catalyst demand continued to be positive thanks to the launch of new emission standards in China, while demand in other automotive applications remained weak. The semiconductor industry was stable.
- **Silica** sales were down -0.9%, showing resilience in a soft market environment.

Fourth quarter underlying EBITDA decreased by -11% and was down -12% organically^[2] excluding forex conversion effects, as the price increase could not mitigate lower volume. Costs were also slightly higher, due mainly to inventory destocking in both Specialty Polymers and Composites. Measures to improve production yield and optimize the supply chain partly offset the destocking impact. The underlying EBITDA margin fell 2.2pp to 24%.

Full year net sales increased by +2.9% overall and by +0.3% organically^[2]. Lower volumes in Specialty Polymers' automotive and electronics markets were offset by double-digit growth in Composite Material's for aerospace. Prices were up across the segment.

Full year underlying EBITDA was down -6.7% and -9.3% organically^[2]. Higher prices, as well as cost containment and productivity measures only partly offset the higher cost base, resulting primarily from destocking and the effect of expanded production capabilities in Composite Materials. The one-time pension-related synergy benefit of €19 million, booked in the second quarter of 2018, had a -1.5% impact on the 2019 full year EBITDA. The EBITDA margin was down -2.6pp at 25%.

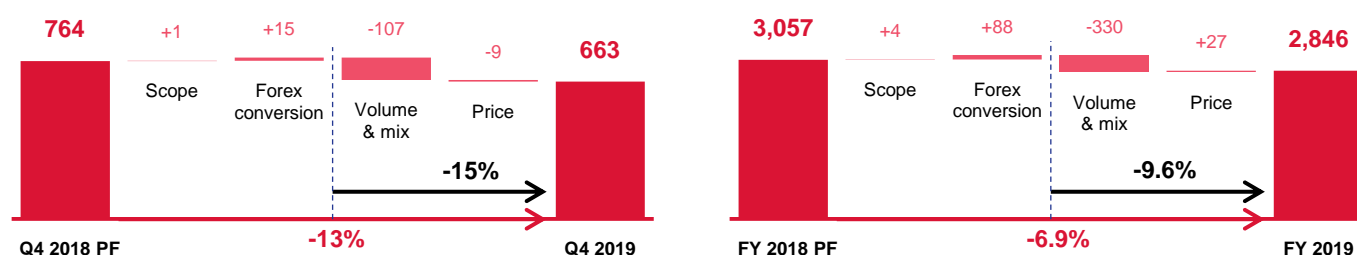
ADVANCED FORMULATIONS

- Resilient performance in coatings, agro, personal care, flavors and fragrances offset by softer mining environment and increasingly challenging conditions in the oil & gas market.
- Cost measures partly mitigated the impact of lower volumes.

Key figures (in € million)	Underlying					
	Q4 2019	Q4 2018 PF	% yoy	FY 2019	FY 2018 PF	% yoy
Net sales	663	764	-13%	2,846	3,057	-6.9%
Novecare	399	478	-17%	1,789	2,000	-11%
Technology Solutions	158	169	-6.8%	632	643	-1.7%
Aroma Performance	106	116	-8.6%	425	414	+2.8%
EBITDA	102	122	-17%	490	533	-8.1%
EBITDA margin	15.4%	16.0%	-0.6pp	17.2%	17.4%	-0.2pp
EBIT	54	82	-35%	322	381	-15%
Capex in continuing operations				(155)	(158)	+1.5%
Cash conversion				68.3%	70.4%	-2.1pp
CFROI				5.9%	6.8%	-0.9pp
Research & innovation				(94)	(97)	+2.7%
Research & innovation intensity				3.3%	3.2%	+0.1pp

Yoy net sales bridge

(in €million)



Q4 2019 and FY 2019 performance

Fourth quarter net sales were down -13%, and -15% organically^[2] as North American shale oil & gas stimulation activities were increasingly challenging.

- In **Novecare**, sales fell -17% with lower volumes and prices in a deteriorating Oil & Gas environment. Customers remained focused on costs in a challenging market. Sales in other end-markets such as coatings increased modestly.
- **Technology Solutions** sales were down -6.8% on lower volumes. Activity levels in mining were down related to production stoppages at some key mining customers, while volumes of phosphorous specialties and polymer additives were impacted by weak demand in the construction and automotive sectors.
- In **Aroma Performance**, sales were down -8.6% related to order phasing across the quarters.

Fourth quarter underlying EBITDA decreased by -17% and excluding forex conversion effects -19% organically^[2], due to the lower volumes. These were partly compensated by better prices and cost reduction measures. The underlying EBITDA margin of the fourth quarter decreased by 0.6pp at 15.4%.

Full year net sales were down -6.9% and -10% organically^[2]. Prices were slightly up, and volumes declined -11% primarily linked to the challenging shale oil & gas conditions in North America and softer activity in mining in the second half. Aroma Performance sales were up on volumes, notably in natural vanillin, and prices.

Full year underlying EBITDA was down -8.1% and -12% organically^[2]. The significant volume declines were mitigated by price increases and cost containment measures, particularly in Novecare, leading to stable EBITDA margin of 17%.

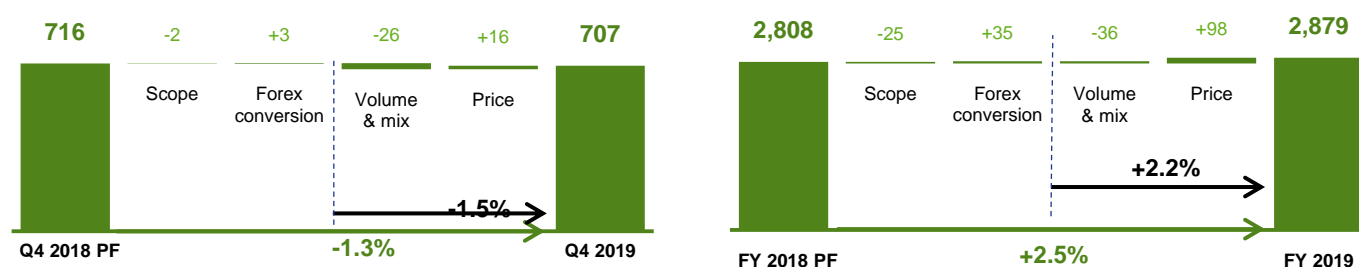
PERFORMANCE CHEMICALS

→ In a supportive market environment, higher prices were achieved in soda ash and peroxide leading to a strong full year performance.

Key figures (in € million)	Underlying					
	Q4 2019	Q4 2018 PF	% yoy	FY 2019	FY 2018 PF	% yoy
Net sales	707	716	-1.3%	2,879	2,808	+2.5%
Soda Ash & Derivatives	412	399	+3.2%	1,661	1,562	+6.3%
Peroxides	168	170	-1.0%	683	654	+4.4%
Coatis [11]	128	148	-14%	535	591	-9.6%
EBITDA	207	180	+15%	852	761	+12%
EBITDA margin	29.2%	25.1%	+4.1pp	29.6%	27.1%	+2.5pp
EBIT	152	127	+19%	639	556	+15%
Capex in continuing operations				(177)	(175)	-0.9%
Cash conversion				79.3%	77.0%	+2.3pp
CFROI				8.5%	8.1%	+0.5pp
Research & innovation				(25)	(27)	+5.9%
Research & innovation intensity				0.9%	1.0%	-0.1pp

Yoy net sales bridge

(in € million)



Q4 2019 and FY 2019 performance

Fourth quarter net sales in the segment were down -1.3%, and -1.5% organically^[2]. Higher contract prices for soda ash and peroxides did not fully offset the lower volumes.

- In **Soda Ash & Derivatives**, sales grew +3.2%. Soda ash volumes were down at year-end, with higher customer inventories, while prices were well up.
- **Peroxides** sales were down -1.0%, with higher prices partly offsetting lower volumes in different markets. Demand for propylene oxide drove solid volumes in the HPPO plants, offsetting some softness for pulp applications.
- **Coatis** sales were down -14%, both on volumes and prices, with softer demand in its domestic Brazilian market compared to a very strong 2018, mainly related to weaker automotive demand.

Fourth quarter underlying EBITDA rose +15%. Excluding scope^[8] and forex conversion effects it grew +14%, mainly due to higher prices for soda ash and peroxides as well as favorable energy costs and productivity gains across the supply chain. Consequently, the segment EBITDA margin grew +4.1pp to 29%.

Full year net sales in the segment were up +2.5% and +2.2% organically^[2], reflecting the higher contract prices for soda ash and peroxides, and more than offsetting lower sales in Coatis, which compare to a very strong 2018.

Full year underlying EBITDA grew +12% and +10% organically^[2] driven by higher prices. Productivity gains, favorable energy costs and a strong contribution from the Russian PVC joint venture also contributed positively to the performance. A one-time gain of €12 million was booked in the second quarter on the settlement of an energy contract in the soda ash business. The EBITDA margin was up +2.5pp at 30%.

2020 OUTLOOK

2020 outlook

Underlying full year **EBITDA** is expected to be flat to modestly down (0% to -3%) organically compared to €2,322 million in 2019, with growth to be back-ended. Against a backdrop of a strong Q1 2019, first quarter 2020 is expected to be down by high single digit as a combined result of the 737MAX production halt, the impact of the COVID-19 virus, and the increasingly challenging oil and gas market.

Key assumptions:

- Solvay assumes Boeing 737MAX production of 200 aircraft in 2020 compared to close to 600 in 2019. The net impact, after mitigation efforts, is expected to be between -€30 million and -€40 million in 2020.
- Disruptions related to COVID-19 are uncertain; Solvay expects approximately -€25 million impact in the first quarter and will update its outlook as the situation becomes clearer.
- Macroeconomic environment headwinds are expected to continue into 2020, with expected improvement in key markets (auto and electronics) in the second half. We expect the oil and gas market to remain significantly challenged again this year.

Free Cash Flow conversion of 28%.

Proceeds from Polyamide divestiture support reduced pension charges of about €40 million and lower financial charges of about €20 million related to the reduction of net financial debt.

ROCE to be stable around 8%.

Efficiency Measures

In 2020, Solvay is accelerating the alignment of its worldwide organization with its G.R.O.W. strategy and is responding to the challenging economic environment, leading to 500 redundancies and 150 new positions to support future growth. The social procedures are launched on February 26 and the savings will commence in the fourth quarter of 2020 and will be fully implemented by the end of 2021. This plan will complement prior measures and raise our mid-term cost reduction target to at least €350 million. Restructuring charges of approximately €70 million will be provisioned in our first quarter financials. It should be noted that, in the fourth quarter of 2019 a provision of €48 million was reversed from the prior program.

Forex sensitivities

Solvay is mostly exposed to the U.S. dollar, with the main sensitivities per US\$/€0.10 change:

- EBITDA sensitivity of about €(125) million based on the average rate in 2019 of US\$/€1.15, with some 2/3 on conversion and 1/3 on transaction (excluding hedging).
- Net debt sensitivity of about €100 million based on the rate at the end of 2019 of US\$/€1.12.

SUPPLEMENTARY INFORMATION

Reconciliation of alternative performance metrics

Solvay measures its financial performance using alternative performance metrics, which can be found below. Solvay believes that these measurements are useful for analyzing and explaining changes and trends in its historical results of operations, as they allow performance to be compared on a consistent basis. For comparability purposes the 2018 reference figures are on a pro forma basis, as if IFRS 16 had been implemented in 2018. The balance sheet evolution is compared with January 1, 2019, which includes the IFRS 16 impact versus December 31, 2018.

Tax rate		Underlying	
		FY 2019	FY 2018 PF
<i>(in € million)</i>			
Profit / (loss) for the period before taxes	a	1,171	1,212
Earnings from associates & joint ventures	b	92	74
Interests and realized foreign exchange gains (losses) on the RusVinyl joint venture	c	(18)	(21)
Income taxes	d	(305)	(303)
Tax rate	e = -d/(a-b-c)	27.8%	26.1%

Underlying tax rate = Income taxes / (Result before taxes – Earnings from associates & joint ventures – Interests & realized foreign exchange results on the RusVinyl joint venture) – all determined on an underlying basis. The adjustment made to the denominator regarding associates and joint ventures is done because these contributions are already net of income taxes.

Research & innovation			
<i>(in € million)</i>		FY 2019	FY 2018
IFRS research & development costs	a	(323)	(297)
Grants netted in research & development costs	b	26	25
Depreciation, amortization & impairments included in research & development costs	c	(83)	(59)
Capex in research & innovation	d	(70)	(89)
Research & innovation	e = a-b-c+d	(336)	(352)
Advanced Materials		(157)	(171)
Advanced Formulations		(94)	(97)
Performance Chemicals		(25)	(27)
Corporate & Business Services		(60)	(58)
Net sales	f	10,244	10,257
Advanced Materials		4,512	4,385
Advanced Formulations		2,846	3,057
Performance Chemicals		2,879	2,808
Corporate & Business Services		6	7
Research & innovation intensity	g = -e/f	3.3%	3.4%
Advanced Materials		3.5%	3.9%
Advanced Formulations		3.3%	3.2%
Performance Chemicals		0.9%	1.0%

Research & innovation measures the total cash effort in research and innovation, regardless of whether the costs were expensed or capitalized. It consists of research & development costs from the income statement before netting of related subsidies and royalties, and where depreciation and amortization are replaced by related capital expenditure.

Research & innovation intensity is the ratio of research & innovation to net sales.

Free cash flow (FCF)

(in € million)		Q4 2019	Q4 2018 PF	FY 2019	FY 2018 PF
Cash flow from operating activities	a	521	813	1,815	1,829
of which additional voluntary contribution related to pension plans	b	(114)		(114)	
Cash flow from investing activities	c	(249)	(231)	(880)	(784)
of which capital expenditures required by share sale agreement	d	(15)	(13)	(59)	(38)
Acquisition (-) of subsidiaries	e	(2)	-	(6)	(12)
Acquisition (-) of investments - Other	f	(1)	(4)	(16)	(4)
Loans to associates and non-consolidated companies	g	6	(3)	10	(3)
Sale (+) of subsidiaries and investments	h	(13)	4	(31)	26
Recognition of factored receivables	i	-	-	(23)	(21)
Increase/decrease of borrowings related to environmental remediation	j	8	-	8	-
Payment of lease liabilities	k	(31)	(23)	(110)	(92)
FCF	l = a-b+c-d-e-f-g-h-i+j+k	388	575	1,072	1,006
FCF from discontinued operations	m	13	16	195	160
FCF from continuing operations	n = l-m	376	559	878	846
Net interests paid	o	(53)	(61)	(118)	(130)
Coupons paid on perpetual hybrid bonds	p	(27)	(27)	(115)	(111)
Dividends paid to non-controlling interests	q	(34)	(32)	(39)	(39)
FCF to Solvay shareholders	r = l+o+p+q	274	454	801	725
FCF to Solvay shareholders from discontinued operations	s	13	16	195	160
FCF to Solvay shareholders from continuing operations	t = r-s	261	438	606	566
Underlying EBITDA	u	525	531	2,322	2,330
FCF conversion ratio	v = (t-q)/u	56.2%	88.7%	27.8%	25.9%

Free cash flow is calculated as cash flows from operating activities (excluding cash flows linked to acquisitions or disposals of subsidiaries and cash outflows of Additional Voluntary Contributions related to pension plans as they are of deleveraging nature as reimbursement of debt), cash flows from investing activities (excluding cash flows from or related to acquisitions and disposals of subsidiaries and other investments, and excluding loans to associates and non-consolidated investments, as well as related tax elements and recognition of factored receivables) and payment of lease liabilities and increase/decrease of borrowings related to environmental remediation. Prior to the adoption of IFRS 16, operating lease payments were included in the free cash flow. Following the application of IFRS 16, because leases are generally considered to be operating in nature, the free cash flow incorporates the payment of the lease liability (excluding the interest expense). Not including this item in the free cash flow would result in a significant improvement of the free cash flow compared to prior periods, whereas the operations themselves have not been affected by the implementation of IFRS 16.

Free cash flow to Solvay shareholders is calculated as free cash flow after payment of net interests, coupons of perpetual hybrid bonds and dividends to non-controlling interests. This represents the cash flow available to Solvay shareholders, to pay their dividend and/or to reduce the net financial debt.

Free cash flow conversion: Calculated as the ratio between the free cash flow from continuing operations to Solvay shareholders (before netting of dividends paid to non-controlling interest) and underlying EBITDA.

Net working capital		2019	2019	2018
(in € million)		December 31	January 1	December 31
Inventories	a	1,587	1,685	1,685
Trade receivables	b	1,414	1,434	1,434
Other current receivables	c	628	718	719
Trade payables	d	(1,277)	(1,431)	(1,439)
Other current liabilities	e	(792)	(850)	(850)
Net working capital	f = a+b+c+d+e	1,560	1,557	1,550
Sales	g	2,710	2,830	2,830
Annualized quarterly total sales	h = 4*g	10,841	11,321	11,321
Net working capital / sales	i = f / h	14.4%	13.8%	13.7%
Year-to-date average	j = $\mu(Q1, Q2, Q3, Q4)$	16.0%		15.3%

Net working capital includes inventories, trade receivables and other current receivables, netted with trade payables and other current liabilities.

Capital expenditure (capex)

(in € million)		Q4 2019	Q4 2018 PF	FY 2019	FY 2018 PF
Acquisition (-) of tangible assets	a	(249)	(233)	(751)	(691)
Acquisition (-) of intangible assets	b	(25)	(41)	(106)	(142)
Payment of lease liabilities	c	(31)	(23)	(110)	(92)
Capex	d = a+b+c	(305)	(298)	(967)	(925)
Capex in discontinued operations	e	(50)	(55)	(141)	(131)
Capex in continuing operations	f = d-e	(255)	(243)	(826)	(794)
Advanced Materials				(375)	(379)
Advanced Formulations				(155)	(158)
Performance Chemicals				(177)	(175)
Corporate & Business Services				(119)	(82)
Underlying EBITDA	g	525	531	2,322	2,330
Advanced Materials		252	282	1,143	1,225
Advanced Formulations		102	122	490	533
Performance Chemicals		207	180	852	761
Corporate & Business Services		(35)	(53)	(163)	(189)
Cash conversion	h = (f+g)/g	51.5%	54.2%	64.4%	65.9%
Advanced Materials				67.2%	69.1%
Advanced Formulations				68.3%	70.4%
Performance Chemicals				79.3%	77.0%

Capex is defined as cash paid for the acquisition of tangible and intangible assets presented in cash flows from investing activities, and cash paid on the lease liabilities (excluding interests paid), presented in cash flows from financing activities.

Cash conversion is a ratio used to measure the conversion of EBITDA into cash. It is defined as (Underlying EBITDA + Capex from continuing operations) / Underlying EBITDA.

Net financial debt

(in € million)		December 31	January 1	December 31
Non-current financial debt	a	(3,382)	(3,520)	(3,180)
Current financial debt	b	(1,132)	(723)	(630)
IFRS gross debt	c = a+b	(4,513)	(4,243)	(3,810)
Underlying gross debt	d = c+h	(6,313)	(6,743)	(6,310)
Other financial instruments	e	119	101	101
Cash & cash equivalents	f	809	1,103	1,103
Total cash and cash equivalents	g = e+f	928	1,205	1,205
IFRS net debt	i = c+g	(3,586)	(3,038)	(2,605)
Perpetual hybrid bonds	h	(1,800)	(2,500)	(2,500)
Underlying net debt	j = i+h	(5,386)	(5,538)	(5,105)
Underlying EBITDA (last 12 months)	k	2,322	2,330	2,230
Adjustment for discontinued operations [12]	l	366	315	305
Adjusted underlying EBITDA for leverage calculation [12]	m = k+l	2,688	2,645	2,536
Underlying leverage ratio [12]		2.0	2.1	2.0

(IFRS) net debt = Non-current financial debt + Current financial debt – Cash & cash equivalents – Other financial instruments. Underlying net debt represents the Solvay share view of debt, reclassifying as debt 100% of the hybrid perpetual bonds, classified as equity under IFRS. Leverage ratio = Net debt / Underlying EBITDA of last 12 months. Underlying leverage ratio = Underlying net debt / Adjusted underlying EBITDA of last 12 months.

ROCE		FY 2019	FY 2018 PF
(in € million)		As calculated	As calculated
EBIT	a	1,503	1,554
Non-cash accounting impact from amortization & depreciation of purchase price allocation (PPA) from acquisitions	b	(214)	(237)
Numerator	c = a+b	1,289	1,317
WC industrial	d	1,932	1,838
WC Other	e	(139)	(110)
Tangible assets	f	5,470	5,377
Intangible assets	g	2,753	2,871
Right-of-use assets	h	462	447
Investments in associates & joint ventures	i	519	443
Other investments	j	40	43
Goodwill	k	4,864	5,098
Denominator	l = d+e+f+g+h+i+j+k	15,901	16,007
ROCE	m = c/l	8.1%	8.2%

Return on Capital employed is calculated as the ratio between underlying EBIT (before adjustment for the amortization of PPA) and capital employed. Capital employed consists of net working capital, tangible and intangible assets, goodwill, right-of-use assets, investments in associates & joint ventures and other investments, and is taken as the average of the situation at the end of the last 4 quarters.

CFROI		FY 2019		FY 2018 PF			
		As published	Adjustment	As calculated	As published	Adjustment	As calculated
(in € million)							
Underlying EBIT	a	1,503		1,503	1,554		1,554
Underlying EBITDA	b	2,322		2,322	2,330		2,330
Underlying earnings from associates & joint ventures	c	92		92	74		74
Dividends received from associates & joint ventures [19]	d	25	-	25	25	-	25
Recurring capex [20]	e = -2.3%*m			(409)			(388)
Recurring income taxes [21]	f = -28%*(a-c)			(395)			(444)
Recurring "CFROI" cash flow data	g = b-c+d+e+f			1,450			1,449
Advanced Materials				756			798
Advanced Formulations				308			335
Performance Chemicals				511			456
Corporate & Business Services				(125)			(140)
Tangible assets	h	5,472			5,454		
Intangible assets	i	2,642			2,861		
Right-of-use assets	j	447			428		
Goodwill	k	4,468			5,173		
Replacement value of goodwill & fixed assets [22]	l = h+i+j+k	13,028	7,007	20,035	13,915	5,106	19,021
of which fixed assets	m	8,114	9,685	17,799	8,314	8,575	16,889
Investments in associates & joint ventures [23]	n	555	(36)	519	441	1	443
Net working capital [23]	o	1,560	233	1,793	1,550	178	1,728
"CFROI" invested capital	p = l+n+o			22,347			21,192
Advanced Materials				8,533			8,036
Advanced Formulations				5,208			4,929
Performance Chemicals				5,989			5,658
Corporate & Business Services				2,617			2,569
CFROI	q = g/p			6.5%			6.8%
Advanced Materials				8.9%			9.9%
Advanced Formulations				5.9%			6.8%
Performance Chemicals				8.5%			8.1%

Cash Flow Return On Investment measures the cash returns of Solvay's business activities. Movements in CFROI levels are relevant indicators for showing whether economic value is being added, though it is accepted that this measure cannot be benchmarked or compared with industry peers. The definition uses a reasonable estimate (management estimate) of the replacement cost of assets and avoids accounting distortions, e.g. for impairments. It is calculated as the ratio between recurring cash flow and invested capital, where:

- Recurring cash flow = Underlying EBITDA + Dividends from associates and joint ventures – Earnings from associates and joint ventures + Recurring capex + Recurring income taxes;
- Invested capital = Replacement value of goodwill & fixed assets + Net working capital + Carrying amount of associates and joint ventures;
- Recurring capex is normalized at 2.3% of the replacement value of fixed assets net of goodwill values;
- Recurring income tax is normalized at 28% of (Underlying EBIT – Earnings from associates and joint ventures)

Extra financial information

Extra financial indicators	2019	2018	2017
Greenhouse Gas emissions (scope 1 and 2) Evolution yoy (%)	-5%	flat	
Sustainable solutions As % of Group sales	53%	50%	49%
Occupational accidents at Group sites * Evolution yoy (%)	-18%	-17%	-16%
Employees involved in societal actions As % of employees	47%	33%	33%

*Rate of accidents with medical treatment, with or without work stoppage

Greenhouse Gas emissions

The -5% reduction in greenhouse gas emissions is primarily the result of investments in cogeneration activities.

Sustainable solutions

More than half of Solvay's portfolio is now solidly positioned as "Sustainable solutions". The progress is the combination of stronger organic growth in sustainable solutions and environmental improvements of operations.

Occupational accidents

This improving outcome is due to a continued and unrelentless focus on safety.

Societal actions

The Citizen Day - Solvay's first World Citizen Day for environmental preservation - contributed to the significant increase from 33% to 47% of employees involved in societal actions in 2019.

Reconciliation of underlying income statement indicators

Besides IFRS accounts, Solvay also presents underlying Income Statement performance indicators to provide a more consistent and comparable indication of Solvay's economic performance. These figures adjust IFRS figures for the non-cash Purchase Price Allocation (PPA) accounting impacts related to acquisitions, for the coupons of perpetual hybrid bonds classified as equity under IFRS but treated as debt in the underlying statements, and for other elements to generate a measure that avoids distortion and facilitates the appreciation of performance and comparability of results over time. For comparability purposes the 2018 reference figures are on a pro forma basis, as if IFRS 16 had been implemented in 2018, and were restated for the amendment of IAS 12.

FY consolidated income statement (in € million)	FY 2019			FY 2018 PF		
	IFRS	Adjust- ments	Under- lying	IFRS	Adjust- ments	Under- lying
Sales	11,227	-	11,227	11,299	-	11,299
of which revenues from non-core activities	983	-	983	1,042	-	1,042
of which net sales	10,244	-	10,244	10,257	-	10,257
Cost of goods sold	(8,244)	2	(8,242)	(8,258)	2	(8,256)
Gross margin	2,983	2	2,985	3,042	2	3,043
Commercial costs	(381)	-	(381)	(373)	-	(373)
Administrative costs	(950)	28	(922)	(1,005)	35	(970)
Research & development costs	(323)	3	(321)	(297)	3	(294)
Other operating gains & losses	(131)	182	51	(123)	197	74
Earnings from associates & joint ventures	95	(3)	92	44	30	74
Result from portfolio management & reassessments	(914)	914	-	(208)	208	-
Result from legacy remediation & major litigations	(61)	61	-	(86)	86	-
EBITDA	2,222	99	2,322	2,030	301	2,330
Depreciation, amortization & impairments	(1,906)	1,087	(818)	(1,036)	260	(777)
EBIT	316	1,187	1,503	994	560	1,554
Net cost of borrowings	(141)	13	(128)	(134)	-	(134)
Coupons on perpetual hybrid bonds	-	(105)	(105)	-	(112)	(112)
Interests and realized foreign exchange gains (losses) on the RusVinyl joint venture	-	(18)	(18)	-	(21)	(21)
Cost of discounting provisions	(105)	20	(85)	(77)	3	(74)
Result from equity instruments measured at fair value through other comprehensive income	4	-	4	-	-	-
Profit / (loss) for the period before taxes	74	1,097	1,171	783	429	1,212
Income taxes	(153)	(151)	(305)	(73)	(230)	(303)
Profit / (loss) for the period from continuing operations	(79)	946	866	710	199	909
Profit / (loss) for the period from discontinued operations	236	11	247	201	15	216
Profit / (loss) for the period	157	957	1,113	910	215	1,125
attributable to Solvay shareholders	118	956	1,075	871	214	1,085
attributable to non-controlling interests	38	1	39	39	-	40
Basic earnings per share (in €)	1.15	9.27	10.41	8.43	2.08	10.51
of which from continuing operations	(1.14)	9.16	8.02	6.49	1.93	8.42
Diluted earnings per share (in €)	1.15	9.25	10.39	8.40	2.07	10.46
of which from continuing operations	(1.14)	9.14	8.01	6.46	1.92	8.38

EBITDA on an IFRS basis totaled €2,222 million, versus €2,322 million on an underlying basis. The difference of €99 million is explained by the following adjustments to IFRS results, which are done to improve the comparability of underlying results:

- €(3) million in "Earnings from associates & joint ventures" for Solvay's share in the financial charges of the Rusvinyl joint venture and the foreign exchange gains on the €-denominated debt of the joint venture, following the 12% revaluation of the Russian ruble over the period. These elements are reclassified in "Net financial charges".
- €41 million to adjust for the "Result from portfolio management and reassessments", excluding depreciation, amortization and impairment elements. This result comprises €23 million of restructuring costs, mainly related to the cost booked for the Group simplification plan and results related to past M&A transactions for €13m.
- €61 million to adjust for the "Result from legacy remediation and major litigations", primarily environmental expenses.

EBIT on an IFRS basis totaled €316 million, versus €1,503 million on an underlying basis. The difference of €1,187 million is explained by the above-mentioned €99 million adjustments at the EBITDA level and €1,087 million of "*Depreciation, amortization & impairments*". The latter consist of:

- €214 million to adjust for the non-cash impact of purchase price allocation (PPA), consisting of amortization charges on intangible assets, which are adjusted in "*Cost of goods sold*" for €2 million, "*Administrative costs*" for €28 million, in "*Research & development costs*" for €3 million, and in "*Other operating gains & losses*" for €182 million.
- €873 million to adjust for the net impact of impairments, mainly for the Oil & Gas Goodwill and Intangible assets, which are non-cash in nature and are reported in "*Result from portfolio management and reassessments*" (see page 33).

Net financial charges on an IFRS basis were €(242) million versus €(332) million on an underlying basis. The €(90) million adjustment made to IFRS net financial charges consists of:

- €(13) million for the costs related to the restructuring of the Group financial debt and the reimbursement of the USD800 million bond,
- €(105) million reclassification of coupons on perpetual hybrid bonds, which are treated as dividends under IFRS, and as financial charges in underlying results,
- €(18) million reclassification of financial charges and realized foreign exchange result on the €-denominated debt of RusVinyl as net financial charges. The €15 million delta with the adjustment made to EBITDA is attributed to unrealized foreign exchange gains,
- €20 million for the net impact of decreasing discount rates on the valuation of environmental liabilities in the period.

Income taxes on an IFRS basis were €(153) million, versus €(305) million on an underlying basis. The €(151) million adjustment includes mainly:

- €(252) million to adjust for the tax impacts of the adjustments made to the underlying result before taxes (as described above) and in particular for the deferred tax net income of the Oil & Gas impairment (€(167) million).
- €101 million to adjust for tax elements related to prior periods, resulting mainly from changes in deferred tax assets related to the revision of the forecast of utilization of tax losses.

Discontinued operations generated a profit of €236 million on an IFRS basis and €247 million on an underlying basis. The €11 million adjustment to the IFRS profit is made for costs related to the divestment of the polyamide activities.

Profit attributable to Solvay shareholders was €118 million on an IFRS basis and €1,075 million on an underlying basis. The delta of €956 million reflects the above-mentioned adjustments to EBIT, net financial charges, income taxes and discontinued operations. There was no impact from non-controlling interests.

Consolidated income statement Q4

(in € million)	Q4 2019			Q4 2018 PF		
	IFRS	Adjust-ments	Under-lying	IFRS	Adjust-ments	Under-lying
Sales	2,710	-	2,710	2,830	-	2,830
of which revenues from non-core activities	270	-	270	256	-	256
of which net sales	2,440	-	2,440	2,574	-	2,574
Cost of goods sold	(2,030)	-	(2,029)	(2,134)	-	(2,133)
Gross margin	680	-	681	697	-	697
Commercial costs	(96)	-	(96)	(96)	-	(96)
Administrative costs	(237)	4	(232)	(259)	9	(251)
Research & development costs	(87)	1	(87)	(80)	1	(80)
Other operating gains & losses	(25)	44	19	(19)	50	31
Earnings from associates & joint ventures	19	2	21	15	8	23
Result from portfolio management & reassessments	(23)	23	-	(8)	8	-
Result from legacy remediation & major litigations	(30)	30	-	(13)	13	-
EBITDA	516	10	525	486	45	531
Depreciation, amortization & impairments	(314)	94	(219)	(250)	44	(206)
EBIT	202	104	306	236	89	325
Net cost of borrowings	(33)	-	(33)	(32)	-	(31)
Coupons on perpetual hybrid bonds	-	(24)	(24)	-	(29)	(29)
Interests and realized foreign exchange gains (losses) on the RusVinyl joint venture	-	(2)	(2)	-	(3)	(3)
Cost of discounting provisions	(34)	7	(27)	(29)	11	(19)
Result from equity instruments measured at fair value through other comprehensive income	-	-	-	-	-	-
Profit / (loss) for the period before taxes	135	85	220	175	67	242
Income taxes	(146)	73	(74)	42	(115)	(73)
Profit / (loss) for the period from continuing operations	(11)	158	147	217	(47)	170
Profit / (loss) for the period from discontinued operations	28	(3)	24	43	5	47
Profit / (loss) for the period	16	155	171	260	(43)	217
attributable to Solvay shareholders	9	155	163	250	(42)	208
attributable to non-controlling interests	7	-	8	10	(1)	10
Basic earnings per share (in €)	0.08	1.50	1.58	2.42	(0.42)	2.01
of which from continuing operations	(0.18)	1.53	1.34	2.01	(0.46)	1.55
Diluted earnings per share (in €)	0.08	1.49	1.58	2.41	(0.41)	2.01
of which from continuing operations	(0.18)	1.52	1.34	2.01	(0.46)	1.55

EBITDA on an IFRS basis totaled €516 million, versus €525 million on an underlying basis. The difference of €10 million is explained by the following adjustments to IFRS results, which are done to improve the comparability of underlying results:

- €2 million in “*Earnings from associates & joint ventures*” for Solvay’s share in the financial charges of the Rusvinyl joint venture and the foreign exchange gains on the €-denominated debt of the joint venture, following the 1% revaluation of the Russian ruble over the period. These elements are reclassified in “*Net financial charges*”.
- €(22) million to adjust for the “*Result from portfolio management and reassessments*”, excluding depreciation, amortization and impairment elements. This result comprises mainly the reversal of the provisions for indemnities for expected refusals to relocate, following the decision to stop the planned transfers of the teams based in Paris to Lyon and Brussels (€ (48) million) net of other restructuring costs
- €30 million to adjust for the “*Result from legacy remediation and major litigations*”, primarily environmental expenses.

EBIT on an IFRS basis totaled €202 million, versus €306 million on an underlying basis. The difference of €104 million is explained by the above-mentioned €10 million adjustments at the EBITDA level and €94 million of “*Depreciation, amortization & impairments*”. The latter consist of:

- €50 million to adjust for the non-cash impact of purchase price allocation (PPA), consisting of amortization charges on intangible assets, which are adjusted in “*Administrative costs*” for €4 million, in “*Research & development costs*” for €1 million, and in “*Other operating gains & losses*” for €44 million.
- €44 million to adjust for the impact of impairments, mainly for other previously capitalized items related to the Group’s simplification and transformation program which are non-cash in nature and are reported in “*Result from portfolio management and reassessments*”.

Net financial charges on an IFRS basis were €(67) million versus €(86) million on an underlying basis. The €(19) million adjustment made to IFRS net financial charges consists of:

- €(24) million reclassification of coupons on perpetual hybrid bonds, which are treated as dividends under IFRS, and as financial charges in underlying results.
- €(2) million reclassification of financial charges and realized foreign exchange result on the €-denominated debt of RusVinyl as net financial charges.
- €7 million for the net impact of decreasing discount rates on the valuation of environmental liabilities in the period.

Income taxes on an IFRS basis were €(146) million, versus €(74) million on an underlying basis. The €73 million adjustment includes mainly adjustments for tax elements related to prior periods, resulting mainly from changes in deferred tax assets related to the revision of the forecast of utilization of tax losses.

Discontinued operations generated a profit of €28 million on an IFRS basis and €24 million on an underlying basis. The €(3) million adjustment to the IFRS profit is made for income from previous M&A deals less the costs related to the divestment of the polyamide activities.

Profit / (loss) attributable to Solvay shareholders was €9 million on an IFRS basis and €163 million on an underlying basis. The delta of €155 million reflects the above-mentioned adjustments to EBIT, net financial charges, income taxes and discontinued operations. There was no impact from non-controlling interests.

CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

[13]

The fourth quarter and full year comparable figures used in these financial statements are on a non-pro forma basis: not adjusted for IFRS 16 and restated for the retrospective amendments to IAS 12.

Consolidated income statement

(in € million)

	IFRS			
	Q4 2019	Q4 2018	FY 2019	FY 2018
Sales	2,710	2,830	11,227	11,299
of which revenues from non-core activities	270	256	983	1,042
of which net sales	2,440	2,574	10,244	10,257
Cost of goods sold	(2,030)	(2,135)	(8,244)	(8,264)
Gross margin	680	695	2,983	3,035
Commercial costs	(96)	(96)	(381)	(373)
Administrative costs	(237)	(260)	(950)	(1,006)
Research & development costs	(87)	(80)	(323)	(297)
Other operating gains & losses	(25)	(19)	(131)	(123)
Earnings from associates & joint ventures	19	15	95	44
Result from portfolio management & reassessments	(23)	(8)	(914)	(208)
Result from legacy remediation & major litigations	(30)	(13)	(61)	(86)
EBIT	202	234	316	986
Cost of borrowings	(30)	(31)	(140)	(131)
Interest on lendings & deposits	3	4	15	13
Other gains & losses on net indebtedness	(6)	(1)	(16)	(1)
Cost of discounting provisions	(34)	(29)	(105)	(77)
Result from equity instruments measured at fair value through other comprehensive income	-	-	4	-
Profit / (loss) for the period before taxes	135	177	74	791
Income taxes	(146)	42	(153)	(75)
Profit / (loss) for the period from continuing operations	(11)	219	(79)	716
attributable to Solvay shareholders	(19)	209	(118)	677
attributable to non-controlling interests	7	9	38	39
Profit / (loss) for the period from discontinued operations	28	43	236	201
Profit / (loss) for the period	16	261	157	917
attributable to Solvay shareholders	9	252	118	877
attributable to non-controlling interests	7	9	38	39
Weighted average of number of outstanding shares, basic	103,253,946	103,198,714	103,176,942	103,276,632
Weighted average of number of outstanding shares, diluted	103,558,333	103,473,072	103,403,463	103,735,303
Basic earnings per share (in €)	0.08	2.44	1.15	8.49
of which from continuing operations	(0.18)	2.03	(1.14)	6.55
Diluted earnings per share (in €)	0.08	2.43	1.15	8.46
of which from continuing operations	(0.18)	2.02	(1.14)	6.52

Consolidated statement of comprehensive income

(in € million)

	IFRS			
	Q4 2019	Q4 2018	FY 2019	FY 2018
Profit / (loss) for the period	16	261	157	917
Gains and losses on hedging instruments in a cash flow hedge	23	(51)	5	(47)
Currency translation differences from subsidiaries & joint operations	(199)	74	140	255
Share of other comprehensive income of associates and joint ventures accounted for using equity method that will be reclassified to profit or loss	(2)	4	24	(34)
Recyclable components	(178)	28	169	173
Gains and losses on equity instruments measured at fair value through other comprehensive income	-	2	3	3
Remeasurement of the net defined benefit liability [14]	125	(238)	(163)	26
Share of other comprehensive income of associates and joint ventures accounted for using equity method that will not be reclassified to profit or loss	-	-	(2)	-
Non-recyclable components	125	(236)	(162)	29
Income tax relating to components of other comprehensive income	(42)	62	48	1
Other comprehensive income, net of related tax effects	(95)	(147)	55	204
Total comprehensive income	(78)	115	211	1,120
attributed to Solvay share	(81)	104	174	1,077
attributed to non-controlling interests	3	10	37	43

Consolidated statement of cash flows

(in € million)

	Q4 2019	Q4 2018	FY 2019	FY 2018
Profit / (loss) for the period	16	261	157	917
Adjustments to profit / (loss) for the period	530	292	2,496	1,556
Depreciation, amortization & impairments (-)	313	227	1,906	944
Earnings from associates & joint ventures (-)	(19)	(15)	(95)	(44)
Additions & reversals on provisions (-)	20	59	154	315
Other non-operating and non-cash items	(13)	(8)	23	(12)
Net financial charges (-)	69	58	245	198
Income tax expenses (-)	160	(30)	262	156
Changes in working capital	261	386	(86)	(148)
Uses of provisions	(107)	(107)	(399)	(395)
Use of provisions for additional voluntary contributions (pension plans)	(114)	-	(114)	-
Dividends received from associates & joint ventures	4	8	25	25
Income taxes paid (including income taxes paid on sale of investments)	(70)	(55)	(263)	(235)
Cash flow from operating activities	521	786	1,815	1,720
Acquisition (-) of subsidiaries	(2)	-	(6)	(12)
Acquisition (-) of investments - Other	(1)	(4)	(16)	(4)
Loans to associates and non-consolidated companies	6	(3)	10	(3)
Sale (+) of subsidiaries and investments	(13)	4	(31)	26
Acquisition (-) of tangible and intangible assets (capex)	(274)	(275)	(857)	(833)
of which tangible assets	(249)	(233)	(751)	(691)
of which capital expenditures required by share sale agreement	(15)	(13)	(59)	(38)
of which intangible assets	(25)	(41)	(106)	(142)
Sale (+) of tangible & intangible assets	10	23	18	42
of which cash flow related to the sale of real estate in the context of restructuring, dismantling or remediation	-	9	-	9
Dividends from financial assets measured at fair value through other comprehensive income	-	-	4	-
Changes in non-current financial assets	25	23	(1)	-
Cash flow from investing activities	(249)	(231)	(880)	(784)
Repayment of perpetual hybrid bond	-	298	(701)	298
Sale (acquisition) of treasury shares	26	(23)	23	(22)
Increase in borrowings	1,303	392	3,044	2,444
Repayment of borrowings	(1,426)	(1,175)	(2,776)	(2,994)
Changes in other current financial assets	15	(35)	(32)	(25)
Payment of lease liabilities	(31)	-	(110)	-
Net interests paid	(53)	(57)	(118)	(114)
Coupons paid on perpetual hybrid bonds	(27)	(27)	(115)	(111)
Dividends paid	(34)	(33)	(426)	(411)
of which to Solvay shareholders	-	-	(387)	(372)
of which to non-controlling interests	(34)	(32)	(39)	(39)
Other [15]	(17)	(10)	(19)	123
Cash flow from financing activities	(244)	(671)	(1,230)	(811)
of which increase/decrease of borrowings related to environmental remediation	8	-	8	-
Net change in cash and cash equivalents	28	(116)	(295)	126
Currency translation differences	(3)	1	1	(14)
Opening cash balance	784	1,218	1,103	992
Closing cash balance	809	1,103	809	1,103

Statement of cash flow from discontinued operations

(in € million)

	Q4 2019	Q4 2018	FY 2019	FY 2018
Cash flow from operating activities	49	55	276	244
Cash flow from investing activities	(45)	(52)	(130)	(122)
Cash flow from financing activities	-	-	(5)	(1)
Net change in cash and cash equivalents	4	3	141	120

Consolidated statement of financial position

(in € million)	2019		2018
	December 31	January 1	December 31
Intangible assets	2,642	2,861	2,861
Goodwill	4,468	5,173	5,173
Tangible assets	5,472	5,454	5,454
Right-of-use assets	447	428	-
Equity instruments measured at fair value through other comprehensive income	56	51	51
Investments in associates & joint ventures	555	441	441
Other investments	38	41	41
Deferred tax assets	1,069	1,123	1,123
Loans & other assets	289	272	282
Non-current assets	15,035	15,844	15,427
Inventories	1,587	1,685	1,685
Trade receivables	1,414	1,434	1,434
Income tax receivables	129	97	97
Dividends receivable	-	-	-
Other financial instruments	119	101	101
Other receivables	628	718	719
Cash & cash equivalents	809	1,103	1,103
Assets held for sale	1,586	1,453	1,434
Current assets	6,272	6,592	6,574
Total assets	21,307	22,436	22,000
Share capital	1,588	1,588	1,588
Issue premiums	1,170	1,170	1,170
Other reserves	6,757	7,750	7,750
Non-controlling interests	110	124	117
Total equity	9,625	10,632	10,624
Provisions for employee benefits	2,694	2,672	2,672
Other provisions	825	868	883
Deferred tax liabilities	531	618	618
Financial debt	3,382	3,520	3,180
Other liabilities	159	121	121
Non-current liabilities	7,592	7,798	7,474
Other provisions	190	281	281
Financial debt [16]	1,132	723	630
Trade payables	1,277	1,431	1,439
Income tax payables	102	114	114
Dividends payable	161	154	154
Other liabilities	792	850	850
Liabilities associated with assets held for sale	437	454	435
Current liabilities	4,091	4,006	3,902
Total equity & liabilities	21,307	22,436	22,000

The impact of IFRS 16 as of January 1, 2019 is presented in the consolidated statement of financial position, to allow better comparability with the statements as of December 2018 and December 2019. The different impacts of the implementation of IFRS 16 from January 1, 2019 are the following:

- Inclusion of "Right-of-use assets" in "Non-current assets" for €428 million;
- Decrease of "Loans & other assets" by €(10) million;
- Decrease of "Other receivables" by €(1) million;
- Assets and liabilities associated with assets held for sale increased by €19 million for the right-of-use assets and lease liabilities related to the polyamide activities;
- Increase of "Reserves" by €8 million;
- Decrease of "Provisions" by €(16) million, of which €(15) million in "Non-current liabilities" and €(1) million in "Current liabilities";
- Decrease of "Trade payables" by €(8) million;
- Increase of "Financial debt" by €433 million, of which €340 million in "Non-current liabilities" and €93 million in "Current liabilities".

Consolidated statement of changes in equity

	Revaluation reserve (fair value)											
	Share capital	Share premiums	Treasury shares	Perpetual hybrid bonds	Retained earnings	Currency translation differences	Equity instruments measured at fair value through other comprehensive income	Cash flow hedges	Defined benefit pension plans	Total other reserves	Non-controlling interests	Total equity
<i>(in € million)</i>												
Balance on December 31, 2017	1,588	1,170	(281)	2,188	6,454	(834)	5	16	(666)	6,882	113	9,752
Adoption IFRS 9	-	-	-	-	(5)	-	-	-	-	(5)	-	(5)
Balance on January 1, 2018	1,588	1,170	(281)	2,188	6,449	(834)	5	16	(666)	6,876	113	9,747
Profit / (loss) for the period	-	-	-	-	877	-	-	-	-	877	39	917
Items of other comprehensive income [17]	-	-	-	-	-	217	4	(42)	22	200	4	204
Comprehensive income	-	-	-	-	877	217	4	(42)	22	1,077	43	1,120
Perpetual hybrid bond issuance (repayment)	-	-	-	298	-	-	-	-	-	298	-	298
Cost of stock options	-	-	-	-	9	-	-	-	-	9	-	9
Dividends	-	-	-	-	(378)	-	-	-	-	(378)	(40)	(418)
Coupons of perpetual hybrid bonds	-	-	-	-	(111)	-	-	-	-	(111)	-	(111)
Sale (acquisition) of treasury shares	-	-	(18)	-	(4)	-	-	-	-	(22)	-	(22)
Other	-	-	-	-	(8)	-	-	-	8	-	1	-
Balance on December 31, 2018	1,588	1,170	(299)	2,486	6,834	(618)	9	(26)	(636)	7,750	117	10,624
Balance on December 31, 2018	1,588	1,170	(299)	2,486	6,834	(618)	9	(26)	(636)	7,750	117	10,624
Adoption IFRS 16	-	-	-	-	8	-	-	-	-	8	-	8
Balance on January 1, 2019	1,588	1,170	(299)	2,486	6,842	(618)	9	(26)	(636)	7,758	117	10,632
Profit / (loss) for the period	-	-	-	-	118	-	-	-	-	118	38	157
Items of other comprehensive income [17]	-	-	-	-	-	164	1	5	(114)	55	(1)	55
Comprehensive income	-	-	-	-	118	164	1	5	(114)	174	37	211
Perpetual hybrid bond issuance (repayment)	-	-	-	(697)	(3)	-	-	-	-	(701)	-	(701)
Cost of stock options	-	-	-	-	11	-	-	-	-	11	-	11
Dividends	-	-	-	-	(394)	-	-	-	-	(394)	(39)	(432)
Coupons of perpetual hybrid bonds	-	-	-	-	(115)	-	-	-	-	(115)	-	(115)
Sale (acquisition) of treasury shares	-	-	25	-	(2)	-	-	-	-	23	-	23
Reclassification	-	-	-	-	5	-	-	1	(6)	-	(5)	(5)
Balance on December 31, 2019	1,588	1,170	(274)	1,789	6,462	(454)	10	(20)	(756)	6,757	110	9,625

NOTES TO THE CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

1. General information and significant events

Solvay is a public limited liability company governed by Belgian law and quoted on Euronext Brussels and Euronext Paris. These condensed consolidated financial statements were authorized for issue by the Board of Directors on February 25, 2020.

On January 18, 2019, the European Commission cleared the divestment of Solvay's Polyamides activities to BASF, a key milestone in the completion of Solvay's transformation into an advanced materials and specialty chemicals company. One of the remaining closing conditions included the divestment of a remedy package to a third-party buyer to address the European Commission's competition concerns. BASF has offered remedies involving part of the assets originally in the scope of the acquisition. These entail among others the manufacturing assets of Solvay's polyamide intermediates, technical fibers, and engineering plastics business as well as its innovation capabilities in Europe. On August 14, 2019 Solvay and BASF have reached an agreement with Domo Chemicals whereby Domo Chemicals is to acquire the Solvay Polyamide assets that needed to be divested to a third party as part of the European Commission's merger control clearance process. Domo is a fully integrated nylon 6 specialist, providing specialized engineering materials solutions to its customers in the automotive, electrical, construction, industrial applications and consumer goods industries. The assets acquired by Domo involve Solvay's Performance Polyamides facilities at Belle-Etoile and Valence, as well as a stake in a newly created joint venture between BASF and Domo in Chalampé (France). They also involve sites in Gorzow (Poland), Blanes (Spain) and commercial activities in Germany and Italy. BASF acquired all the activities that were not included in the remedy package and that were part of the original agreement between Solvay and BASF signed at the end of 2017. The entire transaction, which is based on an aggregate purchase price of € 1.6 billion on a debt free and cash free basis, was completed on January 31, 2020.

On May 12, 2019, Solvay Finance SA (subsidiary of Solvay) exercised its first call option on its € 700 million hybrid bond (ISIN XS0992293570 / Common Code 099229357). This perpetual deeply subordinated bond, bearing an annual interest rate of 4.199%, was treated as equity under IFRS rules. Its repayment was due on May 12, 2019 at the end of the first 5.5 years. As a result, the overall quantum of hybrid bonds in Solvay's balance sheet decreased from € 2.5 billion at the end of 2018 to € 1.8 billion at the end of 2019.

On August 30, 2019, Solvay announced that Solvay SA placed senior fixed rate bonds for an aggregate nominal amount of € 600 million paying a coupon of 0.5% and having its maturity date in September 6, 2029. The notes are listed and admitted to trading on the regulated market of the Luxembourg Stock Exchange with ISIN BE6315847804. Meanwhile, Solvay Finance (America), LLC redeemed its outstanding US\$ 800 million 3.400% notes due 2020 (CUSIP No. US8344PAA7 (Regulation S Notes) and 834423AA3 (Rule 144A Notes) / ISIN USU8344PAA76 (Regulation S Notes) and US834423AA33 (Rule 144A Notes)) on 30 September 2019.

On September 30, 2019 Solvay and Aquatq concluded a joint-venture agreement regarding Aqua Pharma company, under which Solvay acquired 50% of the shares for an amount of € 21 million. This strengthens their long-term collaboration to serve aquaculture customers. With this alliance, Solvay and Aqua Pharma aim to become a key aquaculture player by offering a wide range of sustainable and efficient solutions for sea lice and Amoebic Gill Disease (AGD) to the salmon industry.

After a strategic review performed in Q3 in the context of deteriorating profitability of the Oil & Gas business, the synergies between this business and the rest of Novecare appear to be too small and future growth opportunities too modest to support the Oil & Gas business being considered as part of one Novecare Cash Generating Unit. As a result, an impairment test was performed at the Oil & Gas business level rather than at Novecare level, which was carried out on September 30, 2019. Taking into account the carrying amount of the assets of the Oil & Gas business as of September 30, 2019 and the present value of future cash flows, an impairment of € 825 million pre-tax and € 658 million post-tax has been recognized.

On October 3, 2019 management decided to adapt the projects unveiled in June and September 2018, which focused on the footprint of its Research and Innovation sites in Lyon and Aubervilliers, the future of its Paris office and the transformation of its headquarters in Brussels. The initial objectives of these projects remain unchanged, namely:

- accelerate growth through innovation for its customers;
- strengthen collaboration between employees, customers, and partners;
- simplify the footprint of Solvay's administrative and Research & Innovation activities.

Adaption was needed because of the sharp increase in the projects' cost and the evolution of the economic context. Moreover, the number of employees willing to move to Brussels or Lyon has been considered too low. This could have hampered the continuity of activities at the service of our customers. As a consequence, the planned transfers of the teams based in Paris to Lyon and Brussels have been discontinued and the provision for indemnities resulting from expected refusals to relocate has been reversed (€ 48 million).

2. Accounting policies

General

Solvay prepares its condensed consolidated interim financial statements on a quarterly basis, in accordance with IAS 34 *"Interim Financial Reporting"*. They do not include all the information required for the preparation of the annual consolidated financial statements and should be read in conjunction with the consolidated financial statements for the year ended December 31, 2018. The consolidated financial statements for 2019 will be published in the annual report due in April 2020.

The condensed consolidated interim financial statements for the twelve months ended December 31, 2019, were prepared using the same accounting policies as those adopted for the preparation of the consolidated financial statements for the year ended December 31, 2018, except for the adoption of new standards, interpretations and amendments effective as of January 1, 2019, that are discussed hereafter. Aside from Interest Rate Benchmark Reform, the Group has not early adopted any other standard, interpretation or amendment that has been issued but is not yet effective.

Impacts of new Standards, interpretations and amendments

As of January 1, 2019, the Group applied, for the first time, IFRS 16 *"Leases"*, the amendments to IAS 12 *"Income Taxes"* as part of the annual improvements to IFRS standards 2015–2017 cycle, and IFRIC 23 *"Uncertainty over Income Tax Treatments"*. As required by IAS 34 for condensed consolidated interim financial statements, the nature and effect of these changes are disclosed below.

Several other amendments and interpretations apply for the first time in 2019 (including *"Interest Rate Benchmark Reform"*, which amends IFRS 9 *"Financial Instruments"*, IAS 39 *"Financial Instruments: Recognition and Measurement"*, and IFRS 7 *"Financial Instruments: Disclosures"*) but do not have a more than insignificant impact on the consolidated financial statements of the Group.

IFRS 16 *"Leases"*

As from January 1, 2019, the Group no longer applies IAS 17 *"Leases"*, IFRIC 4 *"Determining whether an Arrangement contains a Lease"*, SIC-15 *"Operating Leases – Incentives"* and SIC-27 *"Evaluating the Substance of Transactions Involving a Legal Form of a Lease"*. IFRS 16 is applicable for annual periods beginning on or after January 1, 2019. IFRS 16 sets out the principles for the recognition, measurement, presentation, and disclosure of leases and requires lessees to account for all leases under a single on-balance sheet model, similar to the accounting for finance leases under IAS 17. At the commencement date of a lease, lessees recognize a lease liability (i.e. a liability to make lease payments), and a right-of-use asset (i.e. an asset representing the right to use the underlying asset over the lease term).

The Group's leased assets relate mainly to buildings, transportation equipment, and industrial equipment.

The right-of-use assets are presented separately in the consolidated statement of financial position, and the lease liabilities are presented as part of financial debt.

On January 1, 2019, the Group:

- adopted IFRS 16, using the modified retrospective approach and did not restate comparative information. The Group did publish pro forma comparative information outside its IFRS financial statements, that was included in the fourth quarter 2018 Financial Report;
- measured the lease liability for leases previously classified as an operating lease at the present value of the remaining lease payments, discounted using the respective Group entity's incremental borrowing rate as of January 1, 2019. The lease liability amounted to €433 million, as further detailed in the table below. The weighted average incremental borrowing rate was 3.73%;
- measured the right-of-use assets for leases previously classified as an operating lease at an amount equal to the lease liability, adjusted by the amount of any prepaid or accrued lease payments relating to that lease recognized in the statement of financial position at December 31, 2018. The right-of-use assets amounted to €428 million;
- used the practical expedient available on transition to IFRS 16 related to onerous contracts, adjusting the right-of-use assets at January 1, 2019 by the amount of any provision for onerous leases recognized in the consolidated statement of financial position immediately before January 1, 2019. Such positively impacted the retained earnings as of January 1, 2019 by €8 million.

The following reconciliation to the opening balance for the lease liability as at January 1, 2019 is based upon the operating lease obligations as at December 31, 2018:

(in € million)	January 1, 2019
Total of future minimum lease payments under non-cancellable operating leases (undiscounted) at December 31, 2018	491
Minimum lease payments of finance leases (undiscounted) at December 31, 2018	90
Other	24
Lease liabilities (undiscounted) at January 1, 2019	606
Discounting (including finance leases as at December 31, 2018)	(137)
Present value of minimum lease payments of finance leases at December 31, 2018	(36)
Additional lease liabilities as a result of the initial application of IFRS 16 as at January 1, 2019	433

“Other” mainly includes onerous lease contracts, previously recognized in “Other provisions” for €16 million, and accrued lease payments, previously included in “Trade payables” for €8 million.

As a result of the adoption of IFRS 16, for the financial year 2019, depreciation and finance expense for continuing operations increased by €113 million and €23 million, respectively, and operating expenses decreased by €(133) million. In addition, the operating cash flows (including discontinued operations) increased by €133 million, against a decrease of financing cash flows.

Amendments to IAS 12 “Income Taxes” as part of the annual improvements to IFRS standards 2015–2017 cycle

As from January 1, 2019, the Group applies the amendments to IAS 12, that apply to the income tax consequences of dividends recognized on or after the beginning of the earliest comparative period, i.e. January 1, 2018.

In 2018, the income tax consequences of the coupons on perpetual hybrid bonds classified as equity were recognized in equity. As a result of the adoption of the amendment, those income tax consequences will be recognized in profit or loss.

(in € million)		Q1 2018	Q2 2018	Q3 2018	Q4 2018	FY 2018
Profit / (loss) for the period, IFRS as published	a	118	235	288	257	897
Tax on hybrids in equity	b	-	15	-	5	19
Profit / (loss) for the period, IFRS restated	c = a+b	118	249	288	261	917
Profit / (loss) for the period attributable to non-controlling interests, IFRS restated	d	10	9	11	9	39
Profit / (loss) for the period attributable to Solvay shareholders, IFRS restated	e = c-d	109	240	277	252	877
Weighted average of number of outstanding shares, basic	f	103,354,210	103,275,653	103,277,950	103,198,714	103,276,632
Basic earnings per share (in €), IFRS restated	g = e/f	1.05	2.32	2.68	2.44	8.49

In the statement of cash flows, increase in “Profit for the period” is offset by lower “Income tax expenses”;

In the statement of changes in equity, increase in “Profit for the period” is offset by lower “Other” changes in “Retained Earnings”.

IFRIC 23 “Uncertainty over Income Tax Treatments”

The interpretation addresses the financial reporting of the impacts of uncertainties surrounding income taxes in the scope of IAS 12 “Income Taxes” and does not apply to taxes or levies outside the scope of IAS 12, nor does it specifically include requirements related to interest and penalties associated with uncertain tax treatments.

The interpretation is effective for annual reporting periods beginning on or after January 1, 2019, but certain transition reliefs are available. The Group applies the interpretation since its effective date, yet did not identify a more than insignificant measurement impact on its consolidated financial statements. Uncertain tax liabilities in the amount of € 40 million, formerly included under provisions, have been reclassified to other non-current liabilities.

New accounting policies

IFRS 16 “Leases”

Definition of a lease

At inception of a contract, which generally coincides with the date the contract is signed, the Group assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

An asset is typically *identified* by being explicitly specified in a contract. However, an asset can also be identified by being implicitly specified at the time that the asset is made available for use by the customer. If the supplier has a substantive substitution right, then the asset is not identified. A substantive substitution right means that (a) the supplier has the practical ability to substitute the asset throughout the period of use, and (b) would economically benefit from doing so.

To assess whether a contract conveys *the right to control the use* of an identified asset, the Group assesses whether, throughout the period of use, it has:

- the right to obtain substantially all of the economic benefits from use of the identified asset; and
- the right to direct the use of the identified asset. This is generally the case when the Group has the decision-making rights regarding how and for what purpose the asset is used.

Lease term

The Group determines the lease term as the non-cancellable period of a lease, together with both:

- periods covered by an option to extend the lease if the Group is reasonably certain to exercise that option; and
- periods covered by an option to terminate the lease if the Group is reasonably certain not to exercise that option.

In its assessment, the Group considers the impact of the following factors (non-exhaustive):

- contractual terms and conditions for the optional periods, compared with market rates;

- significant leasehold improvements undertaken (or expected to be undertaken) over the term of the contract;
- costs relating to the termination of the lease, including relocation costs, costs of identifying another underlying asset suitable for the Group's needs, costs of integrating a new asset into the Group's operations, and termination penalties;
- the importance of that underlying asset to the Group's operations, including the availability of suitable alternatives;
- conditionality associated with exercising the option (i.e. when the option can be exercised only if one or more conditions are met), and the likelihood that those conditions will exist; and
- past practice.

Right-of-use asset and lease liability

The Group recognizes a right-of-use asset and a lease liability at the lease commencement date, which is the date that the lessor makes the asset available for use by the Group.

Right-of-use asset

The right-of-use asset is initially measured at cost, which comprises:

- the amount of the initial measurement of the lease liability;
- any lease payments made at or before the commencement date, less any lease incentive received; and
- any initial direct costs incurred by the Group.

After the commencement date, the right-of-use asset is measured at cost less any accumulated depreciation and any accumulated impairment losses. Right-of-use assets are depreciated using the straight-line depreciation method, from the commencement date to (a) the end of the useful life of the underlying asset, in case the lease transfers ownership of the underlying asset to the Group by the end of the lease term, or the lease contains a purchase option that the Group is reasonably certain to exercise, or (b) the earlier of the end of the useful life and the end of the lease term, in all other cases.

Lease liability

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using the interest rate implicit in the lease or, if that rate cannot be readily determined, the respective Group entity's incremental borrowing rate. Lease payments included in the measurement of the lease liability comprise the following:

- fixed payments, less any lease incentives receivable;
- variable lease payments that depend on an index or a rate, initially measured using the index or rate as at the commencement date;
- amounts expected to be payable by the Group under residual value guarantees;
- the exercise price of a purchase option if the Group is reasonably certain to exercise that option; and
- payments of penalties for early terminating the lease, if the Group is reasonably certain to exercise an option to early terminate the lease.

Service components (e.g. utilities, maintenance, insurance, ...) are excluded from the measurement of the lease liability.

After the commencement date, the lease liability is measured by:

- increasing the carrying amount to reflect interest on the lease liability;
- reducing the carrying amount to reflect the lease payments made; and
- remeasuring the carrying amount to reflect any reassessment or lease modifications, or to reflect the impact from a revised index or rate.

Amendments to IAS 12 "Income Taxes" as part of the annual improvements to IFRS standards 2015–2017 cycle

Tax impacts relating to the coupons of perpetual hybrid bonds classified as equity are recognized in profit or loss, to the extent that they are considered to stem from past transactions or events that generated distributable profits.

IFRIC 23 "Uncertainty over Income Tax Treatments"

When recognizing income taxes, the following shall be taken into account:

- whether an entity considers uncertain tax treatments separately or together with one or more other uncertain tax treatments is based on what approach better predicts the resolution of the uncertainty;
- an entity is to assume that a taxation authority with the right to examine any amounts reported to it will examine those amounts and will have full knowledge of all relevant information when doing so;
- an entity determines taxable profit (tax loss), tax bases, unused tax losses, unused tax credits and tax rates considering whether it is probable that the relevant authority will accept each tax treatment, or group of tax treatments, that it used or it plans to use in its income tax filing; and
- an entity reassess its judgments and estimates if facts and circumstances change.

3. Segment information

Solvay is organized in the following operating segments:

- **Advanced Materials** offers a unique portfolio of high-performance polymers and composite technologies used primarily in sustainable mobility applications. Its solutions enable weight reduction and enhance performance while improving CO2 and energy efficiency. Major markets served include next-generation mobility in automotive and aerospace, healthcare and electronics.
- **Advanced Formulations** includes a broad-based portfolio of surface chemistries focused on improving the world's resource efficiency. The segment offers customized formulations that alter fluids behavior to optimize yield while reducing environmental impact. Major markets include resource efficiency in oil & gas, mining and agriculture, as well as consumer goods, and food.
- **Performance Chemicals** hosts chemical intermediate businesses focused on mature and resilient markets. Solvay is a world leader in soda ash and peroxides and major markets served include building and construction, consumer goods and food. It provides resilient profitability thanks to good pricing and market dynamics, underpinned by high quality assets.
- **Corporate & Business Services** includes corporate and other business services, such as Group research & innovation or energy services, whose mission is to optimize energy consumption and reduce CO2 emissions.

Reconciliation of segment, underlying and IFRS data

(in € million)	Q4 2019	Q4 2018	FY 2019	FY 2018
Net sales	2,440	2,574	10,244	10,257
Advanced Materials	1,069	1,093	4,512	4,385
Advanced Formulations	663	764	2,846	3,057
Performance Chemicals	707	716	2,879	2,808
Corporate & Business Services	1	1	6	7
Underlying EBITDA	525	506	2,322	2,230
Advanced Materials	252	275	1,143	1,197
Advanced Formulations	102	119	490	521
Performance Chemicals	207	172	852	729
Corporate & Business Services	(35)	(60)	(163)	(218)
Underlying depreciation, amortization & impairments	(219)	(183)	(818)	(684)
Underlying EBIT	306	322	1,503	1,546
Non-cash accounting impact from amortization & depreciation of purchase price allocation (PPA) from acquisitions [18]	(50)	(60)	(214)	(237)
Net financial charges and remeasurements of equity book value of the RusVinyl joint venture	(2)	(8)	3	(30)
Result from portfolio management & reassessments	(23)	(8)	(914)	(208)
Result from legacy remediation & major litigations	(30)	(13)	(61)	(86)
EBIT	202	234	316	986
Net financial charges	(67)	(57)	(242)	(194)
Profit / (loss) for the period before taxes	135	177	74	791
Income taxes	(146)	42	(153)	(75)
Profit / (loss) for the period from continuing operations	(11)	219	(79)	716
Profit / (loss) for the period from discontinued operations	28	43	236	201
Profit / (loss) for the period	16	261	157	917
attributable to non-controlling interests	7	9	38	39
attributable to Solvay shareholders	9	252	118	877

The FY 2018 figures have been prepared using IAS 17. The pro forma FY 2018 figures, prepared using IFRS 16 have been published outside the IFRS financial statements, and were included in the fourth quarter 2018 Financial Report.

4. Segment information according to the new segmentation

This presentation reflects the changes in the segmentation following the strategy review announced on November 7, 2019. It will be applicable as from 2020 onward.

- The **Materials** segment includes Specialty Polymers and Composite Materials;
- The **Chemicals** segment includes Soda Ash & Derivatives, Peroxides, Silica and Coatis;
- The **Solutions** segment includes Novecare, Aroma Performance, Special Chem and Technology Solutions.

The strategy review and this new segmentation also triggered the reallocation of some corporate costs to the businesses in the different segments, affecting the corporate costs line in 2019, which has been restated accordingly.

Segment review restatement (in € million)				Underlying			
	FY 2018	FY 2018 PF	FY 2019	Q1 2019	Q2 2019	Q3 2019	Q4 2019
Net sales	10,257	10,257	10,244	2,571	2,654	2,578	2,440
Materials	3,091	3,091	3,199	801	833	818	747
Specialty Polymers	2,009	2,009	1,927	480	509	489	449
Composite Materials	1,082	1,082	1,272	321	324	329	298
Chemicals	3,250	3,250	3,328	831	836	845	816
Soda Ash & Derivatives	1,562	1,562	1,661	408	419	423	412
Peroxides	654	654	683	172	171	172	168
Silica	442	442	449	113	113	115	109
Coatis	591	591	535	138	133	136	
Solutions	3,908	3,908	3,710	938	984	912	876
Novecare	2,000	2,000	1,789	478	476	436	399
Aroma Performance	414	414	425	106	104	109	106
Special Chem	852	852	864	210	232	209	213
Technology Solutions	643	643	632	144	172	159	158
Corporate & Business Services	7	7	6	2	1	2	1
EBITDA	2,230	2,330	2,322	571	624	601	525
Organic growth	+5.3%		-2.8%				
Materials	962	978	884	236	235	233	180
Organic growth	+7.3%		-11%				
Chemicals	811	846	945	226	245	241	232
Organic growth	+0.5%		+9.3%				
Solutions	675	695	663	161	184	168	150
Organic growth	+2.6%		-9.8%				
Corporate & Business Services	(218)	(189)	(169)	(52)	(40)	(40)	(37)
EBITDA margin	21.7%	22.7%	22.7%	22.2%	23.5%	23.3%	21.5%
Materials	31.1%	31.7%	27.6%	29.5%	28.2%	28.5%	24.1%
Chemicals	24.9%	26.0%	28.4%	27.3%	29.3%	28.5%	28.4%
Solutions	17.3%	17.8%	17.9%	17.2%	18.7%	18.4%	17.1%
Capex in continuing operations	(711)	(794)	(826)	(179)	(177)	(215)	(255)
Materials	(274)	(288)	(300)				
Chemicals	(185)	(213)	(204)				
Solutions	(194)	(211)	(203)				
Corporate & Business Services	(58)	(82)	(119)				
Cash conversion	68.1%	65.9%	64.4%	68.7%	71.6%	64.3%	51.5%
Materials	71.5%	70.6%	66.1%				
Chemicals	77.2%	74.8%	78.4%				
Solutions	71.3%	69.7%	69.3%				
CFROI	6.9%	6.8%	6.5%				
Materials	10.9%	10.8%	9.1%				
Chemicals	8.1%	7.9%	8.5%				
Solutions	7.0%	7.0%	6.5%				
ROCE	8.4%	8.2%	8.1%				
FCF to Solvay Shareholders from continuing operations	566	566	606				
FCF conversion ratio	27.1%	26.0%	27.8%				

The definition of the Return on Capital Employed slightly changed compared to the publication of November 7, 2019, as it is now calculated on the basis of the situation at the end of the last 4 quarters instead of using the average of the situation at the start and the end of the period.

5. Impairment on Novecare's oil & gas assets

Most of Novecare Oil & Gas business is linked to the unconventional oil & gas in North America, and in particular the “fracking” stage of the process. Novecare serves other oil & gas applications and other process stages, such as cementing and production, but they represent only a small portion of the total sales.

In the context of difficult and uncertain global oil & gas markets, the fracking chemicals business has proved to be highly volatile and over the last two years the value pool for fracking chemicals has significantly decreased and both volumes and prices have come under pressure, as changes in the competitive environment are commoditizing the market. Solvay's oil & gas position, which comprise the Chemlogics and the Rhodia Oil & Gas businesses, have also been impacted by two further developments that have accelerated and became particularly impactful in 2019:

- The first is a marked decline in more sustainable & efficient, but also more expensive, natural guar-based formulations as customers have continued to opt for lower cost friction reducers rather than Solvay's solutions, and recent innovations have thus far failed to reverse that trend.
- The second is increased pricing pressure and loss of market share as competitors entered the important “last-mile” delivery and service space, which was previously a source of differentiation, as well as the more general pressure on the whole value chain caused by lower oil and natural gas prices.

As a result of these developments, in 2019 the profitability of the Oil & Gas business has deteriorated significantly. Action has been taken in terms of changing management, adapting cost structures as well as developing plans that are expected to help recover to a level of profitability that better reflects the competitive landscape.

Further, the strategic review that was undertaken also evidenced that the former Chemlogics business has been relatively more resilient than the former Rhodia guar based business.

As a result the synergies between the Oil & Gas business and the rest of Novecare are now too small and future growth opportunities too modest to support the Oil & Gas business being considered as part of Novecare, which was previously the position. This conclusion required, in compliance with IAS 36 “Impairment of assets”, for the Oil & Gas activities to be isolated in a separate CGU and the impairment test to be conducted at an Oil & Gas business level rather than at Novecare level.

Taking into account the carrying amount of the assets related to the Oil & Gas business and the present value of future cash flows based on the recovery plan, an impairment of € 825 million pre-tax and € 658 million post-tax has been recognized in 3Q19. The magnitude of the impairment is exacerbated both by the evolution of foreign currency exchange rates since the acquisition of Chemlogics in 2013, and by an expectation of persistently low oil prices. The latter dampens demand for premium solutions and thereby the recoverable amount of the asset (cash-generating unit), which is its value in use, calculated with a WACC of 6.7%.

The impairment loss of € 825 million has been recognized by class of assets in the Segment Advanced Formulations as follows: € 758 million for goodwill and € 53 million for intangible assets, € 9 million for property, plant and equipment, and € 5 million for inventories.

6. Financial Instruments

Valuation techniques

Compared to December 31, 2018, there are no changes in valuation techniques.

Fair value of financial instruments measured at amortized cost

For all financial instruments not measured at fair value in Solvay's consolidated statement of financial position, the fair value of those financial instruments as of December 31, 2019, is not significantly different from the ones published in Note F35 of the consolidated financial statements for the year ended December 31, 2018.

Financial instruments measured at fair value

For financial instruments measured at fair value in Solvay's consolidated statement of financial position, the fair value of those instruments as of December 31, 2019, is not significantly different from the ones as published in the Note F35 of the consolidated financial statements for the year ended December 31, 2018.

7. Events after the reporting period

On January 31, 2020, Solvay announced it had formally completed the divestment of its Performance Polyamides activities to BASF and Domo Chemicals. The transaction is based on an enterprise value of €1.6 billion and the expected selling proceeds net of costs of disposals on the combined transaction are estimated to be around €1.2 billion (selling proceeds of €1.5 billion received on January 31, 2020). The expected capital gain after taxes, subject to customary post-closing purchase price adjustments, is around €70 million.

Solvay has used a portion of the polyamide sale proceeds to prefund a part of the pension liabilities in France. This additional voluntary contribution amounts to approximately €380 million.

8. Declaration by responsible persons

Ilham Kadri, Chief Executive Officer, and Karim Hajjar, Chief Financial Officer, of the Solvay Group, declare that to the best of their knowledge:

- The condensed consolidated financial information, prepared in accordance with IAS 34 *“Interim Financial Reporting”* as adopted by the European Union, reflects a faithful image of the assets and liabilities, financial situation and results of the Solvay Group;
- The management report contains a faithful presentation of significant events occurring during the year 2019, and their impact on the condensed consolidated financial information;
- The main risks and uncertainties are in accordance with the assessment disclosed in the Risk Management section of the Solvay 2018 Annual Integrated Report, taking into account the current economic and financial environment.

9. Auditor report

Deloitte confirmed that the fieldwork related to the audit of the consolidated financial statements of Solvay SA/NV (“the company”) and its subsidiaries (jointly “the Group”), prepared in accordance with International Financial Reporting Standards as adopted by the European Union, and with the legal and regulatory requirements applicable in Belgium, is substantially completed. Deloitte confirmed that the financial information shown in this press release requires no comments on its part and is in agreement with the consolidated financial statements of the Group.

Deloitte also confirmed that it has reviewed the compliance, in all material aspects, of the alternative performance indicators as included in the Supplementary Information section.

Deloitte confirmed that it will issue an unqualified reasonable assurance opinion on the information shown on the extra-financial priority domains “Greenhouse gas intensity” (CO₂ emissions), “Sustainable solutions” and “Occupational accidents”, which is prepared in accordance with Solvay’s Reporting Framework. For “Employees involved in societal actions” Deloitte confirmed it will issue an unqualified limited assurance opinion.

The complete audit report related to the audit of the consolidated financial statements and of the social, environmental and other sustainable development information will be shown in the 2019 Annual Report that will be published on the Internet (www.solvay.com) in April, 2020.

10. Notes

All comparisons are made year on year with 2018 pro forma figures, as if IFRS 16 had already been implemented in 2018, unless stated otherwise.

- [1] A full reconciliation of IFRS and underlying income statement data can be found on page 19 of this report.
- [2] Organic growth excludes forex conversion and scope effects, as well as the effect from the implementation of IFRS 16.
- [3] Earnings per share, basic calculation.
- [4] Organic growth excludes forex conversion and scope effects, and compares to €2,330 pro forma in 2018, which already includes the €100 million IFRS 16 effect.
- [5] Free cash flow to Solvay shareholders is the free cash flow after payment of net interests, coupons of perpetual hybrid bonds and dividends to non-controlling interests. This represents the cash flow available to Solvay shareholders, to pay their dividend and/or to reduce the net financial debt. The free cash flow conversion ratio is calculated as the ratio between the free cash flow to Solvay shareholders (before netting of dividends paid to non-controlling interest) and underlying EBITDA.
- [6] Underlying net financial charges include the coupons on perpetual hybrid bonds (accounted as dividends under IFRS, and thereby excluded from the P&L), as well as the financial charges and realized foreign exchange losses from the RusVinyl joint venture (part of earnings from associates under IFRS, and thereby included in the IFRS EBITDA).
- [7] Underlying net financial debt includes the perpetual hybrid bonds, accounted for as equity under IFRS.
- [8] Scope effects include acquisitions and divestments of smaller businesses not leading to the restatement of previous periods.
- [9] Impact of inflation, mortality, forex & discount rate changes.
- [10] The net sales and EBITDA pie charts exclude Corporate & Business Services, Corporate & Business Services had no material contribution to net sales and their contribution to EBITDA is negative, and therefore cannot be depicted.
- [11] Since 2019, Coatis incorporates the Fibras activities, formerly in Functional Polymers. As a result Functional Polymers only consists of the PVC joint venture RusVinyl, which does not contribute to net sales.
- [12] As net debt at the end of the period does not yet reflect the net proceeds to be received on the divestment of discontinued operations, whereas the underlying EBITDA excludes the contribution of discontinued operations, the underlying EBITDA is adjusted to calculate the leverage ratio. Polyamide's underlying EBITDA was added.
- [13] Audited for FY only.
- [14] The remeasurement of the net defined benefit liability of €(163) million in 2019 is mainly due to decrease of discount rates applicable to post-employment provisions across all regions, partly offset by the return of plan assets.
- [15] Other cash flow from financing activities mainly relate to margin calls.
- [16] Current financial debt is composed of €700 million of commercial paper and €432 million of other short term financing (which include €152 million of short term portion of long term financing and leases).
- [17] The decrease in 2018 and increase in 2019 in equity related to currency translation differences is mainly related to changes in the U.S. dollar to euro exchange rate.
- [18] The non-cash PPA impacts can be found in the reconciliation table on pages 19 to 22. For 2019 these consist of €(214) million of amortization of intangible assets, which are adjusted in "Cost of goods sold" for €2 million, "Administrative costs" for €28 million, in "Research & development costs" for €3 million, and in "Other operating gains & losses" for €182 million.
- [19] Excluding discontinued operations
- [20] Currently estimated at 2.3% of replacement value of fixed assets
- [21] Currently estimated at 28% of underlying EBIT
- [22] The adjustment reflects the quarterly average over the year.
- [23] The adjustment reflects the difference between the estimated replacement value of goodwill and fixed assets, and the accounting value. The changes over time come from foreign exchange variations, new investments and portfolio moves. It also reflects the quarterly average over the year.



- **Early April 2020** 2019 Integrated annual report
- **May 6, 2020** First quarter 2020 results
- **May 12, 2020** Annual general meeting
- **May 18, 2020** Final dividend: ex-coupon date
- **May 19, 2020** Final dividend: record date
- **May 20, 2020** Final dividend: payment date
- **July 29, 2020** First half 2020 results
- **November 5, 2020** Nine months 2020 results
- **February 26, 2021** Full year 2020 results



- **Press release**
- **News corner**
- **Investors corner**
- **Earnings toolkit:** financial report, presentation, excel tables, financial & extra-financial glossary
- **Analysts & Investors conference call (14:00 CET)**
- **Annual integrated report**



Investor Relations

Geoffroy Raskin

+32 2 264 1540
geoffroy.raskin@solvay.com

Jodi Allen

+1 609 860 4608
jodi.allen@solvay.com

Bisser Alexandrov

+32 2 264 3687
bisser.alexandrov@solvay.com

Geoffroy d'Oultremont

+32 2 264 2997
geoffroy.doultremont@solvay.com

Media relations

Nathalie van Ypersele

+32 478 20 10 62
nathalie.vanypersle@solvay.com

Brian Carroll

+32 2 264 15 30
Brian.carroll@solvay.com



Safe harbor

This press release may contain forward-looking information. Forward-looking statements describe expectations, plans, strategies, goals, future events or intentions. The achievement of forward-looking statements contained in this press release is subject to risks and uncertainties relating to a number of factors, including general economic factors, interest rate and foreign currency exchange rate fluctuations, changing market conditions, product competition, the nature of product development, impact of acquisitions and divestitures, restructurings, products withdrawals, regulatory approval processes, all-in scenario of R&I projects and other unusual items. Consequently, actual results or future events may differ materially from those expressed or implied by such forward-looking statements. Should known or unknown risks or uncertainties materialize, or should our assumptions prove inaccurate, actual results could vary materially from those anticipated. The Company undertakes no obligation to publicly update or revise any forward-looking statements.



Solvay is an advanced materials and specialty chemicals company, committed to developing chemistry that addresses key societal challenges. Solvay innovates and partners with customers worldwide in many diverse end-markets. Its products are used in planes, cars, batteries, smart and medical devices, as well as in mineral and oil and gas extraction, enhancing efficiency and sustainability. Its lightweighting materials promote cleaner mobility, its formulations optimize the use of resources, and its performance chemicals improve air and water quality.

Solvay is headquartered in Brussels with around 24,100 employees in 64 countries. Net sales were €10.2 billion in 2019, with the vast majority of activities where Solvay ranks among the world's top 3 leaders, resulting in an EBITDA margin of 22%. Solvay SA (**SOLB.BE**) is listed on Euronext Brussels and Paris Bloomberg: **SOLB.BB** - Reuters: **SOLB.BR**), and in the United States its shares (**SOLVY**) are traded through a level-1 ADR program. *(Figures take into account the planned divestment of Polyamides.)*



SOLVAY

asking more from chemistry®

www.solvay.com

FOLLOW US ON



QUESTIONS?

Contact us
investor.relations@solvay.com