

ANNUAL REPORT 2019





Montana Tech Components AG, Reinach

Statutory Auditor's Report
on the Audit of the Consolidated Financial Statements
to the General Meeting
Consolidated Financial Statements 2019

KPMG AG
St. Gallen, 25 March 2020



KPMG AG
Audit
Bogenstrasse 7
CH-9000 St. Gallen

Postfach 1142
CH-9001 St. Gallen

Telefon +41 58 249 22 11
Telefax +41 58 249 22 12
www.kpmg.ch

Statutory Auditor's Report to the General Meeting of

Montana Tech Components AG, Reinach

Report on the Audit of the Consolidated Financial Statements

Opinion

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

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

Basis for Opinion

We conducted our audit in accordance with Swiss law, International Standards on Auditing (ISAs) and Swiss Auditing Standards. Our responsibilities under those provisions and standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are independent of the Group in accordance with the provisions of Swiss law and the requirements of the Swiss audit profession, as well as the IESBA Code of Ethics for Professional Accountants, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Other information in the Annual Report

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

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

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

Responsibility of the Board of Directors for the Consolidated Financial Statements

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

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

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

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

As part of an audit in accordance with Swiss law, ISAs and Swiss Auditing Standards, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control [5].
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made.
- Conclude on the appropriateness of the Board of Directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.



- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.

We communicate with the Board of Directors or its relevant committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Report on Other Legal and Regulatory Requirements

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

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

KPMG AG

Daniel Haas
Licensed Audit Expert
Auditor in Charge

Roman Künzle
Licensed Audit Expert

St. Gallen, 25 March 2020

Enclosure:

- Consolidated financial statements, which comprise the consolidated statement of financial position, the consolidated statement of profit and loss, consolidated statement of comprehensive income, consolidated statement of changes in equity, consolidated statement of cash flows and notes to the consolidated financial statements.

Consolidated statement of financial position

(in T€)	Notes	31.12.2019	31.12.2018 restated*	1.1.2018 restated*
ASSETS				
Intangible assets	7	220'190	226'179	159'094
Property, plant and equipment	8	918'617	550'423	359'665
Real estate held as investment property	8	90'449	38'704	17'651
Joint ventures and shares in associates	9	27'877	65'002	35'370
Loans	28	62'544	83'183	152'573
Other financial assets		63'831	8'657	6'801
Deferred tax assets	14	10'980	9'005	10'604
Other assets	12	52'873	23'010	21'644
Non-current assets		1'447'361	1'004'163	763'402
Inventories	11	329'987	277'000	218'316
Contract assets		15'824	2'370	0
Trade receivables	28	184'444	159'795	100'397
Current tax assets		5'113	5'584	8'040
Other assets	12	87'340	54'476	36'756
Cash and cash equivalents	13	412'279	193'225	233'229
Current assets		1'034'987	692'450	596'738
TOTAL ASSETS		2'482'348	1'696'613	1'360'140
EQUITY AND LIABILITIES				
Share capital	16	12'710	12'710	12'710
Share premium	16	180'156	180'156	180'156
Retained earnings	16	658'876	459'489	401'289
Treasury shares	16	-75'136	-74'942	-58'004
Equity attributable to the shareholders of MTC AG		776'606	577'413	536'151
Non-controlling interests	27	255'320	97'952	87'298
Total equity		1'031'926	675'365	623'449
Bank loans and borrowings	17	363'847	194'699	66'036
Other financial liabilities	17	365'690	291'541	291'512
Deferred tax liabilities	14	33'232	37'443	27'509
Provisions	18	3'184	1'959	1'709
Employee benefits	15	69'527	71'158	59'600
Contract liabilities	20	0	239	0
Other liabilities	21	84'550	44'895	5'839
Non-current liabilities		920'030	641'934	452'205
Bank loans and borrowings	17	63'737	83'951	60'500
Other financial liabilities	17	41'792	13'284	12'367
Current tax liabilities		21'312	13'224	7'809
Provisions	18	7'783	7'929	7'324
Employee benefits	15	27'000	25'098	19'107
Trade payables	28	243'031	150'666	118'464
Contract liabilities	20	23'103	20'990	0
Accruals	19	29'593	17'842	21'299
Other liabilities	21	73'041	46'330	37'616
Current liabilities		530'392	379'314	284'486
Total liabilities		1'450'422	1'021'248	736'691
TOTAL EQUITY AND LIABILITIES		2'482'348	1'696'613	1'360'140

* see Note 5

Consolidated statement of profit or loss

(in T€)	Notes	2019	2018 restated*
Gross sales		1'366'878	1'230'830
Sales deductions		-13'445	-12'436
Net sales	4	1'353'433	1'218'394
Change in finished and unfinished goods		26'212	20'566
Other operating income	23	65'077	53'468
Cost of materials, supplies and services		-732'579	-692'562
Personnel expenses	22	-332'981	-280'541
Depreciation and amortization	7/8	-130'986	-64'631
- thereof impairment	7/8	-35'116	-122
Other operating expenses	24	-189'409	-171'178
Operating profit		58'767	83'516
Interest income		6'793	6'593
Interest expenses		-25'804	-21'993
Other financial income	25	32'428	5'953
Other financial expenses	25	-11'549	-14'511
Financial result		1'868	-23'958
Share of profit of equity-accounted investees, net of tax	9	-292	12'251
Result before tax		60'343	71'809
Income tax expense	14	-21'868	-18'875
Result for the year		38'475	52'934
Thereof attributable to:			
Shareholders of MTC AG		18'189	43'424
Non-controlling interests	27	20'286	9'510

* see Note 5

Consolidated statement of other comprehensive income

(in T€)	Notes	2019	2018 restated*
Result for the year		38'475	52'934
Items that are not reclassified to profit or loss			
Remeasurements of defined benefit (liability (asset))	15	-10'642	1'598
Revaluation of the reimbursement claim	15	2'625	180
Related taxes	14	1'590	-219
		-6'427	1'559
Items that are or may be reclassified subsequently to profit or loss			
Effective portion of changes in fair value of cash flow hedges		508	-408
Foreign exchange differences		4'861	8'711
Related taxes	14	-51	171
		5'318	8'474
Other comprehensive income for the year, net of tax		-1'109	10'033
Total comprehensive income for the year		37'366	62'967
Thereof attributable to:			
Shareholders of MTC AG		15'925	52'964
Non-controlling interests	27	21'441	10'003

* see Note 5

Earnings per share

	2019	2018 restated*
Result attributable to the shareholders of MTC (in T€)	18'189	43'424
Average number of outstanding shares	72'164'222	72'178'254
Basic earnings per registered share in €	0.25	0.60
Basic earnings per voting share in €	0.03	0.06
	2019	2018 restated*
Result attributable to the shareholders of MTC (in T€)	18'189	43'424
Average number of outstanding shares	72'164'222	72'178'254
Diluted earnings per registered share in €	0.25	0.60
Diluted earnings per voting share in €	0.03	0.06

* see Note 5

Consolidated statement of cash flows

(in T€)	Notes	2019	2018 restated*
Cash flows from operating activities			
Result before tax		60'343	71'809
Net interest income		19'011	15'400
Share of profit of equity-accounted investees, net of tax		292	-12'251
Depreciation and amortization	7/8	130'986	64'631
Changes in fair value of real estate held as investment property		0	-3'291
Gains and losses from disposals of property, plant and equipment and intangible assets		104	-2'782
Gains and losses from disposals of financial assets		-14'753	
Negative Goodwill		0	-34
Losses from bond buyback		38	965
Other non-cash income and expenses	26	-13'101	-951
Subtotal		182'920	133'496
Changes in assets and liabilities:			
Inventories		-51'283	-27'581
Trade receivables and other current assets		-68'152	-26'547
Trade payables and other current liabilities		120'966	37'222
Provisions and liabilities for employee benefits		747	46
Subtotal		2'278	-16'860
Income taxes paid		-18'150	-12'262
NET CASH FROM OPERATING ACTIVITIES		167'048	104'374
Cash flows from investing activities			
Acquisition of subsidiaries less cash acquired	6/26	-17'302	8'354
Disposal of subsidiaries less cash disposed of	26	0	196
Acquisition of intangible assets and property, plant and equipment	7/8/26	-341'279	-182'469
Acquisition of real estate held as financial investment	8	-752	-17'040
Income from disposal of property, plant and equipment and intangible assets	7/8	1'114	15'230
Acquisition of joint ventures and shares in associates	9	0	-19'790
Loans to associates	28	0	-211
Loans to uncontrolled companies		-42'020	-79'234
Income from liquidation of joint ventures		286	0
Repayment of loans granted to uncontrolled companies		16'637	79'899
Dividends received from associates		0	2'409
Dividends received / Capital reductions from uncontrolled companies		106	20
Interest received		2'008	1'738
NET CASH FROM INVESTING ACTIVITIES		-381'202	-190'898
Cash flows from financing activities			
Acquisition of treasury shares	16	-194	-16'938
Disposal of non-controlling interests	6/26	320'969	2'168
<i>thereof VARTA AG - capital increase</i>	6/26	102'120	0
<i>thereof VARTA AG - disposal of 808,000 shares as of 5 December 2019</i>	6/26	96'986	0
<i>thereof VARTA AG - share option programmes</i>	6/26	1'795	2'168
<i>thereof Aluflexpack AG - IPO</i>	6/26	120'068	0
Payment of lease liabilities (until 31.12.2018 according to IAS 17, upon 01.01.2019 according to IFRS 16)	17	-17'406	-1'685
Issuance of interest-bearing liabilities	17	260'449	192'967
Repayment of interest-bearing liabilities	17	-112'921	-112'043
Interest paid		-19'808	-19'082
NET CASH FROM FINANCING ACTIVITIES		431'089	45'386
Net change in cash and cash equivalents		216'935	-41'138
Cash and cash equivalents as at 1 January	13	193'225	233'229
Effect of exchange rate changes on cash and cash equivalents		2'119	1'134
Cash and cash equivalents as at 31 December	13	412'279	193'225

* see Note 5

Consolidated statement of changes in equity

(in T€)	Notes	Attributable to the shareholders of MTC AG						Non controlling interests	Total equity	
		Share capital	Share premium	Foreign exchange differences	Fair value reserve	Other retained earnings	Own shares			Total
Balance as at 1 January 2018 (as previously reported)		12'710	180'156	29'123	204	369'007	-58'004	533'196	87'298	620'494
Impact of the application of IAS 8						2'955		2'955		2'955
Balance as at 1 January 2018 (restated)*		12'710	180'156	29'123	204	371'962	-58'004	536'151	87'298	623'449
Impact of new accounting standards IFRS 9 and IFRS 15 on the opening balance sheet as at 1 January 2018		-	-	-	-	1'407	-	1'407	-275	1'132
Total comprehensive income for the year										
Result for the year		-	-	-	-	43'424	-	43'424	9'510	52'934
Other comprehensive income for the year, net of tax		-	-	8'218	-237	1'559	-	9'540	493	10'033
Total		-	-	8'218	-237	44'983	-	52'964	10'003	62'967
Transactions with the shareholders of MTC AG										
Acquisition of treasury shares		-	-	-	-	-	-16'938	-16'938	-	-16'938
Total transactions with the shareholders of MTC AG		-	-	-	-	-	-16'938	-16'938	-	-16'938
Changes in interests held in subsidiaries										
Disposal of non-controlling interests		-	-	-	-	3'829	-	3'829	926	4'755
Total changes in interests held in subsidiaries		-	-	-	-	3'829	-	3'829	926	4'755
Balance as at 31 December 2018		12'710	180'156	37'341	-33	422'181	-74'942	577'413	97'952	675'365

(in T€)	Notes	Attributable to the shareholders of MTC AG						Non controlling interests	Total equity	
		Share capital	Share premium	Foreign exchange differences	Fair value reserve	Other retained earnings	Own shares			Total
Balance as at 1 January 2019 (restated)*		12'710	180'156	37'341	-33	422'181	-74'942	577'413	97'952	675'365
Total comprehensive income for the year										
Result for the year		-	-	-	-	18'189	-	18'189	20'286	38'475
Other comprehensive income for the year, net of tax		-	-	3'706	457	-6'427	-	-2'264	1'155	-1'109
Total		-	-	3'706	457	11'762	-	15'925	21'441	37'366
Transactions with the shareholders of MTC AG										
Acquisition of treasury shares	16	-	-	-	-	-	-194	-194	-	-194
Total transactions with the shareholders of MTC AG		-	-	-	-	0	-194	-194	0	-194
Changes in interests held in subsidiaries										
Disposal of non-controlling interests	6/26	0	0	0	0	183'462	0	183'462	135'927	319'389
Total changes in interests held in subsidiaries		-	-	-	-	183'462	-	183'462	135'927	319'389
Balance as at 31 December 2019		12'710	180'156	41'047	424	617'405	-75'136	776'606	255'320	1'031'926

* see Note 5

1.	Reporting entity.....	7
2.	Basis of preparation	7
3.	Main assumptions and estimates.....	8
4.	Segment reporting	11
5.	Changes in presentation	14
6.	Significant changes to the scope of consolidation	18
7.	Intangible assets	22
8.	Property, plant and equipment and Investment properties	25
9.	Joint ventures and shares in associates	27
10.	Leases	28
11.	Inventories	29
12.	Other receivables and assets	29
13.	Cash and cash equivalents	29
14.	Income taxes.....	30
15.	Liabilities for employee benefits	32
16.	Equity	37
17.	Financial liabilities	39
18.	Provisions	42
19.	Accruals	43
20.	Contract liabilities	43
21.	Other liabilities	43
22.	Personnel expenses	44
23.	Other operating income.....	45
24.	Other operating expenses	45
25.	Net financial result	46
26.	Consolidated cash flow statement.....	46
27.	Non controlling interests.....	48
28.	Risk management.....	49
29.	Related parties.....	62
30.	Contingent liabilities	65
31.	Events after the balance sheet date	66
32.	Investments	67
33.	Significant accounting policies	69

Notes to the consolidated financial statements

The consolidated financial statements are a translation from the original German version. In case of any inconsistency the German version shall prevail.

1. Reporting entity

Montana Tech Components AG (“MTC” or the “Group”) has its registered office in Reinach, Switzerland. The core business activities of MTC are presented in Note 4. The Company’s consolidated financial statements include the Company and its subsidiaries (together described as the “Group”). The reporting date for MTC, all subsidiaries and for the consolidated financial statements is 31 December 2019.

2. Basis of preparation

2.1. Basis of accounting

These consolidated financial statements have been prepared in accordance with the International Financial Reporting Standards (IFRS) and in compliance with Swiss law.

This is the first set of the MTC Group’s consolidated financial statements in which IFRS 16 *Leases* has been applied. Changes to significant accounting policies are described in Note 33.20.

These consolidated financial statements were authorized for issue by the Board of Directors on 25 March 2020. They further have to be approved by the next shareholder meeting.

2.2. Basis of measurement

Recognition and measurement within the Group are performed according to uniform criteria. The consolidated financial statements have been prepared based on historical acquisition and production costs, except for the derivative financial instruments and non-derivative financial instruments, that are measured at fair value through profit or loss, the net liability (asset) from defined benefit pension plans (measured at the present value of the defined benefit obligation less the fair value of plan assets), as well as real estate held as investment property, that is recognized at fair value. Non-current assets and groups of assets held for sale are recognized at the lower of carrying amount and fair value less expected costs to sell.

2.3. Functional and presentation currency

Generally, the Group companies’ functional currency is that used in their primary economic environment and corresponds to the local currency. For the majority of companies, the functional currency is the euro (EUR resp. €), which is why these consolidated financial statements are also presented in euro (EUR resp. €). The parent company’s functional currency is the Swiss franc (CHF).

For purposes of clarity and comparability, these consolidated financial statements are presented in thousands of euros (T€). The commercial rounding of individual items and percentages may result in minor calculation differences.

3. Main assumptions and estimates

In preparing these consolidated financial statements in accordance with IFRSs, management has made estimates and assumptions that affect the reported amounts of income, expenses, assets, liabilities and contingent liabilities. If the actual results differ from these estimates and assumptions, the initial estimates and assumptions are adjusted accordingly in the reporting year in which the changes have occurred.

The main assumptions that have been made by management in the application of IFRS and that have significant effects on the consolidated financial statements, as well as the estimates according to which there is a significant risk that major adjustments may be necessary in the following year, are presented hereafter.

3.1. Use of judgements and estimates

The consolidated financial statements include the following significant items, whose measurement depends largely on the underlying assumptions and estimates:

Business combinations

At the date of acquisition, the acquisition price of the acquired company is compared with the fair value of the acquired net assets that have been recognised. The difference is recognized either as goodwill or directly through profit or loss (negative goodwill). This requires management to estimate the fair value of these items. Such estimate is carried out in particular for the valuation of customer relationships, brands, licenses and patents. Information on business combinations performed during the reporting period is presented in Note 6.

Useful life of non-current assets

Property, plant and equipment and acquired intangible assets are recognized at acquisition or production costs and depreciated on a straight-line basis over their estimated useful lives. The estimation of useful lives is based on assumptions about wear and tear, aging, technical standards, contract periods and changes in demand. Changes in these factors may cause a reduction or an extension of the economic useful life of an asset. In such a case, the residual carrying amount is depreciated/amortized over the remaining shorter or longer useful life, resulting in higher or lower annual depreciation/amortization expenses. The necessary adjustments of the depreciation/amortization period due to a change in the expected useful life are also treated as changes in estimates.

Certain intangible assets are considered to have an indefinite useful life if an analysis of all the relevant factors does not allow to identify the end of the period in which the asset contributes to the generation of cash flows. This analysis is reviewed each year in order to determine whether the assessment of an indefinite useful life is still justified. If this is not the case, the assessment is changed from an indefinite to a finite useful life on a prospective basis. Intangible assets with an indefinite useful life are not amortized as planned, but they are tested for impairment on an annual basis and in case of any indication of impairment. Impairments are recognized in the year in which the value-impairing event occurs.

Impairment of non-current assets

Goodwill and other intangible assets with indefinite useful life are tested for impairment in the course of an annual impairment test. Furthermore, goodwill and intangible assets are always tested for impairment whenever events that have occurred or circumstances that have changed indicate that the carrying amount may no longer be recoverable.

The need for an impairment is determined by comparing the existing carrying amount with the discounted expected future net cash inflows or the expected net sales price. If these values are lower than the actual carrying amount, the carrying amount is impaired up to the level of the newly calculated value. The impairment is recognized as an expense through profit or loss. In the course of this impairment test, the valuation of non-current assets is also based on business planning, market- or company-specific discount rates, expected inflation rates and exchange rates. The corresponding inflation rates are adjusted according to the global economic evolution in order to reflect actual market expectations.

Impairment tests have revealed that all goodwill items and customer relationships with indefinite useful lives were fully recoverable as at the reporting date. More information on the impairment tests conducted is provided in Note 7. However, the assumptions made could be subject to changes that could lead to impairment losses in future periods.

Property, plant and equipment and intangible assets with finite useful lives are tested for impairment on an annual basis. If there are any indications of a sustained impairment, an impairment test is performed to determine the new carrying amount and the difference between the previous and the new carrying amounts is recognized through profit or loss.

Liabilities for employee benefits

Various pension plans are used within the Group for a number of employees. In order to determine the resulting assets and/or liabilities, it is necessary to assess whether these are defined benefit or defined contribution plans. In order to estimate the future evolution, statistical assumptions are made as regards defined benefit plans.

The actuarial valuation of pension liabilities is based on assumptions regarding discount rates, salary increases, employee/worker fluctuations and retirement age (demographic and financial variables). If these assumptions change due to a change in the economic situation or new market conditions, the actual data may differ significantly from the actuarial assessment and calculations. In the middle term, these deviations can have a significant impact on the income and expenses from pension institutions. More detailed information on pension institutions is provided in Note 15.2.

Provisions

In the ordinary course of business, provisions are made for various situations. The amount of the expected cash outflows is calculated in each concrete situation based on assumptions and estimates. These assumptions may be subject to changes, which result in a deviation in future periods. The carrying amounts of such provisions are presented in Note 18.

Deferred taxes

Deferred taxes are recognized in respect of temporary differences between the carrying amounts in the IFRS financial statements and the tax base as well as for expected recoverable tax loss carry forwards. Deferred taxes are calculated on the basis of the tax rates expected under current legislation to apply to the period in which the temporary differences are expected to reverse and on the basis of an assessment of future taxable profit. Any changes in the tax rate or variations in future taxable profit from that assumed could make it improbable that deferred tax assets will be recovered and necessitate a value adjustment with regard to the respective assets. Moreover, changes in the tax rate could lead to adjustments in deferred tax liabilities. The carrying amounts of deferred taxes are shown in the consolidated balance sheet and are broken down into the individual balance sheet items in Note 14.1.

4. Segment reporting

MTC is a leading component manufacturer active in the five reportable segments Aerospace Components, Metal Tech, ASTA, Energy Storage and Aluflexpack.

The allocation of the newly acquired companies is described in Note 32. The Chief Operating Decision Maker (CODM) of the Montana Tech Components Group is Mr. DDr. Michael Tojner (CEO).

The reportable segments are determined based on the strategic business entities that report to the Group's management. These strategic business entities provide various products and services and are managed individually due to their different technological and sales strategies.

In the *Aerospace Components* segment, high-quality aluminium profiles are developed and manufactured for the aviation industry and other industry sectors. For selected industry sectors, the Group manufactures application-specific semi-finished aluminium products and ready-to-install components in the core areas Aluminium Aerospace and Aluminium Extrusion.

The *Metal Tech* segment develops, manufactures and distributes special product identification machinery in the metallurgic sector. The sub-sectors Marking and Reading enable the steel identification of metallurgic products, whereby the Group provides all standard technologies. Marking using various solutions ensures tracking up to the end product.

In the *ASTA* segment, high-quality isolated copper winding material is manufactured for electrical engineering in the high-energy sector, i.e. drill conductors for transformers and Roebel bars for generators.

The *Energy Storage* segment deals with the manufacturing of micro-batteries for hearing aids and rechargeable micro-batteries in the entertainment sector. Moreover, lithium-ion battery packs for various applications as well as stationary energy-storage devices for households and commercial applications are developed and manufactured.

In the *Aluflexpack* segment, flexible aluminium packages are manufactured in particular for the milk, confectionary, animal feed and pharmaceutical industries.

The headquarters, research and development centers and sales organizations of the five segments are situated in Austria, Germany, the USA, Croatia and Switzerland. They are active worldwide with distribution and production facilities.

The transfer prices for any transactions performed between the reportable segments are determined "at arm's length".

Information according to reportable segments

(in T€)	Aerospace Components		Metal Tech		Energy Storage		Aluflexpack		ASTA		Total reportable segments		Corporate Center & Eliminations		Group	
	2019	2018*	2019	2018*	2019	2018*	2019	2018*	2019	2018*	2019	2018*	2019	2018*	2019	2018*
External net sales	414'455	359'972	78'910	93'716	362'244	270'619	207'931	181'741	289'893	312'348	1'353'433	1'218'396		-2	1'353'433	1'218'394
Net sales between segments	16	3		29	448	1'031				0	464	1'063	-464	-1'063	0	
Total net sales	414'471	359'975	78'910	93'745	362'692	271'650	207'931	181'741	289'893	312'348	1'353'897	1'219'459	-464	-1'065	1'353'433	1'218'394
Changes in inventories and other operating income	42'964	34'169	2'159	-3'011	14'085	15'667	15'200	13'313	13'980	4'889	88'388	65'027	2'901	9'007	91'289	74'034
Cost of materials, supplies and services	-190'615	-162'067	-31'830	-38'204	-124'942	-107'195	-138'647	-125'344	-245'175	-258'520	-731'209	-691'330	-1'370	-1'232	-732'579	-692'562
Personnel expenses	-115'202	-96'511	-29'049	-27'906	-114'406	-92'440	-27'687	-26'056	-33'460	-32'828	-319'804	-275'741	-13'177	-4'800	-332'981	-280'541
Depreciation and amortization	-48'051	-28'102	-2'790	-1'659	-21'526	-11'141	-18'565	-15'154	-39'230	-8'453	-130'162	-64'509	-824	-122	-130'986	-64'631
<i>thereof impairment</i>	-3'664						-991	-122	-30'461	0	-35'116	-122			-35'116	-122
Other operating expenses	-80'101	-69'812	-12'661	-15'258	-45'853	-40'115	-29'507	-22'144	-18'586	-16'901	-186'708	-164'230	-2'701	-6'948	-189'409	-171'178
Operating result	23'466	37'652	4'739	7'707	70'050	36'426	8'725	6'356	-32'578	535	74'402	88'676	-15'635	-5'160	58'767	83'516
EBITDA	71'517	65'754	7'529	9'366	91'576	47'567	27'290	21'510	6'652	8'988	204'564	153'185	-14'811	-5'038	189'753	148'147
Investments	208'461	103'397	1'217	1'072	132'300	59'520	38'028	17'581	7'318	3'311	387'324	184'881	1'614	227	388'938	185'108

^a The Corporate Center includes Montana Tech Components AG, Montana Tech Components GmbH, and the companies of the ETV H Group and the Montana Real Estate Group that are not allocated to an operative segment.

* see Note 5

Information by geographical segment

(in T€)	2019		2018	
	Net sales*	Non-current assets**	Net sales*	Non-current assets**
Switzerland	35'784	40'227	35'659	48'115
Germany	261'542	292'662	245'485	169'674
United Kingdom	46'092	730	38'488	207
Croatia	22'684	83'208	22'144	59'311
Liechtenstein	15'160	11'704	13'573	8'666
France	89'756	14'018	81'126	8'800
Italy	25'561		29'020	
Turkey	25'257	22'911	8'064	21'928
Romania	6'260	295'699	3'424	183'334
Other Europe	164'015	74'824	164'513	96'026
USA	249'623	280'470	227'814	168'345
Brazil	71'776	23'420	76'261	24'775
Other America	47'906		48'953	
Singapore	33'694	1'107	15'480	50
China	151'860	9'391	78'396	8'970
India	26'408	14'529	34'036	15'126
Other Asia	69'031	64'356	86'644	1'979
Africa, Australia and New Zealand	11'024		9'314	
Total Group	1'353'433	1'229'256	1'218'394	815'306

* The geographic information on revenues in the table above is based on the customers' location.

** Non-current assets include in this respect real estate held as financial investment, property, plant and equipment and intangible assets.

Products and services

MTC's revenues and trade receivables are split into the following products and services:

(in T€)	2019		2018	
	Net sales w/o IC	Trade receivables	Net sales w/o IC	Trade receivables
thereof product sales	1'343'836	181'716	1'208'910	157'138
thereof service sales	9'597	2'728	9'484	2'657
Total Group	1'353'433	184'444	1'218'394	159'795

Key accounts

In FY 2019, no transactions with a single external customer accounted for 10% or more of the Group sales.

Contract balances

No information is provided about remaining performance obligations at 31 December 2019 or at 31 December 2018 that have an original expected duration of one year or less, as allowed by IFRS 15.

5. Changes in presentation

5.1. Changes according to IAS 8 (correction of errors)

Since 30 September 2013, the MTC Group has held 26.66% of Central European Growth IV Beteiligungs-Invest GmbH (formerly Central European Growth IV Beteiligungs-Invest AG; 'CEG IV'); a further 7.41% was acquired in FY 2014 and a further 14.95% in FY 2015. Since then, the MTC Group has held a 49% interest in CEG IV. Consequently, as from 2013 CEG IV must be treated as an associate and valued in accordance with the equity method. In the course of the sale of the entire investment in CEG IV in FY 2019, it has become apparent that the results of companies reported according to the equity method as well as the corresponding financial assets recognized according to the equity method are undervalued.

The errors have been corrected by adjusting the financial statements items in question for the previous years.

5.2. Other changes

Changes in presentation – Consolidated statement of financial position

Reclassifications have been performed between contractual liabilities and other liabilities, as well as between accrued debt and contractual liabilities. The 2018 comparative figures have been adjusted accordingly.

The quantitative impact of the described adjustments on the consolidated financial statements is presented hereafter. The effect on the consolidated statement of cash flows is not presented since it is not material.

Consolidated statement of financial position

(in T€)	01.01.2018		
	As previously reported	Adjustments	Restated
ASSETS			
Intangible assets	159'094	0	159'094
Property, plant and equipment	359'665	0	359'665
Real estate held as investment property	17'651	0	17'651
Joint ventures and shares in associates	32'415	2'955	35'370
Loans	152'573	0	152'573
Other financial assets	6'801	0	6'801
Deferred tax assets	10'604	0	10'604
Other assets	21'644	0	21'644
Non-current assets	760'447	2'955	763'402
Non-current assets held for sale			
Current assets	596'738	0	596'738
TOTAL ASSETS	1'357'185	2'955	1'360'140
EQUITY AND LIABILITIES			
Share capital	12'710	0	12'710
Share premium	180'156	0	180'156
Retained earnings	398'334	2'955	401'289
Treasury shares	-58'004	0	-58'004
Equity attributable to the shareholders of MTC AG	533'196	2'955	536'151
Non-controlling interests	87'298	0	87'298
Total equity	620'494	2'955	623'449
Total liabilities	736'691	0	736'691
TOTAL EQUITY AND LIABILITIES	1'357'185	2'955	1'360'140

Consolidated statement of financial position

(in T€)	31.12.2018		
	As previously reported	Adjustments	Restated
ASSETS			
Intangible assets	226'179	0	226'179
Property, plant and equipment	550'423	0	550'423
Real estate held as investment property	38'704	0	38'704
Joint ventures and shares in associates	56'288	8'714	65'002
Loans	83'183	0	83'183
Other financial assets	8'657	0	8'657
Deferred tax assets	9'005	0	9'005
Other assets	23'010	0	23'010
Non-current assets	995'449	8'714	1'004'163
Current assets	692'450	0	692'450
TOTAL ASSETS	1'687'899	8'714	1'696'613
EQUITY AND LIABILITIES			
Share capital	12'710	0	12'710
Share premium	180'156	0	180'156
Retained earnings	450'775	8'714	459'489
Treasury shares	-74'942	0	-74'942
Equity attributable to the shareholders of MTC AG	568'699	8'714	577'413
Non-controlling interests	97'952	0	97'952
Total equity	666'651	8'714	675'365
Bank loans and borrowings	194'699	0	194'699
Other financial liabilities	291'541	0	291'541
Deferred tax liabilities	37'443	0	37'443
Provisions	1'959	0	1'959
Employee benefits	71'158	0	71'158
Contract liabilities	30'486	-30'247	239
Other liabilities	14'648	30'247	44'895
Non-current liabilities	641'934	0	641'934
Bank loans and borrowings	83'951	0	83'951
Other financial liabilities	13'284	0	13'284
Current tax liabilities	13'224	0	13'224
Provisions	7'929	0	7'929
Employee benefits	25'098	0	25'098
Trade payables	150'666	0	150'666
Contract liabilities	25'875	-4'885	20'990
Accruals	24'544	-6'702	17'842
Other liabilities	34'743	11'587	46'330
Current liabilities	379'314	0	379'314
Total liabilities	1'021'248	0	1'021'248
TOTAL EQUITY AND LIABILITIES	1'687'899	8'714	1'696'613

Consolidated statement of profit or loss

(in T€)	2018		
	As previously reported	Adjustments	Restated
Gross sales	1'230'830	0	1'230'830
Sales deductions	-12'436	0	-12'436
Net sales	1'218'394	0	1'218'394
Change in finished and unfinished goods	20'566	0	20'566
Other operating income	53'468	0	53'468
Cost of materials, supplies and services	-692'562	0	-692'562
Personnel expenses	-280'541	0	-280'541
Depreciation and amortization	-64'631	0	-64'631
Other operating expenses	-171'178	0	-171'178
Operating profit	83'516	0	83'516
Interest income	6'593	0	6'593
Interest expenses	-21'993	0	-21'993
Other financial income	5'953	0	5'953
Other financial expenses	-14'511	0	-14'511
Financial result	-23'958	0	-23'958
Share of profit of equity-accounted investees, net of tax	6'492	5'759	12'251
Result before tax	66'050	5'759	71'809
Income tax expense	-18'875	0	-18'875
Result for the year	47'175	5'759	52'934
Thereof attributable to:			
Shareholders of MTC AG	37'665	5'759	43'424
Non-controlling interests	9'510	0	9'510

6. Significant changes to the scope of consolidation

6.1. Significant changes in 2018

The number of consolidated companies shows the following development:

Development/number of consolidated companies	2019		2018	
	full consolidation	equity consolidation	full consolidation	equity consolidation
as of 1.1.	73	4	53	5
first consolidation in the reporting year				
start-up	9		8	
acquisition	11		12	
deconsolidated in the reporting year	-2	-1		-1
merger				
as of 31.12.	91	3	73	4

* see Note 5

Acquisitions above include companies that do not meet the definition of a business in accordance with IFRS 3 and therefore are not disclosed in Note 6.1.1, but in Note 6.1.2.

6.1.1. Business combinations (according to IFRS 3)

In FY 2019 the MTC Group acquired Charles Engineering Inc. (acquirer: Universal Alloy Corporation, US) as part of an Asset Deal.

The identifiable net assets, goodwill (badwill) and cash outflows were as follows:

(in T€)	Charles Engineering (asset deal)
Intangible assets	6'110
Property, plant and equipment	3'557
Inventories	731
Trade receivables	736
Other non-current liabilities	0
Other current liabilities	0
Identifiable net assets	11'134
(in T€)	
Cash and cash equivalents (excl. transaction costs)	12'612
Total purchase price	12'612
Fair value of identifiable net assets	-11'134
Goodwill	1'478
(in T€)	
Cash and cash equivalents (excl. transaction costs)	12'612
Acquired cash and cash equivalents	0
Total cash outflow (+), Total cash inflow (-)	12'612

The contribution of the acquired company, which has been included in the consolidated financial statements since the beginning of the financial year, to revenue of the current financial year amounted to T€ 5,996, whereas the contribution to the profit for the period amounted to T€ 437. The identified goodwill results mainly from the integration of Charles Engineering in the MTC Group.

6.1.2. Other acquisitions

The following other acquisitions were made in the MTC Group in FY 2019:

- IndustrieCapital AG, CH
- Duane 131 LLC, US
- Washington Place Realty LLC, US
- MTC Real Estate Inc., US
- UAC Real Estate LLC, US
- Washington Fifth LLC, US
- Duane 129 Retail LLC, US
- NY RE Portfolio LLC, US
- UAC Ball Ground LLC, US
- UAC Brown LLC, US
- UAC Canton LLC, US

6.1.3. Mergers, spin-offs and intragroup restructurings

There were no mergers and spin-offs in FY 2019.

The following companies were liquidated in the MTC Group in FY 2019:

- Aluflexpack Deutschland GmbH
- MTC Versiche LLC

The following intragroup restructurings were carried out in the MTC Group in FY 2019:

- Montana AS Beteiligungs Holding AG was sold by Montana Tech Components AG to Montana Aerospace AG.
- Montana Aerospace GmbH was sold by Montana Tech Components AG to Montana Aerospace AG.
- UAC Export Co. was sold by Montana Tech Components AG to Montana AS Beteiligungs Holding AG.

6.1.4. Foundation of companies

In FY 2019, the following companies were founded by the MTC Group:

- Universal Alloy Corporation Asia Pte., SG
- Universal Alloy Corporation Vietnam Company Ltd.
- UAC Air Support Ltd.
- Seclnt Air Support Ltd.
- Montana Aerospace AG
- Montana Aerospace GmbH
- ASTA Bosnia d.o.o.
- Montana Real Estate Inc.
- VAMI-SK neunzehn GmbH

6.1.5. Acquisition of non-controlling interests

In FY 2019, no non-controlling interests were acquired by the MTC Group.

6.1.6. Acquisition of associates

In FY 2019, no associates were acquired by the MTC Group.

6.1.7. Disposal of companies

In FY 2019, the entire interests in Central European Growth IV Beteiligungs-Invest GmbH ('CEG IV') was sold to a related company; see also Note 29.

6.1.8. Disposal of non-controlling interests

(in T€)	Attributable to the shareholders of MTC AG	Non controlling interests	31.12.2019
VARTA AG - capital increase	51'697	50'423	102'120
VARTA AG - disposal of 808,000 shares as of 5.12.2019	89'503	7'483	96'986
VARTA AG - share option programs	1'500	1'072	2'572
Aluflexpack AG - IPO	40'762	76'949	117'711
Disposal of non-controlling interests	183'462	135'927	319'389

VARTA AG capital increase

VARTA AG carried out a capital increase on 13 June 2019. 2,221,686 new shares were issued at a price of € 46.7 per share. This resulted in gross proceeds of € 103.8 million. The transaction costs recognized in equity that arose from the capital increase amounted to € 1.6 million.

VARTA AG – Sale of 808.000 shares

On 5 December 2019 VGG GmbH sold 808,000 shares of VARTA AG at a price of € 121 per share and recognized gross proceeds of € 97.8 million. During this transaction, approximately 2% of the shares of VARTA AG were sold to non-controlling interests. The transaction costs recognized in equity that arose from this transaction amounted to € 0.8 million.

VARTA stock option program

VGG GmbH (main shareholder of VARTA AG) has granted to a number employees options for the acquisition of ordinary shares in VARTA AG as an incentive in order to increase the company's value. Following the exercise of these options, ca. 0.36% of the investment in VARTA AG was sold to non-controlling interests during the year; see also Note 27.

Aluflexpack AG – IPO

Aluflexpack has carried out on IPO on 28 June 2019 in the regulated market of the Zürich Stock Exchange. The issue price was CHF 21. By the issue of 7,300,000 new shares, Aluflexpack AG received gross proceeds of € 137.8 million. In addition, 730,000 "old shares" of Aluflexpack AG were sold, resulting in gross proceeds of € 13.8 million. The transaction costs recognized in equity that arose in connection with the IPO of Aluflexpack AG amounted to € 33.9 million.

6.2. Significant changes in 2018

The number of consolidated companies shows the following development:

Development/number of consolidated companies	2018		2017	
	full consolidation	equity consolidation	full consolidation	equity consolidation
as of 1.1.	53	5	52	5
first consolidation in the reporting year				
start-up	8		4	0
acquisition	12		3	0
deconsolidated in the reporting year				
merger		-1	-1	0
as of 31.12.	73	4	53	5

7. Intangible assets

	Goodwill	Customer relationships and other intangible assets	Industrial property rights	Other rights and advance payments	Licenses	Development costs	Total
<i>(in T€)</i>							
COST							
Balance as at 1 January 2018	67'150	82'492	21'496	9'645	3'065	15'019	198'867
Effect of movements in exchange rates	1'277	1'646	64	-1	27		3'013
Change in consolidation scope	27'420	19'352	13'117	1'311	757		61'957
Additions		3'927	11	8'706	169	1'753	14'566
Disposals					-31		-31
Transfers		6'399		-6'937	23	392	-123
Balance as at 31 December 2018	95'847	113'816	34'688	12'724	4'010	17'164	278'249
Effect of movements in exchange rates	841	993	189	8	11	-39	2'003
Change in consolidation scope	1'478	4'323	1'787				7'588
Additions		3'846	3	9'487	938	15'101	29'375
Disposals		-102			-6		-108
Transfers		7'228	592	-9'618	2'021		223
Balance as at 31 December 2019	98'166	130'104	37'259	12'601	6'974	32'226	317'330
ACCUMULATED AMORTIZATION and IMPAIRMENT LOSSES							
Balance as at 1 January 2018	2'264	27'454	592	2'736	2'165	4'562	39'773
Effect of movements in exchange rates		223		-1	22		244
Additions		8'851	172	237	934	1'890	12'084
Disposals					-31		-31
Transfers							0
Balance as at 31 December 2018	2'264	36'528	764	2'972	3'090	6'452	52'070
Effect of movements in exchange rates		127	-13	6	15		135
Additions		11'147	453	122	877	1'972	14'571
Impairment loss	19'825		10'636				30'461
Disposals		-91			-6		-97
Transfers		-141			141		0
Balance as at 31 December 2019	22'089	47'570	11'840	3'100	4'117	8'424	97'140
CARRYING AMOUNT							
Carrying amount as at 1 January 2018	64'886	55'038	20'904	6'909	900	10'457	159'094
Carrying amount as at 31 December 2018	93'583	77'288	33'924	9'752	920	10'712	226'179
Carrying amount as at 31 December 2019	76'077	82'534	25'419	9'501	2'857	23'802	220'190

In the reporting year, research and development costs of T€ 15,990 (2018: T€ 13,374) were recognized through profit or loss.

Intangible assets show restrictions on disposal of T€ 47,373 (2018: T€ 41,057).

The carrying amount of goodwill, customer relationships, other intangible assets and industrial property rights are allocated as follows to the individual cash generating units, which correspond largely to the MTC Group's reporting segments, with the exception of Aerospace Components USA:

2019						
(in T€)	Goodwill	Customer relationships with indefinite useful life	Customer relationships with finite useful life	Other intangible assets	Industrial property rights with indefinite useful life	Industrial property rights with finite useful life
Aerospace Components	32'825	31'052	295	20'929	-	1'778
Metal Tech	23'138	-	748	138	-	103
Energy Storage	9'666	-	9'094	715	18'299	497
ASTA	0	-	2'953	2'542	-	0
Aluflexpack	10'448	-	13'796	272	1'807	2'935
Total	76'077	31'052	26'886	24'596	20'106	5'313

2018						
(in T€)	Goodwill	Customer relationships with indefinite useful life	Customer relationships with finite useful life	Other intangible assets	Industrial property rights with indefinite useful life	Industrial property rights with finite useful life
Aerospace Components	30'767	30'813	392	15'033	-	0
Metal Tech	23'138	-	1'091	142	-	114
Energy Storage	9'666	-	9'739	341	18'299	654
ASTA	19'825	-	3'567	806	10'044	0
Aluflexpack	10'187	-	14'863	501	4'813	0
Total	93'583	30'813	29'652	16'823	33'156	768

Due to the longstanding customer relationships and the marginal client fluctuation, management considers that the useful life of certain customer relationships is indefinite, because all the relevant factors do not allow to identify the end of the period for which the assets contribute to the generation of cash flows. These customer relationships with indefinite useful life are contributed mainly by Universal Alloy Corporation, USA. In this regard, it is observed that the client structure of this company has remained constant since 2006 and that no new competitor has appeared on the market since then. The situation was reviewed in 2019 and the classification of an indefinite useful life is maintained.

Goodwill and intangible assets with indefinite useful life are tested for impairment on an annual basis and in case of any indication of impairment. An impairment is recognized when the carrying amount exceeds the higher of fair value less cost of disposal and value in use.

For the impairment test, the value in use is calculated, except for the Energy Storage and Aluflexpack divisions. The fair value less cost of disposal is calculated subsequently only if the value in use is lower than the segment's carrying amount. Regarding the Energy Storage and Aluflexpack divisions, the fair value was used for the impairment test based on the respective stock exchange listing.

The value in use is calculated using the discounted cash flow method and is based on internal projections, which are prepared in detail for the following three financial years. After these three years an inflation-protected level is assumed in the absence of significant evidence to the contrary. The projections are derived from previous results and past experience as well as management's best estimates of probable future developments. It is assumed that the segments will not experience any significant organizational changes. The discount rate applied to the calculation of discounted cash flows is the interest rate that reflects current market estimates of the time value of money and the specific risk related to respective asset. Since the cash flows reflect tax expenditure, the discount rate is applied after taxes. Applying the discount rate after taxes leads to a similar result as applying a discount rate before taxes to cash flows before taxes.

The calculations are based on the following assumptions:

2019

	Discount rate after taxes	Discount rate before taxes	Budgeted growth rate
Aerospace Components USA	11.27%	13.65%	2.00%
Metal Tech	11.23%	14.52%	1.20%
ASTA	8.67%	10.76%	1.20%

2018

	Discount rate after taxes	Discount rate before taxes	Budgeted growth rate
Aerospace Components USA	11.23%	12.57%	2.30%
Metal Tech	8.56%	10.72%	2.10%
ASTA	8.60%	11.02%	2.10%

As part of assessing the recoverable amount of all goodwill positions, the goodwill recognized in connection with the acquisition of the ASTS Group in the amount of T€ 19,825 and intangible assets in the amount of T€ 10,636 were written off. The recoverable amount amounts to T€ 1,831. The reason for the impairment is that ASTA Group is faced with low market prices and overcapacities in its main business area, "Insulated Flat Wires (CTC)" and unlike in previous years, management no longer assumes that an increase in prices will be possible in the medium term despite the quality leadership of the ASTA Group.

The impairment tests have revealed that the remaining goodwill positions and customer relationships with indefinite useful life were fully recoverable. Consequently, no further impairment losses were recognized for the items in question during the reporting period.

In addition, the goodwill items were tested by means of sensitivity analyses with the following results:

The value in use of Aerospace Components USA is higher than the carrying amount. The value in use would correspond to the carrying amount only with a discount rate after taxes of 11.85% (instead of 11.27%) resp. a growth rate in the terminal value of 1.21%. The surplus which results from the difference between the value in use and the book value amounts to T€ 13,420.

In the Metal Tech division, the value in use is also higher than the carrying amount and would correspond to the carrying amount only with a discount rate after taxes of 12.13% (instead of 11.23%) resp. a negative growth rate in the terminal value of 0.6%. The surplus which results from the difference between the value in use and the book value amounts to T€ 5,221.

In the Energy Storage and Aluflexpack divisions, the fair value is significantly higher than the carrying amount.

8. Property, plant and equipment and Investment properties

	Land	Buildings	Right-of-use assets - Land and Buildings	Technical equipment and machinery	Right-of-use assets - Techn. Equipm. and machinery	Other equipment	Right-of-use assets - Other equipment	Plant under construction and advance payments	Operating property, plant and equipment	Real estate held as financial investment
(in T€)										
COST										
Balance as at 1 January 2018	20'657	75'479		331'484		75'057		55'591	558'268	17'651
Effect of movements in exchange rates	323	944		5'538		1'354		502	8'661	1'424
Change in consolidation scope	8'536	31'493		34'818		4'614		117	79'578	0
Additions	446	7'591		53'552		11'220		97'732	170'541	17'040
Disposals	-722	-8'851		-3'113		-1'894		-4'399	-18'979	0
Transfers	702	14'380		16'056		3'154		-33'467	825	-702
Balance as at 31 December 2018	29'942	121'036		438'335		93'505		116'076	798'894	38'704
Effect of movements in exchange rates	324	642	455	2'490	146	673	166	-94	4'802	645
IFRS 16 - initial application as of 1 January 2019			74'665		736		5'572		80'973	0
Change in consolidation scope	1'830	26'713		1'936					30'479	50'348
Additions	827	1'226	7'953	29'816	1'619	17'585	2'639	297'898	359'563	752
Disposals	-336	-313	-22'877	-7'099		-2'709	-12	-98	-33'444	0
Transfers	784	1'135	1'893	57'865	6'101	6'866	20	-72'994	1'670	0
Balance as at 31 December 2019	33'371	150'439	62'089	523'343	8'602	115'920	8'385	340'788	1'242'937	90'449
ACCUMULATED DEPRECIATION AND IMPAIRMENT LOSSES										
Balance as at 1 January 2018	1'856	15'030		135'246		46'322		149	198'603	0
Effect of movements in exchange rates		236		2'672		935		9	3'852	
Depreciation	731	4'427		37'331		9'810		126	52'425	
Impairment loss				107		15			122	
Disposals		-2'079		-2'878		-1'574			-6'531	
Transfers	445	-445		7		-7			0	
Balance as at 31 December 2018	3'032	17'169		172'485		55'501		284	248'471	0
Effect of movements in exchange rates	-1	238	-1	1'278	20	630	-4	11	2'171	
Depreciation	772	4'848	12'613	48'340	793	11'922	2'026	-15	81'299	
Impairment loss		104		4'391		160			4'655	
Disposals		-211	-2'923	-6'658		-2'479	-4	-1	-12'276	
Transfers			-145	-2'412	2'326	81	150		0	
Balance as at 31 December 2019	3'803	22'148	9'544	217'424	3'139	65'815	2'168	279	324'320	0
CARRYING AMOUNT										
Carrying amount as at 1 January 2018	18'801	60'449	0	196'238	0	28'735	0	55'442	359'665	17'651
Carrying amount as at 31 December 2018	26'910	103'867	0	265'850	0	38'004	0	115'792	550'423	38'704
Carrying amount as at 31 December 2019	29'568	128'291	52'545	305'919	5'463	50'105	6'217	340'509	918'617	90'449

Investments were focused on the development of production capabilities in the Aerospace Components (Romania and Vietnam) and Energy Storage (Germany) divisions.

The reclassifications of the acquisition costs of the rights of use relating to land and buildings include a reclassification of T€ 1,893, which was still reported as other current assets as of 31 December 2018.

Operating property, plant and equipment show restrictions on disposal of T€ 204,531 (2018: T€ 175,372). Contract liabilities for the acquisition of property, plant and equipment amount to T€ 195,921 (2018: T€ 57,919).

In FY 2019, there were unplanned depreciations of T€ 3,664 (2018: T€ 0) in the Aerospace Components division and of T€ 991 (2018: T€ 122) in the Aluflexpack division.

In FY 2019 changes in the scope of consolidation also include other acquisitions of companies in the amount of T€ 26,922 which do not meet the definition of a business in accordance with IFRS 3 and therefore are not included in Note 6.1.1.

Investment properties

The additions of investment properties from the change in the scope of consolidation relate to the acquired US real estate companies (see Note 6.1.2.), which are not assigned to any operating segment of the MTC Group. These relate to properties in the US federal State of New York.

Real estate held as investment property is measured at fair value.

Real estate held as investment property achieved rental income of T€ 589 (2018: T€ 437).

Real estate held as investment property show a restriction on disposal of T€ 0 (2018: T€ 0).

9. Joint ventures and shares in associates¹

The carrying amounts of the joint ventures and shares in associates are as follows:

(in T€)	2019	2018*
VW-VM Forschungsgesellschaft mbH & Co. KG (liquidated)	0	292
VW-VM Verwaltungsgesellschaft mbH	13	13
Total carrying amount of joint ventures	13	305
VARTA Micro Innovation GmbH	213	213
HENN Industrial Group GmbH & Co. KG	27'652	28'811
Central European Growth IV Beteiligungs-Invest GmbH	0	35'672
Total carrying amount of associates	27'865	64'696
Total carrying amount of joint ventures and shares in associates	27'877	65'002

* see Note 5

HENN Industrial Group GmbH & Co KG (“HENN”)

Since 2018, the MTC Group is holding 45.45% of the limited partner's share of HENN. A purchase price improvement was agreed with the seller for 25.45% of the interests, which will apply until 31 December 2023. The improvement in the purchase price is shown in the “Other financial liabilities”.

The main key figures of HENN are:

(in T€)	2019*	2018
Non-current assets	136'452	137'637
Current assets	37'066	36'870
Non-current liabilities	53'321	53'887
Current liabilities	23'015	21'670
Equity	97'182	98'950
Net Sales	88'925	66'253
Result before tax	-2'941	5'991
Result for the year	-1'769	5'990
Other comprehensive income for the year, net of tax	0	0
Total comprehensive income for the year	-1'769	5'990

* These are the provisional figures as of 12 March 2020. Any deviations from the final figures as of 31 December 2019 will be recorded accordingly in the MTC Group's consolidated financial statements for FY 2020.

Transfer of the carrying amount to HENN:

(in T€)	2019	2018
MTC share in equity	44'169	44'973
Value adjustments	-16'517	-16'162
Carrying amount	27'652	28'811

Central European Growth IV Beteiligungs-Invest GmbH (“CEG IV”)

MTC had 49% of CEG IV's capital stock and by holding participation certificates, MTC also held 60.73% of CEG IV's equity. In FY 2019 the entire interests in CEG IV was sold to a related company; see also Note 29.

¹ Any company of which MTC holds directly or indirectly more than 20% of the voting rights or over which it has a significant influence, but which is controlled neither directly nor indirectly by MTC, is considered as an associate.

10. Leases

The Group applies IFRS 16 using the modified retrospective approach. Therefore, the comparative information has not been restated and it is reported in accordance with IAS 17 and IFRIC 4. The details of the accounting policies in accordance with IAS 7 and IFRIC 4 are disclosed separately if they differ. The effects of changes are disclosed in Note 33.20.1.

10.1. Right of use asset

(in T€)	2019
Balance as at 1 January 2019	80'973
Transfers*	5'683
Depreciation	-15'432
Additions	12'211
Disposals	-19'962
Effect of movements in exchange rates	752
Balance as at 31 December 2019	64'225

The rights of use assets mainly relate to rental agreements for buildings in the Aerospace and Energy Storage divisions.

10.2. Amounts recognized in the Income statement

2019 – Leases in accordance with IFRS 16

(in T€)	2019
Interest on lease liabilities	-2'389
Expenses relating to short-term leases	-1'639
Expenses relating to leases of low-value assets, excluding short-term leases of low-value assets	-2'407
Total amounts recognised in profit or loss	-6'435

2018 – Leases in accordance with IAS 17

(in T€)	2018
Total Payments recognised as an expense for the period	-15'553
thereof sublease payments	-329

10.3. Amounts recorded in the cash flow statement

The total cash outflows for leases in 2019 amount to T€ -23,841.

10.4. Leases in which MTC Group is a lessor

There are no leases in which the MTC Group is the lessor.

11. Inventories

Inventories are distributed amongst the individual items as follows:

(in T€)	2019	2018
Raw materials and supplies	129'148	105'675
Tools and replacement parts	1'495	2'003
Unfinished goods and services	121'943	99'715
Finished goods and merchandise	77'401	69'607
Inventories	329'987	277'000
<i>valuation adjustment realized in the income statement</i>	2'836	2'071

Inventories with a carrying amount of T€ 206,434 (2018: T€ 162,806) are pledged as security for liabilities.

12. Other receivables and assets

Other receivables and assets are composed as follows:

(in T€)	2019	2018
Receivables from associates	1	89
- thereof non-current	1	0
- thereof current	0	89
Receivables from companies related to DDr. Tojner	0	799
Prepaid expenses / deferred charges (current)	15'087	14'551
Receivables from debt assumption VARTA pensions	17'907	15'633
Receivables from disposal of investments in associates	23'800	0
Receivables from government aid and grants	9'594	7'402
Other tax receivables	23'575	20'261
Other assets	50'249	18'751
Other assets	140'213	77'486
thereof non-current	52'873	23'010
thereof current	87'340	54'476

13. Cash and cash equivalents

Cash and cash equivalents are composed of as follows:

(in T€)	2019	2018
Cash	63	96
Bank deposits	329'796	190'054
Time deposits with an initial duration of up to 3 months	82'420	3'075
Total	412'279	193'225

Cash and cash equivalents of T€ 42,728 (2018: T€ 1,024) are pledged explicitly as security. Taking into account the general pledging of investments in relation with loan agreements, these amount to T€ 105,551 (2018: T€ 20,000).

14. Income taxes

14.1. Income tax expense

(in T€)	2019	2018
Current income tax expense	-27'054	-19'960
Income tax expense from previous periods	114	1'775
Deferred income tax expense	5'072	-690
Income tax expense	-21'868	-18'875

14.2. Deferred taxes

Deferred tax assets and liabilities are accounted for in the following balance sheet items:

(in T€)	Deferred tax assets	Deferred tax liabilities	31.12.2019 net	Deferred tax assets	Deferred tax liabilities	31.12.2018 net
Intangible assets	-154	20'997	-21'151	744	26'242	-25'498
Property, plant and equipment	-1'331	21'677	-23'008	32	23'286	-23'254
Financial assets	4	1'555	-1'551	0	1'383	-1'383
Other non-current assets and receivables	0	6'336	-6'336	255	5'539	-5'284
Inventories	2'257	1'386	871	2'451	835	1'616
Trade receivables	1'278	895	383	1'292	433	859
Other current assets	3'642	419	3'223	3'384	227	3'157
Non-current financial liabilities	1'104	1'006	98	381	341	40
Other non-current liabilities	1'461	2'587	-1'126	2'288	1'132	1'156
Non-current liabilities for employee benefits	11'932	0	11'932	7'963	0	7'963
Current financial liabilities	126	53	73	1	33	-32
Short-term provisions	348	0	348	104	0	104
Trade payables as well as contract liabilities	2'333	3	2'330	111	-296	407
Other current liabilities	4'941	1'869	3'072	3'147	348	2'799
Tax loss carried forward	8'590	0	8'590	8'912	0	8'912
Offset	-25'551	-25'551	0	-22'060	-22'060	0
Total deferred tax assets / liabilities	10'980	33'232	-22'252	9'005	37'443	-28'438

Deferred taxes were only recognized for temporary differences relating to investments in subsidiaries to the extent that taxes will be incurred upon reversal of the differences.

14.3. Reconciliation of effective tax rate

The effective tax rate amounts to 36% (2018: 26%) in the reporting year. The tax expense is calculated as follows:

(in T€)	2019	2018*
Result before tax	60'343	71'809
Income tax rate**	18%	27%
Expected (theoretical) tax expense	-10'861	19'388
Adjustments due to local tax rate changes as compared to the previous year	-494	5
Tax-free income	1'212	623
Current-year losses for which no deferred tax asset is recognised	-10'159	-6'499
Utilization of unrecognized tax loss carry-forwards	1'147	4'042
Non-tax deductible expenses	-1'539	-486
Non-tax deductible interests	-58	-139
Tax expense / tax income due to audit	159	2'721
Other	-1'275	-780
Income tax expense	-21'868	-18'875

** This is an average weighted tax rate resulting from all fully consolidated companies.

* see Note 5

The change in the MTC Group's income tax rate is due to the change in the individual companies' contribution to the profit.

14.4. Movement in deferred tax balances

(in T€)	2019	2018
Net deferred tax liability as at 1 January	28'438	16'905
Income tax expense recognized in profit or loss	-5'072	690
Effects due to acquisitions during the year	0	9'729
Other	-1'114	1'114
Net deferred tax liability as at 31 December	22'252	28'438

Income taxes of T€ -51 (2018: T€ 171) for cash flow hedges are recognized in the consolidated statement of comprehensive income. Income taxes on revaluations of defined benefit pension plans amounted to T€ 1,590 (2018: T€ -219).

The Group has the following unrecognized tax loss carryforwards that can be utilized for tax purposes:

(in T€)	31.12.2019	31.12.2018
In the forthcoming financial year - to be used within 1 year	924	1'183
Within 2 years	42	26
Within 3 years	19'121	17'576
Within 4 years	87	110
Within 5 years	4'187	1'834
Within 6 years	2'144	1'431
Within 7 years	37'832	7'361
After more than 7 years	4'722	3'067
No expiration	183'003	171'237
Total tax loss carryforwards as at 31 December	252'062	203'825

In the companies concerned, the probability that future profits can be offset with the accumulated tax loss carryforwards was considered as low at the time when the accounts were prepared.

Each year, the recognition of tax loss carryforwards that can be utilized for tax purposes is subject to a review based on management's assumptions and estimates. In this respect, those tax loss carryforwards that can be utilized within the next five years given the profit situation of the individual companies or taxable entities are recognized. In the countries resp. companies in which the use of tax loss carryforwards is not probable, no recognition is performed.

As at 31 December 2019, based on the above-mentioned estimates, deferred taxes on tax loss carryforwards of T€ 8,590 (2018: T€ 8,912) were recognized. In this respect, the corresponding country-specific tax provisions and possibilities were taken into account.

15. Liabilities for employee benefits

15.1. Composition of post-employment and other employee benefits

(in T€)	31.12.2019	31.12.2018
Pensions*	48'541	38'780
Severance payments	15'550	13'614
Anniversary bonuses	3'330	3'062
Semi-retirement	1'285	1'289
Employee bonuses	9'497	25'758
Entitlement to holiday, overtime and compensatory time	12'194	9'643
Other deferred liabilities for employee benefits	6'131	4'109
Total liabilities for employee benefits	96'527	96'256
thereof current	27'000	25'098
thereof non-current	69'527	71'158

* 2019 excluding surplus plan assets in the amount of T€ 118 which are shown in Other non-current assets.

15.2. Pensions

Within the Group, there are defined benefit or defined contribution plans for certain categories of employees. These pension plans pay out benefits in case of retirement, death and invalidity. There are defined benefit commitments in Switzerland, the USA and Germany, the main pension plans being located in Switzerland and Germany.

Based on a present value of defined benefit obligations of T€ 172,430 (2018: T€ 160,590) and a fair value of plan assets of T€ 124,007 (2018: T€ 121,810), the Group's defined benefit pension plans show a liability of T€ 48,423 (2018: T€ 38,780) in the balance sheet.

(in T€)	31.12.2019	31.12.2018
Present value of defined benefit obligation (DBO) at the balance sheet date	172'430	160'590
Fair value of plan assets	-124'007	-121'810
Net liability (+) / Net asset (-) in the balance sheet	48'423	38'780
thereof Switzerland	19'637	13'718
thereof Germany	22'492	18'908

The first significant defined benefit pension plan, in Switzerland (Alu Menziken Extrusion AG, Aerospace Components division), insures the employees of the affiliated companies as planned against the risks of old age, death and invalidity.

All operative Swiss group companies have their own legally independent pension institutions. The Board of Trustees is their most senior governing body and is composed of the same number of employee and employer representatives. According to the law and the pension fund regulations, the Board of Trustees has the obligation to act exclusively in the interests of the foundation and the plan participants (active insured persons and pensioners). All decisions are made based on the principle of parity. The Board of Trustees is responsible for the drawing up of the pension regulations and for the changes thereto as well as for the determination of the funding of the benefits. In this regard, the minimum requirements of the Swiss Federal Law on Occupational Retirement, Survivors' and Disability Pension Plans (BVG) and

its implementation provisions must be observed. The BVG specifies the minimum insured salary and the minimum pension credits. The minimum interest rate applicable to this minimum retirement capital is set by the Federal Council at least every two years. In 2019, it amounted to 1.00% (2018: 1.00%). The pension institution is subject to the oversight of the foundation supervisory authority of the canton of Aargau. All pension plans are funded collectively by the employers and employees, whereby the risk portion is funded equally and the savings portion is funded disproportionately.

Retirement benefits are paid out in the form of a lifelong pension that results from the multiplication of the pension capital available upon retirement (composed of salary-related employee and employer contributions) with the regulatory conversion rate. Death benefits represent 60% of the (probable) retirement pension, and invalidity benefits represent 40% of the insured salary.

The other most significant defined benefit pension plan, in Germany (VARTA Microbattery GmbH, Energy Storage division), insures the employees of the affiliated companies as planned against the risks of old age, death and invalidity.

Retirement benefits are paid out in the form of a lifelong pension that results from the multiplication of the pension capital available upon retirement (composed of salary-related employee and employer contributions) with the regulatory conversion rate. Death benefits represent 60% of the (probable) retirement pension, and invalidity benefits represent 40% of the insured salary.

The development of the pension obligation and the changes in the plan assets for the defined benefit pension plans can be illustrated as follows:

(in T€)	Net liability		Fair value of plan assets		Present value of defined benefit obligation		Reimbursement claim	
	2019	2018	2019	2018	2019	2018	2019	2018
Balance at 1 January	38'780	35'358	-121'810	-122'393	160'590	157'751	15'633	15'780
Included in profit or loss								
Current service cost	1'886	1'662			1'886	1'662	0	0
Past service cost	0	6			0	6	0	0
Interest income / Interest cost	845	770	-1'132	-1'086	1'977	1'856	0	0
Plan settlements	0	0			0	0	0	0
	2'731	2'438	-1'132	-1'086	3'863	3'524	0	0
Included in OCI								
(i) Remeasurement:								
Actuarial gain/loss arising from	11'336	-1'529			11'336	-1'529	2'625	180
Return on plan assets, excl. interest income/expenses	-1'468	217	-1'468	217				
(ii) Effect of movements in exchange rates:	792	861	-3'487	-3'362	4'279	4'223	0	0
	10'660	-451	-4'955	-3'145	15'615	2'694	2'625	180
Other								
Changes in consolidation scope	0	73	0	-141	0	214	0	0
Contributions paid by the employer	-459	-283			-459	-283	0	0
Employer contributions	-3'269	1'149	-3'269	1'149				
Employee contributions	0	0	-1'018	-1'009	1'018	1'009	0	0
Benefits paid	0	0	8'460	6'671	-8'460	-6'671	-351	-327
Other			-283	-1'856	263	2'352	0	0
	-3'748	1'435	3'890	4'814	-7'638	-3'379	-351	-327
Balance at 31 December	48'423	38'780	-124'007	-121'810	172'430	160'590	17'907	15'633
<i>funded via provision</i>	<i>20'859</i>	<i>18'305</i>			<i>20'859</i>	<i>18'305</i>	<i>0</i>	<i>0</i>
<i>funded via plan assets</i>	<i>151'571</i>	<i>142'285</i>			<i>151'571</i>	<i>142'285</i>	<i>0</i>	<i>0</i>
<i>Thereof Switzerland</i>	<i>19'637</i>	<i>13'718</i>	<i>-92'711</i>	<i>-90'628</i>	<i>112'348</i>	<i>104'346</i>	<i>0</i>	<i>0</i>
<i>Thereof Germany</i>	<i>22'492</i>	<i>18'908</i>	<i>-25'702</i>	<i>-26'470</i>	<i>48'194</i>	<i>45'378</i>	<i>17'907</i>	<i>15'633</i>

The assets of the most significant defined benefit pension plan in Switzerland are invested in the pension fund PK Pro, Menziken. Consequently, it is not possible to allocate the plan assets to the various categories according to IAS 19.142. The majority of these assets are not listed on an active market.

Actuarial assumptions

The actuarial assumptions of the most significant pension plan in Switzerland (pension plan of Alu Menziken Extrusion AG, Switzerland) are as follows:

	31.12.2019	31.12.2018
Discount rate (in %)	0.20%	0.70%
Expected salary increases (in %)	1.00%	1.00%
Expected pension increases (in %)	0.00%	0.00%
Fluctuation workers/employees (in %)	0.00%	0.00%
Life expectancy	BVG 2015 GT	BVG 2015 GT
Retirement age men (in years)	65	65
Retirement age women (in years)	64	64

The actuarial assumptions of the most significant pension plan in Germany (pension plan of VARTA Microbattery GmbH, Germany) are as follows:

	31.12.2019	31.12.2018
Discount rate (in %)	1.23%	1.90%
Expected salary increases (in %)	2.50%	2.50%
Expected pension increases (in %)	1.50%	1.50%
Fluctuation of workers/employees (in %)	0.00%	0.00%
Life expectancy	RT Heubeck 2018 G	RT Heubeck 2018 C
Retirement age men (in years)	67	67
Retirement age women (in years)	67	67

The actuarial assumptions of the other pension plans (Germany, UK, Liechtenstein and Austria) are as follows:

	31.12.2019
Discount rate (in %)	0,20% - 2,00%
Expected salary increases (in %)	0% - 2,50%
Expected pension increases (in %)	0% - 3,10%
Fluctuation of workers/employees (in %)	0.00%
Retirement age men (in years)	64 - 67
Retirement age women (in years)	64 - 67

The actuarial assumptions are recalculated at the end of each financial year. The actuarial assumptions are used to define the liabilities at the end of the year and the pension costs of the following year.

Sensitivity analyses

A change in the above-mentioned actuarial assumptions used to determine the DBO as at 31 December 2019 would increase or reduce the corresponding DBO of the company as follows:

Change in the DBO of Alu Menziken Extrusion AG, Switzerland, due to the increase/reduction of the parameters:

(in T€)	Increase	Reduction
Discount rate (+/- 0,50%)	-7'514	8'492
Life expectancy (+/- 1 year)	5'715	-4'817
Pension trend (+/- 0,50%)	6'548	-5'982

Change in the DBO of Varta Microbattery GmbH, Germany, due to the increase/reduction of the parameters:

(in T€)	Increase	Reduction
Discount rate (+/- 0,25%)	-1'029	1'111
Life expectancy (+/- 1 year)	751	-746
Pension trend (+/- 0,25%)	687	-654

Change in the DBO of VRT Pensionen GmbH, Germany, due to the increase/reduction of the parameters:

(in T€)	Increase	Reduction
Discount rate (+/- 0,25%)	-538	560
Life expectancy (+/- 1 year)	1'610	-1'546
Pension trend (+/- 0,25%)	496	-530

The effective return on the plan assets amounted to T€ 2,600 (2018: T€ 869) in the reporting year. The expected employer contributions for defined benefit plans upon termination of employment for the subsequent year amount in total to T€ 1,972 (2018: T€ 1,756).

Average weighted duration of defined benefit pension plans

The average weighted remaining term of the most significant defined benefit pension plan in Switzerland amounts to 13.1 years (2018: 12.4 years).

The average weighted remaining term of the most significant defined benefit pension plan in Germany amounts to 19.9 years (2018: 15.0 years).

15.3. Severance

Provisions for severance are constituted to cover the employees' legal and contractual claims in Austria, Indonesia, Croatia and France. Severance payments represent mainly termination benefits. Provisions are calculated similarly to pensions in accordance with the projected unit credit method.

The provision for severance in the balance sheet is as follows:

(in T€)	31.12.2019	31.12.2018
Present value of provision for severance at balance sheet date (DBO)	15'550	13'614
Defined benefit liability (provision for severance)	15'550	13'614

The development of the provision for severance is as follows:

(in T€)	2019	2018
Present value of provision for severance as at 1 January	13'614	8'731
FX differences	94	252
Changes in the scope of consolidation	0	4'977
Current service cost	1'735	858
Interest expense	170	161
Actuarial gains (-) / losses (+)	774	-466
Benefits paid	-830	-907
Plan reductions and compensation	-19	0
Other	12	8
Present value of provision for severance as at 31 December	15'550	13'614

The severance expense is as follows:

(in T€)	2019	2018
Current service cost	1'735	858
Interest expense	170	161
Expense realized in the profit or loss statement	1'905	1'019
Actuarial gains (-) / losses (+)	774	-466
Revaluations recognized in the consolidated statement of comprehensive income	774	-466
Severance expense for the period	2'679	553

The actuarial assumptions which were used for the calculation are as follows for the three most significant pension plans (Austria and Indonesia):

	31.12.2019	31.12.2018
Discount rate (in %)	1,0% - 8,1%	1,9% - 8,0%
Expected salary increases (in %)	2,5% - 11,5%	2,5% - 11,5%
Fluctuation of workers/employees (in %)	0,0%	0,0%
Retirement age men (in years)	55 - 65	55 - 65
Retirement age women (in years)	55 - 65	55 - 65

16. Equity

16.1. Share capital

As at 31 December 2019, the capital structure of Montana Tech Components AG as the Group's top holding entity was as follows:

- Ordinary share capital of TCHF 17,192 (2018: TCHF 17,192)
- Approved share capital of TCHF 7,747 (2018: TCHF 7,747)
- Conditional share capital of TCHF 1,325 (2018: TCHF 1,325)

The ordinary share capital of TCHF 17,192 corresponds to T€ 12,710.

The approved share capital of TCHF 7,747 is limited until 12 June 2021 and can be used by way of a resolution of the Board of Directors. The Board of Directors is entitled to exclude the shareholders' subscription right and to attribute it to third parties when such new shares are used for the acquisition of parts of companies or investments through an exchange of shares, in order to fund the acquisition of companies or for employee stock option plans.

The conditional share capital of TCHF 1,325 is composed of TCHF 325 for employee stock option plans and TCHF 1,000 for the exercise of conversion or option rights.

The Board of Directors is authorized, at any time until 12 June 2021, to increase the company's share capital for a maximum amount of CHF 7,350,112.40 by issuing at most 36,750,562 fully paid-in registered shares with a nominal value of CHF 0.20 each as well as for a maximum amount of CHF 396,707.24 by issuing at most 19,835,362 fully paid-in registered shares with a nominal value of CHF 0.02 each.

The par value of the share capital as at 31 December 2019 is divided into 39,670,725 fully paid-in registered shares with a nominal value of CHF 0.02 each (voting shares) and 81,995,270 registered shares with a nominal value of CHF 0.20 each (ordinary shares).

16.2. Share premium

There was no change in the share premium in FY 2019.

16.3. Retained earnings

This item includes, besides the retained earnings of Montana Tech Components AG, the accumulated exchange differences resulting from the translation of the foreign group companies and intragroup loans as well as the other retained earnings, that also include, besides the result for the year less any dividends, the valuation of derivative financial instruments without effect on profit or loss as well as the market estimate of financial assets held for disposal.

16.4. Treasury shares

As at 31 December 2019, MTC has treasury shares in the amount of T€ 75,136 (2018: T€ 74,942). The following transactions were performed in the reporting year:

	Number of shares
Balance as at 1 January 2018	12'086'886
Acquisition of treasury shares	1'697'203
Balance as at 31 December 2018	13'784'089
Acquisition of treasury shares	14'032
Balance as at 31 December 2019	13'798'121

16.5. Dividends

In FY 2019, as in the previous year, MTC distributed no dividends. The Board of Directors proposes no dividends to the 2020 general shareholders' meeting.

17. Financial liabilities

17.1. Change in liabilities arising from financing activities

	01.01.2018	Reclassification	Addition consolidation scope	Repayment	Acquisition	Non-cash adjustments	Interest accrued	Currency translation	31.12.2018
Non-current financial liabilities									
Bank loans and borrowings	66'036	-17'193	31'222	-31'456	144'460		413	1'217	194'699
Lease liabilities	2'600			-1'419		1'164			2'345
Other financial liabilities*	288'912	-6'508	10'045	-5'265	0	1'423	442	147	289'196
Current financial liabilities									
Bank loans and borrowings	60'500	17'193	24'945	-67'221	47'866		-14	682	83'951
Lease liabilities	487			-266		693			914
Other financial liabilities*	11'754	6'508	1'429	-8'101	642		-297	0	11'935
Total	430'289	0	67'641	-113'728	192'968	3'280	544	2'046	583'040

	01.01.2019	IFRS 16 - initial application as of 1 January 2019	Reclassification	Addition consolidation scope	Repayment	Acquisition	Non-cash adjustments	Interest accrued	Currency translation	31.12.2019
Non-current financial liabilities										
Bank loans and borrowings	194'699		2'822	39'500	-8'982	133'053		2'061	694	363'847
Lease liabilities**	2'345	71'736	-3'118	0	-9'405		-10'433	1'676	466	53'267
Other financial liabilities*	289'196		-24'500	11'726	-11'999	57'530	-9'946	0	416	312'423
Current financial liabilities										
Bank loans and borrowings	83'951		-2'822	1'565	-85'418	66'779		674	-992	63'737
Lease liabilities**	914	9'237	3'118	0	-8'001		2'627	718	337	8'950
Other financial liabilities*	11'935		24'500	0	-6'522	3'087		-165	-2	32'833
Total	583'040	80'973	0	52'791	-130'327	260'449	-17'752	4'964	919	835'057

* excl. accrued interest payable towards third parties of T€ 9 (2018: T€ 434)

** until 31.12.2018 according to IAS 17; from 01.01.2019 according to IFRS 16

17.2. Bank loans and borrowings

						2019	2018
(in T€)	Original currency	Maturity	Interest calculation type	Effective interest rate in %	Credit line in reporting currency	Carrying amount in reporting currency	
Loan	EUR	30.11.2023	fixed	1.45%	116'790	110'167	
Loan	EUR	30.08.2024	variable	var. + 1,25%	103'261	100'427	
Loan	USD	indefinite	variable	Libor + 1,9%	27'640	26'684	
Loan	EUR	31.12.2022	fixed	2.25%	15'200	15'200	
Loan	EUR	< 1 year	fixed	n/a	0	51	
Loan	EUR	< 1 year	fixed	n/a	0	85	
Loan	EUR	15.06.2020	variable	3.00%	1'546	210	
Loan	EUR	15.06.2020	fixed	3.00%	773	105	
Loan	EUR	31.08.2019	variable	2.50%	9'981	0	
Loan	EUR	15.12.2023	variable	1.80%	7'438	5'861	
Loan	EUR	15.12.2025	variable	1.50%	12'463	6'896	
Loan	EUR	15.12.2025	variable	1.50%	12'463	6'896	
Loan	EUR	15.06.2020	variable	3.00%	140	140	
Loan	EUR	15.06.2020	variable	3.00%	70	70	
Loan	EUR	31.12.2023	variable	1.80%	7'566	7'566	
Loan	EUR	> 1 year	fixed	1.50%	870	297	
Loan	EUR	> 1 year	fixed	3.00%	340	115	
Loan	EUR	> 1 year	fixed	1.05%	820	397	
Loan	EUR	< 1 year	fixed	1.20%	250	154	
Loan	EUR	< 1 year	fixed	1.20%	200	200	
Loan	EUR	< 1 year	fixed	4.00%	400	31	
Loan	EUR	< 1 year	fixed	4.00%	200	58	
Loan	USD	30.09.2023	variable	3.74%	19'146	12'782	
Loan	USD	30.09.2023	variable	3.74%	8'036	5'365	
Working Capital Line	EUR	30.08.2020	variable	1.35%	15'000	45	
Revolving Line of Credit	USD	21.03.2021	variable	n/a	12'462	7'228	
Loan	USD	21.03.2021	variable	n/a	26'111	26'111	
Loan	USD	21.03.2021	variable	n/a	8'902	8'902	
Swing line	USD	21.03.2021	variable	n/a	n/a	1'230	
Loan	EUR	01.01.2023	fixed	1.50%	25'000	25'000	
Loan	EUR	until further notice	fixed	1.50%	10'000	2	
Loan	EUR	30.06.2022	fixed	1.10%	274	274	
Loan	EUR	30.06.2022	fixed	1.55%	1'000	293	
Loan	EUR	30.06.2022	fixed	2.30%	1'000	275	
Loan	EUR	30.06.2022	fixed	1.55%	1'000	293	
Loan	EUR	30.06.2022	fixed	2.30%	1'000	275	
Loan	EUR	31.03.2022	variable	3.12%	12'400	2'451	
Loan	EUR	31.12.2020	fixed	1.52%	7'500	1'871	
Loan	BRL	20.09.2020	fixed	5.50%	12'977	9'921	
Loan	BRL	07.10.2020	fixed	5.50%	2'325	1'241	
Loan	USD	07.10.2020	variable		9'522	8'881	
Loan	USD	25.01.2020	variable	7.50%	709	823	
Loan	BRL	11.10.2021	fixed	9.60%	1'772	554	
Loan	BRL	11.10.2021	fixed	11.35%	2'214	1'910	
Loan	CNY	20.08.2020	fixed	4.35%	1'279	1'327	
Loan	CNY	22.04.2020	fixed	4.57%	1	1	
Working Capital Line	INR	revolving	fixed	8.95%	4'027	3'118	
Loan	USD	01.01.2027	fixed	4.95%	8'457	7'923	
Loan	USD	01.01.2027	fixed	4.95%	4'005	3'753	
Loan	USD	30.01.2023	fixed	3.62%	1'892	1'390	
Loan	USD	21.03.2021	variable	n/a	15'863	12'735	
Total liabilities towards financial institutions						427'584	278'650
thereof non-current liabilities towards financial institutions						363'847	194'699
thereof current liabilities towards financial institutions						63'737	83'951

For liabilities at variable interest rates, the fair value corresponds to the reported carrying amount.

17.3. Other financial liabilities

Other financial liabilities are composed as follows:

(in T€)	31.12.2019	31.12.2018
Borrower's note loans	317'957	279'109
Lease liabilities*	62'217	3'259
Other financial liabilities	27'308	22'457
Other financial liabilities	407'482	304'825
thereof current	365'690	291'541
thereof non-current	41'792	13'284

* until 31.12.2018 according to IAS 17; from 01.01.2019 according to IFRS 16

Borrower's note loans were as follows:

(in T€)	Original currency	Maturity	Interest calculation type	Effective interest rate in %	Credit line in reporting currency	2019	2018
						Carrying amount in reporting currency	
Borrower's note loans 2014 - Tranche	EUR	15.07.2019	fixed	3.40%	5'000		
Borrower's note loans 2014 - Tranche	EUR	15.07.2021	fixed	3.94%	12'000		
Borrower's note loans 2014						17'268	24'157
Borrower's note loans 2015 - Tranche	EUR	08.07.2022	fixed	2.71%	47'500		
Borrower's note loans 2015 - Tranche	EUR	08.07.2025	fixed	3.53%	11'000		
Borrower's note loans 2015 - Tranche	EUR	08.07.2022	variable	1.68%	23'500		
Borrower's note loans 2015 - Tranche	EUR	08.07.2025	variable	2.18%	8'000		
Borrower's note loans 2015 - Tranche	EUR	04.09.2022	variable	1.68%	8'500		
Borrower's note loans 2015						99'475	99'438
Borrower's note loans 2016 - Tranche	EUR	15.12.2020	fixed	1.34%	14'000		
Borrower's note loans 2016 - Tranche	EUR	15.12.2020	variable	1.15%	5'500		
Borrower's note loans 2016 - Tranche	EUR	15.12.2023	fixed	2.01%	20'500		
Borrower's note loans 2016 - Tranche	EUR	15.12.2023	variable	1.50%	7'500		
Borrower's note loans 2016 - Tranche	EUR	15.12.2023	variable	1.36%	500		
Borrower's note loans 2016 - Tranche	EUR	06.06.2021	fixed	1.42%	5'000		
Borrower's note loans 2016 - Tranche	EUR	06.06.2024	fixed	2.12%	5'000		
Borrower's note loans 2016 - Tranche	EUR	15.01.2021	fixed	1.34%	9'500		
Borrower's note loans 2016 - Tranche	EUR	15.01.2021	variable	1.15%	15'500		
Borrower's note loans 2016 - Tranche	EUR	15.01.2021	variable	1.02%	9'000		
Borrower's note loans 2016 - Tranche	EUR	16.01.2024	fixed	2.01%	15'500		
Borrower's note loans 2016 - Tranche	EUR	16.01.2024	variable	1.50%	17'000		
Borrower's note loans 2016 - Tranche	EUR	16.01.2024	variable	1.37%	5'000		
Borrower's note loans 2016 - Tranche	EUR	16.01.2024	variable	1.50%	6'000		
Borrower's note loans 2016 - Tranche	EUR	15.01.2021	variable	1.02%	3'000		
Borrower's note loans 2016 - Tranche	EUR	16.01.2024	variable	1.37%	3'000		
Borrower's note loans 2016 - Tranche	EUR	15.12.2023	fixed	2.14%	1'500		
Borrower's note loans 2016						143'559	155'514
Borrower's note loans 2019 - Tranche	EUR	28.06.2024	fixed	1.40%	15'000		
Borrower's note loans 2019 - Tranche	EUR	30.07.2024	fixed	1.45%	10'000		
Borrower's note loans 2019 - Tranche	EUR	28.08.2024	fixed	1.45%	15'000		
Borrower's note loans 2019 - Tranche	EUR	16.06.2024	variable	1.25%	17'500		
Borrower's note loans 2019						57'655	0
Total loans and borrower's note loans						317'957	279'109

In relation to borrower's note loans, covenants to be met were agreed at Group level (net debt/EBITDA, equity ratio and level of indebtedness). In FY 2019, these were realized, as in FY 2018.

The other financial liabilities are composed of T€ 662 (2018: T€ 669) towards foundations and welfare funds.

18. Provisions

The 2019 provisions are as follows:

(in T€)	Onerous contracts and anticipated losses	Warranties, guarantees, etc.	Decommissioning, repair and other obligations	Other provisions	Total 2018
Balance as at 1 January 2019	1'134	4'358	71	4'325	9'888
Increase	1	2'534		2'469	5'004
Used	-846	-796	-12	-1'843	-3'497
Reversal		-434		-425	-859
FX differences		13	2	416	431
Balance as at 31 December 2019	289	5'675	61	4'942	10'967
Maturity					
Current	1	4'181	61	3'540	7'783
Non-current	288	1'494		1'402	3'184
Total provisions	289	5'675	61	4'942	10'967

Provisions are recognized if an outflow of resources is probable within the next 5 years. Warranty provisions are calculated based on the effective returns in the past and on the damage cases and usually cover an appropriate guarantee and grace period.

19. Accruals

Accruals comprise the following items:

(in T€)	31.12.2019	31.12.2018
Audit, tax advisory and legal advisory	4'341	3'005
Outstanding invoices	15'078	4'373
Customer bonuses, rebates and discounts	0	0
Other accruals	10'174	10'464
Accruals	29'593	17'842
thereof current	29'593	17'842

20. Contract liabilities

Contract liabilities comprise the following items:

(in T€)	2019	2018*
Advance payments received from contracts with customers	8'874	14'225
Bonus payments	8'057	6'702
Other	6'172	302
Contract liabilities	23'103	21'229
thereof non-current	0	239
thereof current	23'103	20'990

* see Note 5

21. Other liabilities

Other liabilities comprise the following items:

(in T€)	31.12.2019	31.12.2018*
Other advance payments	67'059	41'834
Insurance liabilities	2'758	2'992
Derivative financial instruments	2'291	4'666
Accruals and deferred income	3'943	4'353
Other tax liabilities	5'487	5'285
In relation to social security	3'144	1'962
Liabilities from promotion projects	59'529	15'921
Liabilities towards employees	8'586	6'755
Liabilities towards associates	1	69
Other liabilities	4'793	7'388
Other liabilities	157'591	91'225
thereof non-current	84'550	44'895
thereof current	73'041	46'330

* see Note 5

22. Personnel expenses

Personnel expenses contain the following items:

(in T€)	2019	2018
Wages and salaries	273'571	221'635
Severance and redundancy	4'419	1'664
Compulsory social security expenses	30'664	27'793
Pension expenses	9'273	8'640
Expenses from stock option plans	2'853	2'830
Other personnel expenses	12'201	17'979
Total	332'981	280'541

* see Note 5

Pension expenses are composed as follows:

(in T€)	2019	2018
Defined contribution plans	7'387	6'972
Defined benefit plans	1'886	1'668
Total	9'273	8'640

As at 31 December 2019, the MTC Group had 9,572 employees (2018: 7,781).

23. Other operating income

Other operating income contains the following items:

(in T€)	2019	2018
Income from reversal of provisions and accruals	1'886	1'684
Capitalized own services	19'302	5'616
Income from insurance	7'393	425
Income from disposal of property, plant and equipment	146	2'977
Income from disposal of recycling products	17'339	15'271
Grants and public benefits	8'480	6'796
Income from measurement of real estate held as financial investment	0	3'291
Income from measurement of old shares	0	7'027
Other	10'531	10'381
Other operating income	65'077	53'468

24. Other operating expenses

Other operating expenses comprise the following items:

(in T€)	2019	2018
Energy costs	28'027	20'209
Maintenance	21'534	17'690
Freight-out costs and customs duties	30'658	30'092
Commissions	5'182	5'351
Legal advice, audit and consulting fees	30'653	25'081
Rental and leasing expenses	4'046	16'099
Travel expenses	8'876	8'882
Phone and postal charges, IT supplies	5'827	5'271
Insurance	3'416	3'116
Marketing, advertising and entertainment expenses	5'002	4'989
Taxes other than income taxes	4'907	3'677
Other operating expenses	41'281	30'721
Total other operating expenses	189'409	171'178

25. Net financial result

The interest income is attributable to cash equivalents as well as to loans and receivables. The interest expense is attributable to liabilities measured at amortized cost.

Other financial income and other financial expenses are composed as follows:

(in T€)	2019	2018
Foreign currency exchange gains	4'764	3'837
Other financial income	12'911	2'082
Income from disposal of investments in associated companies	14'753	0
Income from disposal of financial assets	0	34
Other financial income	32'428	5'953

(in T€)	2019	2018
Foreign currency exchange losses	8'569	4'859
Other financial expenses	2'980	9'652
Other financial expenses	11'549	14'511

* see Note 5

Other financial income mainly consists of the valuation of put options (T€ 6,509) and a purchase price improvement agreement (T€ 4,447).

Foreign exchange effects resulting from the classification of net investments in foreign operations amounted to T€ -6,569 (2018: T€ -1,996). These were not recognized in the result of the period but in the consolidated statement of comprehensive income.

26. Consolidated cash flow statement

Other non-cash revenues and expenses result mainly from the valuation of put options in the amount of T€ -6,509 (2018: T€ -1,268), a purchase price improvement agreement in the amount of T€ -4,447 (2018: 1,693), foreign exchange effects in the amount of T€ -2,687 (2018: T€ -4,171) as well as from movements without impact on profit or loss recognized in the consolidated statement of comprehensive income in the amount of T€ 508 (2018: T€ 1,370).

The item "Acquisition of intangible assets and property, plant and equipment" cannot be reconciled with the additions in intangible assets and property, plant and equipment, due to open positions resulting from investments of T€ 44,769 (2018: T€ 9,318) [translated at the annual average rate, the difference amounts to T€ 35,448] and non-cash additions to right-of-use assets, in the amount of T€ 12,211. The open positions resulting from investments from the previous year were paid for a large part in FY 2019 and attributed to the acquisition of intangible assets and property, plant and equipment.

The item "Proceeds from the sale of intangible assets and property, plant and equipment" cannot be reconciled with the disposals of intangible assets and property, plant and equipment due to the non-cash termination of rights-of-use assets amounting to T€ 19,963.

In FY 2019, T€ 17,302 was received from the acquisition of subsidiaries and other business units, less cash and cash equivalents provided. Of this, T€ 4,690 relate to an acquisition from the previous year.

In FY 2019 the MTC Group sold its entire interest in CEG IV to a related company for T€ 51,300. In addition, the MTC Group acquired IndustrieCapital AG in FY 2019 for T€ 26,870 and several US real estate companies for T€ 17,614 from related companies. In the course of these transactions, there were no cash inflows or outflows in FY 2019.

Due to non-cash effects of T€ -1,580 (2018: T€ 2,587), the item “Disposal of non-controlling interests” cannot be reconciled with the development of the consolidated statement of changes in equity.

27. Non-controlling interests

The following table summarizes the information regarding the Group's individual subsidiaries (before any intragroup eliminations) that show significant minority interests:

(in T€)				31.12.2019
	VARTA AG, Ellwangen (DE)	Aluflexpack AG, Reinach (CH)	Other	Total
Non-controlling interest	42%	46%		
Non-current assets (+)	300'676	133'321		
Current assets (+)	380'369	145'069		
Non-current liabilities (-)	-92'219	-48'189		
Current liabilities (-)	-165'250	-58'013		
Net assets	423'576	172'188		
Net assets - attributable to non controlling interests	176'046	80'575	-1'300	255'320
Net revenues	362'692	207'931		
Result for the year	49'935	-3'427		
Other comprehensive income	2'018	293		
Total comprehensive income	51'953	-3'134		
Result for the year - attributable to non controlling interests	19'543	2'049	-1'306	20'286
Other comprehensive income - attributable to non controlling interests	456	694	5	1'155
Cash flows from operating activities	105'733	15'450		
Cash flows from investing activities	-105'805	-32'840		
Cash flows from financing activities	94'883	60'064		
Net change in cash and cash equivalents	94'810	42'674		

VARTA AG is a fully consolidated group company listed on the Frankfurt stock exchange. MTC's investment in VARTA AG amounts to ca. 58% as at 31 December 2019. The interim and final financial statements are prepared and published by VARTA AG in accordance with the International Financial Reporting Standards (IFRS). Due to certain consolidation entries, there are minor deviations between VARTA AG's results published by VARTA AG and VARTA AG's results consolidated by MTC.

Aluflexpack AG is a fully consolidated group company, which is listed on the SIX Swiss Exchange. MTC's share in Aluflexpack AG was approximately 54% as of December 31, 2019. The half-year and annual reports are prepared and published by Aluflexpack AG in accordance with the International Financial Reporting Standards (IFRS).

28. Risk management

28.1. Risk assessment

In order to ensure the compliance of the company's consolidated financial statements with the applicable accounting policies as well as the regularity of the Group's reporting, the Board of Directors has established internal control and monitoring systems for financial reporting. According to the Board of Directors, this provides reasonable assurance on the reliability of financial reporting, thus ensuring the most reliable assessment of the company's assets, financial situation and results.

Each internal control system, no matter how well designed, has inherent limits. Consequently, those internal control and monitoring systems that have been considered as efficient cannot provide full assurance on the preparation and presentation of the financial statements.

Regarding recognition and valuation, estimates and assumptions are made about the future. The estimates and assumptions that represent a significant risk in the form of a material adjustment of the assets and liabilities' carrying amounts over the next financial year are presented under the individual items in the notes.

28.2. Financial risk management

The primary objective of the Board of Directors with respect to financial risk management is to identify and monitor the financial risks to which the Group is exposed and to establish effective measures for hedging such risk. Financial risks arise from the company's operating activities as well as from its financing structure. This includes, in particular, credit risk, liquidity risk, currency risk, interest rate risk, and market price risk with respect to commodities.

In addition to identifying, analyzing and measuring financial risk, decisions on the use of financial instruments to manage risk are made by Group headquarters, which generally pursues a low-risk strategy.

The following paragraphs give an overview of the extent of the various risks as well as of the objectives, principles and processes for the measurement, monitoring and hedging of financial risks.

Credit risk

Credit risk is the risk of financial loss to the Group resulting from loans, trade receivables, other receivables and cash and cash equivalents. The risk of default on loans is mitigated by using targeted measures such as credit checks, pre-payment agreements and receivables management. Credit risk arising from bank deposits is likewise limited as a result of the company's policy of only investing cash and cash equivalents with financial institutions of impeccable, first-rate credit quality.

The carrying amount of financial assets corresponds to the maximum credit risk, which was composed as follows at the balance sheet date:

(in T€)	2019	2018
Cash and cash equivalents	412'279	193'225
Trade receivables	184'444	159'795
Loans	60'735	81'401
Loans towards associated companies as well as to other invested companies	1'809	1'782
Other financial assets	63'831	8'656
Contract assets	15'824	2'370
Other assets*	101'552	42'674
Total financial assets	840'474	481'247

* excl. other tax receivables of T€ 23.575 (2018: T€ 20.261) and excl. prepaid expenses / deferred charges of T€ 15.087 (2018: T€ 14.551)

At the balance sheet date, loans incl. accrued interest of T€ 59,931 and T€ 2,613 were granted respectively to related companies (see Note 29) and to other parties.

The calculation is based on gross carrying amounts less allowances recognized in accordance with IFRS 9. Collaterals received or other credit enhancements are not taken into account.

The maximum credit risk in relation with trade receivables is to be considered as low since the immanent risk of default of business partners resulting from the underlying transaction is widely hedged by credit risk insurance as well as by bank guarantees and letters of credit. The applicable criteria for credit assessment are set forth in the agreements with credit insurers and in internal guidelines. In addition, there is no concentration of credit risk since the Group's client base is made up of large variety of customers.

Any claims outstanding at the balance sheet date must meet the Group's risk assessment criteria, regardless of their due dates. In principle, financial assets show no risk of default if they can be classified as "fully recoverable" at the balance sheet date based on past experience and the examination of credit worthiness. Such receivables are not subject to allowances. No financial assets were subject to a renegotiation of conditions.

Trade receivables after allowances are presented as follows:

(in T€)	31.12.2019	31.12.2018
Trade receivables	185'473	161'639
Allowance	-1'029	-1'844
Trade receivables - net	184'444	159'795

As at 31 December 2019, allowances amounted to T€ 1,029 (2018: T€ 1,844). The probability of future incoming payments on trade receivables that have already been adjusted was considered as low at the balance sheet date.

The following table shows the movement of all the allowances in relation with trade receivables:

(in T€)	2019	2018
At the beginning of the financial year	1'844	1'754
Allocation	231	1'223
Derecognition	-748	-405
Write-off	-311	-893
Other changes	2	367
Translation differences	11	-202
Total allowances	1'029	1'844

The following table discloses the information on overdue trade receivables:

(in T€)	31.12.2019		
	Gross	Allowance	Net
not yet due	146'176	-102	146'074
0 to 10 days past due	13'611	-84	13'527
11 to 30 days past due	7'882	0	7'882
31 days to 60 days past due	7'022	-10	7'012
61 days to 180 days past due	7'570	-265	7'305
181 days to 360 days past due	1'904	-134	1'770
> 360 days past due	1'308	-434	874
Total	185'473	-1'029	184'444

The net overdue trade receivables primarily relate to receivables from long-term customer relationships. Based on past experience, the Group does not anticipate any significant defaults.

Liquidity risk

The Treasury Department monitors liquidity on an ongoing basis. Liquidity management extends from constant comparison of forecast and actual payment flows to coordinating the maturity profiles of financial assets and liabilities.

The following table shows the undiscounted, contractual due dates of non-derivative and derivative financial liabilities. It contains both interest and principal payments:

31 December 2019

(in T€)	Carrying amount	Contractual cash flows	immediately	up to 3 months	3 - 12 months	1 to 5 years	more than 5 years
Non-derivative financial liabilities							
Bank loans and borrowings	427'584	447'477	1'409	18'663	50'646	356'197	20'562
Lease liabilities	62'217	70'689		3'591	10'773	45'506	10'819
Other financial liabilities*	345'256	357'424	3'069	2'781	29'901	288'665	33'008
Trade payables	243'031	243'031	96'277	135'800	10'954		
Accruals	29'593	29'593			29'593		
Contract liabilities**	14'229	14'229			14'229		
Other liabilities***	75'670	75'670	4'413	19'540	4'291	26'289	21'137
Total non-derivative financial liabilities	1'197'580	1'238'113	105'168	180'375	150'387	716'657	85'526

* excl. accrued interest payable towards third parties of T€ 9 (2018: T€ 434)

** excl. advance payments in relation to customer contracts of T€ 7.874 (2018: T€14.225)

*** excl. deferred income of T€ 3.943, excl. derivative financial instruments of T€ 2.291, excl. other tax liabilities from taxes and liabilities in relation with social security of T€ 8.631, excl. liabilities towards associates of T€ 1 as well as excl. other advance payments of T€ 67.059

(in T€)	Carrying amount	Contractual cash flows	immediately	up to 3 months	3 - 12 months	1 to 5 years	more than 5 years
Derivative financial liabilities							
Interest rate swap (Cash Flow Hedge)		0					
Interest rate swap (Fair Value Hedge)	790	790				790	
Commodityswaps (Cash Flow Hedge)	53	53		22	31		
Commodityswaps (Fair Value Hedge)	190	190		34	76	80	
Forward exchange contracts (Cash Flow Hedge)	23	23		23			
Forward exchange contracts (Fair Value Hedge)	1'235	1'235		650	572	13	
Derivative financial liabilities	2'291	2'291	0	729	679	883	0

31 December 2018

(in T€)	Carrying amount	Contractual cash flows	immediately	up to 3 months	3 - 12 months	1 to 5 years	more than 5 years
Non-derivative financial liabilities							
Bank loans and borrowings	278'650	291'399	206	16'420	40'042	200'037	34'694
Lease liabilities	3'259	3'259			914	2'345	
Other financial liabilities*	301'132	354'513	2'071	1'204	23'199	258'165	69'874
Trade payables	145'566	145'567	37'571	99'572	8'424		
Accruals	17'842	17'842			17'842		
Contract liabilities**	7'004	7'004			7'004		
Other liabilities***	74'891	74'892	7'141	12'788	13'439	38'499	3'025
Total non-derivative financial liabilities	828'344	894'476	46'989	129'984	110'864	499'046	107'593

* excl. accrued interest payable towards third parties of T€ 434 (2017: T€ 126)

** excl. Residual purchase price liabilities of T€4.954 as well as excl. other current advance payments of T€ 146

*** excl. advance payments in relation to customer contracts of T€ 14.225

**** excl. deferred income of T€ 4.353, derivative financial instruments of T€ 4.665, excl. other tax liabilities from taxes and liabilities in relation with social security of T€ 7.247, excl. liabilities towards associates of T€ 69 as well as excl. other advance payments of T€ 41.834

(in T€)	Carrying amount	Contractual cash flows	immediately	up to 3 months	3 - 12 months	1 to 5 years	more than 5 years
Derivative financial liabilities							
Interest rate swap (Cash Flow Hedge)		0					
Interest rate swap (Fair Value Hedge)	1'272	1'272			146	1'126	
Commodityswaps (Cash Flow Hedge)		0					
Commodityswaps (Fair Value Hedge)	2'013	2'013		482	1'389	142	
Forward exchange contracts (Cash Flow Hedge)	39	39		33	6		
Forward exchange contracts (Fair Value Hedge)	1'341	1'341		152	869	320	
Derivative financial liabilities	4'665	4'665	0	667	2'410	1'588	0

Currency risk

The Group settles goods purchases and sales based on the functional currency of the divisions, predominantly in Swiss francs, US dollars and euros. Currency risks resulting from trade receivables are very limited since outgoing invoices that are due at foreign company level are billed predominantly in the local currency and the purchase of inventories and/or services is performed in the local currency of the subsidiaries. This results in a natural hedging effect.

At the balance sheet date, interest-bearing financial liabilities are denominated predominantly in euros and in US dollars, which correspond to the functional currencies of the respective group companies, so that there is no significant currency risk either in this respect according to the Group's assessment.

The following table shows – by currency pair – financial assets and liabilities denominated in a currency that deviates from the functional currency of the respective group company holding the financial instrument.

(in T€)	31.12.2019			31.12.2018		
	CHF/EUR	CHF/USD	EUR/USD	CHF/EUR	CHF/USD	EUR/USD
Cash and cash equivalents	54'950	2'490	29'068	7'580	872	8'681
Trade receivables	8'124	527	39'833	8'655	1'065	14'560
IC receivables	20'828	4'421	17'964	17'324	3'318	7'780
IC loans	158'497	124'413	109'414	92'549	983	66'318
Other financial liabilities	-210'595	-31'526	-18'147	-110'139	-6'026	-22'553
Trade payables	-9'097	-3'347	-96'453	-8'860	-2'246	-4'424
IC payables	-3'649	0	-19'028	-11'337	0	-9'237
IC loans	-300	-170'888	-60'524	-20'353	0	-34'498
Total currency exposure - gross	18'758	-73'910	2'127	-24'581	-2'034	26'627
Forward exchange contracts	0	0	50'318	0	0	4'025
Total currency exposure - net	18'758	-73'910	52'445	-24'581	-2'034	30'652

Sensitivity analysis

A change in the following functional currency compared to the foreign currency in the currency pair in the amount of the percentage points indicated below would have increased (reduced) the Group's result before non-controlling interests by the amounts stated below as at 31 December. In the context of this analysis, the other variables, in particular the interest rates, remain constant.

(in T€)		Gain (+) / Loss (-)		Equity + / -	
31. Dezember 2019					
CHF / EUR	+/- 4,9%	-567	567		
CHF / USD	+/- 6,6%	3'185	-3'185		
EUR / USD	+/- 7,3%	-5'164	5'442	-20	22

(in T€)		Gain (+) / Loss (-)		Equity + / -	
31. Dezember 2018					
CHF / EUR	+/- 4,8%	860	-860		
CHF / USD	+/- 6,6%	99	-99		
EUR / USD	+/- 7,3%	-4'299	4'754	-562	651

The volatility for each relevant currency pair was calculated with the historical data for the last 250 exchange days (before 31 December 2019). Based on the daily movement of foreign exchange rates (variation of actual rates compared to the previous day), the presented annual volatility was calculated by upscaling these daily volatilities.

Interest rate risk

Interest rate risk is divided into the risk of changes in future payment of interests due to fluctuations in the market interest rate and interest rate risk relating to a change in the fair value of financial instruments due to fluctuations in the market interest rate.

The Group is subject to interest rate risk resulting from the receipt or payment of cash at fixed or variable rates, whereby the Group funds itself predominantly with variable interest-rate bank liabilities as well as fixed-rate and variable interest-rate borrower's note loans.

At the balance sheet date, there are the following interest-bearing financial instruments:

(in T€)	2019	2018
Financial instruments with fixed interest		
Financial assets*	145'027	86'354
Financial liabilities**	476'085	236'472
Financial instruments with variable interest		
Financial assets*	329'796	190'054
Financial liabilities**	358'981	347'003

* including bank deposits, fixed deposits as well as loans

** including borrower's note loans, lease liabilities, bank loans and borrowings as well as other financial liabilities

Sensitivity analysis for fixed-rate financial instruments

The Group measures neither financial assets (fixed deposits or securities) nor financial liabilities (bank loans and borrowings) bearing fixed interest rates at fair value through profit or loss. These financial instruments are measured at amortized cost. An increase in interest rates would therefore not impact the Group's net income for the year.

Sensitivity analysis for variable interest-rate financial instruments

An increase in interest rates of one percentage point would lead – taking into account the hedging of variable interest-rate financial instruments with fixed rates – to a reduction of the consolidated net profit or loss before non-controlling interests of T€ 239 (2018: reduction of T€ 1,146). A decrease in interest rates of one percentage point would lead to an increase of the consolidated profit or loss before non-controlling interests of T€ 239 (2018: increase of T€ 1,146). In this regard, a potential decrease of interest rates under 0% has also been taken into account. This analysis includes the assumption that all other variables, in particular foreign currency effects, remained constant.

The sensitivity analysis showed that an increase (decrease) in interest rates of one percentage point would have no impact on the Group's equity.

Derivative financial instruments

The Group uses derivative financial instruments primarily to reduce the risk of changes resulting from foreign exchange rates and interest rates. In this regard, forward exchange transactions are used in order to reduce the short-term effects of exchange rate fluctuations and interest rate swaps. In this respect, all contractual partners are renowned international financial institutes with which the Group has ongoing business relations. Consequently, the Group considers that the risk of default from a contractual partner, and thus the risk of corresponding losses, is low.

The following table shows the Group's holdings of derivative financial instruments at the balance sheet date:

31 December 2019

	Currency	Nominal value (in thousand original currency)	Fair Value (in T€)	Thereof recognised in equity	Maturity
Commodityswap	EUR	10'292	39	0	1 - 5 years
Commodityswap	EUR	1'317	-24	0	up to 1 year
Commodityswap	EUR	19'473	-80	0	1 - 5 years
Commodityswap	EUR	3'207	-71	0	up to 1 year
Commodityswap	USD	392	-42	-42	up to 1 year
Forward exchange contracts	USD	27'950	-196	0	up to 1 year
Forward exchange contracts	USD	11'761	-188	0	up to 1 year
Forward exchange contracts	USD	29'200	-81	0	up to 1 year
Forward exchange contracts	USD	9'600	-724	0	up to 1 year
Forward exchange contracts	SGD	5'592	-33	0	up to 1 year
Forward exchange contracts	SGD	1'856	-13	0	1 - 5 years
Forward exchange contracts	USD	670	12	12	up to 1 year
Forward exchange contracts	USD	500	3	0	up to 1 year
Forward exchange contracts	USD	960	12	0	up to 1 year
Commodityswap	USD	145	8	0	up to 1 year
Commodityswap	USD	147	7	0	up to 1 year
Commodityswap	USD	1'071	-11	-11	up to 1 year
Commodityswap	USD	145	-8	0	up to 1 year
Commodityswap	USD	147	-7	0	up to 1 year
Forward exchange contracts	USD	1'000	-23	-23	up to 1 year
Commodityswap	CNY	9'665	23	0	up to 1 year
Forward exchange contracts	USD	6'360	-20	0	up to 1 year
Interest rate swap	EUR	38'000	-790	0	1 - 5 years
Total			-2'207	-64	

In FY 2019, T€ 109 (2018: T€ 152) were reclassified from the statement of comprehensive income to the statement of profit or loss.

31 December 2018

	Currency	Nominal value (in thousand original currency)	Fair Value (in T€)	Thereof recognised in equity	Maturity
Commodityswap	EUR	8'533	-770	0	up to 1 year
Commodityswap	EUR	602	-100	0	1 - 5 years
Commodityswap	EUR	14'049	-1'006	0	up to 1 year
Forward exchange contracts	EUR	12'650	31	31	up to 1 year
Commodityswap	USD	432	-38	0	up to 1 year
Forward exchange contracts	USD	21'900	-106	0	up to 1 year
Forward exchange contracts	USD	10'000	-23	0	up to 1 year
Forward exchange contracts	USD	8'000	-229	0	up to 1 year
Forward exchange contracts	USD	11'200	-320	0	up to 1 year
Forward exchange contracts	USD	271	-6	-6	up to 1 year
Commodityswap	USD	820	65	0	up to 1 year
Commodityswap	USD	473	22	0	up to 1 year
Commodityswap	USD	148	-1	0	up to 1 year
Commodityswap	USD	156	6	0	up to 1 year
Commodityswap	USD	5'449	117	117	up to 1 year
Commodityswap	USD	820	-64	0	up to 1 year
Commodityswap	USD	473	-22	0	up to 1 year
Commodityswap	USD	148	1	0	up to 1 year
Commodityswap	USD	156	-6	0	up to 1 year
Forward exchange contracts	USD	17'700	-33	-33	up to 1 year
Commodityswap	CNY	13'555	-8	0	up to 1 year
Forward exchange contracts	USD	3'970	2	0	up to 1 year
Interest rate swap	EUR	18'500	-146	0	up to 1 year
Forward exchange contracts	USD	18'500	-665	0	up to 1 year
Interest rate swap	EUR	38'000	-1'126	0	1 - 5 years
Total			-4'425	109	

The liquidity analysis of the derivative financial instruments is presented above under "Liquidity risk".

Categories of financial instruments

The following table shows the carrying amounts and fair values of the financial instruments per category. It does not include fair value information for financial assets and financial liabilities that are not measured at fair value if the carrying amount is a reasonable approximation of fair value.

Further, for the current year the fair value disclosure of lease liabilities is also not required.

With the exception of borrower's note loans, they correspond primarily to the fair values. The fair value of the borrower's note loans as at 31 December 2019 amounts to T€ 432,454 (2018: T€ 391,857).

31.12.2019

(in T€)	Notes	Carrying amount				Fair value					
		Measured at fair value - hedging instruments	Other assets and liabilities measured at fair value in profit and loss	Financial assets measured at amortised acquisition cost	Other financial liabilities	Total	Level 1	Level 2	Level 3	Total	
Financial assets - measured at fair value											
Forward exchange contracts (hedge accounting)	28	7					7			7	
Commodityswaps (hedge accounting)	28	77					77			77	
Securities			5'858						5'843	15	5'858
		84	5'858	0	0						5'942
Financial assets - not measured at fair value											
Loans	28			60'735			60'735				
Loans towards associated companies as well as to other invested companies	28			1'809			1'809				
Contract assets	28			15'824			15'824				
Trade receivables	28			184'444			184'444				
Other assets	12			159'441			159'441				
Cash and cash equivalents	13			412'279			412'279				
		0	0	834'532	0	0	834'532				
Financial liabilities - measured at fair value											
Interest rate swaps (hedge accounting)	28	790					790	790			790
forward exchange contracts (hedge accounting)	28	1'258					1'258	1'258			1'258
Commodityswaps (hedge accounting)	28	243					243	243			243
Other financial liabilities	17		9'461				9'461		9'461		9'461
		2'291	9'461	0	0		11'752				
Financial liabilities - not measured at fair value											
Bank loans and borrowings	17					427'584	427'584				0
Other financial liabilities*	17					335'795	335'795	432'454			432'454
Lease liabilities	17					62'217	62'217				0
Trade payables	17					243'031	243'031				0
Contract liabilities**	20					14'229	14'229				0
Accruals	19					29'593	29'593				0
Other liabilities	21					75'670	75'670				0
		0	0	0	0	1'188'119	1'188'119				

* excl. accrued interest payable towards third parties of T€ 9 (2018: T€ 434)

** excl. advance payments in relation to customer contracts of T€ 7.874 (2018: T€14.225)

31.12.2018

	Carrying amount					Fair value			
	Measured at fair value - hedging instruments	Other assets and liabilities measured at fair value in profit and loss	Financial assets measured at amortised acquisition cost	Other financial liabilities	Total	Level 1	Level 2	Level 3	Total
(in T€)									
Financial assets - measured at fair value									
Forward exchange contracts (hedge accounting)	31				31		31		31
Commodityswaps (hedge accounting)	209				209		209		209
Securities		6'694			6'694	5'704	990		6'694
	240	6'694	0	0	6'934				
Financial assets - not measured at fair value									
Loans			81'401		81'401				
Loans towards associated companies as well as to other invested companies			1'782		1'782				
Contract assets			2'370		2'370				
Trade receivables			159'795		159'795				
Other assets			44'398		44'398				
Cash and cash equivalents			193'225		193'225				
	0	0	482'971	0	482'971				
Financial liabilities - measured at fair value									
Interest rate swaps (hedge accounting)	1'272				1'272		1'272		1'272
forward exchange contracts (hedge accounting)	1'380				1'380		1'380		1'380
Commodityswaps (hedge accounting)	2'013				2'013		2'013		2'013
Other financial liabilities		19'282			19'282			19'282	19'282
	4'665	19'282	0	0	23'947				
Financial liabilities - not measured at fair value									
Bank loans and borrowings				278'650	278'650				0
Other financial liabilities*				281'850	281'850		391'857		391'857
Lease liabilities				3'259	3'259				0
Trade payables				145'566	145'566				0
Contract liabilities**				7'004	7'004				0
Accruals				17'842	17'842				0
Other liabilities				74'891	74'891				0
	0	0	0	809'062	809'062				

* excl. accrued interest payable towards third parties of T€ 434 (2017: T€ 126)

** excl. advance payments in relation to customer contracts of T€ 14.225

The MTC Group holds financial instruments measured at fair value and uses the following hierarchy for the measurement of the fair values:

Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities

Level 2: inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices)

Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

MTC has an obligation based on a purchase price improvement agreement and put options that are recognized in Other financial liabilities. The valuation model for these obligations considers the present value of the expected payments, discounted using a risk-adjusted discount rate.

Capital management

The capital managed by the Group is equivalent to its consolidated equity. The Group's objectives are:

- to increase the income of those with an investment in the company by optimizing the ratio of equity to debt
- to ensure that all Group companies are able to operate under the going concern principle
- to achieve a return for investors commensurate with the level of risk

The Group regularly monitors the equity structure by means of the equity ratio, the gearing ratio and return on equity. The equity ratio initially targeted for 2019 – taking into account the acquisition of own shares – amounts to 30% and was reached at the balance sheet date. The equity ratio at the reporting date amounts to 42%.

The Board of Directors aims to maintain the equity ratio for the next reporting period, whereby the latter can be lower due to acquisitions. The minimum equity ratio amounts nevertheless to 30%. The Group pursues a result-oriented dividend policy and plans a dividend ratio of at least one third of the result in the middle term – depending on the liquidity situation.

29. Related parties

The related parties include the members of the Group's Management and Board of Directors, key shareholders and companies over which the key shareholders exert control or significant influence and pension funds existing for the benefit of employees to provide benefits after cessation of the employment relationship.

The main shareholder of MTC is DDr. Michael Tojner, who holds the majority of voting rights either directly or indirectly via several companies under his control (also described as main shareholder hereafter).

29.1. Overview

The transactions and outstanding amounts with related parties were included in the following items in 2019:

Transaction type (in T€)	Note	Transaction volume		Outstanding amount	
		Revenue	Expense	Receivables	Payables
Remuneration paid to Board of Directors and Group Management	29.2	0	679	0	90
Transactions with persons and companies related to DDr. Tojner (incl. loan granted)	29.3.1	67'981	98'323	82'050	18'676
Transactions with joint ventures	29.3.2	0	0	0	0
Transactions with associates	29.3.2	4'966	457	15'132	13'413
Total		72'947	99'459	97'182	32'179

The transactions and outstanding amounts with related parties were included in the following items in 2018:

Transaction type (in T€)	Note	Transaction volume		Outstanding amount	
		Revenue	Expense	Receivables	Payables
Remuneration paid to Board of Directors and Group Management		0	1'167	0	170
Transactions with persons and companies related to DDr. Tojner (incl. loan granted)		97'098	108'867	79'895	8'568
Transactions with joint ventures		112	1'522	5	0
Transactions with associates		490	10'934	15'148	17'774
Transactions with other related parties		4'265	0	0	0
Total		101'965	122'490	95'048	26'512

29.2. Remuneration paid to the Group's Management and Board of Directors

Remuneration paid to the Group's Management and Board of Directors was as follows in the year under review:

(in T€)	2019	2018
Short-term employee benefits	679	1'167
Remuneration paid to Group Management and BoD	679	1'167

The Board of Directors of Montana Tech Components AG is composed of DDr. Michael Tojner, Mag. Christian Hosp and Dr. Markus Vischer. The Group's Management is composed of DDr. Michael Tojner as CEO of the company.

The item "Short-term employee benefits" comprises the fixed and variable remuneration of the Group's Management and Board of Directors.

The fixed remuneration of the Group's Management and Board of Directors in the year under review amounted to T€ 609 (2018: T€ 1,097), of which T€ 180 (2018: T€ 983) were paid to DDr. Tojner.

In the year under review, the variable remuneration elements amounted to T€ 70 (2018: T€ 70), of which T€ 0 (2018: T€ 0) were paid to DDr. Tojner.

29.3. Transaction with related parties

29.3.1. Transactions with persons and companies related to DDr. Tojner

The transactions and outstanding amounts with related persons and companies under the control or the significant influence of DDr. Tojner were included in the following items:

2019

Transaction type (in T€)	Transaction volume		Outstanding amount	
	Revenue	Expense	Receivables	Payables
Sale of services	275	0	128	0
Advisory services	0	5'283	0	5'367
Office space, cleaning services and other services	0	4'866	0	92
Acquisition of assets	0	246	0	53
Disposal of investments	51'300	0	23'800	0
Acquisition of investments	0	44'484	0	0
Repayment (revenue) / Granting (expense) of given loans				
Granting (revenue) / Repayment (expense) of received loans	16'406	43'444	58'122	13'164
Total	67'981	98'323	82'050	18'676

2018

Transaction type (in T€)	Transaction volume		Outstanding amount	
	Revenue	Expense	Receivables	Payables
Sale of services	2'080	0	202	0
Disposal of assets	14'588	0	0	0
Advisory services	0	5'200	0	8'419
Office space, cleaning services and other services	0	3'893	0	149
Acquisition of assets	0	196	0	0
Acquisition of investments	0	19'790	0	0
Repayment (revenue) / Granting (expense) of loans	80'430	79'788	79'693	0
Total	97'098	108'867	79'895	8'568

29.3.1.1. Sale of investments

In FY 2019 MTC Group sold its entire interests in CEG IV to a related company for T€ 51,300. The result from the sale in the amount of T€ 14,753 is shown as Other financial income. As of the balance sheet date, the remaining receivable from this sale was T€ 23,800.

Please refer to Note 9 for investments in joint ventures and associates.

29.3.1.2. Acquisition of subsidiaries

In FY 2019 MTC Group acquired IndustrieCapital AG for T€ 26,870 and several US real estate companies for T€ 17,614 from related companies.

29.3.1.3. Loans granted

Loans amounting to T€ 43,444 were granted to related companies in FY 2019. The outstanding loan amount totaling € 58,122 bears interest at arm's length and is provided with sufficient tangible security.

29.3.2. Transactions with joint ventures and associates

There were no transactions with joint ventures in FY 2019 and there were no outstanding amounts as of the balance sheet date.

The transactions and outstanding amounts with associates were included in the following items in 2019:

Transaction type (in T€)	Transaction volume		Outstanding amount	
	Revenue	Expense	Receivables	Payables
Provision of personnel	34	0	13	0
Sale of know-how*	0	0	9'868	0
Sale of services	16	0	0	0
Deferment interests*	226	0	3'442	0
Value adjustment in relation with the sale of know-how and deferment interests*	0	226	0	13'310
Acquisition of services and assets	0	205	0	103
Acquisition of investments	4'690	0	0	0
Repayment (revenue) / Granting (expense) of loans	0	26	1'809	0
Total	4'966	457	15'132	13'413

* The receivables from the sale of know-how and the receivables from deferred interest were fully written down as of 31 December 2019; the outstanding amounts thus add up to T€0.

Additionally, loans to associates increased by the amount of interest accrued in FY 2019 (T€ 26).

Transactions and outstanding amounts with joint ventures included the following items in 2018:

Transaction type (in T€)	Transaction volume		Outstanding amount	
	Revenue	Expense	Receivables	Payables
Provision of personnel	88	0	0	0
Sale of services	0	0	5	0
Sale of assets	0	0	0	0
Sale of leases	24	0	0	0
Acquisition of services and assets	0	1'522	0	0
Total	112	1'522	5	0

Transactions and outstanding amounts with associates included the following items in 2018:

Transaction type (in T€)	Transaction volume		Outstanding amount	
	Revenue	Expense	Receivables	Payables
Provision of personnel	40	0	282	0
Sale of know-how	0	0	9'868	0
Deferment interests	450	0	3'216	0
Value adjustment in relation with the sale of know-how and deferr	0	450	0	13'084
Acquisition of services and assets	0	149	0	0
Acquisition of investments	7'027	10'100	0	4'690
Repayment (revenue) / Granting (expense) of loans	0	235	1'782	0
Total	7'517	10'934	15'148	17'774

29.3.3. Transactions with pension institutions

In FY 2019, as in FY 2018, there were no transactions with pension institutions.

30. Contingent liabilities

As at the balance sheet date, there were contingent liabilities of T€ 6,029 (2018: T€ 6,343).

31. Events after the balance sheet date

As of 2 January 2020, VARTA AG acquired 100% of the VARTA Consumer Batteries Group ("VARTA Consumer"). The relevant purchase price allocation has not yet been finalized at the time the financial statements were prepared. The provisional total consideration transferred is T€ 111,731, the provisional assets acquired amount to T€ 109,744 and the provisional goodwill is T€ 1,987.

VARTA Consumer has since been assigned to the Energy Storage division and recorded as a fully consolidated group in the MTC Group.

In view of the corona virus, which is spreading worldwide, negative influences on the MTC Group cannot be ruled out. This could affect both the production options at our locations, our transport options to our customers and the impairment of our suppliers. It can also not be ruled out that our customers can temporarily not take products from us due to their own production interruptions.

32. Investments

As at 31 December 2019, MTC AG held shares in the following companies:

Name of the company	Location	Country	Currency	Interest	Share capital
Montana Tech Components GmbH	Vienna	AT	EUR	100.00%	35'000
ETV Montana Tech Holding GmbH	Vienna	AT	EUR	100.00%	2'450'000
ETV Beteiligungs GmbH	Vienna	AT	EUR	100.00%	35'000
IndustrieCapital Alpha GmbH	Vienna	AT	EUR	100.00%	500'000
Mezzanin Finanzierungs GmbH	Vienna	AT	EUR	100.00%	35'000
IndustrieCapital Eins GmbH	Vienna	AT	EUR	100.00%	54'000
IndustrieCapital AG	Zollikon	CH	CHF	100.00%	100'000
VRT Pensionen GmbH	Ellwangen	DE	EUR	100.00%	25'000
CONNEXIO alternative investment & holding AG	Vienna	AT	EUR	100.00%	100'000
VAMI-SK neunzehn GmbH	Graz	AT	EUR	100.00%	70'000
HENN Industrial Group GmbH & Co KG*	Dornbirn	AT	EUR	45.45%	5'000
VGG GmbH	Vienna	AT	EUR	100.00%	578'000
Makra GmbH	Vienna	AT	EUR	100.00%	17'500
Aerospace Components					
Montana AS Beteiligungs Holding AG	Zug	CH	CHF	100.00%	26'862'000
Montana Aerospace Components Inc.	Wilmington, DE	US	USD	100.00%	10
MTC US Corp.	East Hanover, NJ	US	USD	100.00%	10
Alu Menziken Extrusion AG	Reinach	CH	CHF	100.00%	4'000'000
Alu Menziken SRL	Satu Mare	RO	EUR	100.00%	4'010'468
Alu Menziken Euromotive GmbH	Ranshofen	AT	EUR	100.00%	35'000
Medies Investimo SRL	Satu Mare	RO	EUR	100.00%	2'144
Universal Alloy Corp.	Canton, GA	US	USD	100.00%	8'950
Universal Alloy Corp Europe S.R.L	Dumbravita	RO	EUR	100.00%	11'354
UAC Airport SRL	Dumbravita	RO	EUR	100.00%	215
UAC Design SRL	Dumbravita	RO	EUR	100.00%	215
Neviton Softech Pvt. Ltd.	Odisha	IN	INR	100.00%	100'000
MTC Aerosystems Kft.	Budapest	HU	USD	100.00%	12'000
MTC Management Kft.	Budapest	HU	USD	100.00%	12'000
Universal Alloy Corp. Asia Pte. Ltd.	Singapore	SG	USD	97.50%	50'000
Universal Alloy Corp. Vietnam Company Ltd.	Da Nang	VN	USD	100.00%	34'000'000
UAC Air Support Ltd.	Bristol	UK	GBP	100.00%	0
SecInt Air Support Ltd.	Warwickshire	UK	GBP	51.00%	0
Montana Aerospace AG	Reinach	CH	CHF	100.00%	100'000
Montana Aerospace GmbH	Vienna	AT	EUR	100.00%	35'000
UAC Export Co.	Wilmington, DE	US	USD	100.00%	0
MTC Aerosystems LLC	Wilmington, DE	US	USD	100.00%	0
Alpine Metal Tech					
ALPINE METAL TECH GmbH	Regau	AT	EUR	100.00%	36'500
Alpine Metal Tech Denmark ApS	Stenløse	DK	DKK	100.00%	5'000'000
Alpine Metal Tech (Taicang) Co. Ltd	Taicang	CN	CNY	100.00%	1'491'708
AMT Makra GmbH	Forst	DE	EUR	100.00%	25'000
GeGa GmbH	Dillingen/Saar	DE	EUR	100.00%	66'700
Alpine Metal Tech Germany GmbH	Dillingen/Saar	DE	EUR	100.00%	1'534'150
Alpine Metal Tech UK Ltd.	Derbyshire	UK	GBP	100.00%	100
Alpine Metal Tech North America Inc.	Pittsburgh, PA	US	USD	100.00%	3'000
Alpine Metal Tech Brasil - Peças e Serviços Ltda.	Nova Lima	BR	BRL	100.00%	2'675'013
GeGa China Co. Ltd.	Shanghai	CN	CNY	100.00%	2'204'704
GeGa Iberica S.L.	Tarragona	ES	EUR	100.00%	3'500
Simulation Live Fire Training Solution Inc.	Pittsburgh, PA	US	USD	100.00%	0
Alpine Metal Tech Germany Holding GmbH	Dillingen/Saar	DE	EUR	100.00%	5'000'000

Energy Storage					
Varta Microbattery GmbH	Ellwangen	DE	EUR	58.33%	5'000'000
VARTA Micro Production GmbH	Nördlingen	DE	EUR	58.33%	100'000
Varta Storage GmbH	Nördlingen	DE	EUR	58.33%	100'000
Varta Microbattery Pte Ltd Singapore	Singapore	SG	USD	58.33%	1'971'544
Varta Microbattery Ltd Shanghai	Shanghai	CN	CNY	58.33%	42'142'757
PT Varta Microbattery Indonesia	Batam	ID	USD	58.33%	409'900
VARTA Microbattery Japan K.K.	Tokyo	JP	USD	58.33%	385'485
VARTA Microbattery SRL	Brasov	RO	RON	58.33%	45'000
Varta Microbattery Inc. Us	Rye, NY	US	USD	58.33%	2'800'000
VW-VM Verwaltungsgesellschaft mbH*	Ellwangen	DE	EUR	29.17%	25'000
VARTA Micro Innovation GmbH*	Graz	AT	EUR	34.63%	70'000
VARTA AG	Ellwangen	DE	EUR	58.33%	40'421'686
Auditas GmbH	Nördlingen	DE	EUR	14.64%	100'000
Auditas Inc.	Ridgefield, CT	US	USD	14.64%	100
ASTA					
ASTA Energy Transmission Components GmbH	Vienna	AT	EUR	100.00%	1'235'000
ASTA Elektrodraht GmbH	Oed	AT	EUR	100.00%	1'500'000
ASTA Bosnia d.o.o.	Zivinice	BA	BAM	100.00%	1'000
PPE Fios Esmaltados S.A.	Cerquillo	BR	BRL	74.38%	120'262'860
ASTA Conductors Co. Ltd.	Yangzhou	CN	CNY	100.00%	120'300'846
ASTA India Pvt. Ltd.	Vadodara	IN	INR	100.00%	873'799'560
Insulated Conductors and Enameled Wires N.V.	Amsterdam	NL	EUR	100.00%	250'000
ASTA International Pte. Ltd.	Singapore	SG	SGD	100.00%	18'879'551
ASTA Singapore Pte. Ltd.	Singapore	SG	SGD	100.00%	18'879'551
ASTA Industrie GmbH	Oed	AT	EUR	100.00%	35'000
ASTA Americas Inc.	Wilmington, DE	US	USD	100.00%	100
Aluflexpack					
AFP Group GmbH	Vienna	AT	EUR	53.58%	35'000
Aluflexpack AG	Reinach	CH	CHF	53.58%	17'300'000
Aluflexpack Novi d.o.o.	Umag	HR	HRK	53.58%	1'000'000
Omial Novi d.o.o.	Omis	HR	HRK	51.97%	7'274'728
Process Point Service AG	Triesen	LI	CHF	49.37%	1'000'000
Aluflexpack Polska sp. z.o.o	Poznan	PL	PLN	53.58%	6'006'548
Eliopack s.a.s.	La Ferte Bernard	FR	EUR	42.86%	1'340'000
Arimpeks Alüminyum AS	Kokaeli	TR	TRY	42.86%	2'000'000
MTC Real Estate					
Montana Real Estate Inc.	Wilmington, DE	US	USD	100.00%	100
Duane 131 LLC	New York City, NY	US	USD	100.00%	0
Washington Place Realty LLC	New York City, NY	US	USD	100.00%	0
MTC Real Estate Inc.	New York City, NY	US	USD	100.00%	0
UAC Real Estate LLC	Canton, GA	US	USD	100.00%	0
Washington Fifth LLC	New York City, NY	US	USD	100.00%	0
William 165 LLC	New York City, NY	US	USD	100.00%	0
Auevilla Holdings LLC	East Hanover, NJ	US	USD	100.00%	0
Duane 129 Retail LLC	New York City, NY	US	USD	100.00%	0
NY RE Portfolio LLC	New York City, NY	US	USD	100.00%	0
UAC Ball Ground LLC	Canton, GA	US	USD	100.00%	0
UAC Brown LLC	Canton, GA	US	USD	100.00%	0
UAC Canton LLC	Canton, GA	US	USD	100.00%	0

* Equity consolidation

33. Significant accounting policies

The Group has consistently applied the following accounting policies to all periods presented in these consolidated financial statements.

33.1. Basis of consolidation

i. Business combinations

The Group accounts for business combinations using the acquisition method when control is transferred to the Group. In this regard, the acquisition price of the acquired company is compared at the acquisition date with the acquired net assets measured at fair value. A positive difference is recognized as goodwill. A negative difference (negative goodwill) is recognized directly through profit or loss.

ii. Subsidiaries

The consolidated financial statements include all the companies controlled directly or indirectly by MTC. The Group has control, when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The assessment whether MTC can exercise this power over an investment is based on the voting rights and the contractual agreements. The subsidiaries are initially consolidated at the date at which control is transferred to the Group (closing). They are deconsolidated on the date at which such control ceases to exist.

iii. Non-controlling interests

Non-controlling interests are measured at the acquisition date with their proportionate share of the acquiree's identifiable net assets.

Changes in the Group's interest over a subsidiary that do not result in a loss of control are accounted for as equity transactions.

iv. Loss of control

When the Group loses control over a subsidiary, it derecognizes the assets and liabilities of the subsidiary, and any related non-controlling interests and other components of equity. Any resulting gain or loss is recognized in profit or loss. Interest retained in the former subsidiary is measured at fair value when control is lost.

v. Shares in financial assets accounted for according to the equity method

Joint ventures in which MTC holds directly or indirectly a 50% share respectively for which management responsibility is shared equally are accounted for using the equity method pursuant to IAS 28.

Companies over which MTC exerts significant influence – i.e. holds directly or indirectly 20% or more of the voting rights – are accounted for using the equity method and presented under investments in associates.

vi. Transactions eliminated on consolidation

Intra-group balances and transactions, and any unrealized income and expenses arising from intra-group transactions, are eliminated. Unrealized gains from transactions with companies accounted for using the equity method are eliminated against the investment in the amount of the Group's share in the investment. Unrealized losses are eliminated in the same way as unrealized gains, but only if there are no evidence of impairment.

33.2. Currency translation

33.2.1. Foreign operations

Assets and liabilities of foreign operations, including goodwill and fair value adjustments arising from acquisitions are translated in euros at the exchange rate at the reporting date. Revenues and expenses from foreign operations are translated using the rate at the transaction date.

Foreign exchange differences are recognized in other comprehensive income and presented in the foreign currency translation reserve in equity except to the extent that the foreign currency translation difference is allocated to non-controlling interests.

Upon the disposal of a foreign operation that results in the loss of control, joint control or significant influence, the corresponding amount accumulated to this date and recognized in the foreign currency translation reserve is reclassified to profit or loss as part of the result upon disposal.

33.2.2. Foreign currency transactions

Transactions in foreign currencies are translated into the functional currency at the exchange rates at the dates of the transactions. Outstanding amounts in foreign currencies are translated at the balance sheet date for monetary items and at historical cost for non-monetary items. Non-monetary items in foreign currency recognized at fair value are translated using the exchange rate at the revaluation date. Foreign exchange gains and losses resulting from the translation at the reporting date are presented, except for the translation from financial assets held for disposal and net investments in foreign operations, in the statement of profit or loss under other financial income/expenses. Foreign currency gains and losses resulting from intragroup loans that are classified as net investments in foreign operations are recognized in the consolidated statement of comprehensive income.

The currency translation exchange rates with a material impact on the consolidated financial statements are as follows:

1 Euro equals	Closing rate		Average rate	
	31.12.2019	31.12.2018	2019	2018
USD (US dollar)	1.1234	1.1450	1.1195	1.1810
CHF (Swiss franc)	1.0854	1.1269	1.1124	1.1550

33.3. Financial instruments

33.3.1. Recognition and initial measurement

Trade receivables and debt securities issued are recognized when they are originated. All other financial assets and liabilities are initially recognized when the Group becomes a party to the contractual provisions of the instrument.

A financial asset (unless it is a trade receivable without a significant financing component) or financial liability is initially measured at fair value plus, for an item not at FVTPL, transaction costs that are directly attributable to its acquisition or issue. A trade receivable without a significant financing component is initially measured at the transaction price.

33.3.2. Classification and subsequent measurement

33.3.2.1. Financial assets

On initial recognition, a financial asset is classified and measured as follows:

- Amortized cost
- FVOCI debt instruments (investments in debt instruments measured at fair value with changes in other comprehensive income)
- FVOCI equity investments (equity instruments measured at fair value with changes in other comprehensive income)
- FVTPL (at fair value with value changes in profit or loss)

A financial asset is measured at amortized cost if it meets both of the following conditions and is not designated as at FVTPL:

- it is held within a business model whose objective is to hold financial assets to collect contractual cash flows; and
- its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

On initial recognition of an equity investment that is not held for trade purposes the Group can decide irrevocably to present the subsequent changes in the investment's fair value in other comprehensive income. This decision is made on a case-by-case basis for each investment.

All financial assets not classified as measured at amortized cost or FVOCI as described above are measured at FVTPL. This includes all derivative financial assets (see item 32(A) in the notes).

33.3.2.2. Financial assets – Subsequent measurement and gains and losses

Financial assets – measured at fair value (FVTPL)

These assets are subsequently measured at fair value. Net gains and losses, including any interest or dividend income, are recognized in profit or loss. For derivatives designated as hedging instruments, refer to Note 33.3.5.

Financial assets – measured at amortized cost

These assets are subsequently measured at amortized cost using the effective interest method. The amortized cost is reduced by impairment losses. Interest income, foreign exchange gains and losses and impairments are recognized in profit or loss. Any gain or loss resulting on derecognition is recognized in profit or loss.

Debt instruments – measured at fair value with no impact on profit or loss (FVOCI)

These assets are subsequently measured at fair value. Interest income calculated using the effective interest method, foreign exchange gains and losses and impairments are recognized in profit or loss. Other net gains or losses are recognized in other comprehensive income. On derecognition, the accumulated other comprehensive income is reclassified to profit or loss.

Equity instruments – measured at fair value with no impact on profit or loss (FVOCI)

These assets are subsequently measured at fair value. Dividends are recognized in profit or loss, unless the dividend is clearly designed to cover part of the investment's costs. Other net gains or losses are recognized in other comprehensive income; they are never reclassified to profit or loss.

33.3.2.3. Financial liabilities – Classification, subsequent measurement and gains and losses

Financial liabilities are classified and measured at amortized cost or at fair value through profit or loss (FVTPL). A financial liability is classified at FVTPL if it is classified as held-for-trading, it is a derivative or it is designated as such on initial recognition.

Financial liabilities at FVTPL are measured at fair value and net gains and losses, including any interest expense, are recognized in profit or loss.

Other financial liabilities are subsequently measured at amortized cost using the effective interest method. Interest expense and foreign exchange differences are recognized in profit or loss. Any gain or loss on derecognition is also recognized in profit or loss.

Refer to Note 33.3.5 for financial liabilities that have been designated as hedging instruments.

33.3.3. Derecognition**33.3.3.1. Financial assets**

The Group derecognizes a financial asset when the contractual rights to cash flows from the financial asset expire or it transfers the rights to receive cash flows in a transaction in which substantially all of the risks and rewards of ownership of the financial asset are also transferred.

Derecognition is also performed if the Group neither transfers nor retains substantially all of the risks and rewards of ownership and it does not retain control of the financial asset.

33.3.3.2. Financial liabilities

The Group derecognizes a financial liability when its contractual obligations are discharged or cancelled, or expire. The Group also derecognizes a financial liability when its terms are modified and the cash flows of the modified liability are substantially different. In such as case, a new financial liability based on the modified terms is recognized at fair value.

On derecognition of a financial liability, the difference between the carrying amount of the extinguished liability and the consideration paid (including the non-cash assets transferred or liabilities assumed) is recognized in profit or loss.

33.3.3.3. Offsetting

Financial assets and liabilities are offset and the net amount presented in the balance sheet when, and only when, the Group has a current enforceable right to offset the recognized amounts against each other, and it intends either to settle them on a net basis or to realize the asset and settle the liability simultaneously.

33.3.4. Derivative financial instruments and hedge accounting

33.3.4.1. Derivative financial instruments and hedge accounting

The Group holds derivative financial instruments to hedge its currency and interest rate risks exposure. Embedded derivatives are recognized separately from the underlying contract if certain conditions are met.

Derivatives are initially measured at fair value. Subsequent to initial recognition, derivatives are measured at fair value. Resulting changes are generally recognized in profit or loss.

The Group designates certain derivatives as hedging instruments to hedge the variability in cash flows associated with highly probable forecast transactions arising from changes in foreign exchange rates and interest rates.

At inception of designated hedging relationship, the Group documents the risk management objectives and strategy for undertaking the hedge. The Group also documents the economic relationship between the hedged item and the hedging instrument including whether the changes in cash flows of the hedged item and hedging instrument are expected to offset each other.

33.3.4.2. Cash-flow hedges

When a derivative is designated as a cash-flow hedging instrument, the effective portion of changes in the fair value is recognized in other comprehensive income and accumulated in the hedging reserve. The effective portion of changes in the fair value that is recognized in other comprehensive income is limited to the cumulative change in the fair value of the hedged items, determined on a present value basis, from inception of the hedge. Any ineffective portion of changes in the fair value of the derivative is recognized immediately in profit or loss.

When the hedged forecast transaction subsequently results in the recognition of non-financial item, such as inventory, the amount accumulated in the hedging reserve and the cost of hedging reserve is included directly in the initial cost of the non-financial item when it is recognized.

For all other hedged forecast transactions, the amount accumulated in the hedging reserve and the cost of hedging reserve is reclassified to profit or loss in the same period(s) during which the hedged expected future cash flows affect profit or loss.

If the hedge no longer meets the criteria for hedge accounting or the hedging instrument expires, is sold, terminated or exercised, then hedge accounting is discontinued prospectively. If hedge accounting for cash flow hedges is discontinued, the amount that has been accumulated in the hedging reserve remains in equity until – for a hedge of a transaction that results in the recognition of a non-financial item – this amount is included in the acquisition cost of the non-financial item upon initial recognition or – for other cash-flow hedges – this amount is reclassified in profit or loss in the same period(s) as the hedged expected future cash flows affect profit or loss.

If the hedged future cash flows are no longer expected to occur, then the amounts that have been accumulated in the hedging reserve and the cost of hedging reserve are reclassified immediately to profit or loss.

33.4. Equity

Capital stock

Shares are part of equity since they are not repayable and there is no dividend guarantee. Any costs directly related to an increase in the capital stock are deducted from equity.

Treasury shares

Repurchased shares are classified as treasury shares and deducted from equity at their acquisition cost. Upon the sale of treasury shares, the amount received is recognized as an increase in equity and the difference resulting from the transaction is recognized in the retained earnings.

Dividends

Dividends are presented as a liability as soon as they are approved by the Annual General Meeting.

33.5. Intangible assets

33.5.1. Goodwill

The positive difference between the fair value of the consideration transferred, plus the recognized amount of any non-controlling interests in the acquiree, plus the fair value of previously held equity interest in the acquiree in a business combination achieved in stages and the fair value of all net assets acquired is recognized as goodwill from the acquisition of subsidiaries (see Note 33.1). If the difference is negative, the profit is recognized immediately in profit or loss.

Goodwill is measured at acquisition cost less accumulated impairment losses.

Goodwill is not systematically amortized but is tested for impairment at least annually or whenever there is any indication of impairment (see Note 33.9).

33.5.2. Research and development

Research costs incurred for the purpose of obtaining new technological knowledge or basic understanding are recognized as an expense.

Development costs incurred to achieve new or significantly improved products or processes are capitalized provided all of the following conditions are fulfilled: the company must have the intention and be able to complete the intangible asset and use or sell it, and demonstrate how the asset will bring future economic benefits to the company. Capitalized development costs are recognized at cost less accumulated amortization and any impairment (see Note 33.9). Other development costs are recognized as an expense as incurred.

33.5.3. Other intangible assets

Other intangible assets include industrial property rights, which include trademarks and patents, licenses as well as other intangible assets in which acquired client relationships are mainly capitalized within the Group.

Intangible assets with determinable useful lives are recognized at cost less accumulated amortization and impairment losses (see Note 33.9). Subsequent expenditures are capitalized if it is probable that they will increase the future economic benefit. All other expenses are charged directly to profit or loss when incurred.

Intangible assets are amortized straight-line over their estimated useful lives, starting on the date on which they are available for use. The estimated useful life for industrial property rights, licenses and other intangible assets is 3 to 16 years, and customer relationships with determinable useful lives are amortized over a period of 5 and 15 years.

Intangible assets with indefinite useful lives are not amortized but subjected to an annual impairment test (see Note 33.9).

33.6. Property, plant and equipment

Property, plant and equipment is measured at cost less accumulated depreciation and any impairment losses. Items of property, plant and equipment with different useful lives are recognized individually and

depreciated separately. Subsequent expenditures are capitalized when it is probable that the economic benefit will flow to the entity. All other expenses for property, plant and equipment are recognized immediately as an expense.

The Group holds real estate in order to achieve value increases as well as properties that are rented to third parties and are thus qualified as "investment property". These properties are measured at fair value.

With the exception of land, all property, plant and equipment is depreciated to profit or loss on a straight-line basis over the following expected useful lives:

Buildings	8 – 40 years
Technical equipment and machinery	8 – 25 years
Other equipment	3 – 15 years

The method of depreciation, the useful life and the assumed residual value, if not immaterial, are reviewed each year and adjusted prospectively where necessary.

Upon the disposal of items of property, plant and equipment, the difference between the carrying amounts and the net sale proceeds is recognized in the statement of profit or loss under other operating income or in the other operating expenses.

33.7. Leases

33.7.1. Accounting policies from 1 January 2019

The Group assesses at inception of a contract whether that contract is, or contains, a lease. The contract is, or contains, a lease if it conveys the right to control the use of an identified asset for a certain period of time in exchange for a consideration. In order to assess whether a contract conveys the right to control the use of an identified asset, the Group uses the definition of a lease in accordance with IFRS 16. This method applies to contracts entered into on or after 1 January 2019.

33.7.2. Accounting policies before 1 January 2019

For contracts entered into before 1 January 2019, the Group determines whether the contract was, or contained a lease based on the following assessment:

- Fulfillment of the contract was dependent on the use of a specified asset or assets; and
- The contract conveyed a right of use for the asset. An agreement conveys the right to use the asset if one of the following conditions is met:
 - o The purchaser had the ability or right to operate the asset while obtaining or controlling more than an insignificant amount of the output;
 - o The purchaser had the ability or right to control physical access to the asset while obtaining or controlling more than an insignificant amount of the output; or
 - o Facts and circumstances indicated that it was remote that other parties would take more than an insignificant amount of the output and the price per unit was neither fixed per unit of output nor equal to the current market price per unit of output.

33.7.2.1. Lessee

At the commencement of the contract or when remeasuring a contract that contains a lease component, the Group allocates the consideration in the contract to each lease component based on their relative

stand-alone prices. In case of leases for land and buildings in which the Group acts as lessee, the Group has elected not to separate the non-lease-related components and thus to recognize the lease and the non-lease-related components as a single lease component.

The Group recognizes a right of use asset and a lease liability when the lease begins. The right of use asset is measured at initial recognition at cost, which comprises the initial amount of the lease liability, adjusted for any lease payments before or at the beginning of the lease term, plus any initial direct costs incurred and an estimate of the costs of dismantling and removing the underlying asset or the restoration of the underlying asset or the location where it is located, less any leasing incentives received.

The right of use asset is subsequently depreciated using the straight-line method from the commencement date until the earlier of the end of the useful life of the right of use asset or until the end of the lease term. The estimated useful life of the right of use asset is determined on the same basis as for property, plant and equipment. In addition, the right of use asset is regularly reduced for any impairment losses and adjusted for certain remeasurements of the lease liability.

The lease liability is initially measured at the present value of the future lease payments, discounted using the interest rate implicit in the lease or – if this rate cannot be readily determined – at the Group's incremental borrowing rate. In general, the Group uses the Group's incremental borrowing rate as a discount rate.

The lease payments included in the measurement of the lease liability are as follows:

- Fixed payments;
- Variable lease payments that depend on an index or a rate and were initially measured using the index or rate at the commencement date;
- Amounts that are expected to be paid under a residual value guarantee; and
- The exercise price of a purchase option if the Group is reasonably certain to exercise that option, lease payments in a renewal option if the Group is reasonably certain to exercise that option, and penalties for the early termination of the lease if the Group is reasonably certain to terminate the lease.

The lease liability is measured at amortized cost using the effective interest method. A remeasurement takes place when the future lease payments change as a result of a change in an index or the interest rate, if the Group's assessment of the amount that is likely to be paid under a residual value guarantee changes, or if the Group changes its assessment of whether a purchase, renewal or termination option is exercised.

If the lease liability is remeasured, the carrying amount of the right of use asset is adjusted accordingly or recognized in profit or loss if the carrying amount of the right of use asset has already been reduced to zero.

The Group presents right of use assets that do not meet the definition of investment property under "Property, plant and equipment" and lease liabilities under "Other financial liabilities" in the balance sheet (see Note 8, Note 10 and Note 17).

Short-term leases and leases of low-value assets

The Group has elected not to recognize right of use assets and lease liabilities for short-term leases with a lease term of up to 12 months and for leases of low-value assets. The Group recognizes the lease payments associated with these leases as an expense on a straight-line basis over the lease term.

Classification under IAS 17

In the comparative period the Group, as a lessee, classified leases that substantially transferred all of the risks and rewards of ownership as finance leases. The leased assets were initially measured at an amounts equal to the fair value of the leased asset or, if lower, the present value of the minimum lease payments. Minimum lease payments were the payments over the lease term that the Group had to make, less any contingent rent payments.

The assets were then accounted for in accordance with the accounting and valuation method applicable to the underlying asset.

Assets from other leases were classified as operating leases and were not recognized in the consolidated balance sheet. Payments from operating leases were recognized in the income statement on a straight-line basis over the term of the lease. Lease incentives received were recognized over the lease term as an integral part of total lease payments.

33.7.2.2. Lessor

When the Group acts as a lessor, it determines at inception of the lease whether a lease is a finance lease or an operating lease.

To classify a lease, the Group makes an overall assessment of whether the lease transfers substantially all of the risks and rewards associated with the ownership of the underlying asset. If this is the case, it is a finance lease, otherwise it is an operating lease. As part of this assessment, the Group takes into account certain indicators, such as whether the lease is for the major part of the economic life of the asset.

If the Group is a sub-lessor, it accounts for its interests in the head lease and the sub-lease separately. It assesses the lease classification of a sub-lease with reference to the right-of-use asset arising from the head lease, not with reference to the underlying asset. If a head lease is a short-term lease to which the Group applies the exemption described above, then it classifies the sub-lease as an operating lease. If an arrangement contains lease and non-lease components, then the Group applies IFRS 15 to allocate the consideration in the contract.

The lease payments received in operating leases are recognized as income on a straight-line basis over the term of the lease.

The accounting policies that were applied to the Group as lessor in the comparative period did not differ from IFRS 16. However, if the Group was a sub-lessor, the sub-leases were classified accordingly with reference to the underlying asset.

33.8. Inventories

Inventories are recognized at the lower of cost or net realizable value. Net realizable value is the estimated average selling price less the estimated costs of completion and the estimated costs necessary to make the sale.

Internally generated products are measured at the cost of conversion and purchased products at the cost of purchase. The cost of conversion includes direct materials and direct labor costs as well as the allocable portion of overheads. Fixed production overheads are based on the normal capacity of the production facilities. Inventories are generally measured using the first-in, first-out (FIFO) principle. Allowances are recognized when the net realizable value is lower than the carrying amount.

33.9. Impairment

33.9.1. Non-derivative financial assets

Financial instruments and contract assets

The Group recognizes allowances for expected credit losses (ECL) for:

- financial assets measured at amortized cost, and
- contract assets.

Loss allowances for trade receivables and contract assets are always measured at an amount equal to lifetime ECLs (expected credit losses).

When determining whether the credit risk of a financial asset has increased significantly since initial recognition and when estimating ECLs, the Group considers reasonable and supportable information that is relevant and available without undue cost or effort. This includes both quantitative and qualitative information and analysis, based on the Group's historical experience and informed credit assessment and including forward-looking information.

Lifetime ECLs are the ECLs that result from all possible default events over the expected life of a financial instrument.

The maximum period to be taken into account when assessing ECLs corresponds to the maximum contract term in which the Group is exposed to a credit risk.

Measurement of estimated ECLs

ECLs are a probability-weighted estimate of credit losses. Credit losses are measured as the present value of all cash shortfalls (i.e. the difference between the cash flows due to the entity in accordance with the contract and the cash flows that the Group expects to receive).

ECLs are discounted at the effective interest rate of the financial asset.

Financial assets with impaired creditworthiness

At each reporting date, the Group estimates whether the creditworthiness of financial assets at amortized cost is impaired. The creditworthiness of a financial asset is impaired if an event or several events occur with negative effects on the expected future cash flows of the financial asset:

Evidence that the creditworthiness of a financial asset is impaired include the following observable data:

- significant financial difficulties of the issuer or the borrower
- a breach of contract, such as default or an overdue period of over 90 days
- restructuring of a loan or credit by the Group that it would not otherwise take into consideration
- it is probable that the borrower will go bankrupt or be subject to other restructuring proceedings, or
- disappearance of an active market for a security due to financial difficulties.

33.9.1.1. Presentation of the allowance for ECLs in the balance sheet

Allowances on financial assets measured at amortized cost are deducted from the gross carrying amount of the assets.

33.9.2. Non-financial assets

The carrying amounts of the Group's non-financial assets – except for assets from employee benefits, real estate held as investment property, inventories and deferred tax assets – are assessed for indications of impairment at each balance sheet date. If there are any such indications, the recoverable amount is determined. Goodwill and intangible assets with an indefinite useful life are subject to an annual impairment test.

When performing the impairment test, the assets are grouped together into the smallest group of assets that generates independent cash inflows (cash-generating units, CGU). The goodwill acquired in the context of a business combination is allocated to those CGUs or groups of CGUs that are expected to benefit from synergies from the underlying business combination.

The recoverable amount of an asset or a cash-generating unit (CGU) is the higher of the value in use and fair value less costs to sell. To estimate the value in use, the estimated future cash flows are discounted to present value, whereby a discount rate before taxes reflecting the current market assessments of the interest effects and the specific risks of an asset or a CGU is used.

An impairment loss exists if the carrying amount of an asset or cash-generating unit exceeds its recoverable amount.

Impairment losses are recognized in profit or loss. Impairment losses recognized for a cash-generating unit or a group of cash-generating units are first allocated to goodwill and then pro rata to the other assets of the unit or group.

Goodwill impairment is not reversed. In the case of impairment losses recognized for other assets, an impairment loss is reversed only if the carrying amount of the asset does not exceed the carrying amount that would have been determined less depreciation and amortization when no impairment loss had been recognized.

33.10. Non-current assets held for sale

Non-current assets or groups of assets, including directly allocable liabilities, are classified as “held for sale” and reported as a separate item in the balance sheet if the carrying amount of the asset will be recovered principally through a sale transaction rather than through continuing use. For this to be the case, the asset must be available for immediate sale in its present condition and the sale must be highly probable.

Immediately before the asset is classified as “held for sale”, the carrying amounts of the asset are re-measured in accordance with applicable IFRS. After reclassification, the assets (or disposal groups) are measured at the lower of the carrying amount and fair value less costs to sell. From such point onward the asset is no longer depreciated. Any impairment of a disposal group is first allocated to goodwill and then pro rata to the other non-current assets and liabilities. Impairment losses from initial classification as “held for sale” are recognized in profit or loss.

33.11. Post-employment benefits and other employee benefits

The Group provides defined benefit or defined contribution pension plans for portions of the workforce in addition to the government retirement benefits. The pension plans provide age-related benefits and benefits in the event of death or invalidity.

33.11.1. Defined contribution plans

In the case of defined contribution plans, the expenses reported in the statement of profit or loss correspond with the contributions made by the employer.

33.11.2. Defined benefit plans

For all significant defined benefit plans, the defined benefit obligation (DBO) is determined each year by independent actuaries using the projected unit credit method. The expected pension payments are allocated in accordance with the employees’ length of active service until retirement. Future salary increases are taken into account. The fair value of plan assets is deducted from the DBO. The discount rate is based on the interest rate for high-quality corporate bonds having terms similar to those of the defined benefit obligations. Plan costs resulting from employee service in the current period (current service cost) are recognized in profit or loss.

The Group calculates the net interest expense (income) on the net debt (asset) from defined benefit plans for the reporting period using the discount rate that was used for the measurement of the DBO at the beginning of the annual reporting period. This discount rate is applied to the net debt (asset) from defined benefit plans at this date. Any changes in the net debt (asset) from defined benefit plans that occur following the contribution and benefit payments in the course of the reporting period are taken into account. The net interest expense is recognized as income in the financial result.

Remeasurements of the net debt from defined benefit plans are recognized immediately in other comprehensive income. The remeasurement includes the actuarial gains and losses, the income from the plan assets (without interests) and the effect of any asset ceiling (without interests).

If plan benefits change or if a plan is curtailed, the resulting change in the benefit attributable to past service or the gain or loss upon curtailment is recognized immediately in profit or loss. The Group recognized gains and losses from the settlement of a defined benefit plan at the date of settlement.

Excess amounts of plan assets over the DBO are only recognized if they are actually available to the Group in the form of future contribution payments or reductions.

33.12. Trade payables and other liabilities

Trade payables and other liabilities are measured at amortized cost.

33.13. Accruals

Accruals refer to future expenditures that are uncertain in terms of their amount or timing but where the uncertainty is less than in the case of provisions. Accruals include liabilities for items or services received or supplied that have neither been paid for nor invoiced or formally agreed. They also include current liabilities to employees (for instance bonuses or holiday entitlements). Accruals are carried in the amount of the expected utilization.

33.14. Bank loans and borrowings and other financial liabilities

These liabilities are initially recognized at fair value less directly attributable transaction costs. The subsequent measurement is performed at amortized cost, whereby the difference between the fair value and the outstanding amount is recognized in the statement of profit or loss using the effective interest method.

Bank loans and borrowings and other financial liabilities are presented as non-current only if the repayment term is unconditionally more than 1 year after the balance sheet date. Revolving amounts are presented as non-current if the whole period for the financing framework exceeds the one-year period.

33.15. Provisions

Provisions are recognized if the Group has a present obligation to a third party based on a past event, an outflow of resources to settle the obligation is probable and the amount of the obligation can be reliably estimated. Provisions are discounted where the effect is material.

Provisions where the outflow of resources is likely to occur within the next year are classified as current, and all other provisions as non-current.

33.16. Revenue and earnings recognition

Revenues are recognized after deduction of value added taxes and credits for returns and rebates when the client obtains control over the sold goods and services.

The assessment as to whether the Group transfers control at a point in time or over a period of time requires the use of judgements. According to IFRS 15, all contracts with customers must follow a 5-step model before revenues can be recognized. Two of these steps decide whether revenues must be recognized at a point in time or over time. The decisive criterion for the assessment is the classification of the contractually agreed products as "client specific". Such products have no alternative use since there are no contractual or practical restrictions. The second criterion is the legal entitlement to receive a payment including an appropriate profit margin for past services in case of a breach of contract. Both

steps were performed for all identified client-specific contracts. The method used to assess the performance progress over time, revenue recognition is based on the direct calculation of the value of the goods or services transferred so far for the client in relation to the remaining contractually promised goods or services.

Revenues from the provision of services are also recognized at a point in time or over time based on the power of disposal. Completion is assessed using surveys of the work performed.

33.16.1. Description of performance obligations and revenue recognition

The Group generates sales mainly from the sale of products in the Aerospace Components, ASTA and Energy Storage segments. Sales are measured on the basis of the consideration specified in a contract with a customer. The Group recognizes revenue when it transfers control of a good or service to a customer.

Aerospace Components division

In the Aerospace Components division, sales are mainly generated through the sale of aluminum profiles in the aerospace ("hard alloy") and automotive ("soft alloy") business segments.

Revenue is recognized when the goods are delivered to the customer in accordance with Incoterms (especially FOB, DAP, EXW and FCA).

Metal Tech division

The Metal Tech division consists of three business units, with sales generated from the sale of special machines and from the downstream after-sales area.

The Steel business unit develops, designs, produces and maintains special systems and machines for rolling, processing and handling long products, product identification and inspection, as well as complete packages for continuous casting machines.

Revenue recognition for the sale of machines mainly takes place upon delivery to the customer according to Incoterms (especially EXW, DAP and FCA).

Energy Storage division

In the Energy Storage division, sales are mainly generated from the sale of microbatteries for hearing aids, rechargeable microbatteries in the entertainment sector (Microbatteries segment) and energy storage solutions and large storage applications (Energy Storage Solutions segment).

Revenue is primarily recognized when delivered to the customer in accordance with Incoterms (especially DAP, EXW and FCA).

Aluflexpack division

In the Aluflexpack division, sales are mainly generated from the sale of packaging to leading European manufacturers and global brands in the food, pet food and pharmaceutical industries.

Revenue is mainly recognized when delivered to the customer in accordance with Incoterms (especially DAP, CIF and FCA).

ASTA division

In the ASTA division, sales are primarily generated through the sale of high-quality insulated winding material made of copper for electrical engineering in the high-energy sector, so-called drill conductors for transformers and Roebel bars for generators.

Revenue recognition:

Revenue is mainly recognized when delivered to the customer in accordance with Incoterms (especially CIF, FOB, FCA and DAP).

33.17. Net financial result

Net interest expense includes income from financial assets and cash and cash equivalents as well as expenses from liabilities to financial institutions and other financial liabilities. Interest income and expenses are recognized in profit or loss in the period in which they are incurred using the effective interest rate method.

The Group recognizes borrowing costs incurred in connection with the acquisition of a qualifying asset in accordance with IAS 23.4. A qualifying asset is an asset that necessarily takes a substantial period of time to get ready for its intended use or sale.

Other financial results include dividend income, gains from the sale of financial assets available for sale, changes in the fair value of financial assets measured at fair value in the statement of profit or loss, impairment losses of financial assets and the foreign exchange differences from foreign currency transactions. Dividend income is recognized in profit or loss when the right to receive payment is established.

33.18. Income taxes

Income taxes include both current and deferred taxes on income. Current taxes and deferred tax are normally recognized in profit or loss unless they refer to a business combination or to an item that is recognized directly in equity or in other comprehensive income.

33.18.1. Current income taxes

Current income taxes are the expected tax liability or tax receivable on the revenues to be taxed in the financial year or the tax loss, based on the tax rates that are applicable at the balance sheet date or will be applicable, including expenses for taxes for past periods. The amount of the expected tax liability or tax receivable reflect the amount that represents the best estimate taking into account tax uncertainties, if any. Current income taxes also include all tax liabilities resulting from the determination of dividends. Current tax assets and liabilities are offset only under specific conditions.

33.18.2. Deferred taxes

Deferred taxes are calculated according to the balance sheet liability method for all temporary differences between the carrying amount of an asset or liability on the balance sheet and its tax base. Deferred taxes are measured at the tax rates enacted or expected or substantially enacted to the Group entity in question.

Deferred taxes are not recognized for the following temporary differences: initial recognition of goodwill, initial recognition of an asset or liability associated with a transaction affecting neither taxable profit or accounting profit and temporary differences on investments in subsidiaries, provided that the entity is able to control the timing of the reversal of the differences and it is probable that the reversal will not occur in the foreseeable future.

Deferred tax assets on tax losses carried forward and deductible temporary differences are only recognized to the extent it is probable that it will be possible to utilize them against future taxable profits.

33.19. Segment reporting

See Note 4.

33.20.Changes in significant accounting policies

33.20.1. New standards as at 1 January 2019

The Group has initially applied IFRS 16 for the first time on 1 January 2019 (see below). All other interpretations and changes to the accounting principles applicable from 1 January 2019 have no material effect on the consolidated financial statements.

The Group applied IFRS 16 using the modified retrospective approach. Due to the transition method chosen by the Group when applying this standard, the comparative information throughout these financial statements has not been restated, i.e. as previously presented in accordance with IAS 17 and the related interpretations. The details of changes in accounting policies are provided below.

A. Definition of a lease

The Group previously determined at contract inception whether an agreement was or contained a lease in accordance with IFRIC 4. In accordance with IFRS 16, the Group now assesses whether a contract is or contains a lease based on the definition of a lease as described in Note 33.7.

On transition to IFRS 16, the Group decided to apply a practical expedient regarding the question of which transactions are or contain leases. As a result, IFRS 16 was only applied to contracts that were previously identified as leases. Contracts that were not identified as leases in accordance with IAS 17 and IFRIC 4 were not reassessed for whether there is a lease. Therefore, the definition of a lease relationship in accordance with IFRS 16 was only applied to contracts that were entered into or changed on or after January 1, 2019.

B. Lessee

As a lessee, the Group previously classified leases as operating leases or finance leases based on its assessment of whether all of the risks and rewards associated with ownership of the underlying asset were essentially transferred to the Group. In accordance with IFRS 16, the Group now recognizes right of use assets and lease liabilities in the balance sheet for most leases.

The Group has decided to apply exemptions for short-term leases and leases for low-value assets (see Note 33.7).

Leases classified as operating leases in accordance with IAS 17

On transition, the lease liabilities were measured at the present value of the remaining lease payments, discounted at the Group's incremental borrowing rate as of 1 January 2019. Right of use assets are measured at the amount of the lease liability – adjusted by the amount of all prepaid or accrued lease payments.

When applying IFRS 16 to leases that were previously classified as operating leases in accordance with IAS 17, the Group used the following practical exemptions:

- Account for leases for which the lease term ends within 12 months of the date of initial application as short-term leases.
- Exclude initial direct costs from the measurement of the right of use asset at the date of initial application.
- Use of hindsight when determining the lease term if the contract contains options to extend or terminate the lease.

Leases classified as finance leases in accordance with IAS 17

For leases classified as finance leases in accordance with IAS 17, the carrying amounts of the right of use asset and the lease liability as of 1 January 2019 were determined at the carrying amounts of the lease asset and the lease liability immediately before that date.

C. Lessor

Except for sub-leases, the Group is not required to make any adjustments on transition to IFRS 16 for leases in which it acts as a lessor. The Group accounts for its leases in accordance with IFRS 16 from the date of initial application.

Pursuant to IFRS 16, the Group reassesses the classification of sub-leases with reference to the right of use asset instead of the underlying asset.

D. Effects on the annual accounts

On transition to IFRS 16, the Group recognized right of use assets and lease liabilities in the amount of T€ 80,973 (plus liabilities from finance leases in accordance with IAS 17 as of 31 December 2018 in the amount of T€ 3,259).

When measuring the lease liabilities, the Group discounted the lease payments at the Group's incremental borrowing rate as of 1 January 2019. The weighted average rate applied is 3.4%.

Reconciliation of lease liabilities

(in T€)

Operating lease commitment at 31 December 2018	90'990
→ Discounted using the incremental borrowing rate at 1 January 2019	81'197
Finance lease liabilities recognised as at 31 December 2018	3'259
Recognition exemption for:	
- short-term leases (< 1 year)	-754
- leases of low-value assets	-588
- Extension and termination options reasonably certain to be exercised	868
- Other	250
Lease liabilities recognised at 1 January 2019	84'232

33.21. Amendments to IFRS standards with potential impact on the Group after 31 December 2019

The following new and revised standards and interpretations were approved up to the balance sheet date, but came only later into force and the Group has not early adopted them in preparing these consolidated financial statements. Their impact on MTC's consolidated financial statements have not yet been analyzed systematically, except when this is specifically disclosed. The expected effects presented below constitute only a first estimate by the MTC Group's management.

	Effective date	Planned application by in the financial year
New Standards or Interpretations		
IFRS 17 <i>Insurance Contracts</i>	1 January 2021	FY 2021
Revisions and Amendments of Standards and Interpretations		
Amendments to References to the Conceptual Framework in IFRS Standards	1 January 2020	FY 2020
Definition of a Business (Amendments to IFRS 3)	1 January 2020	FY 2020
Definition of Material (Amendments to IAS 1 and IAS 8)	1 January 2020	FY 2020
Reform of the reference interest rates (Amendments to IFRS 9, IAS 39 and IFRS 7)	1 January 2020	FY 2020

* ED/2019/4 – amendments to IFRS 17 – The exposure draft proposes to postpone the first-time application by one year, to annual periods beginning on or after 1 January 2022.

33.22. Determination of the fair values

Certain accounting and measurement policies and disclosures require the determination of the fair values both for financial and non-financial assets and liabilities. The fair value corresponds to the price that would be received for the sale of an asset resp. for the transfer of a liability in an arm's length transaction between market participants at the measurement date.

MONTANA TECH COMPONENTS AG
Alte Aarauerstrasse 11, CH-5734 Reinach
Tel: +41 62 765 2500 / Fax: + 41 62 765 2510
office@montanatechcomponents.com
www.montanatechcomponents.com