

Financial Statements 2022



Contents

Financial statements		
Consolidated statement of profit or loss		164
Consolidated statement of comprehensive income		165
Consolidated statement of financial position		166
Consolidated statement of cash flows		167
Consolidated statement of changes in equity		168
General information		
Note 1	General information and basis of presentation	170
Note 2	Basis for preparing the consolidated financial statements	170
Note 3	Accounting estimates	172
Group structure		
Note 4	Composition of the group	172
Note 5	Equity accounted investments and joint operation	178
Information about statement of profit or loss		
Note 6	Operating segments	182
Note 7	Operating income	187
Note 8	Grants	189
Note 9	Employee benefits	190
Note 10	Share-based payments	196
Note 11	Other operating expenses	198
Note 12	Other items	199
Note 13	Finance income and expenses	200
Note 14	Taxes	201
Information about statement of financial position		
Note 15	Property, plant and equipment	206
Note 16	Leases	209
Note 17	Other intangible assets	212
Note 18	Goodwill	215
Note 19	Impairment assessment	216
Note 20	Inventories	219
Note 21	Trade receivables	220
Note 22	Other assets	222
Note 23	Interest-bearing assets and liabilities	224
Note 24	Provisions and other liabilities	228
Note 25	Financial assets and liabilities	230
Note 26	Hedging	237
Other information		
Note 27	Financial risk	241
Note 28	Capital management	248
Note 29	Number of shares	248
Note 30	Earnings per share	249
Note 31	Supplemental information to the consolidated statement of cash flows	250
Note 32	Related parties	250
Note 33	Pledge of assets and guarantees	252
Note 34	Change in presentation	253
Note 35	Events after the reporting period	253
APM	Alternative Performance Measures	298



Consolidated statement of profit or loss

Amounts in NOK million	Note	2022	2021 Restated ¹⁾
1 January - 31 December			
Revenue	7	45 018	33 083
Other operating income	7	746	586
Share of profit (loss) from equity accounted investments	5	135	49
Total operating income	6	45 898	33 717
Raw materials and energy for production		(21 976)	(15 985)
Employee benefit expenses	9	(4 918)	(4 530)
Other operating expenses	11	(6 714)	(5 536)
Amortisation and depreciation	15, 16, 17	(1 999)	(1 816)
Impairment losses	15, 16, 17	(28)	(76)
Operating profit (loss) before other items		10 263	5 775
Other items	12	2 151	10
Operating profit (loss)		12 414	5 785
Share of profit (loss) from equity accounted financial investments	5	(17)	37
Finance income	13	67	40
Foreign exchange gains (losses)	13	85	241
Finance expenses	13, 16	(313)	(276)
Profit (loss) before income tax		12 236	5 827
Income tax (expense) benefit	14	(2 594)	(1 163)
Profit (loss) for the year		9 642	4 664
Attributable to:		80	36
Non-controlling interests' share of profit (loss)		9 561	4 628
Owners of the parent's share of profit (loss)			
Earnings per share in NOK:			
Basic	30	15.09	7.49
Diluted	30	15.04	7.44

¹⁾ See note 34 Change in presentation

Consolidated statement of comprehensive income

Amounts in NOK million	Note	2022	2021 Restated ¹⁾
1 January - 31 December			
Profit (loss) for the year		9 642	4 664
Remeasurement of defined benefit pension plans	9	146	69
Tax effects on remeasurement of defined benefit pension plans	14	(33)	(10)
Change in fair value of equity instruments		(4)	3
Total items that will not be reclassified to profit or loss		109	62
Currency translation differences		765	358
Hedging of net investment in foreign operations		(142)	130
Tax effects hedging of net investment in foreign operations	14	31	(29)
Cash flow hedges	26	992	979
Tax effects on cash flow hedges	14	(218)	(215)
Share of other comprehensive income (loss) from equity accounted companies	5	15	13
Total items that may be reclassified to profit or loss in subsequent periods		1 443	1 236
Share of other comprehensive income (loss) from equity accounted companies		13	-
Cash flow hedges	26	(424)	(282)
Tax effects on cash flow hedges	14	93	62
Total reclassification adjustments for the period		(317)	(220)
Other comprehensive income (loss) for the year, net of tax		1 234	1 078
Total comprehensive income for the year		10 876	5 742
Attributable to:			
Non-controlling interests' share of comprehensive income		86	36
Owners of the parent's share of comprehensive income		10 790	5 706
Total comprehensive income for the year		10 876	5 742

Consolidated statement of financial position

Amounts in NOK million	Note	31.12.2022	31.12.2021
Assets			
Property, plant and equipment	15, 19	19 520	15 722
Right-of-use assets	16, 19	779	1 017
Other intangible assets	17, 19	1 385	1 602
Goodwill	18, 19	984	941
Deferred tax assets	14	151	48
Equity accounted investments	5	1 039	241
Derivatives	25, 26	1 562	304
Other assets	22	716	478
Total non-current assets		26 136	20 353
Inventories	20	10 325	7 716
Trade receivables	21	4 248	4 297
Derivatives	25, 26	711	283
Other assets	22	1 698	1 551
Restricted deposits	23	408	609
Cash and cash equivalents	23	9 255	7 040
Total current assets		26 645	21 497
Total assets		52 781	41 850
Equity and liabilities			
Paid-in capital	29	6 228	8 097
Retained earnings		22 412	11 692
Non-controlling interests		134	86
Total equity		28 773	19 874
Interest-bearing liabilities	16, 23	10 331	8 409
Deferred tax liabilities	14	1 123	505
Employee benefit obligations	9	489	611
Derivatives	25, 26	-	18
Provisions and other liabilities	24	232	182
Total non-current liabilities		12 175	9 724
Trade payables		5 335	4 614
Income tax payables		1 903	914
Interest-bearing liabilities	16, 23	204	1 972
Bills payable	23	1 742	2 096
Employee benefit obligations	9	994	976
Derivatives	25, 26	109	23
Provisions and other liabilities	24	1 545	1 657
Total current liabilities		11 832	12 252
Total equity and liabilities		52 781	41 850

Oslo, 8 March 2023

 Zhigang Hao Chair	 Dag Jakob Opedal Vice chair	 Olivier Tillet de Clermont-Tonnerre Board member	 Yougen Ge Board member	 Jingwan Wu Board member	 Grace Tang Board member
 Marianne Elisabeth Johnsen Board member	 Nathalie Brunelle Board member	 Thomas Eggan Board member	 Terje Andre Hanssen Board member	 Marianne Færøyvik Board member	 Helge Aasen CEO

Consolidated statement of cash flows

Amounts in NOK million	Note	2022	2021
Operating profit (loss)		12 414	5 785
Amortisation, depreciation and impairment losses	15, 16, 17	2 027	1 892
Changes in working capital	31	(1 583)	(2 020)
Equity accounted investments	5	(108)	(15)
Changes in fair value of derivatives		(1 139)	(9)
Changes in provisions, bills receivable and other		(539)	(88)
(Gains) losses on disposal of subsidiaries	12	(159)	-
Interest payments received		66	34
Interest payments made		(319)	(242)
Income taxes paid		(1 345)	(423)
Total cash flow from operating activities		9 314	4 913
Investments in property, plant and equipment and intangible assets	15, 17	(4 213)	(3 266)
Received investment grants	8	156	138
Proceeds from sale of property, plant and equipment	15, 17	70	31
Acquisition of subsidiaries, net of cash acquired	4	(108)	-
Disposal of subsidiaries, net of cash	4	151	-
Payment of contingent consideration related to acquisitions (IFRS 3)	24, 31	(176)	(78)
Acquisition of and capital contribution to joint ventures	5	(292)	-
Other investments / sales		9	(10)
Total cash flow from investing activities		(4 404)	(3 185)
Dividends paid to non-controlling interests		(38)	(58)
Dividends paid to owners of the parent		(1 900)	(96)
Capital increase	29	-	1 900
Net sale (purchase) of treasury shares	29	(38)	(278)
Net changes in bills payable and restricted deposits	23	(218)	709
Payment of lease liabilities	16, 23	(116)	(118)
New interest-bearing loans and borrowings	23	6 648	3 177
Payment of interest-bearing loans and borrowings	23	(7 237)	(3 180)
Total cash flow from financing activities		(2 899)	2 056
Change in cash and cash equivalents		2 011	3 784
Currency translation differences		205	101
Cash and cash equivalents opening balance		7 040	3 154
Cash and cash equivalents closing balance	23	9 255	7 040

Consolidated statement of changes in equity

2022

Amounts in NOK million	Share capital	Other paid-in capital	Total paid-in capital	Foreign currency translation reserve	Cash flow hedge reserve	Other retained earnings	Total retained earnings	Total owners share	Non-controlling interest	Total
Closing balance 31 December 2021	3 197	4 899	8 097	1 266	355	10 071	11 692	19 789	86	19 874
Changes in accounting policy (note 2)	-	-	-	-	-	(24)	(24)	(24)	-	(24)
Opening balance 1 January 2022	3 197	4 899	8 097	1 266	355	10 047	11 668	19 764	86	19 850
Profit (loss) for the year	-	-	-	-	-	9 561	9 561	9 561	80	9 642
Other comprehensive income for the year	-	-	-	661	444	124	1 228	1 228	6	1 234
Total comprehensive income for the year	-	-	-	661	444	9 685	10 790	10 790	86	10 876
Share-based payments (note 10)	-	24	24	-	-	-	-	24	-	24
Capital increase (note 29)	-	-	-	-	-	-	-	-	-	-
Net movement treasury shares (note 29)	-	7	7	-	-	(46)	(46)	(38)	-	(38)
Dividends to equity holders (note 28)	-	(1 900)	(1 900)	-	-	-	-	(1 900)	(38)	(1 938)
Closing balance	3 197	3 030	6 228	1 927	798	19 686	22 412	28 639	134	28 773

2021

Amounts in NOK million	Share capital	Other paid-in capital	Total paid-in capital	Foreign currency translation reserve	Cash flow hedge reserve	Other retained earnings	Total retained earnings	Total owners share	Non-controlling interest	Total
Opening balance	2 907	3 389	6 296	806	(189)	5 615	6 232	12 527	108	12 635
Profit (loss) for the year	-	-	-	-	-	4 628	4 628	4 628	36	4 664
Other comprehensive income for the year	-	-	-	460	544	75	1 079	1 079	(0)	1 078
Total comprehensive income for the year	-	-	-	460	544	4 703	5 706	5 706	36	5 742
Share-based payments (note 10)	-	28	28	-	-	-	-	28	-	28
Capital increase (note 29)	291	1 610	1 900	-	-	-	-	1 900	-	1 900
Net movement treasury shares (note 29)	-	(32)	(32)	-	-	(246)	(246)	(278)	-	(278)
Dividends to equity holders (note 28)	-	(96)	(96)	-	-	-	-	(96)	(58)	(154)
Closing balance	3 197	4 899	8 097	1 266	355	10 071	11 692	19 789	86	19 874

Notes to the consolidated financial statements

1. General information

Elkem ASA is a limited liability company located in Norway and whose shares are publicly traded on Oslo Børs. Elkem ASA is owned 52.9% by Bluestar Elkem International Co. Ltd S.A., Luxembourg, which is under the control of Sinochem Holdings Co., Ltd (Sinochem), a company registered and domiciled in China.

Elkem is one of the world's leading providers of advanced material solutions shaping a better and more sustainable future. The company develops silicones, silicon products and carbon solutions by combining natural raw materials, renewable energy and human ingenuity. Elkem helps its customers create and improve essential innovations like

electric mobility, digital communications, health and personal care as well as smarter and more sustainable cities. With a strong track record since 1904, its global team of more than 7,000 people has a joint commitment to stakeholders: Delivering your potential. In 2022, Elkem achieved an operating income of NOK 45,898 million.

The consolidated financial statements for Elkem ASA (hereafter Elkem/the group), including notes, for the year 2022 were authorised for issue by the Board of Directors of Elkem ASA on 8 March 2023.

2. Basis for preparing the consolidated financial statements

Compliance

The consolidated financial statements are prepared and in accordance with International Financial Reporting Standards (IFRS) as endorsed by the European Union (EU) and effective as of 31 December 2022. All accounting policies are used consistently by all subsidiaries in the consolidated financial statement. Relevant financial reporting principles are described in each note to the consolidated financial statements.

Preparation of consolidated financial statements

The consolidated financial statements are prepared on a historical cost basis, with the exception of derivative financial instruments and other financial assets measured at fair value.

The presentation currency of Elkem is Norwegian Krone (NOK). All financial information is presented in NOK million, unless otherwise stated. As a result of rounding adjustments, the amounts shown in one or more rows and columns included in the consolidated financial statements, may not add up to the total.

In text, the current year's figures are presented outside parentheses, followed by the comparative figures presented in parentheses.

The consolidated financial statements have been prepared based on the going concern assumption.

Foreign currency translation

Each entity in the group determines its functional currency based on the economic environment in which it operates, and items included in the financial statements of each entity

are measured using that functional currency. When preparing the financial statements of each individual group entity, transactions in currencies other than the entity's functional currency are recognised in the functional currency, using the transaction date's currency rate.

Monetary items denominated in foreign currencies are translated to each entity's functional currency using the closing rate at the end of the reporting period, and any gains (losses) are reported in the statement of profit or loss. Non-monetary items that are measured at fair value in a foreign currency are translated using the exchange rate at the date when the fair value was measured. Currency gains (losses) related to operating activities, i.e. receivables, payables, bank accounts for operating purposes including current intragroup balances, are recognised as a part of other items. Currency effects recognised in finance income and expenses are only related to financing activities such as loans, lease liabilities, long-term placements and dividends.

Foreign currency differences are recognised in other comprehensive income for the following items:

- a financial asset or liability designated as a hedging instrument in a cash flow hedge, to the extent that the hedge is effective
- loans in foreign currencies designated as hedging instruments in a hedge of a net investment in a foreign operation

In consolidation of the statement of profit or loss and the statement of financial position, separate group entities with other functional currency than the group's presentation currency, are translated directly into the presentation currency as follows:

- Assets and liabilities are translated using the exchange rate at the end of the reporting period
- Income and expenses are translated using an average exchange rate per month
- Equity transactions, except for profit or loss for the period, are translated using the transaction date rates

All resulting exchange differences are booked as a separate component in other comprehensive income (OCI)

Any goodwill arising on acquisition of a foreign operation and any fair value adjustment to the carrying amount of assets and liabilities arising on the acquisition, are treated as assets and liabilities of the foreign operations. On disposal of a foreign entity, the deferred cumulative amount recognised in other comprehensive income relating to that particular foreign operation, is recognised in the statement of profit or loss.

Statement of cash flows

The statement of cash flows is prepared under the indirect method. Cash inflows and outflows are shown separately for investing and financing activities, while operating activities include both cash and non-cash effect items. Interest received and paid and other financial expenses, such as bank guarantee expenses, are reported as a part of operating activities. Net currency gains or losses related to financing activities are reported as part of financing activities. Dividends received from joint ventures and associates that do not operate within Elkem's main business areas are included in investing activities.

Dividend to shareholders

Dividend is recognised as a liability when the shareholders' right to payment is established, which is when the dividend is approved by the General Meeting.

Changes in accounting policies and correction of material errors

Changes in accounting policies and correction of material errors are recognised retrospectively by restating the comparative amounts for the prior period presented, including the opening balance of the prior year.

Changes in accounting policy

The IFRS Interpretations Committee (IFRIC) published an agenda decision in April 2021 "Configuration or Customisation Costs in a Cloud Computing Arrangement (IAS 38 Intangible Assets)", confirming that a cloud computing customer should expense the costs of configuring or customising a supplier's application software in a Software as a Service arrangement. From 1.1.2022 Elkem has applied this policy for costs related to the implementation of cloud computing. Following the accounting policy change NOK 24 million was adjusted towards opening balance of equity in second quarter of 2022. Due to materiality comparable figures are not restated.

Change in presentation

Presentation of realised hedge ineffectiveness is changed from raw materials and energy for production to other items in the statement of profit and loss. The change is done to present realised effects together with unrealised effects from ineffectiveness. The impact from realised ineffectiveness has not been material in previous years. Comparable figures are restated. See note 34 Changes in accounting policies.

New and revised standards - adopted

New or revised accounting standards and interpretations implemented as of 1 January 2022 are among others Onerous Contracts – Costs of Fulfilling a Contract (Amendments to IAS 37) and Proceeds before Intended Use (Amendments to IAS 16 Property, plant and equipment). The new or revised accounting standards and interpretations do not represent a significant impact to Elkem's accounting policies.

New standards, interpretations and amendments - not yet effective

The consolidated financial statements will be affected by future changes in IFRS. No standards, interpretations or amendments published at the balance sheet date are expected to have significant effect on the group.

3. Accounting estimates

The preparation of the consolidated financial statements according to IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. When management makes estimates and assumptions concerning the future, the resulting accounting estimates will, by definition, seldom equal the actual outcome.

Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Revisions of reported estimates are recognised in the period in which the estimates are revised and in any future period affected. Changes in accounting estimates are recognised prospectively by including them in the statement of profit or loss in the period of the change and future periods, if the change affects both.

The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are addressed in the different notes.

Information about judgements, assumptions and estimation uncertainties at 31 December 2022 that have the most significant effects on the amounts recognised in the financial statements is included in the following notes:

- Note 14 Taxes
- Note 15 Property, plant and equipment
- Note 19 Impairment assessment
- Note 24 Provisions and other liabilities
- Note 25 Financial assets and liabilities

Business combinations under common control

Business combinations involving entities under common control are accounted for on a historical cost basis. This means applying book value accounting, which is applied in the following manner:

- Assets and liabilities of the combining entities are reflected at their carrying amounts.
- No new goodwill is recognised as a result of the combination.
- The statement of profit or loss reflects the result of the combining entities for the full year, irrespective of when the combination took place.
- Comparative figures are restated.
- The purchase price is booked against equity at the acquisition date.

Property, plant and equipment is valued using the cost approach and by estimating the current cost to purchase or replace the asset, at today's current condition. Intangible assets are identified and valued based on a relief from royalty method and multi-period excess earnings method, whereby; the relief from royalty method considers the discounted estimated royalty payments that are expected to be avoided as a result of the patents being owned, and the multi-period excess earnings method considers the present value of net cash flows expected to be generated by the customer relationships, by excluding any cash flows related to contributory assets.

Valuations are subject to numerous assumptions, the fair value estimates may impact assessment of possible impairment of assets and / or goodwill in future periods.

Judgements and estimates

Business combinations

Elkem uses valuation models as a basis for the measurement of the fair value of net identifiable value of transferred assets and liabilities in a business combination. Fair values are normally not readily observable in an active market for individual assets and liabilities in the business which Elkem operates.

4. Composition of the group

Principle

Consolidation

The consolidated financial statements include the financial statements of Elkem ASA and entities controlled directly or indirectly by Elkem ASA. The group controls an entity when the group 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. Subsidiaries are fully consolidated from the date on which the group obtains control, and are deconsolidated from the date that control ceases.

Profit or loss and each component of OCI are attributed to the equity holders of the parent of the group and to non-controlling interests, presented on separate lines in the financial statements.

All intra-group assets and liabilities, equity, income and expenses and gains and losses are eliminated in full on consolidation.

Business combinations

Business combinations are accounted for using the acquisition method in accordance with IFRS 3. The consideration transferred in a business combination is measured at fair value, and goodwill is measured as the excess of the sum of consideration transferred, and net identifiable fair value of transferred assets and liabilities.

Elkem's contingent consideration is classified as a financial liability and measured at fair value at the acquisition date. The liability is subsequently measured at fair value at each reporting date, with changes recognised in other items in the statement of profit or loss. Acquisition-related costs are expensed as incurred.

Acquisitions of non-controlling interests are accounted for as transactions with owners in their capacity as owners, and therefore no goodwill is recognised as a result. Adjustments to non-controlling interests arising from transactions that do not involve the loss of control, are based on a proportionate amount of the net assets of the subsidiary.

During a measurement period of maximum one year provisional amounts recognised at the acquisition date are adjusted to reflect new information obtained about facts and circumstances that existed on the date of acquisition. Any adjustments of identified assets or liabilities in the acquisition are offset by a corresponding increase / decrease in goodwill.

Elkem ASA and the following subsidiaries and joint operations make up the composition of the group and are included in the consolidated financial statement

Company	Functional currency	Country of incorporation	31.12.2022	31.12.2021	Owner
			Equity interests	Equity interests	
Elkania DA (Joint operation)	NOK	Norway	50 %	50 %	Elkem ASA
Elkem (Thailand) Co., Ltd.	THB	Thailand	100 %	100 %	Elkem ASA
Elkem Carbon (China) Co., Ltd.	CNY	China	100 %	100 %	Elkem Carbon Singapore Pte. Ltd.
Elkem Carbon AS	NOK	Norway	100 %	100 %	Elkem ASA
Elkem Carbon Malaysia Sdn. Bhd.	MYR	Malaysia	100 %	100 %	Elkem Carbon AS
Elkem Carbon Singapore Pte. Ltd.	SGD	Singapore	100 %	100 %	Elkem Carbon AS
Elkem Chartering Holding AS	NOK	Norway	80 %	80 %	Elkem ASA
Elkem Digital Office AS	NOK	Norway	100 %	100 %	Elkem ASA
Elkem Distribution Center B.V.	EUR	Netherlands	100 %	100 %	Elkem ASA
Elkem Dronfield Ltd.	GBP	United Kingdom	100 %	100 %	Elkem UK Holdings Ltd.
Elkem Egypt for Industry, Contracting & Trading S.A.E.	USD	Egypt	100 %	100 %	Elkem International AS
Elkem Ferroveld JV (Joint operation)	ZAR	South Africa	50 %	50 %	Elkem Carbon AS
Elkem Foundry (China) Co., Ltd.	CNY	China	100 %	100 %	Elkem ASA
Elkem GmbH	EUR	Germany	100 %	100 %	Elkem ASA
Elkem Iberia S.L.U	EUR	Spain	100 %	100 %	Elkem ASA
Elkem International AS	NOK	Norway	100 %	100 %	Elkem ASA
Elkem International Trade (Shanghai) Co., Ltd.	CNY	China	100 %	100 %	Elkem International AS
Elkem Ísland ehf.	NOK	Iceland	100 %	100 %	Elkem ASA
Elkem Japan K.K.	JPY	Japan	100 %	100 %	Elkem ASA
Elkem Korea Co., Ltd.	KRW	Republic of Korea	100 %	100 %	Elkem ASA
Elkem Ltd.	GBP	United Kingdom	100 %	100 %	Elkem UK Holdings Ltd.
Elkem Madencilik Metalurji Sanayi Ve Ticaret Ltd. STI	EUR	Turkey	100 %	100 %	Elkem International AS
Elkem Materials, Inc.	USD	USA	100 %	100 %	NEH LLC
Elkem Materials Delaware, Inc.	USD	USA	100 %	100 %	Elkem Materials, Inc.
Elkem Materials Processing (Tianjin) Co., Ltd.	CNY	China	100 %	100 %	Elkem ASA
Elkem Materials Processing Services BV	EUR	Netherlands	100 %	100 %	Elkem ASA
Elkem Materials South America Ltda.	BRL	Brazil	100 %	100 %	Elkem Materials, Inc.
Elkem Metal Canada Inc.	CAD	Canada	100 %	100 %	Elkem ASA
Elkem Milling Services GmbH	EUR	Germany	100 %	100 %	Elkem ASA
Elkem Nordic A.S.	DKK	Denmark	100 %	100 %	Elkem ASA
Elkem Oilfield Chemicals FZCO Ltd.	AED	UAE	51 %	51 %	Elkem ASA
Elkem Paraguay S.A.	USD	Paraguay	100 %	100 %	Elkem ASA ³⁾
Elkem Participações Indústria e Comércio Limitada	BRL	Brazil	100 %	100 %	Elkem Carbon AS
Elkem Processing Services S.A. ¹⁾	EUR	Belgium	100 %	-	Elkem ASA
Elkem S.à r.l.	EUR	France	100 %	100 %	Elkem ASA
Elkem S.r.l.	EUR	Italy	100 %	100 %	Elkem ASA

Company	Functional currency	Country of incorporation	31.12.2022	31.12.2021	Owner
			Equity interest	Equity interest	
Elkem Silicon Materials (Lanzhou) Co., Ltd.	CNY	China	100 %	100 %	Elkem ASA
Elkem Silicon Product Development AS	NOK	Norway	100 %	100 %	Elkem ASA
Elkem Siliconas España S.A.U	EUR	Spain	100 %	100 %	Elkem ASA
Elkem Silicones (UK) Ltd.	GBP	United Kingdom	100 %	100 %	Elkem UK Holdings Ltd.
Elkem Silicones Brasil Ltda.	BRL	Brazil	100 %	100 %	Elkem ASA
Elkem Silicones Canada Corp.	CAD	Canada	100 %	100 %	Elkem ASA
Elkem Silicones Czech Republic, s.r.o.	CZK	Czech Republic	100 %	100 %	Elkem ASA
Elkem Silicones Finland OY	EUR	Finland	100 %	100 %	Elkem ASA
Elkem Silicones France SAS	EUR	France	100 %	100 %	Elkem ASA
Elkem Silicones Germany GmbH	EUR	Germany	100 %	100 %	Elkem ASA
Elkem Silicones Guangdong Co., Ltd.	CNY	China	100 %	100 %	Elkem ASA
Elkem Silicones Hong Kong Co., Ltd.	HKD	Hong Kong	100 %	100 %	Elkem ASA
Elkem Silicones Korea Co., Ltd.	KRW	Republic of Korea	100 %	100 %	Elkem ASA
Elkem Silicones Material Zhongshan Co., Ltd.	CNY	China	100 %	100 %	Elkem Silicones Guangdong Co., Ltd.
Elkem Silicones México S. De R.L. De C.V.	MXN	Mexico	100 %	100 %	Elkem ASA
Elkem Silicones Poland sp. z o.o.	PLN	Poland	100 %	100 %	Elkem ASA
Elkem Silicones Scandinavia AS	NOK	Norway	100 %	100 %	Elkem ASA
Elkem Silicones Services S.à r.l.	EUR	France	100 %	100 %	Elkem ASA
Elkem Silicones Shanghai Co., Ltd.	CNY	China	100 %	100 %	Elkem ASA
Elkem Silicones USA Corp.	USD	USA	100 %	100 %	Elkem ASA
Elkem Siliconi Italia S.r.l.	EUR	Italy	100 %	100 %	Elkem ASA
Elkem Singapore Materials Pte. Ltd.	SGD	Singapore	100 %	100 %	Elkem ASA
Elkem South Asia Private Limited	INR	India	100 %	100 %	Elkem ASA
Elkem UK Holdings Ltd.	GBP	United Kingdom	100 %	100 %	Elkem ASA
Elkem Uruguay S.A.	USD	Uruguay	100 %	100 %	Elkem ASA
Euro Nordic Logistics BV	EUR	Netherlands	80 %	80 %	Elkem Chartering Holding AS
Euro Nordic Netherlands BV	EUR	Netherlands	80 %	80 %	Euro Nordic Logistics BV
Explotación de Rocas Industriales y Minerales S.A. (ERIMSA)	EUR	Spain	100 %	100 %	Elkem ASA
Iniconce, S.L.	EUR	Spain	100 %	100 %	Explotación de Rocas Industriales y Minerales S.A.
Jiangxi Bluestar Xinghuo Silicones Co., Ltd.	CNY	China	100 %	100 %	Elkem ASA
NEH LLC	USD	USA	100 %	100 %	Elkem ASA
NorenoComercial Importada e Exportadora Limitada	BRL	Brazil	100 %	100 %	Elkem Participações Indústria e Comércio Limitada
Norsil, S.A.	EUR	Spain	100 %	100 %	Iniconce, S.L
Tifwer Trade S.A.	USD	Uruguay	100 %	100 %	Elkem Uruguay S.A.
Vianode AS ²⁾	NOK	Norway	-	100 %	Elkem ASA

¹⁾ Previously KeyVest Belgium S.A.

²⁾ See Loss of control.

³⁾ Elkem ASA owns 79% and Elkem Uruguay S.A owns 21%

Changes in composition of the group in 2022, business combinations

31 January 2022 Elkem increased its ownership in Salten Energigjenvinning AS (SEAS) from 50% to 100% by acquisition from Kvitebjørn Energi AS. Salten Energigjenvinning AS operates the Elkem Salten energy recovery plant. The investment in the energy recovery plant further strengthens Elkem's efforts to ensure environmentally friendly silicon and ferrosilicon production with the lowest possible emissions and lowest possible use of resources. Salten Energigjenvinning AS was merged with Elkem ASA in 2022 and is presented within the Silicon products operating segment.

The energy recovery plant has been built in partnership between Elkem and Kvitebjørn Energi. The total investment in the energy recovery plant has amounted to around NOK 1,180 million, financed through a NOK 350 million grant from Enova, external debt and some equity. The book value of Elkem's 50% equity accounted joint venture was NOK 47 million at 31 January 2022. The difference between the fair value and the book value of the 50% share results in a fair value gain of NOK 75 million. This gain is partially offset by a loss on pre-existing relationships of NOK 58 million related to delivery of heat from Elkem ASA to Salten Energigjenvinning AS and a loss of NOK 13 million related to the cash flow hedge reserve from an interest rate hedge in SEAS which has been reclassified from other comprehensive income to other items in profit and loss as a result of the transaction (see note 12 Other items). If the company had been part of the group from 1 January 2022 revenue would have increased with NOK 1 million and profit after tax would have decreased with NOK 6 million.

20 June 2022 Elkem acquired Elkem Processing Services S.A (formerly KeyVest Belgium S.A), a specialist company in the sourcing of materials and production of metal powders to the refractory industry and other segments including

advanced ceramics. With the acquisition of Elkem Processing Services S.A Elkem will enable further growth by providing additional specialised products to our current customers, improve service level and processing capabilities and grow in adjacent segments. The acquisition will expand Elkem's product portfolio and create a platform for further growth. The production facility and related inventory amounts to around NOK 30 million. After the acquisition date revenues of NOK 37 million and profit after tax of NOK 1 million from the company has been included in consolidated statement of comprehensive income. If the company had been part of the group from 1 January 2022 revenue and profit after tax would have increased with NOK 96 million and NOK 16 million respectively, including a NOK 5 million gain from bargain purchase. Elkem Processing Services S.A is presented within the Silicon Products operating segment.

Net cash outflow	2022
Cash transferred on acquisition	(156)
Cash and cash equivalents of the acquiree	48
Acquisition of subsidiaries, net of cash acquired	(108)

The table below summarise the total consideration and the provisional amounts recognised for assets acquired and liabilities assumed after the business combination:

Consideration	2022
Cash transferred on acquisition	156
Fair value of 50% pre-transaction ownership in SEAS	122
Total consideration	278

Assets acquired and liabilities assumed

Amounts in NOK million	Carrying amount	Excess value	Fair value
Property, plant and equipment	823	119	942
Other intangible assets	0	6	6
Deferred tax assets	7	-	7
Inventories	29	-	29
Trade receivables	10	-	10
Other assets, current	13	-	13
Cash and cash equivalents	48	-	48
Deferred tax liabilities	-	(28)	(28)
Interest-bearing liabilities, non-current	(650)	-	(650)
Derivatives, non-current	(87)	-	(87)
Trade payables	(7)	-	(7)
Income tax payables	(3)	-	(3)
Interest-bearing liabilities, current	(10)	-	(10)
Provisions and other liabilities, current	(46)	-	(46)
Total identifiable net assets	128	97	225
Loss on pre-existing relationship	-	-	58
Gain on bargain purchase ¹⁾	-	-	(5)
Total recognised	128	97	278

¹⁾ After the transaction process started, KeyVest delivered better than expected results. This was not fully reflected in the final purchase price, resulting in a bargain purchase.

Acquisition-related costs of NOK 2 million is recognised in other items in the statement of profit or loss in 2022.

Loss of control

6 April 2022 Elkem, Hydro and Altor (Altor Fund V) announced a partnership with the intention to accelerate the growth of Elkem ASA's subsidiary Vianode AS, a producer of sustainable battery materials. The final regulatory approvals for the transaction were received on the 14 September 2022 upon which Elkem lost of control of Vianode. Elkem has recognised a gain of NOK 150 million in the third quarter resulting from the loss of control. The entire gain is attributable to the fair value measurement of Elkem's retained investment in Vianode. Following the transaction Elkem will classify the remaining investment as a joint venture and measure the investment using the equity method of accounting.

The value of the investment on initial recognition was NOK 576 million including the first tranche of capital injection on loss of control, NOK 134 million. Vianode had a negative overdraft position at the transaction date resulted in a positive cash effect for the group on disposal of NOK 151 million.

Net cash inflow	2022
Cash received on disposal	-
Cash and cash equivalents of the subsidiaries	151
Disposal of subsidiaries, net of cash	151

Changes in composition of the group in 2021, business combination

No business combinations took place in 2021.

5. Equity accounted investments and joint operations

Principle

Joint arrangements

Investments in joint arrangements are classified as either joint operations or joint ventures, depending on the contractual rights and obligations of each investor.

Joint ventures are accounted for using the equity method. Under the equity method, the investment is initially recognised at cost, and the carrying amount is increased or decreased to recognise Elkem's share of the profit or loss, and other comprehensive income of the investee after the date of acquisition. In cases where a joint venture's loss or other comprehensive income exceed the initially recognised cost the carrying amount is presented to reflect Elkem's liability to finance the joint venture only to the extent that Elkem has an obligation to fund the investees operations. Any liability to finance a joint venture is presented either as part of provisions and other liabilities, current, or netted against Elkem's receivables towards the joint venture.

The group's interest in joint operations is recognised in relation to its interests in the joint operation:

- Assets, including its share of any assets held jointly
- Liabilities, including its share of any liabilities incurred jointly
- Revenue from the sale of its share of the output arising from the joint operation
- Expenses, including its share of any expenses incurred jointly

Investments in associates

Associates are those entities in which the group has significant influence, but no control over the financial and operating policies. Significant influence is presumed to exist when the group holds between 20% and 50% of the voting power of another entity. Investments in associates are accounted for using the equity method. Under the equity method, the investment is initially recognised at cost, and the carrying

amount is increased or decreased to recognise the investor's share of the profit or loss and other comprehensive income of the investee after the date of acquisition. In cases where an associates' loss or other comprehensive income exceed the initially recognised cost the carrying amount is presented to reflect Elkem's liability to finance the associate only to the extent that Elkem has an obligation to fund the investees operations. Any liability to finance an associate is presented either as part of provisions and other liabilities, current, or netted against Elkem's receivables towards the associate. The group's investments in associates includes goodwill identified on acquisition.

Upon disposal of an associate that results in the group losing significant influence over that associate, any retained investment is measured at fair value at that date.

Share of profit from investments in associates and joint ventures

Share of profit (loss) from investments in associates and joint ventures is recognised in the statement of profit or loss depending on the purpose of the investments. Investments that are closely related to the group's main activities are recognised as share of profit from equity accounted companies, included in operating income. Investments in associates and joint ventures that do not operate within Elkem's main business areas are recognised as share of profit from equity accounted financial investments.

Elkem has interests in the following joint arrangements and associates

Name of entity	Business office	Country	Principal activities	Classification	% equity interests 2022	% equity interests 2021
Elkem Ferroveld JV	Ferrobank Emalahleni	South Africa	Electrode paste production	Joint operation	50 %	50 %
Elkania DA	Hauge i Dalane	Norway	Microfine weighting material	Joint operation	50 %	50 %
North Sea Container Line AS	Haugesund	Norway	Shipping services	Joint venture	50 %	50 %
North-Sea Management AS	Haugesund	Norway	Shipping services	Joint venture	50 %	50 %
Salten Energigjenvinning AS	Oslo	Norway	Energy production	Joint venture	-	50 %
Klafi EHF	Grundartangi, Akranes	Iceland	Transportation / harbour services	Joint venture	50 %	50 %
Weldermate AS	Oslo	Norway	Robot welding systems	Joint venture	50 %	50 %
Vianode AS	Oslo	Norway	Battery materials	Joint venture	40 %	-
Jiangxi Guoxing Intelligence Energy Co. Ltd	Yangjialing	China	Energy production	Joint venture	35 %	-
Euro Partnership BV	Moerdijk	Netherlands	Ship management services	Associate	50 %	50 %
Combined Cargo Warehousing BV	Moerdijk	Netherlands	Warehousing	Associate	33 %	33 %
Euro Nordic Agencies Belgium NV	Antwerpen	Belgium	Ship agencies services	Associate	50 %	50 %
EPB Chartering AS	Oslo	Norway	Deep sea charter services	Associate	25 %	25 %
GIE Osiris	Roussillon	France	Business supplies and equipment	Associate	25 %	25 %
Future Materials AS	Grimstad	Norway	Marketing of research facilities	Associate	20 %	20 %

The share of equity interests are equal to Elkem's voting rights, with the exception of Elkem's investments in Vianode AS where the parties in accordance with the shareholder agreement have 33,33% ownership influence. The shareholder agreements for Jiangxi Guoxing Intelligence Energy Co. Ltd requires a two-third majority in order to approve a majority of business decision on behalf of the entity, making Elkem together with one other party in control of the business.

Of the entities above, Salten Energigjenvinning AS (SEAS) and Vianode AS is classified to not operate within Elkem's main business areas.

There is no quoted market price for the investments.

31 January 2022 Elkem increased its ownership in Salten Energigjenvinning AS (SEAS) from 50% to 100% by acquisition from Kvitebjørn Energi AS. The total investment in the energy recovery plant has amounted to around NOK 1,180 million, financed through a NOK 350 million grant from Enova, external debt and some equity. The book value of Elkem's 50% share was NOK 47 million at 31 January 2022. The difference between the fair value and the book value of the 50% share results in a fair value gain of NOK 75 million. This gain is

partially offset by a loss on pre-existing relationships of NOK 58 million and a loss of NOK 13 million related to the cash flow reserve from an interest rate hedge in SEAS which has been reclassified from other comprehensive income to other items in profit and loss as a result of the transaction (see note 12 Other items). If the company had been part of the group from 1 January 2022 revenue would have increased with NOK 1 million and profit after tax would have decreased with NOK 6 million.

6 April 2022 Elkem, Hydro and Altor (Altor Fund V) announced a partnership with the intention to accelerate the growth of Elkem ASA's subsidiary Vianode AS, a producer of sustainable battery materials. The final regulatory approvals for the transaction were received on the 14 September 2022 upon which Elkem lost of control of Vianode. Elkem has recognised a gain of NOK 149 million in the third quarter resulting from the loss of control. The entire gain is attributable to the fair value measurement of Elkem's retained investment in Vianode. Following the transaction Elkem classified the remaining investment as a joint venture and measure the investment using the equity method of accounting. The value of the investment on initial recognition was NOK 576 million including the first tranche of capital injection on loss of control, NOK 134 million.

Elkem has also committed to cover its proportion of total capital injections in Vianode AS. Elkem's proportion is NOK 534.5 million, whereof NOK 267 million is paid as of 31 December 2022.

Energy of CNY 48.7 million, whereof CNY 17.5 million is paid as of 31 December 2022. In addition Elkem has committed to sell the land, buildings and equipment needed to establish the cogeneration facility and when the facility is up and running committed to supply excess steam from production.

At the end of 2022 Elkem invested in Jiangxi Guoxing Intelligence Energy Co. Ltd (Jinangxi Energy) an entity established to build a cogeneration production facility near Elkem's plant Silicones Xinghuo. Elkem has committed to cover its proportion of total estimated capital injections in Jinangxi

See note 32 Related parties for commitments and transactions related to the joint ventures and associates.

Movements in equity accounted investments

Amounts in NOK million	2022			2021		
	Joint ventures	Associates	Total	Joint ventures	Associates	Total
Opening balance	115	126	241	74	106	181
Acquisition of and capital contribution to joint ventures	292	-	292	-	-	-
Change in equity interest, in relation to business combinations	(47)	-	(47)	-	-	-
Change in equity interest, in relation to disposal of subsidiaries	443	-	443	-	-	-
Dividend received	(13)	(14)	(26)	(28)	(7)	(34)
Share of profit (loss) from equity accounted companies	42	93	135	19	31	49
Share of profit (loss) from equity accounted financial investments	(17)	-	(17)	37	-	37
Part of other comprehensive income	7	7	15	12	-	12
Currency translation differences	0	5	5	1	(4)	(3)
Closing balance	822	217	1 039	115	126	241

Share of profit and loss and carrying amount for equity accounted investments

Amounts in NOK million	2022	31.12.2022	2021	31.12.2021
	Share of profit	Carrying amount	Share of profit	Carrying amount
North Sea Container Line AS	42	95	19	65
North-Sea Management AS	(0)	2	1	3
Salten Energigjenvinning AS	(6)	-	37	46
Klafi EHF	(0)	1	(1)	1
Weldermate AS	(0)	0	-	0
Vianode AS	(11)	699	-	-
Jiangxi Guoxing Intelligence Energy Co. Ltd	-	25	-	-
Euro Partnership BV	10	44	11	39
Combined Cargo Warehousing BV	1	6	1	5
Euro Nordic Agencies Belgium NV	1	4	18	36
EPB Chartering AS	80	117	(0)	2
GIE Osiris	-	46	-	44
Future Materials AS	-	0	-	0
Total	117	1 039	86	241

Cash-flow from operations, equity accounted investments

Amounts in NOK million	2022	2021
Share of profit (loss) from equity accounted investments	(135)	(49)
Dividend received	26	34
Equity accounted investments	(108)	(15)

Summary of financial information for joint ventures on a 100% basis

Amounts in NOK million	Vianode AS ¹⁾	Other	Total 2022	Other	Total 2021
Current assets, including cash and cash equivalents NOK 784 million (NOK 92 million)	729	269	998	234	234
Non-current assets	783	92	875	817	817
Current liabilities, including current financial liabilities NOK 0 million (NOK 0 million)	120	94	214	112	112
Non-current liabilities, including non-current financial liabilities NOK 0 million (NOK 651 million)	127	-	127	710	710
Net assets/equity	1 265	268	1 533	229	229
Excess value	193	-	193	-	-
Elkem's carrying amount	699	123	822	115	115
Total revenue	0	907	907	777	777
Total expenses, including depreciation and amortisation NOK 31 million (NOK 5 million) and other items	(33)	(834)	(867)	(715)	(715)
Financial income, including interest income NOK 0 million (NOK 0 million)	5	3	8	125	125
Financial expenses, including interest expenses NOK 4 million (NOK 11 million)	(0)	(4)	(4)	(76)	(76)
Tax expense	0	(0)	(0)	(0)	(0)
Total profit for the year	(28)	71	43	110	110
Other comprehensive income	-	(14)	(14)	24	24
Total comprehensive income	(28)	57	29	134	134
Elkem's share of profit for the year	(11)	36	24	55	55
Elkem's share of other comprehensive income	-	7	7	12	12

¹⁾ The figures for Vianode AS is based on preliminary figures for 2022

Summary of financial information for associates on a 100% basis

Amounts in NOK million	Total 2022	Total 2021
Total operating income	1 785	152
Total expenses	(1 437)	(53)
Total profit for the year	347	99
Other comprehensive income	29	-
Total comprehensive income	377	99
Elkem's share of profit for the year	93	31
Elkem's share of other comprehensive income	7	-
Net assets/equity	768	417
Elkem's carrying amount	217	126

6. Operating segments

Principle

Elkem identifies its segments according to the organisation and reporting structure as decided and followed up by group management. Operating segments are components of a business that are evaluated regularly by the chief operating decision maker, defined as the CEO, for the purpose of assessing performance and allocating resources. Elkem's operating segments represent separately managed business areas with unique products serving different markets.

Segment performance is evaluated based on EBITDA which is the primary segment result and operating profit (loss) before other items (EBIT), see definitions below. Elkem's financing and income tax are managed on group basis and are not allocated to operating segments.

Transactions between operating segments are conducted on an arm's length basis in a manner similar to transactions with third parties.

Revenues are, in addition, disaggregated by geographical market based on the location of the customer.

Non-current assets by geographical areas are based on the location of the entity owning the assets.

The segment reporting is based on the accounting policies applied for the group with the exception of: Realised effects from hedge ineffectiveness and from the discontinuation of hedging is included in other items in Elkem's statement of profit and loss, but included in operating expenses in the segment reporting. This is because management follows up the operating segments including the impact of the realised effects from power contracts. Elkem has previously included realised effects from discontinuation of hedging in other items for both group and operating segments. The change in presentation does not impact comparable figures for 2021.

Lease payments under internal lease agreements are recognised as operating expenses on a straight-line basis over the lease term.

Elkem's operating segments

Elkem identifies its segments according to the organisation and reporting structure used by group management. Elkem has three reportable segments; Silicones, Silicon Products and Carbon Solutions.

The Silicones division produces and sells a range of silicone-based products across various sub-sectors including release coatings, engineering elastomers, healthcare products, specialty fluids, emulsions and resins.

The Silicon Products division produces various grades of metallurgical silicon, ferrosilicon, foundry alloys and microsilica for use in a wide range of end applications.

The Carbon Solutions division produces carbon electrode materials, lining materials and specialty carbon products for metallurgical processes for the production of a range of metals.

Other comprise Elkem group management and centralised functions within finance, logistics, power purchase, technology, digital office and strategic projects such as biocarbon and battery projects. The battery technology company Vianode AS was de-consolidated in the third quarter of 2022 and is now classified as a joint venture.

Eliminations comprise intersegment sales and profit. Elkem follows internationally accepted principles for transactions between related parties within the group. In general, Elkem seeks to use transaction-based methods (comparable uncontrolled price, transactional net margin method, cost plus and resale price method) in order to set the price for the transaction.

The main related party transactions between operating segments in Elkem can be divided as follows:

- Silicon Products sale of metallurgical silicon to Silicones. Sales prices are based on sale to external customers and CRU prices.
- Carbon Solutions sale of electrode paste and lining material to Silicon Products. Sales prices are based on prices to external customers.
- Other sale of management services e.g., logistics, procurement, financial services, technical support and R&D services. Prices are based on cost plus.

Major customers

Elkem has a range of customers, but no single customer amounts to 10% or more of total operating income.

Main items by operating segment 2022

Amounts in NOK million	Silicones	Silicon Products	Carbon Solutions	Other	Eliminations	Total
Revenue from sale of goods (note 7)	18 994	22 361	3 393	(87)	-	44 660
Other revenue (note 7)	66	72	21	199	-	358
Other operating income (note 7)	150	542	5	48	-	746
Share of profit from equity accounted companies (note 5)	-	(0)	(0)	135	-	135
Total operating income from external customers	19 210	22 974	3 419	295	-	45 898
Operating income from other segments	78	1 483	333	395	(2 289)	-
Total operating income	19 288	24 457	3 752	690	(2 289)	45 898
Operating expenses	(17 266)	(14 233)	(2 586)	(921)	2 032	(32 973)
EBITDA	2 022	10 224	1 166	(231)	(257)	12 925
EBIT	743	9 630	1 063	(281)	(257)	10 898
Cash flow from operations	1 271	7 802	620	(156)	14	9 551
Working capital	2 449	5 467	739	(648)	(371)	7 637
Capital employed	16 762	11 304	1 597	1 018	(371)	30 310
Reinvestments						(1 682)
Strategic investments						(2 797)
Movement CAPEX payables						421
Cash flow from investments in property, plant and equipment and intangible assets, including received investment grants						(4 058)

Main items by operating segment 2021

Amounts in NOK million	Silicones	Silicon Products	Carbon Solutions	Other	Eliminations	Total
Revenue from sale of goods (note 7)	17 206	13 557	1 917	64	-	32 743
Other revenue (note 7)	43	96	21	179	-	340
Other operating income (note 7)	117	422	5	41	-	586
Share of profit from equity accounted companies (note 5)	-	(1)	-	51	-	49
Total operating income from external customers	17 366	14 074	1 943	335	-	33 717
Operating income from other segments	63	710	234	398	(1 404)	-
Total operating income	17 429	14 783	2 176	733	(1 404)	33 717
Operating expenses	(13 758)	(11 081)	(1 669)	(777)	1 358	(25 926)
EBITDA	3 672	3 702	508	(44)	(46)	7 791
EBIT	2 528	3 154	360	(97)	(46)	5 899
Cash flow from operations	1 448	2 273	376	3	0	4 100
Working capital	2 517	3 487	276	(518)	(90)	5 673
Capital employed	14 678	8 169	1 003	839	(90)	24 599
Reinvestments						(1 657)
Strategic investments						(1 717)
Movement CAPEX payables						245
Cash flow from investments in property, plant and equipment and intangible assets, including received investment grants						(3 128)

Definitions

Segments performance are evaluated based on EBITDA and EBIT. Elkem's definition of EBITDA may be different from other companies.

EBITDA is defined as Elkem's profit (loss) for the period, less income tax (expense) benefit, finance expenses, foreign exchange gains (losses), finance income, share of profit from equity accounted financial investments, other items (except realised gains and losses from hedge ineffectiveness and discontinuation of hedging), impairment losses and amortisation and depreciation.

EBIT is defined as Elkem's profit (loss) for the period, less income tax (expense) benefit, finance expenses, foreign exchange gains (losses), finance income, share of profit from equity accounted financial investments and other items (except realised gains and losses from hedge ineffectiveness and discontinuation of hedging).

Cash flow from operations is EBITDA including reinvestments, changes in working capital and equity accounted companies.

Reinvestments generally consist of capital expenditure to maintain existing activities or that involve investments designed to improve health, safety or the environment.

Strategic investments generally consist of investments which result in capacity increases at Elkem's existing plants or that involve an investment made to meet demand in a new geographic or product area.

Below is a reconciliation of profit (loss) for the year against EBIT and EBITDA:

2022

Amounts in NOK million	Silicones	Silicon Products	Carbon Solutions	Other	Eliminations	Elkem
Profit (loss) for the year						9 642
Income tax (expense) benefit						2 594
Finance expenses						313
Foreign exchange gains (losses)						(85)
Finance income						(67)
Share of profit from equity accounted financial investments						17
Other items						(2 151)
Operating profit (loss) before other items						10 263
Realised effects from hedge ineffectiveness and discontinuation of hedging						635
EBIT	743	9 630	1 063	(281)	(257)	10 898
Impairment losses						28
Amortisation and depreciation						1 999
EBITDA	2 022	10 224	1 166	(231)	(257)	12 925

Working capital is defined as accounts receivable, inventory, other current assets, accounts payable, current employee benefit obligations and other current liabilities. Accounts receivables are defined as trade receivables less bills receivable. Other current assets are defined as other current assets less current receivables to related parties, current interest-bearing receivables, tax receivables, grants receivable, assets at fair value through profit or loss and accrued interest income. Accounts payable are defined as trade payables less CAPEX payables. Other current liabilities are defined as provisions and other current liabilities less current provisions, contingent considerations, contract obligations and liabilities to related parties.

Capital employed consists of working capital as defined above, property, plant and equipment, right-of-use assets, other intangible assets, goodwill, equity accounted investments, grants payable, trade payables and prepayments related to purchase of non-current assets. The definition was changed in 2022 to include right-of-use assets, goodwill and other intangible assets. Comparable figures are restated.

Elkem's definitions may be different from other companies.

2021

Amounts in NOK million	Silicones	Silicon Products	Carbon Solutions	Other	Eliminations	Elkem
Profit (loss) for the year						4 664
Income tax (expense) benefit						1 163
Finance expenses						276
Foreign exchange gains (losses)						(241)
Finance income						(40)
Share of profit from equity accounted financial investments						(37)
Other items						(10)
Operating profit (loss) before other items						5 775
Realised effects from hedge ineffectiveness and discontinuation of hedging						124
EBIT	2 528	3 154	360	(97)	(46)	5 899
Impairment losses						76
Amortisation and depreciation						1 816
EBITDA	3 672	3 702	508	(44)	(46)	7 791

The table below show realised effects from Elkem's power and foreign exchange hedging programme, including embedded derivatives and realised effects from hedge ineffectiveness and discontinuation of hedging, on the different group segments.

2022

Amounts in NOK million	Silicones	Silicon Products	Carbon Solutions	Other	Eliminations	Elkem
Revenue from sale of goods (note 26)	0	37	-	(86)		(49)
Operating expenses (note 26)	-	982	44	(15)		1 012
Total realised effects from derivatives included in EBITDA	0	1 019	44	(100)		963

2021

Amounts in NOK million	Silicones	Silicon Products	Carbon Solutions	Other	Eliminations	Elkem
Revenue from sale of goods (note 26)	-	27	-	65		92
Operating expenses (note 26)	-	295	2	17		315
Total realised effects from derivatives included in EBITDA	-	322	2	82		407

Total revenue by geographic market based on customer location

Amounts in NOK million	2022	2021
Norway	1 342	814
Other Nordic countries	1 545	1 637
United Kingdom	1 354	1 094
Germany	5 394	2 903
France	1 566	791
Italy	1 719	1 274
Poland	869	511
Spain	1 066	765
Other European countries	3 238	2 791
Europe	18 093	12 579
Africa	345	217
USA	5 470	3 451
Canada	770	368
Brazil	1 854	1 046
Other South American countries	548	326
America	8 643	5 191
China	10 849	10 534
Japan	2 153	1 197
South Korea	501	549
India	1 485	989
Other Asian countries	2 792	1 635
Asia	17 780	14 904
Rest of the world	206	99
Total revenue before hedging effects	45 067	32 991
Realised effects from hedging programs (note 26)	(49)	92
Total revenue	45 018	33 083

Non-current assets by geographic areas based on entity location

Amounts in NOK million	2022	2021
Norway	5 744	4 606
Other Nordic countries	1	528
United Kingdom	38	37
Germany	97	49
France	4 133	3 535
Italy	134	126
Poland	0	1
Spain	324	281
Other European countries	177	70
Europe	10 647	9 232
Africa	112	89
USA	882	710
Canada	643	523
Brazil	357	255
Other South American countries	494	436
America	2 376	1 924
China	10 930	8 411
Japan	2	3
South Korea	230	222
India	79	71
Other Asian countries	48	49
Asia	11 288	8 757
Total non-current assets	24 423	20 001

Non-current assets are presented less derivatives and deferred tax assets.

7. Operating income

Principle

Operating income consists of:

- a. Revenue
- b. Other operating income
- c. Share of profit (loss) from equity accounted investments (note 5)

(a) Revenue

Revenue is measured based on the consideration specified in a contract with a customer. Elkem recognises revenue when Elkem transfers control over a goods or service to a customer. A five-step process is applied before revenue can be recognised:

- identify contracts with customers
- identify the separate performance obligation
- determine the transaction price of the contract
- allocate the transaction price to each of the separate performance obligations, and
- recognise the revenue as each performance obligation is satisfied.

Sale of goods

Elkem's main performance obligation is related to sale of goods where the obligation is to deliver agreed volume of products within the agreed specification. Elkem has both short-term and long-term contracts. Short-term contracts, normally within one month, cover delivery of an agreed volume at market price at the date the order is placed. These types of contracts are most common for commodity products, such as sales of ferrosilicon and silicones and sales to customers in China. The long-term contracts cover a period of a few months and up to one year, where the prices normally are fixed within a volume range. Elkem has for sale of metallurgical silicon some contracts that cover a period longer than one year. In these contracts the prices are normally negotiated on an annual basis. Some of Elkem's sales contracts include an element of freight services, see separate section below for accounting policies.

Revenue is recognised when control of the goods is transferred to the customer, at an amount that reflects the consideration to which Elkem expects to be entitled in exchange for those goods. Control is transferred to the buyer, according to the agreed delivery term for each sale. Delivery terms are based on Incoterms 2020 issued by International Chamber of Commerce, and the main terms are:

"F" terms, where the buyer arranges and pays for the main carriage. The risk is transferred to the buyer when the goods are handed to the carrier engaged by the buyer.

"C" terms, where the group arranges and pays for the main carriage but without assuming the risk of the main carriage. The risk is transferred to the buyer when the goods are handed over to the carrier engaged by the seller.

"D" terms, where the group arranges and pays for the carriage and retains the risk of the goods until delivery at the agreed destination. The ownership is transferred to the buyer upon arrival at the agreed destination, usually the purchaser's warehouse.

The goods are normally sold with standard warranties that the goods comply with the agreed-upon specifications. These standard warranties are accounted for using IAS 37 Provisions, Contingent Liabilities and Contingent Assets. Elkem does not have any other significant obligations for returns or refunds.

Freight services included in sale of goods

Freight components included in sale of goods on incoterms "C" terms are considered as a separate performance obligation and recognised over the period the service is performed. Shipping and handling services that occur before the customer takes control of the goods for sales on "D" terms are considered to be part of fulfilling the sale of the goods.

Sale of power and revenue connected to energy recovery

Sale of electric power and revenue connected to energy recovery, mainly heat supply in the form of steam and hot water, el-certificates and el-tax, are recognised in income based on volume and price agreed with the customer. Revenue connected to energy recovery is mainly based on long-term contracts where the prices are regulated yearly based on changes in CPI or government regulated prices, except for the el-certificates where the price is based on the observable market price at date of delivery.

Revenue from sale of services

Revenue from sale of services is recognised when the services have been provided. Sale of services are mainly related to management agreements with related parties based on a cost plus a margin and sale of shipping and handling related services.

(b) Other operating income

Insurance settlements

Income from insurance settlements are recognised as other operating income when it is virtually certain that the group will receive the compensation. Expected cash flows from credit insurance contracts where such contracts are deemed to be an integral part of the sale transactions is presented net against impairment losses trade and other receivables, included in other operating expenses. See note 21 Trade receivables.

Grants

See note 8 Grants

**Details of revenue from contracts with customers
2022**

Amounts in NOK million	Silicones	Silicon Products	Carbon Solutions	Other	Total
Sale of goods, Silicones	18 954	-	-	-	18 954
Sale of goods, Silicon Products	39	22 324	-	(1)	22 362
Sale of goods, Carbon Solutions	-	-	3 393	-	3 393
Revenue from energy recovery and other energy related income	2	38	0	52	92
Service agreements with related parties (note 32)	14	1	-	14	30
Other revenue from contracts with customers	48	31	21	133	232
Total revenue from contracts with customers	19 057	22 395	3 413	197	45 063
Rental income	2	1	0	1	4
Realised hedging effects (note 26)	0	37	-	(86)	(49)
Total revenue	19 060	22 432	3 414	112	45 018

**Details of revenue from contracts with customers
2021**

Amounts in NOK million	Silicones	Silicon Products	Carbon Solutions	Other	Total
Sale of goods, Silicones	17 111	-	-	-	17 111
Sale of goods, Silicon Products	94	13 529	-	-	13 623
Sale of goods, Carbon Solutions	-	-	1 917	-	1 917
Revenue from energy recovery and other energy related income	19	32	1	57	108
Service agreements with related parties (note 32)	2	8	12	50	73
Other revenue from contracts with customers	21	55	7	71	155
Total revenue from contracts with customers	17 247	13 624	1 937	178	32 987
Rental income	2	1	-	1	4
Realised currency hedging effects (note 26)	-	27	-	65	92
Total revenue	17 249	13 652	1 937	244	33 083

Details of other operating income

Amounts in NOK million	2022	2021
Gain on disposal of fixed assets	0	0
Insurance settlements	19	27
Grants (note 8)	717	554
Other	10	5
Total other operating income	746	586

8. Grants

Principle

Grants are recognised when it is reasonably assured that Elkem will comply with the conditions attached to them and the grants will be received. Grants are recognised in the statement of profit or loss as other operating income, over the periods necessary to match them with the cost they are intended to compensate.

Tax credits related to R&D projects are classified as government grants in other operating income if they ultimately are settled with cash, tax credits settled only via taxes are classified as tax allowances. Grants relating to cost

of production of goods are recognised as other operating income when the produced goods are sold. Grants relating to property, plant and equipment (fixed assets) and intangible assets are deducted from the carrying amount of the asset and recognised in profit or loss as a reduction of the depreciation charge over the lifetime of the asset.

Details of grants

Amounts in NOK million	2022		2021	
	Other operating income	Deduction of carrying amount FA/IA	Other operating income	Deduction of carrying amount FA/IA
R&D grants from the Norwegian government	59	-	59	15
R&D grants from the French government	71	-	59	-
Other R&D grants	13	-	14	-
CO ₂ compensation from the Norwegian Environment Agency	497	-	367	-
Energy recovery related grants	-	-	-	14
Other government grants	72	93	54	43
Total government grants	712	93	553	72
Norwegian NO _x fund for reduced emission of NO _x	1	64	-	31
Other grants	3	-	1	-
Total grants from other than governments	5	64	1	31
Total grants	717	157	554	103

Grants receivable related to fixed and intangible assets (note 22)	64	63
Grants receivable related to income (note 22)	862	633
Grants payable (note 24)	(16)	(15)
Grants, deferred income (note 24)	(8)	(18)

CO₂ allowances

CO₂ emission allowances allocated from the government are classified as grants, measured at nominal value (zero). The CO₂ allowance scheme pertains to the group's plants in Europe. If actual emissions exceed the number of allocated allowances, additional allowances must be purchased and the cost is included as a part of production cost of inventory. The allocation of free allowances for the period 2021-2025 has been decided by the national authorities.

CO₂ compensation

The Norwegian government has since 2013 had a CO₂ compensation scheme to partially compensate for CO₂ costs included in the power price for certain industries. The compensation scheme is based on a corresponding scheme for EU and are approved by the EFTA surveillance authority ESA. The previous CO₂ compensation scheme ended 31 December 2020 and a new scheme for 2021-2025 has been approved by ESA and implemented into Norwegian regulation. The CO₂ compensation scheme applies for Elkem's Norwegian

Silicon and Ferrosilicon plants. The compensation is based on the market price of CO₂ allowances and will as such vary with the price development. As the grant compensates power costs, which are costs recognised as part of the cost price of inventory during the production process, the compensation is recognised in the statement of profit or loss when the produced goods are sold.

NO_x Fund

The industry in Norway pays a fee for their emission of NO_x to a public foundation run by 15 industry and commerce associations. The foundation is self-financed by the fees and the purpose is to support projects that reduces NO_x emissions from the industry in Norway.

Other

The remaining grants are mainly related to R&D and energy recovery projects.

9. Employee benefits

Principle

Employee benefits

Employee benefits are all forms of considerations given by an entity in exchange for service rendered by employees or for termination of employment.

Employee benefits include both current and non-current benefits, and are expensed as incurred, together with any social security taxes applicable.

Current benefits consist of wages and salaries, bonuses, holiday payments and other short-term benefits that are expected to be settled within 12 months after the reporting period. Non-current benefits consist mainly of jubilee and long-service benefits, post-employment benefits and post-retirement benefits, not expected to be wholly settled within the next 12 months.

Defined contribution plans

Defined contribution plans comprise of arrangements whereby the company makes monthly contributions to the employees' pension plans, and where the future pensions are determined by the amount of the contributions and the return on the individual pension plan asset. The contributions are expensed as incurred and there is no further obligation related to the contribution plans. Prepaid contributions are recognised as an asset.

Defined benefit plans

Defined benefit plans are pension plans where Elkem is responsible for paying pensions at a certain level, based on employees' salaries when retiring. Defined benefit plans are recognised at present value of future liabilities considered

retained at the end of the reporting period, calculated separately for each plan. Plan assets are measured at fair value and deducted in calculating the net pension obligation. Pension plans with a net asset and no offsetting rights are presented as a part of other assets. Actuarial assumptions are used to measure both the obligation and the expense and effects of changes in estimates due to financial and actuarial assumptions are recognised as other comprehensive income. Past service costs arising due to amendments in benefit plans are expensed as incurred. Service costs are recognised as part of employee benefit expenses. Net interest is calculated based on net pension obligations at the start of the period, multiplied by the discount rate. Any difference between actual return on pension assets and the interest income calculated as a part of the net interest, will be recognised directly in other comprehensive income. Interest on net pension obligations are presented as a part of finance expenses.

Multi-employer defined benefit plans where available information is insufficient to be able to calculate each participant's obligation, are accounted for as contribution plans.

Judgements and estimates

Estimation uncertainty is mainly related to defined benefit pension plans, where the calculation of pension obligations is based on financial and actuarial assumptions, such as discount rates, future salary and pension adjustments, expected turnover and mortality. Deviations between applied assumptions and actual results in future periods will have effects on the calculated obligation. See information about sensitivity on pension obligations based on changes in main actuarial assumptions below.

Employee benefit expenses

Amounts in NOK million	2022	2021
Salaries, holiday pay and variable compensation	(3 755)	(3 459)
Employer's national insurance contributions / social security tax	(787)	(727)
Pension expenses	(168)	(137)
Share-based payments (note 10)	(24)	(28)
Other payments / benefits	(185)	(179)
Total employee benefit expenses	(4 919)	(4 530)

Average number of full-time equivalents	7 592	7 178
---	-------	-------

Remuneration to corporate management

Amounts in NOK million	2022	2021
Fixed compensation	(33)	(31)
Variable compensation - STI	(20)	(29)
Variable compensation - LTI	(31)	(9)
Other benefits	(2)	(1)
Pension benefits	(4)	(4)
Total remuneration to corporate management	(90)	(75)

Remuneration provided to the board of directors	(5)	(5)
Remuneration provided to the committee remuneration	(1)	(0)

For more details on the remuneration to corporate management see "Report on salary and other remuneration to leading personnel in Elkem ASA for the financial year 2022". The report is published on Elkem's website. [Z](#)

Shares and options granted to corporate management and board members

Name	Position	2022		2021	
		Number of shares	Number of options	Number of shares	Number of options
Helge Aasen	CEO	46 206	101 000	46 206	101 000
Morten Viga	CFO	46 896	408 380	46 896	800 000
Katja Lehland	SVP Human Resources	-	400 000	-	800 000
Asbjørn Søvik	SVP Green Ventures & Digital	10 000	400 000	10 000	900 000
Håvard Moe	SVP Elkem Technology	110 000	600 000	60 000	900 000
Louis Vovelle	SVP Innovation R&D	6 896	425 140	6 896	800 000
Frédéric Jacquin	SVP Business development	81 551	408 380	6 551	850 000
Inge Grubben-Strømnes	SVP Silicon Products	35 189	676 526	35 189	900 000
Luiz Simao	SVP Carbon Solutions	20 000	350 000	10 000	650 000
Larry Zhang	SVP Silicones	-	250 000	-	500 000
Zhigang Hao ¹⁾	Chair	-	-	-	-
Dag Jakob Opedal	Vice chair	40 000	-	40 000	-
Olivier de Clermont-Tonnerre ¹⁾	Board member	15 517	-	15 517	-
Yougen Ge ¹⁾	Board member	-	-	-	-
Marianne Johnsen	Board member	-	-	15 000	-
Grace Tang	Board member	-	-	-	-
Nathalie Brunelle (from May)	Board member	-	-	-	-
Jin Wang Johnny Wu (from May) ¹⁾	Board member	-	-	-	-
Terje Andre Hanssen	Board member (employee representative)	-	-	-	-
Marianne Færøyvik	Board member (employee representative)	4 950	-	4 950	-
Thomas Eggan (from July)	Board member (employee representative)	-	-	-	-
Heidi Feldborg	Observer (employee representative)	-	-	-	-
Jan Harald Karlsen (from July)	Observer (employee representative)	-	-	-	-
Anja Isabel Dotzenrath (until Apr)	Board member	-	-	-	-
Knut Sande (until June)	Board member (employee representative)	-	-	-	-
Per Roar Aas (until June)	Observer (employee representative)	-	-	-	-

¹⁾ Representatives for the majority shareholder.

Employee benefit assets and obligations

Amounts in NOK million	Non-current		Current	
	31.12.2022	31.12.2021	31.12.2022	31.12.2021
Pension plan assets, net	40	-	-	-
Pension contribution fund (note 22)	1	1	2	2
Employee prepayments etc.	-	-	5	8
Total employee benefit assets	41	1	7	10
Salaries, holiday pay and variable compensation	-	-	752	761
Employer's national insurance contributions / social security tax	-	-	226	203
Pension plan obligations, net	370	492	-	-
Other benefit plans	119	119	16	12
Total employee benefit obligations	489	611	994	976

(a) Salaries, holiday pay and variable compensation

The obligations are related to incurred employee benefits, not paid.

A profit-sharing plan is applicable for French entities with more than 50 employees, where the bonus liability must be calculated based on profit after tax, using a specific formula given by the authorities. As at 31 December 2022 EUR 2 million (EUR 0 million) is accrued related to the agreement.

(b) Pension plans

The group has both defined contribution and defined benefit plans. For defined contribution plans the cost is equal to the group's contribution to the employee's pension savings during the period. For defined benefit plans the cost is calculated based on actuarial valuation methods, taking assumptions related to the employee's salary, turnover, mortality, discount rate, etc. into consideration.

Defined contribution plans

Defined contribution plans are the main pension plan for Elkem's Norwegian entities, where the contribution to each individual pension plan is 5% of annual salary up to 7.1G and 15% of annual salary between 7.1-12G. 1G refers to the Norwegian national insurance scheme's basic amount, which is NOK 111 477 as at 1 May 2022. Pension on salary above 12G is not supported by external service providers and is therefore handled as a separate plan and included under defined benefit plans.

In addition, a Norwegian multi-employer early retirement scheme called AFP, where sufficient information to calculate each participant's pension obligation is not available, is accounted for as it is a defined contribution plan in accordance

with the Ministry of Finance's conclusion. The participants in the pension plan are jointly responsible for 2/3 of the plan's pension obligation, the government is responsible for the remaining part. The pension premium in 2022 is 2.6% of the employees' salary between 1 and 7.1G, covering this year's pension payments and contribution to a security fund for future pension obligations. The yearly premium for 2023 is set to 2.6%.

Defined benefit plans

Defined benefit plans are pension plans where the group is responsible for paying pensions at a certain level, based on employees' salaries when retiring. The group has funded and unfunded benefit plans in Norway, France, Germany, UK, Canada, Japan and South Africa. The pension scheme in UK and two of Canada's schemes are overfunded and are net in an asset position. The schemes that are underfunded and are net in a liability position as at 31 December 2022 are distributed as follows Norway 23%, France 51%, Canada 9%, other Europe 14%, other countries 3%. In Canada provisions are also made for medical insurance as well as pension benefit plans.

The Norwegian pension plans are unfunded and comprise pension on salaries above 12G, where the expense is 15% of annual base salary that exceeds 12G plus interest on the individual calculated pension obligation, and some individual retirement schemes that are closed.

Breakdown of net pension expenses

Amounts in NOK million	2022	2021
Current service expenses	(43)	(40)
Administration expenses	(1)	(1)
Net pension expenses, defined benefit plans	(45)	(40)
Defined contribution plans	(102)	(78)
Early retirement scheme AFP (Norway)	(21)	(18)
Total pension expenses	(168)	(137)

In addition, interest expenses on net pension liabilities are recognised as a part of finance expenses (9) (8)

Net defined benefit obligations

Amounts in NOK million	2022	2021
Present value of funded pension obligations	(384)	(509)
Fair value of plan assets	425	487
Net funded pension obligations	40	(22)
Present value of unfunded pension obligations	(370)	(470)
Net value of funded and unfunded obligations	(329)	(492)

Movements in the defined benefit obligations and plan assets

Amounts in NOK million	2022			2021		
	Defined benefit obligations	Defined benefit plan assets	Net pension plan obligations	Defined benefit obligations	Defined benefit plan assets	Net pension plan obligations
Opening balance	(978)	487	(492)	(1 014)	460	(554)
Current service expenses	(43)	-	(43)	(40)	-	(40)
Interest (expenses) income	(22)	13	(9)	(18)	10	(8)
Administration expenses	-	(1)	(1)	-	(1)	(1)
Remeasurement gains (losses)	237	(91)	146	59	9	69
Contributions from employer	-	32	32	-	15	15
Benefits paid	85	(33)	52	40	(23)	17
Other changes	3	-	3	-	-	-
Currency translation differences	(36)	18	(19)	(5)	16	10
Closing balance	(754)	425	(329)	(978)	487	(492)

Breakdown of pension plan assets

Amounts in NOK million	31.12.2022		31.12.2021	
	Distribution%	Fair value of plan assets	Distribution%	Fair value of plan assets
Cash, cash equivalents and money market investments	12 %	52	11 %	55
Bonds	15 %	62	19 %	95
Shares	36 %	152	38 %	185
Property	35 %	147	30 %	148
Other plan assets ¹⁾	3 %	12	1 %	4
Total pension plan assets	100 %	425	100 %	487

¹⁾ Includes insurance contracts (Buy in policies and Annuity insured contracts)

Actual return on plan assets	-16.0 %	(78)	4.3 %	20
-------------------------------------	----------------	-------------	-------	----

In addition, some Norwegian entities have pension contribution funds, mainly based on excess pension assets from settlement of the defined benefit plans in 2010. The pension contribution funds are classified as non-current pension funds, except next year's expected contributions which are classified as current (see note 22 Other assets)

Principal assumptions used for the actuarial valuations in 2022 (2021)

	Norway		France		Canada		Germany		UK	
Discount rate	4.2%	(2.0%)	3.0%	(0.9%)	5.0%	(3.0%)	3.9%	(1.0%)	5.1%	(1.6%)
Expected rate of salary increase	na	(na)	3.0%	(2.1%)	3.5%	(3.5%)	3.0%	(3.0%)	na	(na)
Annual regulation of pensions paid	1.9%	(1.5%)	na	(na)	na	(na)	2.0%	(2.0%)	na	(na)

Assumptions regarding future mortality are based on actuarial advice in accordance with published statistics and experience in each country.

Sensitivity on pension obligations based on changes in main actuarial assumptions

The defined benefit pension schemes expose the group to actuarial risk such as investment risk, interest rate risk, salary growth risk, mortality risk and longevity risk.

The sensitivity analysis below shows estimated effects in the defined pension obligation based on reasonable changes in the main assumptions.

The calculations are based on a change in one assumption while holding all other assumptions constant. Negative amounts show an expected decrease in the net pension liability.

A decrease in corporate bond yields, a rise in inflation or an increase in life expectancy would result in an increase to plan liabilities.

Assumption

Amounts in NOK million	Discount rate		Life expectancy		Salary growth	
	0.5% increase	0.5% decrease	1 year increase	1 year decrease	0.5% increase	0.5% decrease
2022: Effect on the pension obligation	(38)	42	14	(15)	10	(10)
2021: Effect on the pension obligation	(63)	71	25	(25)	24	(22)

As the group's main pension plans are defined contribution plans, there are no group policies for funding of the defined benefit plans. This is managed locally, based on the terms and status for the individual plan.

Expected contribution for the pension plans next year and average duration for the main defined benefit plans

Amounts in NOK million	Norway	France	Canada	Germany	UK
Contribution to be paid to defined pension plans next year	5	18	19	3	5
Weighted average duration of the defined benefit obligations	6 years	14 years	17 years	11 years	11 years

(c) Other benefit plans

Other employee benefits consist of provisions related to jubilee and long-service benefits, and post-employment benefits to be paid until ordinary retirement age for former employees in Elkem's Chinese entities.

Of total non-current provisions, NOK 64 million (NOK 74 million) relate to jubilee and long-service benefits in the Silicones segment, mainly in France. Estimated duration of the obligation is 13 years. Non-current provisions for other

employee benefits for Elkem's Chinese entities, in the Silicones segment, are calculated to NOK 35 million (NOK 30 million), mainly consisting of post-employment benefits related to employees laid off due to reorganisation. No further obligations are expected to incur however in 2022 an addition of NOK 13 million has incurred related to update of estimate for future health insurance premiums. The estimated remaining duration for these two obligations is 16 years.

10. Share-based payment

Principle

The fair value of options granted under the share-based payment programme is recognised as an employee benefit expense with a corresponding increase in equity for equity settled awards. The total amount to be expensed is determined by reference to the fair value of the options granted. The total expense is recognised over the vesting period, which is the period over which all of the specified vesting conditions are to be satisfied. At the end of each period, the entity revises its estimates of the number of options that are expected to vest based on the non-market vesting and service conditions. It recognises the impact of the revision to original estimates, if any, in the statement of profit or loss, with a corresponding adjustment to equity.

Social security contributions payable in connection with an option grant are considered an integral part of the grant itself and the charges are treated as cash-settled transactions.

Judgements and estimates

Estimating fair value for share based payment transactions requires determination of the most appropriate valuation model and assumptions to the valuation model. The fair value at the grant date is determined using the Black-Scholes option pricing model, which takes into account the exercise price, the life of the option, the current price of the underlying shares, the expected volatility of the share price, any dividends expected on the shares and risk-free interest rate for the life of the option. The expected share price volatility is based on historical volatility for a selection of comparable listed companies adjusted with a premium taking into account the maturity of the peers compared to the Elkem. The risk-free interest rate is based on Norwegian government bonds with same maturity as the option.

Elkem's share option scheme

The group has in 2018 - 2021 granted share options to corporate management and selected key employees. Each option gives the right to acquire one share in Elkem ASA on exercise. In 2022 the Board decided to terminate the option scheme and replace it with a new Long-term Bonus Scheme (LTBS). Please refer to the "Report on salary and other remuneration to leading personnel in Elkem ASA for the financial year 2022" for description of the new bonus scheme. The previous granted options are still exercisable over the exercise period.

The share options vest annually in equal tranches over a three-year period following the date of grant, with one-third vesting each year. The options will expire two years after vesting, in total 5 years after the date of grant. No option holder may in any calendar year realise a total gain on exercise of options in excess of twice the option holder's base salary in the same calendar year, however provided that the maximum gain for Elkem's CEO shall be four times the CEO's base salary. See note 9 Employee benefits for an overview of options granted to Elkem's corporate management.

When the options are exercised, the corresponding number of shares are transferred to the employee. The proceeds received from the exercise of the options (net of any directly attributable transaction costs) are credited directly to equity.

Components of share-based payments employee benefit expenses

Amounts in NOK million	2022	2021
Share-based payment	(24)	(28)
Social security contribution	(9)	(16)
Total expenses related to share-based payments	(33)	(44)

Parameters connected to share options granted in years respectively

Amounts in NOK million	2021	2020	2019
Number of options granted	7 451 000	8 000 000	8 000 000
Date of Grant	29 Jul 2021	29 Jul 2020	29 Jul 2019
Exercise price (NOK)	31.2	19.1	23.5
Share price (NOK)	32.9	17.2	24.7
Expected lifetime*	3.34	3.12	3.12
Volatility*	34.4 %	46.0 %	35.8 %
Interest rate*	0.9 %	0.2 %	1.3 %
Dividend*	6.5 %	6.5 %	6.5 %
FV per instrument*	5.19	2.95	4.08
Vesting conditions	Service	Service	Service

*Weighted average parameters of instruments

Outstanding instruments

Grant	Amounts in NOK million	Exercise price	31 December 2022		31 December 2021	
			Number of instruments outstanding	Remaining contractual life	Number of instruments outstanding	Remaining contractual life
2018 programme	38.52	2 300 000	0.72	4 650 000	1.21	
2019 programme	23.53	612 688	1.57	2 967 500	2.37	
2020 programme	19.10	2 945 140	2.38	5 411 272	2.94	
2021 programme	31.20	5 778 375	2.85	7 451 000	3.58	
Total outstanding		11 636 203	2.24	20 479 772	2.70	

Quantity and weighted average prices

Overview of outstanding options Amounts in NOK million	31 December 2022		31 December 2021	
	Number of instruments	Weighted average exercise price	Number of instruments	Weighted average exercise price
Outstanding options 1 January	20 479 772	28.55	22 767 000	26.76
Granted during the year	-	-	7 451 000	31.20
Exercised during the year	(6 443 569)	23.97	(6 271 228)	22.16
Forfeited during the year	(200 000)	30.01	(900 000)	21.16
Expired during the year	(2 200 000)	38.52	(2 567 000)	38.52
Outstanding options 31 December	11 636 203	29.18	20 479 772	28.55
Of which exercisable (vested)	4 368 870	32.47	5 728 772	35.30
Average share price at exercise date (NOK per share)		37.64		34.00

11. Other operating expenses

Details of operating expenses

Amounts in NOK million	2022	2021
Loss on disposal of fixed assets	(2)	(5)
Freight and commission expenses	(2 395)	(1 661)
Leasing short-term and low value contracts (note 16)	(70)	(56)
Machinery, equipment, spare parts and operating materials	(1 344)	(1 336)
External services ¹⁾	(2 441)	(2 051)
Insurance expenses	(137)	(106)
Impairment losses trade and other receivables	(2)	9
Other operating expenses ^{2) 3)}	(324)	(330)
Total other operating expenses	(6 714)	(5 536)

¹⁾ Including services from auditor, see specification below

²⁾ Including changes in inventories of finished goods and work in progress of positive NOK 288 million (positive NOK 1 million)

³⁾ Including capitalised salary on fixed asset projects of positive NOK 125 million (positive NOK 114 million)

Research and development

During 2022, Elkem expensed NOK 1,000 million (NOK 716 million) related to research and innovation activities, which includes product and business development, technical customer support and improvement projects. In addition, Elkem capitalised development expenses of NOK 312 million (NOK 300 million).

Grants relating to research and development amount to NOK 143 million (NOK 132 million) and are recognised in other operating income. In addition NOK 91 million (NOK 15 million) is recognised as a reduction of intangible assets.

Audit fees

KPMG is the group auditor of Elkem.

Fees to KPMG and other audit firms

Amounts in NOK million	2022	2021
KPMG		
Audit fee	(19)	(19)
Other assurance services	(1)	(1)
Tax services	-	(0)
Other services	-	-
Other audit firms		
Audit fee	(2)	(2)
Other assurance services	(0)	(0)
Tax services	(2)	(1)
Other services	(0)	(1)
Total fees to KPMG and other audit firms	(25)	(24)

Fees to auditors are reported exclusive of VAT.

12. Other items

Principle

Other gains (losses)

Other gains (losses) consists of changes in fair value of financial instruments that are not designated as a part of a hedging relationship, any ineffective part of hedging relationships, effects from discontinuation of hedging and foreign exchange gains (losses) related to operating activities such as trade receivables, trade payables, bank accounts / overdrafts. Foreign exchange gains (losses) related to financing activities, mainly interest-bearing liabilities and group loans, are classified as a part of financial income and expenses.

Other income (expenses)

Other income and (expenses) consists of transactions and events that are related to acquisition of business, gains / (losses) on disposal of businesses, restructuring programme and profit and loss effects from other shares. In addition,

performance incentives for Elkem employees related to such items. Cost related to liquidated / wound-up businesses, costs of public requirements or updated regulations related to events / periods before purchase of the business, e.g., environmental measures, are included in other income and expenses.

Acquisition related costs may include both costs related to acquisitions done, not completed and cancelled projects. Investments in equity instruments with an ownership below 20% are normally classified as other shares. Dividends from such shares are recognised when shareholders' right to receive dividends is determined by the shareholder's meeting. Fair value changes in other shares related to listed companies are recognised as other income (expenses).

Details of other items

Amounts in NOK million	2022	2021
Changes in fair value commodity contracts (note 25)	(2)	(1)
Net gains (losses) on embedded EUR derivatives power contracts (note 25)	218	3
Ineffectiveness on cash flow hedges (note 26)	1 471	127
Net foreign exchange gains (losses) - forward currency contracts	9	14
Operating foreign exchange gains (losses)	387	20
Total other gains (losses)	2 084	163
Dividends from other shares	4	3
Change in fair value from other shares measured at fair value through profit or loss	1	2
Gains (losses) on acquisition and disposal of subsidiaries	159	-
Restructuring expenses (note 24)	26	41
Dismantling and environmental expenses (note 24) ¹⁾	(72)	(181)
Other ²⁾	(50)	(17)
Total other income (expenses)	67	(153)
Total other items	2 151	10

¹⁾ 2022 includes NOK 70 million in restoration expense related to decommissioned business in Canada. 2021 Includes NOK 171 million related to expenses in connection with relocation of workers buildings located in proximity to the Silicones Xinghuo plant, as required by the authorities.

²⁾ Mainly expenses related to business projects and acquisitions

13. Finance income and expenses

Principle

Interest income is recognised on an accrual basis and is classified as finance income.

Foreign exchange gains (losses) related to financing activities including group loans are classified as a part of financial income and expenses, and foreign exchange gains (losses) related to operations are classified as a part of other items.

Interest expenses are recognised on an accrual basis using the effective interest method and are classified as financial

expenses. Interest is capitalised as a part of the carrying amount of a self-constructed item of property, plant and equipment when the construction period takes a substantial period of time, meaning more than 9-12 months, depending on the total amount, and borrowing costs are being incurred.

Financial expenses also include interest on net pension liabilities, unwinding of discounted provisions and contingent consideration acquisition of subsidiaries, and interest on lease liabilities.

Details of net finance income (expenses)

Amounts in NOK million	2022	2021
Interest income on loans and receivables	65	34
Other financial income	1	6
Total finance income	67	40
Net foreign exchange gains (losses) ¹⁾	85	241
Interest expenses on interest-bearing liabilities measured at amortised cost	(229)	(206)
Interest expenses from other items measured at amortised cost ²⁾	(50)	(23)
Capitalised interest expenses	20	5
Interest expenses on lease liabilities (note 16)	(30)	(26)
Unwinding of discounted liabilities	(10)	(8)
Interest expenses on net pension liabilities (note 9)	(9)	(8)
Other financial expenses	(5)	(10)
Total finance expenses	(313)	(276)
Net finance income (expenses)	(161)	6

¹⁾ Some / part of loans are designated as a hedging instrument, hence the unrealised part of net foreign exchange gains (losses) are recognised against OCI, see note 26 Hedging.

²⁾ Interest expenses from other items measured at amortised cost mainly consist of interest on bills payable and factoring agreements.

14. Taxes

Principle

Income taxes

Current tax assets and liabilities are measured at the amount expected to be recovered from or paid to the tax authorities. Current tax payables includes any adjustment to tax payable in respect of previous years. Income tax is recognised in the statement of profit or loss except to the extent that it relates to items recognised directly in equity or in other comprehensive income. The group includes deductions for uncertain tax positions when it is probable that the tax position will be sustained in a tax review. The group records provisions relating to uncertain or disputed tax positions at the amount expected to be paid. The provision is reversed if the disputed tax position is settled in favour of the group and can no longer be appealed.

Penalties and interest related to income taxes are recognised as income tax (expense) benefit in the statement of profit or loss. Accrued penalties and interest are recognised in the statement of financial position in income tax payable and provisions for the current and non-current portions respectively.

Deferred tax

Deferred tax assets and liabilities are calculated using the liability method with full allocation of all temporary differences between the tax base and the carrying amount of assets and liabilities in the financial statements, including tax

losses carried forward. Deferred tax relating to items outside statement of profit or loss are recognised in correlation with the underlying transaction either in other comprehensive income or directly in equity. Deferred tax assets and liabilities are not recognised if the temporary difference arises from the initial recognition of goodwill. Deferred tax assets are recognised in the statement of financial position to the extent that it is more likely than not that the tax assets will be utilised against deferred tax liabilities or future taxable income. Deferred tax assets arising from tax losses are recognised when there is convincing evidence of recoverability. The tax rates substantively enacted at the end of the reporting period and undiscounted amounts are used. Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets, and Elkem intends to settle current tax liabilities and assets on a net basis, or to realise the tax assets and settle the liabilities simultaneously.

Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realised; such reductions are reversed when the probability of future taxable profits improves.

Judgements and estimates

Part of the basis for recognising deferred tax assets is based on applying the loss carried forward against future taxable income in the group, which requires use of estimates for calculating future taxable income. Deferred tax assets are not recognised for start-up projects and entities with longer periods of losses unless there is convincing evidence of recoverability. Elkem recognises a previously unrecognised deferred tax asset to the

extent that it has become probable that future taxable profit will allow the deferred asset to be recovered. For example, when start up projects becomes profitable or the market condition has changed so the entity has longer periods with historic taxable profits and future forecasted taxable profits. When estimating uncertain tax positions the most probable amount, including interests and penalties, is used because in most cases the outcome of the tax review is binary.

Income tax recognised in profit or loss

Amounts in NOK million	2022	2021
Profit (loss) before income tax	12 236	5 827
Current taxes	(2 234)	(1 145)
Deferred taxes	(360)	(18)
Total income tax (expense) benefit	(2 594)	(1 163)

Income taxes recognised in other comprehensive income (OCI)

Amounts in NOK million	2022	2021
Remeasurement of defined benefit pension plans	(33)	(10)
Hedging of net investment in foreign operations	31	(29)
Cash flow hedges	(125)	(153)
Total tax charged to OCI	(127)	(192)

Reconciliation of income tax (expense) benefit

Amounts in NOK million	2022	2021
Profit (loss) before income tax	12 236	5 827
Expected income taxes, 22% of profit before tax (22%)	(2 692)	(1 282)

Tax effects of:

Difference in tax rates for each individual jurisdiction	(99)	(94)
Preferential tax rates	61	12

Permanent differences

Tax effects of income from Norwegian controlled foreign companies (NOKUS)	(16)	(8)
Tax effects share of profit (loss) from equity accounted companies	24	19
Tax effects non-deductible expenses	(12)	(24)
Tax relief based on value of equity	19	18
Tax effects gains (losses) on acquisition and disposal of subsidiaries	34	-
Tax effects non-taxable income	134	76

Other effects

Tax effects of changes in unrecognised deferred tax assets	(32)	157
Tax effects of change in tax rate	-	(19)
Other current taxes paid	(10)	(35)
Previous year tax adjustment	(5)	15
Total income tax (expense) benefit	(2 594)	(1 163)
Effective tax rate	21 %	20 %

Three companies in China are taxed under the regulations for "High and new technology company" which mean that the tax rate is 15% compared to the regular 25%. The companies have to confirm to the authorities every year that they fulfil the conditions for "High and new technology company" in order to apply the preferential tax rate.

Tax effect of non-taxable income is mainly related to R&D, additional R&D deduction and non-taxable R&D grants, and additional deduction on investments in fixed assets equipment.

Other current taxes paid relates mainly to taxes that are indirectly calculated based on profit (loss) before income tax and withholding taxes on dividends.

Deferred tax assets and deferred tax liabilities

Amounts in NOK million	31.12.2022		31.12.2021	
	Temporary difference	Deferred tax	Temporary difference	Deferred tax
Derivatives including cash flow hedges	-	-	17	4
Property, plant and equipment and intangible assets	412	69	795	198
Pension liabilities	325	79	465	121
Trade receivables	92	7	89	16
Inventories	998	222	639	157
Provisions	364	72	208	53
Other differences	458	93	302	68
Debt waiver	595	161	595	161
Tax losses carried forward	2 901	648	2 353	582
Gross deferred tax assets	6 145	1 351	5 463	1 359
Unrecognised deferred tax assets for tax loss carried forward	(2 398)	(520)	(1 960)	(486)
Unrecognised debt waiver	(595)	(161)	(595)	(161)
Unrecognised deferred tax assets other items	(1 264)	(190)	(1 361)	(340)
Recognised deferred tax assets	1 888	480	1 548	372
Netting		(329)		(324)
Net deferred tax assets		151		48

Derivatives including cash flow hedges	2 162	476	560	123
Property, plant and equipment and intangible assets	3 451	775	2 734	610
Inventories	284	62	210	46
Other differences	683	139	243	50
Gross deferred tax liabilities	6 580	1 452	3 748	828
Netting		(329)		(324)
Net deferred tax liabilities		1 123		505

Net deferred tax (liabilities) assets recognised (972) (457)

Unrecognised deferred tax assets other items, are mainly related to property, plant and equipment and inventories. The tax assets are not recognised due to uncertainty regarding future taxable income and the long period for which the tax asset shall be amortised.

Movements in net deferred tax assets and deferred tax liabilities

Amounts in NOK million	2022	2021
Opening balance	(457)	(240)
Recognised in profit or loss for the year	(360)	(18)
Effect of business combination	(20)	-
Disposal of subsidiaries	2	-
Recognised in other comprehensive income	(127)	(192)
Currency translation differences	(10)	(7)
Closing balance	(972)	(457)

**Tax losses carried forward
31 December 2022**

Amounts in NOK million	Gross tax losses carried forward	Net tax losses carried forward	Unrecognised tax losses	Recognised deferred tax losses carried forward
France	1 803	451	(337)	114
China	490	74	(73)	-
Brazil	175	59	(59)	-
Paraguay	295	30	(31)	-
Malaysia	61	15	(14)	-
US	56	14	-	14
Canada	18	5	(5)	-
Mexico	3	1	(1)	-
Total tax losses to carried forward	2 901	649	(520)	128

**Tax losses carried forward
31 December 2021**

Amounts in NOK million	Gross tax losses carried forward	Net tax losses carried forward	Unrecognised tax losses	Recognised deferred tax losses carried forward
France	1 602	431	(347)	84
China	183	39	(28)	11
Brazil	170	58	(58)	-
Malaysia	96	23	(23)	-
Paraguay	298	29	(29)	-
Canada	3	1	(1)	-
Mexico	1	0	(0)	-
Total tax losses to carried forward	2 353	582	(486)	95

Tax losses carried forward by expiry date

Amounts in NOK million	31.12.2022		31.12.2021	
	Total unrecognised losses	Total recognised losses	Total unrecognised losses	Total recognised losses
Loss car.forw.which exp. within 1 year	(3)	-	-	-
Loss car.forw.which exp. within 2 years	(5)	-	-	-
Loss car.forw.which exp. within 3 years	(9)	-	-	-
Loss car.forw.which exp. within 4 years	(10)	-	(29)	-
Loss car.forw.which exp. within 5 years	(70)	-	-	-
Loss car.forw.which exp. within 5-10 years	(7)	-	-	11
Without maturity	(416)	128	(458)	84
Total tax losses carried forward	(520)	128	(486)	95

Pending tax issues with tax authorities

The Norwegian Tax Office decided in February 2021 to increase Elkem ASA's taxable income for the fiscal years 2016-2019 by in total NOK 781 million, which would have led to an increase in the income tax expense of NOK 181 million. The reassessments relate to loan arrangements / debt waiver agreements acquired by Elkem ASA in 2016 through the cross-border parent-subsidary merger with Bluestar Silicones International Sarl. Elkem is of the opinion that the reassessment is unfounded and will appeal. Based on legal advice, Elkem's assessment is that the defence against the action will be successful, and the increase in taxable income is therefore not recognised in profit or loss. The amount was paid in first quarter of 2021 and a corresponding receivable for the paid income tax is recognised in 2021, see note 22 Other assets.

Debt waiver

Elkem Silicones France SAS has four Elkem internal debt waiver agreements where internal loans were converted to equity and the converted amounts were treated as taxable income. Elkem Silicones France SAS can only reinstate the loans to the extent that the company has an accounting profit according to IFRS. All debt that is reinstated under the agreements can be deducted against taxable income. The gross taxable value of the agreements as of 31 December 2022 is NOK 595 million (NOK 595 million). Elkem Silicones France SAS has not reinstated any loan amounts in 2022 or 2021 and correspondingly no tax credit is recognised in 2022 or 2021.

Debt waiver 31 December 2022

Amounts in NOK million	2010	2012	2013	2014	Total
Gross value of debt waiver	54	186	149	207	595
Utilised 2022	-	-	-	-	-
Total debt that can be reversed	54	186	149	207	595
Deferred tax asset unrecognised ¹⁾	15	50	40	56	161

The respective agreements expire in 3 years 5 years 6 years 7 years

Debt waiver 31 December 2021

Amounts in NOK million	2010	2012	2013	2014	Total
Gross value of debt waiver	54	186	149	207	595
Utilised 2021	-	-	-	-	-
Total debt that can be reversed	54	186	149	207	595
Deferred tax asset unrecognised ¹⁾	15	50	40	56	161

The respective agreements expire in 4 years 6 years 7 years 8 years

¹⁾ Based on tax rate 27.0% (28.4%), which is applicable in France.

15. Property, plant and equipment

Principle

Property, plant and equipment

Property, plant and equipment (PPE) are stated in the consolidated statement of financial position at cost less accumulated depreciation and accumulated impairment losses. PPE acquired in business combinations are recognised at fair value at the acquisition date. PPE acquired in a business combination under common control are reflected at their carrying amounts. Assets in the course of construction are carried at cost less any recognised impairment loss. Such assets are classified to the appropriate categories of PPE when completed and ready for the intended use. When significant parts of an item of PPE have different useful lives, they are accounted for as separate items.

Initial cost includes expenditures that are directly attributable to the acquisition of the asset, cost of materials, direct labour, any other costs directly attributable to bringing the assets to working condition for their intended use and estimated dismantling or removal charges.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, when future benefits are probable and the cost can be measured reliably. The carrying amount of the replaced part is derecognised. Major periodic maintenance that is carried out less frequently than every year, is capitalised and depreciated over the period until the next periodic maintenance is performed. All other repairs and maintenance are charged to the statement of profit or loss when incurred.

Depreciations are calculated based on estimated useful life and expected residual value for each item of PPE and are recognised in the statement of profit or loss using the straight-line method. The estimated useful lives, residual values (if any) and depreciation method are reviewed, and if necessary adjusted, at least annually. Depreciation commences when the assets are ready for their intended use.

An item of PPE is derecognised upon disposal or when no future economic benefits are expected to arise from the continued use of the asset. Any gain or loss arising on disposal or retirement of PPE, determined as the difference between the sales proceeds and the carrying amount of the asset, is recognised under other operating income or other operating expenses in the statement of profit or loss.

Accounting principle for impairment of assets, see Note 19 Impairment assessment.

Judgements and estimates

Estimated useful lives, residual values (if any) included in calculation of depreciation of PPE are reviewed and, if necessary, adjusted at least annually.

Details of property, plant and equipment 2022

Amounts in NOK million	Land	Buildings and other property	Plant, machinery, equipment and motor vehicles	Office and other equipment	Construction in progress	Total
Cost						
Opening balance	217	8 064	23 043	866	2 819	35 009
Additions	1	13	34	5	4 091	4 143
Transferred from CiP	2	475	1 271	181	(1 929)	-
Reclassification	-	1	1	(6)	(40)	(43)
Business combinations (note 4)	1	185	749	0	7	942
Disposal of subsidiaries (note 4)	-	-	-	-	(29)	(29)
Disposals	(0)	(10)	(384)	(9)	(12)	(415)
Currency translation differences	13	229	691	40	116	1 088
Closing balance	233	8 957	25 406	1 078	5 022	40 696

Accumulated depreciation

Opening balance	(2 999)	(13 085)	(430)			(16 514)
Additions	(263)	(1 293)	(137)			(1 693)
Reclassification	0	(1)	1			0
Disposals	8	306	6			321
Currency translation differences	(68)	(365)	(20)			(453)
Closing balance	(3 322)	(14 437)	(580)			(18 339)

Impairment losses

Opening balance	(11)	(419)	(2 315)	(1)	(28)	(2 774)
Additions	-	(10)	(13)	(0)	(5)	(28)
Reclassification	-	6	(6)	(0)	-	(0)
Disposals	-	0	44	0	4	48
Currency translation differences	(1)	(13)	(68)	(0)	(1)	(82)
Closing balance	(11)	(435)	(2 358)	(1)	(30)	(2 836)

Carrying amount

Closing balance	222	5 200	8 610	497	4 991	19 520
------------------------	-----	-------	-------	-----	-------	---------------

Original cost of assets fully depreciated but still in use 0 2 738 6 592 252 - **9 583**

Estimated useful life	Indefinite	5–50 years	3–50 years	3–20 years		
Depreciation plan		Straight-line	Straight-line	Straight-line		

Capitalised interest is NOK 20 million in 2022. The weighted average cost of capital for capitalisation of loan interest in 2022 is in the range of 2.5% and 3.7% per annum.

**Details of property, plant and equipment
2021**

Amounts in NOK million	Land	Buildings and other property	Plant, machinery, equipment and motor vehicles	Office and other equipment	Construction in progress	Total
Cost						
Opening balance	184	7 474	21 720	582	1 799	31 759
Additions	17	55	67	132	2 762	3 033
Transferred from CiP	21	344	1 122	186	(1 674)	-
Reclassification	-	7	1	(14)	(105)	(110)
Business combinations (note 4)	-	-	-	-	-	-
Disposals	(0)	(21)	(290)	(12)	(6)	(328)
Currency translation differences	(5)	205	423	(8)	42	656
Closing balance	217	8 064	23 043	866	2 819	35 009
Accumulated depreciation						
Opening balance		(2 738)	(11 929)	(377)		(15 043)
Additions		(236)	(1 211)	(76)		(1 523)
Reclassification		(6)	(2)	9		1
Disposals		17	228	10		255
Currency translation differences		(37)	(171)	4		(203)
Closing balance		(2 999)	(13 085)	(430)		(16 514)
Impairment losses						
Opening balance	(11)	(384)	(2 162)	(0)	(26)	(2 584)
Additions	-	(9)	(54)	(1)	(3)	(67)
Reclassification	-	-	(0)	0	-	-
Disposals	-	0	35	0	2	38
Currency translation differences	0	(25)	(134)	(0)	(2)	(160)
Closing balance	(11)	(419)	(2 315)	(1)	(28)	(2 774)
Carrying amount						
Closing balance	206	4 646	7 644	435	2 790	15 722
Original cost of assets fully depreciated but still in use	0	1 368	6 455	126	-	7 950
Estimated useful life	Indefinite	5–50 years	3–50 years	3–20 years		
Depreciation plan		Straight-line	Straight-line	Straight-line		

Capitalised interest is NOK 5 million in 2021. The weighted average cost of capital for capitalisation of loan interest in 2021 is in the range of 2.5% and 3.1% per annum.

Elkem has decided to transfer the production at Elkem Carbon Malaysia to other Elkem Carbon Solutions production sites.

An impairment loss of NOK 60 million was recognised in 2021 due to the transfer, of which NOK 55 million is related to impairment of property, plant and equipment and NOK 5 million to right-of-use assets. The impairment loss of PPE is mainly related to plant, machinery, equipment and motor vehicles and buildings and other property.

16. Leases

Principle

Right-of-use assets are presented separately in the statement of financial position, whereas lease liabilities are recognised in interest-bearing liabilities.

Right-of-use-assets

Elkem's policy in general is to own critical assets related to the production cycle, including production buildings and land where this is not controlled by the local government or other parties. The group's main lease contracts comprise office buildings and machinery / storage assets to be used at production sites. The less significant lease contracts comprise employee cars, machinery and equipment.

Elkem assesses at contract inception whether a contract is, or contains, a lease. That is, if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

Elkem applies single recognition and measurement approach for all leases, except for:

- Lease contracts for which the lease term ends within 12 months as of the date of initial application are not capitalised (short-term leases). Elkem's short-term lease commitments are mainly related to rental of equipment in connection with maintenance or installation of new equipment.
- Lease contracts for which the underlying asset is of low value, mainly office equipment, are not capitalised.
- Lease of intangible assets are not capitalised.
- Lease payments on contracts that are not capitalised are recognised as other operating expenses on a straight-line basis over the lease term.

Elkem recognise right-of-use assets at the commencement date of the lease (i.e., the date the underlying assets is available for use). Right-of-use assets are measured at cost, less any accumulated depreciation and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognised, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received. Right-of-use assets are depreciated on a straight-line basis from the commencement date to the earlier of the lease term and the remaining useful life of the right-of-use asset for assets where Elkem does not obtain ownership of the leased asset at the end of the lease term. Depreciation expense on the right-of-use asset is presented as depreciation in the statement of profit or loss. Right-of-use assets are subject to impairment assessments as described in note 19 Impairment assessment.

Lease liabilities

At the commencement date of a lease, Elkem recognise lease liabilities measured at the present value of the lease payments to be made over the lease term. The lease payments include fixed payments (less any lease incentives receivable), variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. Non-lease components like insurance, electricity and other property-related expenses to be paid to landlord are excluded from the lease commitment for offices. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by Elkem and payments of penalties for terminating the lease, if the lease term reflects exercising the option to terminate. Variable lease payments that do not depend on an index or a rate are recognised as expenses in the period in which the event or condition that triggers the payment occurs. Elkem uses the incremental borrowing rate at the lease commencement date if the interest rate implicit in the lease cannot be readily determined. The incremental borrowing rate is based on the respective country's risk-free rate for the term corresponding to the lease term, adjusted for own credit risk. Updated incremental borrowing rates are applied to new lease contracts recognised on a quarterly basis.

Lease liability is remeasured upon the occurrence of certain events like change in the lease term, lease payments or reassessment of options which in general implies a change in the carrying amount of the right-of-use asset. If any changes to the contractual terms and conditions; like increase of scope Elkem needs to assess whether the change implies a separate lease if the change has a standalone price. The existing right-of-use asset is adjusted if the increase of scope does not indicate a standalone price or for any other modifications.

Judgements and estimates

The lease term is determined as the non-cancellable period of a lease, together with any periods covered by an option to extend the lease if Elkem is reasonably certain to exercise that option and any periods covered by an option to terminate the lease if the lessee is reasonably certain not to exercise that option. Elkem's main renewal options relate to lease of buildings for office and production purpose, included in Plant, buildings and other property, and lease of land and it is reasonably certain that the renewal option will be used. Elkem reassesses the lease term if there is a significant event or change in circumstances that is within its control and affects its ability to exercise, or not to exercise, the option to renew.

**Details of right-of-use assets
2022**

Amounts in NOK million	Land	Buildings and other property	Plant, machinery, equipment and motor vehicles	Office and other equipment	Total
Cost					
Opening balance	432	730	138	11	1 310
Additions / lease modifications / remeasurements	4	105	21	0	131
Disposal of subsidiaries (note 4)	(118)	(145)	-	-	(264)
Partial or full termination of agreements	(0)	(46)	(15)	(9)	(71)
Currency translation differences	9	15	7	1	31
Closing balance	326	659	150	2	1 138
Accumulated depreciation					
Opening balance	(66)	(143)	(75)	(5)	(288)
Additions	(8)	(79)	(32)	(1)	(119)
Disposal of subsidiaries (note 4)	8	10	-	-	18
Reclassification	(3)	(7)	-	-	(10)
Partial or full termination of agreements	0	32	15	5	53
Currency translation differences	(2)	(6)	(4)	(0)	(12)
Closing balance	(70)	(191)	(96)	(1)	(359)
Impairment losses					
Opening balance	-	(1)	-	(4)	(5)
Disposals	-	1	-	4	5
Currency translation differences	-	(0)	-	(0)	(0)
Closing balance	-	(0)	-	-	0
Carrying amount					
Closing balance	256	468	55	1	779
Estimated useful life	8-99 years	2-25 years	2-6 years	3-4 years	
Depreciation plan	Straight-line	Straight-line	Straight-line	Straight-line	

**Details of right-of-use assets
2021**

Amounts in NOK million	Land	Buildings and other property	Plant, machinery, equipment and motor vehicles	Office and other equipment	Total
Cost					
Opening balance	415	529	134	10	1 087
Additions / lease modifications / remeasurements	0	239	18	2	260
Reclassification	(0)	0	0	(1)	-
Partial or full termination of agreements	-	(41)	(10)	-	(51)
Currency translation differences	17	2	(5)	(0)	14
Closing balance	432	730	138	11	1 310
Accumulated depreciation					
Opening balance	(51)	(105)	(53)	(3)	(212)
Additions	(4)	(77)	(34)	(2)	(116)
Reclassification	(7)	(0)	0	0	(7)
Partial or full termination of agreements	-	40	9	-	49
Currency translation differences	(3)	(1)	2	0	(2)
Closing balance	(66)	(143)	(75)	(5)	(288)
Impairment losses					
Opening balance	-	-	-	-	-
Additions	-	(1)	-	(4)	(5)
Currency translation differences	-	(0)	-	(0)	(0)
Closing balance	-	(1)	-	(4)	(5)
Carrying amount					
Closing balance	366	586	62	2	1 017
Estimated useful life	1-99 years	1-25 years	2-5 years	3-6 years	
Depreciation plan	Straight-line	Straight-line	Straight-line	Straight-line	

Carrying amounts of lease liabilities and the movements during the period

Amounts in NOK million	2022	2021
Opening balance	801	663
Additions / lease modifications / remeasurements	124	260
Partial or full termination of agreements	(6)	(2)
Disposal of subsidiaries	(238)	-
Payments	(146)	(144)
Interest expenses on lease liabilities	30	26
Currency translation differences	13	(2)
Closing balance (note 23)	578	801

The maturity analysis of lease liabilities is disclosed in note 23
Interest-bearing assets and liabilities

Amounts recognised in consolidated statement of profit or loss

Amounts in NOK million	2022	2021
Depreciation of right-of-use assets	(119)	(116)
Interest expenses on lease liabilities (note 13)	(30)	(26)
Leasing expenses, short-term leases (note 11)	(56)	(44)
Leasing expenses, low value assets (note 11)	(13)	(11)
Leasing expenses, variable lease payments (note 11)	(2)	(2)
Total amount recognised in consolidated statement of profit or loss	(219)	(199)

17. Other intangible assets

Principle

Intangible assets are stated in the consolidated financial statements at cost less accumulated amortisation and accumulated impairment losses. Intangible assets acquired in business combinations are recognised at fair value at the acquisition date. Intangible assets with a finite useful life are amortised, using the straight-line method, commencing when the asset is available for use. Assets that are an integral part of a group of assets are amortised from the date the related asset group as a whole is ready for its intended use. Such assets are impairment tested annually.

The estimated useful lives are reviewed at the end of each reporting period.

An intangible asset is derecognised on disposal, or when the group expects no future economic benefits to be derived from its use. Gain or loss arising from derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, is recognised in other operating income or other operating expenses in the statement of profit or loss.

Expenditure on research activities is recognised as an expense in the period in which it is incurred. An intangible asset arising from an internal development project is recognised in the statement of financial position if the group can demonstrate technical feasibility of completing the intangible asset, has the intention to complete it, ability to use it, can demonstrate that it will generate probable future economic benefits and the cost can be reliably measured. Expenditures related to research and development activities, see note 11 Other operating expenses.

Accounting principle for impairment of assets, see Note 19 Impairment assessment.

Judgements and estimates

Estimated useful lives are used in calculation of amortisation of intangible assets, these are reviewed, and if necessary adjusted, at least annually.

Details of intangible assets

2022

Amounts in NOK million	Land use rights	Technology and licences	Software	Development	Other intangible ¹⁾	Intangible assets under construction	Total
Cost							
Opening balance	103	828	567	775	335	568	3 175
Additions ²⁾	-	-	24	1	0	310	335
Transferred from CiP	-	-	5	58	-	(63)	-
Reclassification	-	3	43	-	(1)	7	53
Business combinations (note 4)	-	0	-	-	6	-	6
Disposal of subsidiaries (note 4)	-	-	-	-	-	(460)	(460)
Disposals	-	-	(30)	-	-	(3)	(33)
Currency translation differences	5	36	18	46	11	18	134
Closing balance	108	868	627	880	350	377	3 209

Accumulated amortisation

Opening balance	(55)	(513)	(398)	(519)	(87)		(1 572)
Additions	(2)	(41)	(54)	(57)	(33)		(186)
Reclassification	-	-	(1)	-	1		(0)
Disposals	-	-	8	-	-		8
Currency translation differences	(3)	(26)	(12)	(30)	(3)		(74)
Closing balance	(59)	(579)	(457)	(606)	(122)		(1 824)

Impairment losses

Opening balance	(1)	-	-	-	-	-	(1)
Currency translation differences	(0)	-	-	-	-	-	(0)
Closing balance	(1)	-	-	-	-	-	(1)

Carrying amount

Closing balance	48	288	170	273	228	377	1 385
------------------------	----	-----	-----	-----	-----	-----	--------------

Estimated useful life	3–10 years	3–15 years	3–10 years	3–16 years	3–10 years
Amortisation plan	Straight-line	Straight-line	Straight-line	Straight-line	Straight-line

¹⁾ Other intangible assets consists mainly of customer relationships.

²⁾ Additions in 2022 consists mainly of capitalisation of development projects of NOK 312 million of which NOK 230 million is related to Elkem's biocarbon initiative and battery projects.

**Details of intangible assets
2021**

Amounts in NOK million	Land use rights	Technology and licences	Software	Development	Other intangible ¹⁾	Intangible assets under construction	Total
Cost							
Opening balance	108	836	469	714	322	305	2 753
Additions ²⁾	-	1	16	-	-	324	342
Transferred from CiP	-	2	6	80	-	(87)	-
Reclassification	-	8	81	-	-	29	118
Business combinations (note 4)	-	-	-	-	-	-	-
Disposals	-	-	(9)	-	(0)	-	(9)
Currency translation differences	(5)	(19)	4	(19)	12	(2)	(28)
Closing balance	103	828	567	775	335	568	3 175
Accumulated amortisation							
Opening balance	(56)	(487)	(349)	(486)	(55)	-	(1 433)
Additions	(1)	(41)	(50)	(53)	(31)	-	(177)
Reclassification	-	-	(1)	-	-	-	(1)
Disposals	-	-	5	-	0	-	5
Currency translation differences	3	15	(3)	21	(1)	-	35
Closing balance	(55)	(513)	(398)	(519)	(87)	-	(1 572)
Impairment losses							
Opening balance	(1)	-	-	-	-	-	(1)
Additions	-	-	(4)	-	-	-	(4)
Disposals	-	-	4	-	-	-	4
Currency translation differences	0	-	-	-	-	-	0
Closing balance	(1)	-	-	-	-	-	(1)
Carrying amount							
Closing balance	47	315	169	256	248	568	1 602
Estimated useful life	3–10 years	3–15 years	3–10 years	3–16 years	3–10 years		
Amortisation plan	Straight-line	Straight-line	Straight-line	Straight-line	Straight-line		

¹⁾ Other intangible assets consists mainly of customer relationships.

²⁾ Additions in 2021 consists mainly of capitalisation of development projects of NOK 300 million of which NOK 228 million is related to Elkem's biocarbon initiative and battery projects.

18. Goodwill

Principle

Goodwill

Goodwill is initially measured as the excess of the cost of an acquisition over the group's share of the fair values of the acquired entity's net identifiable assets at the acquisition date. If the fair value of the group's interest in the net assets of the acquired subsidiary exceeds the cost of the acquisition (negative goodwill), the differences are recognised directly in the statement of profit or loss as other items. Goodwill is carried at cost less accumulated impairment losses. Goodwill is tested for impairment annually, or more frequently when there is an indication of impairment. An impairment loss recognised for goodwill is not reversed in subsequent periods.

Accounting principle for impairment of assets, see Note 19 Impairment assessment.

Judgements and estimates

The fair value of an acquired entity's net identifiable assets used to initially measure goodwill are dependent on assumptions such as future cash flows and discount rate. See note 4 Composition of the group.

Judgments and estimates for impairment of assets, see Note 19 Impairment assessment.

Details of goodwill

Amounts in NOK million	2022	2021
Opening balance	941	919
Currency translation differences	43	22
Closing balance	984	941

**Origin of goodwill per CGU
31 December 2022**

Amounts in NOK million	Silicones	Silicon Products	Carbon Solutions	Total
Elkem Silicones Guangdong Co., Ltd.	499	-	-	499
Elkem Silicones Korea Co., Ltd	126	-	-	126
Elkem Silicones	80	-	-	80
Elkem Rana AS	-	40	-	40
Elkem Nagpur	-	38	-	38
Elkem Oilfield Chemical FZCO	-	23	-	23
Elkem Dronfield Ltd.	-	16	-	16
Elkem Materials Process Services BV	-	0	-	0
Ferroveld JV	-	-	43	43
Elkem Participações Indústria e Comércio Limitada	-	-	8	8
Elkem Carbon (China) Co., Ltd.	-	-	1	1
NEH LLC	-	93	17	110
Total goodwill	705	209	69	984

**Origin of goodwill per CGU
31 December 2021**

Amounts in NOK million	Silicones	Silicon Products	Carbon Solutions	Total
Elkem Silicones Guangdong Co., Ltd.	485	-	-	485
Elkem Silicones Korea Co., Ltd	119	-	-	119
Elkem Silicones	76	-	-	76
Elkem Rana AS	-	40	-	40
Elkem Nagpur	-	37	-	37
Elkem Oilfield Chemical FZCO	-	21	-	21
Elkem Dronfield Ltd.	-	16	-	16
Elkem Materials Process Services BV	-	0	-	0
Ferroveld JV	-	-	41	41
Elkem Participações Indústria e Comércio Limitada	-	-	7	7
Elkem Carbon (China) Co., Ltd.	-	-	1	1
NEH LLC	-	83	15	98
Total goodwill	680	197	64	941

19. Impairment assessments

Principle

Impairment exists when the carrying value of an asset or cash generating unit (CGU) exceeds its recoverable amount, which is the higher of its fair value less costs of disposal and its value in use. The fair value less cost of disposal calculation is based on data from binding sales transactions, conducted at arm's length for similar assets or observable market prices less incremental costs of disposing the asset. The value in use calculation is based on a DCF model. The cash flows are derived from the budget for the next five years and do not include restructuring activities that Elkem is not yet committed to or significant future investments that will enhance the performance of the assets of the CGU being tested. A long-term growth rate is calculated and applied to project future cash flows after the fifth year.

A CGU is the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets.

Indicators of impairment will typically be changes in technological development, changes in market conditions and changes in the competitive situation.

Impairment loss and reversal of previous impairment losses are recognised as impairment losses in the statement of profit or loss.

Goodwill

Goodwill arising from a business combination is allocated to CGUs or groups of CGUs that are expected to benefit from the synergies of the combination. Goodwill is tested

for impairment annually, or more frequently when there is an indication of impairment. An impairment loss recognised for goodwill is not reversed in subsequent periods.

Intangible assets, property plant and equipment and right-of-use assets

Intangible assets with indefinite useful lives are tested for impairment annually, or more frequently when there is an indication of impairment. For the other non-financial assets Elkem assess, at each reporting date, whether there is an indication that an asset may be impaired. A previously recognised impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognised. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognised for the asset in prior years.

Judgements and estimates

There is significant judgment required to determine the CGU for impairment testing. For goodwill the determination of the CGU is based on the level where synergies are expected to be realised following a business combination. The CGU for impairment testing of goodwill is determined to be the operating segments as presented in note 6 Operating segments.

For impairment testing of fixed, intangible and right of use assets the CGU the lowest level that generates ingoing cash flows. This can be both a single plant or a combination of plants depending on the facts and circumstances.

The recoverable amounts of assets of CGUs subject to impairment testing are determined based on value-in-use calculations, which are based on estimated future cash flows. The uncertainty in the cash flows relates to future prices for both key input factors in the production and market prices for the sale of Elkem's products. There is uncertainty regarding these factors both for the next 12 months and for the rest of the forecast period. The estimated future cash flows are discounted using a discount rate before tax. The estimation uncertainty in the discount rate relates to the determination of the risk free rate and the beta. Elkem have performed sensitivity analysis in the impairment test to reflect the uncertainty in the estimates.

(a) Impairment test of goodwill

Discounted cash flow models are applied to determine the value in use for the cash-generating unit. Key assumptions used in the calculation of value in use are growth rate, EBITDA levels, capital expenditure and discount rates.

Growth rates

The expected growth rates for a cash-generating unit converge from its current level experienced over the last few years, to the long-term growth level in the market in which the entity operates. The growth rates used to extrapolate cash flow projections beyond the explicit forecast period are based on management's past experience, assumptions in terms of market share and expectations for the market development in which the entity operates. Growth rate used in Elkem's DCF models is 1.5% (2.0%).

EBITDA levels

EBITDA level represents the operating profit (loss) before depreciation and amortisation. The key assumptions used in reaching the forecast figures are sales prices, volume mix, operating costs and productivity targets.

Sales prices, volume and product mix: The 2023 budget is used as a basis for the forecast the next four years. Elkem experienced an increase in sales prices for most of Elkem's products in the first part of the year, but prices declined in the latter part of 2022. For Elkem's Silicones business the sales prices in China have been very volatile in 2022. In the impairment assessment Elkem has assumed sales prices will normalise and the price assumptions are below the current market situation for Silicon Products and Carbon Solutions. For Silicones the assumption is an increase in volume and prices compared to the current level, especially within specialty products. There are no observable long-term market prices for Elkem's products, but there are external independent sources such as CRU for the Silicon Products market that are used as a basis for the budget. Elkem works continuously to improve the specialty ratio and this is reflected in the impairment models. Sales volumes are adjusted for necessary maintenance stops.

Raw materials and energy for smelting: Most of Elkem's plants have long term energy contracts that covers their future need of power. The contract prices is used in the estimate of future cash flows. For Elkem's spot exposure observable market

prices are used adjusted for CPI. Raw material prices are based on 2023 budget and are adjusted to reflect expected volume / mix changes.

Climate related risk: The calculation of value in use reflects the expected development in both the cost of CO₂ quotas and the income from CO₂ compensation going forward in line with the current regulatory framework. Outside of this no climate related legislation has been passed at the current time that will impact the group. However, there is an expectation that any increase in cost due to new legislation will be covered by increased sales prices, full or partial compensation by incentive schemes or increased effectiveness resulting in limited impact on operating cash flows.

Other operating costs: These are estimated based on the current level and adjusted for committed operational efficiency programs. Changes to the outcome of these initiatives may affect future estimated EBITDA levels.

Capital expenditure ("Capex")

A normalised capex is assumed in the long run and are based on today's maintenance level and technology. Estimated capital expenditures do not include capital expenditures that significantly enhance the current performance, as such effects are not included in the cash flow projections.

Currency rates and inflation

The value-in-use calculation is performed in the functional currency for the CGU. The currency rates used to translate future incomes and expenses in other currencies than the functional currency are based on official forward rates from Reuters. The long-term inflation (CPI) are based on external predictions and reflect the CPI which each CGU is located.

Discount rates

The required rate of return is calculated by the WACC method. The cost of a company's equity and liabilities, weighted to reflect its capital structure of 50:50, respectively, derive from its weighted average cost of capital. The WACC rates are based on 10-year risk-free interest rate for the relevant currency of the CGU. The rates are adjusted for inflation differential and country risk premium. The discount rates also take into account the debt premium, market risk premium, corporate tax rate and asset beta. The WACC are adjusted for tax to determine a pre-tax rate that is used for discounting the estimated future cash flows.

Goodwill acquired through business combination are allocated to the operating segments Silicones, Silicon Products and Carbon Solutions. Impairment testing of goodwill is done for a group of CGUs that is included in the respective operating segments. The following table give an overview of carrying amount of goodwill allocated to each of the operating segments. The table also includes the pre-tax discount rate for each operating segment.

Cash Generating Units

Amounts in NOK million	Carrying amount		Pre-tax discount rate	
	31 December 2022	31 December 2021	31 December 2022	31 December 2021
Silicones	705	680	10.5 %	9.2%
Silicon Products	209	197	10.1 %	8.5%
Carbon Solutions	69	64	10.2 %	9.6%
Goodwill	984	941		

Sensitivity for test of goodwill

- An increase of 4% points in discount rate, for each operating segment's discount rate, will not result in impairment.
- A growth rate equal to zero for the terminal period, for the cash-flows for each operating segment will not result in impairment.
- A decrease in the forecasted EBITDA levels of 30% for the cash-flows for each operating segment will not result in impairment.

(b) Impairment test for intangible assets, property plant and equipment and right-of-use assets

For the assets with impairment indicators the recoverable amount was determined estimating the value in use of the assets, see the goodwill section above for assumption used. In 2022 Elkem has identified impairment indicators for one of its CGUs, see below. The CGU was not assessed to be impaired, as the recoverable amount exceed the carrying amount for the CGUs.

In 2021 Elkem identified impairment indicators within the Silicones segment, Silicones excluding Jiangxi Bluestar Xinghuo Silicones, Elkem Silicon Materials (Lanzhou), Elkem Silicones Korea and Elkem Silicones Guangdong, which are tested separately. The CGU have performed better in 2022 than in 2021, and no new impairment indicators are identified.

Elkem Silicones Guangdong

Elkem has identified impairment indicators within Elkem Silicones Guangdong. The total carrying amount of the CGU is NOK 187 million. The impairment indicators are largely due to deterioration of EBITDA margins in 2022 due to significantly increased raw material prices and limited pass-through opportunities for the specialty part of their sales portfolio. Raw material prices have come down and is expected to remain at a lower level with stable sales prices ensuring improved margins going forward.

The assumptions applied follow the assumptions as applied for the goodwill, see section above. It is assumed stable production and sales prices and somewhat reduced cost in 2023 compared to 2022. The contribution margin for the following years are on the same level as for 2022. Pre-tax discount rate used in the DCF calculation for the CGU is 9.5%. An increase of 4% points in discount rate, a growth rate used to extrapolate the cash-flows after five years equal to zero or a decrease in forecasted EBITDA of 30% points, will not result in an impairment for the CGU.

20. Inventories

Principle

Inventories are measured at the lower of cost and net realisable value. Inventory consists of raw materials, semi-finished goods and finished goods, in addition to operating materials and spare parts that do not meet the definition of property, plant and equipment. Raw materials, and operating materials and spare parts, are recognised at cost of purchase including transport and handling to their present location. Finished and semi-finished goods are measured at cost of raw materials, energy for production and cost of conversion up to the actual completion stage. Cost of conversion comprise operating expenses directly related to production of the products and an allocation of direct fixed operating expenses. The cost of CO₂ allowances that Elkem needs to purchase in addition to allowances received from the government (note 8), are based on estimated production / emissions for the year. The cost is allocated to cost of conversion proportionally over the year as the number of allocated allowances will not be revised unless there is a substantial change in the production level at the plants. Net realisable value represents the estimated selling price for inventories less estimated costs of completion and variable selling expenses.

Cost of goods sold is recognised in different lines in the statement of profit or loss based on nature; raw materials and energy for production, employee benefits and other operating expenses. Actual cost of conversion related to goods sold is reported net of change in cost of conversion in inventory and is included in other operating expenses.

Entities within the group sell goods to other group entities, consequently finished goods from one entity become raw materials or semi-finished goods for another group entity. The classification of goods in the group's statement of financial position is based on the separate entity's classification.

Judgements and estimates

The assessment of net realisable value for the inventory is based on estimated market prices in the period the inventory is expected to be sold. The actual market price will differ from the estimates used.

Details of inventory

Amounts in NOK million	31.12.2022			31.12.2021		
	Cost price	Provision	Net total	Cost price	Provision	Net total
Raw materials	3 322	(12)	3 310	2 767	(74)	2 693
Semi-finished goods	402	(41)	361	343	(41)	302
Finished goods	6 035	(142)	5 893	4 198	(63)	4 135
Operating materials and spare parts	792	(31)	761	610	(23)	586
Total inventories	10 550	(226)	10 325	7 918	(202)	7 716

This year's change in provision for impairment of inventory, a loss of NOK 14 million (loss of NOK 87 million), is recognised as a part of raw materials and energy for production.

21. Trade receivables

Principle

Trade and bills receivables are initially recognised at transaction price, which in most cases corresponds to their nominal amount. The carrying amount is subsequently measured at amortised cost using the effective interest rate method, less any provision for expected credit losses. Current receivables with no stated interest rate are recognised at their nominal amount.

A bill receivable is a document where the customer formally agrees to pay for delivered goods or services at maturity date and are normally guaranteed by a financial institution. A bill receivable is transferable and can be used to pay trade payables (endorsed) or be settled in cash with a finance institution (discounted). The bills receivables-document effectively replaces, for the specified amount, the trade receivable exchanged for the bill. Bills receivables (mainly bank acceptance bills that are guaranteed by a financial institution) are primarily used by Elkem's Chinese entities and the duration is normally below six months.

Trade receivables are derecognised when settled, replaced by bills receivable or when transferred to a third party and the group has no further risk related to the receivables. Bills receivables are derecognised when they are settled on due date or when the risk and reward are transferred to a third party. Transferral to a third party can be done by discounting

a bill receivable before due date or by endorsing the bill receivable, meaning that it is accepted by the supplier as payment for goods or services received.

Elkem calculates the expected credit losses (ECL) for trade receivables and bills receivables in accordance with the simplified approach. All expected cash flows, including cash flows from credit insurance contracts where such contracts are deemed to be an integral part of the transactions, is taken into consideration. The assessment is based on historical experienced losses adjusted for forward-looking estimates on changes in risk / probability that credit losses will occur for the different customer groups /segments where applicable.

Judgements and estimates

Judgement is applied when determining expected credit loss on trade receivables. The judgement is based on experienced losses in the past and expectations about future economic conditions for the different customer groups / business areas. Calculation of expected credit losses takes into account cash flows from credit insurance contracts when such contracts are deemed to be an integral part of the transaction. Elkem generally secures its trade receivables by credit insurance from a reputable credit insurance company, see note 27 Financial risk.

Details of trade receivables

Amounts in NOK million	31.12.2022	31.12.2021
Trade receivables	3 208	3 343
Trade receivables, related parties (note 32)	19	33
Allowance for expected credit losses	(65)	(69)
Bills receivable	1 086	990
Total trade receivables	4 248	4 297

Elkem has entered into factoring agreements with a credit limit of a total of EUR 162 million (EUR 127), NOK 1,698 million (NOK 1,265 million), to sell on continuing basis trade receivables that meet specific conditions. The agreements include a recourse clause for maximum 5% -10%, depending on the agreement, of the face value of the individual receivables sold. The non-recourse amount of the receivables sold is derecognised and the recourse amount is recognised as a current liability when the title to the receivables is transferred. As of 31 December 2022, NOK 106 million (NOK 57 million) is recognised as current liability (see note 24 Provisions and other liabilities). In addition, Elkem has entered into factoring agreements without recourse for some specific customers. Receivables that are sold without recourse are derecognised in its entirety when the title is transferred, as there is no remaining credit risk after transfer.

As at 31 December 2022 NOK 1,777 million (NOK 1,467 million) of Elkem's trade receivables are derecognised under these agreements.

Bills receivable consist of NOK 1,086 million (NOK 989 million) bank acceptance bills and NOK 0 million (NOK 2 million) commercial acceptance bills.

A total of NOK 4,033 million (NOK 4,253 million) in unmatured bills receivables are endorsed to a third party where the final payment of the bill is guaranteed by a highly rated financial institution. Elkem will only suffer losses on an endorsed bill if the bank that have issued the bill or all companies that have endorsed the bill before Elkem goes bankrupt. These bills are derecognised as there is very low remaining credit risk related to endorsed bills.

Analysis of gross trade receivables by age, presented based on the due date

Amounts in NOK million	31.12.2022	31.12.2021
Not due	2 392	2 883
Overdue by:		
1-30 days	527	352
31-60 days	92	48
61-90 days	124	27
More than 90 days	91	66
Total trade receivables ¹⁾	3 227	3 376

¹⁾ Bills receivable is not included in the ageing table

Movements in allowance for expected credit losses

Amounts in NOK million	2022	2021
Opening balance	(69)	(92)
Business combinations (note 4)	-	-
Realised losses during the year / Received on earlier losses	5	12
Provision for expected credit losses	(27)	(10)
Reversal of earlier provisions	29	24
Currency translation differences	(2)	(4)
Closing balance	(65)	(69)

Analysis of allowance for expected credit losses, presented based on related trade receivables

Amounts in NOK million	31.12.2022	31.12.2021
Not due	(13)	(14)
Overdue by:		
1-30 days	(1)	(1)
31-60 days	(0)	(0)
61-90 days	(3)	(4)
More than 90 days	(48)	(50)
Total allowance for expected credit losses	(65)	(69)

22. Other assets

Principle

Other shares

Investments in equity instruments with an ownership below 20% are normally classified as other shares and recognised in other non-current assets in the statement of financial position. Other shares consist of equity investments in both listed and unlisted companies. Shares in listed companies are measured at fair value through profit or loss. Investments in equity instruments that do not have a quoted market price in an active market are classified as financial assets measured at fair value through other comprehensive income (OCI). Changes in fair values recognised in OCI cannot be subsequently recycled to statement of profit or loss. Dividends from such investments are recognised as other items in the statement of profit or loss.

Financial assets

A financial asset is recognised in the statement of financial position when Elkem becomes party to a contract. Assets to be acquired in relation to a firm commitment to sell goods or services are recognised at the time Elkem has performed under the agreement.

At initial recognition, the financial assets are carried in the statement of financial position at fair value plus any transaction costs directly attributable to the acquisition or issue of the asset. Financial assets are derecognised once the right to future cash flows have expired or been transferred to a third party, and Elkem has transferred substantially all the risk and rewards of control of these assets. Any rights or obligations retained in any transferred assets are booked separately as assets or liabilities.

Financial assets with a maturity exceeding one year are classified as non-current financial assets. Short-term investments that do not meet the definitions of a cash equivalent, and financial assets with a maturity of less than one year, are classified as current financial assets.

Loans and receivables

Loans and receivables are non-derivative hold to collect financial assets with fixed or determinable payments that are not quoted in a regulated market. After initial recognition, they are recognised at amortised cost using the effective interest method. Gains and losses are recognised in the statement of profit or loss when the loans and receivables are derecognised or impaired, as well as through the amortisation process.

If there is objective evidence of impairment, or if there is a risk that the group may not recover the contractual amounts at the contractual maturity dates, an impairment loss is recognised in the statement of profit or loss. The provision is equal to the difference between the carrying amount and the estimated future recoverable cash flows.

Current assets

Current receivables are initially recognised at fair value, which in most cases corresponds to their nominal amount. The carrying amount is subsequently measured at amortised cost using the effective interest rate method, less any provision for expected credit losses. Current receivables with no stated interest rate are recognised at their nominal amount.

Judgements and estimates

Judgement is applied when assessing the value of shares in unlisted companies. For estimates related to valuation of financial assets, see note 25 Financial assets and liabilities. Judgement is applied when determining the estimated expected credit loss on other receivables and prepayments. The judgement is based on experienced losses in the past and expectations about future economic conditions for the different counterparties.

Details of other assets

Amounts in NOK million	Non-current		Current	
	31.12.2022	31.12.2021	31.12.2022	31.12.2021
Other shares	24	32	-	-
Restricted deposits	46	41	-	-
Other deposits	10	34	-	-
Pension assets, defined benefits and contribution plans (note 9)	41	1	2	2
Prepayments for construction of fixed assets	99	24	-	-
Prepayments for goods and equipment	-	-	150	169
Prepayments for other expenses	77	72	90	87
Prepayments to related parties (note 32)	-	-	15	18
Receivables from related parties, interest-bearing (note 32)	1	1	-	-
Receivables from related parties, interest free (note 32)	-	-	7	1
Grants receivable (note 8)	306	202	620	493
Value added tax	64	47	418	361
Corporate income tax	-	-	338	237
Interest receivables	-	-	0	1
Other receivables	8	8	47	155
Assets at fair value through profit or loss	-	-	-	14
Other assets	39	15	11	14
Total other assets	716	478	1 698	1 551

Provision for impairment included in total other assets, mainly prepayments.

(75) (69)

Restricted deposits mainly consist of restricted deposits related to the ongoing tax litigation in Elkem's business in Brazil of NOK 15 million (NOK 14 million), see note 24 Provisions and other liabilities, and deposit for pension guarantee, related to unfunded pension liabilities for salaries above 12G, of NOK 31 million (NOK 27 million). Other receivables includes NOK 12 million (NOK 87 million) related to settlement of power derivatives.

Corporate income tax receivable partly consists of Elkem ASA's pending tax issues with tax authorities (see note 14 Taxes). Elkem's assessment is that the defence against the action will be successful, but that the case consideration might take up to 3 years. Parts of Elkem's income tax receivables is correspondingly expected to be settled later than one year.

23. Interest-bearing assets and liabilities

Principle

Interest-bearing liabilities

The liabilities are initially recognised at fair value of the amount required to settle the associated obligation, net of prepaid costs directly attributable to the liability. Subsequently and insofar, as they are not designated as liabilities at fair value through profit or loss, such liabilities are recognised at amortised cost using the effective interest rate method.

Financial assets are derecognised when the rights to receive cash flows from the assets have expired or have been transferred to a third party. Financial liabilities are derecognised when they are extinguished.

Bills payable

A bill payable is a document where the buyer formally agrees to pay for purchased goods or services at maturity date and are normally guaranteed by a financial institution. The bills payable are initially recognised when the supplier accepts the bill of exchange and is recognised at the amount equal to the trade payables it replaces. Bills payable are used by Elkem's Chinese entities, and the duration is normally

below six months. When the bill payable is guaranteed by a financial institution it is normally required to deposit a certain per centage of the nominal value of the bill payable into a restricted bank account. All bills payable in Elkem are bank acceptance bills which is guaranteed by a financial institution.

Cash and cash equivalents

Cash and cash equivalents are held for the purpose of meeting short-term fluctuations in liquidity. Deposits with a term of 3 months or less on acquisition are included. Bank overdrafts are presented within interest-bearing current liabilities in the statement of financial position. Restricted deposits are presented separately in the statement of financial position and excluded from cash and cash equivalents presented in the statement of cash flows.

Lease liabilities

See note 16 Leases for accounting policies for right-of-use assets and lease liabilities.

Details of interest-bearing assets / (liabilities)

Amounts in NOK million	Non-current		Current	
	31.12.2022	31.12.2021	31.12.2022	31.12.2021
Interest-bearing liabilities				
Lease liabilities (note 16)	475	685	103	116
Loans from external parties, other than bank	3 697	3 125	10	1 264
Bank financing	6 160	4 599	74	572
Accrued interest	-	-	17	20
Total interest-bearing liabilities	10 331	8 409	204	1 972
Total bills payable	-	-	1 742	2 096
Total interest-bearing liabilities including bills payable	10 331	8 409	1 946	4 067
Interest-bearing assets				
Cash and cash equivalents	-	-	9 255	7 040
Restricted deposits bills payable	-	-	395	601
Other restricted deposits	46	41	12	8
Receivables from related parties	1	1	-	-
Loans to external parties	8	8	-	-
Accrued interest income	-	-	0	1
Total interest-bearing assets	55	50	9 663	7 650
Net interest-bearing assets / (liabilities)	(10 276)	(8 359)	7 717	3 583

Interest-bearing liabilities by currency

Amounts in NOK million	31.12.2022		31.12.2021	
	Currency amount	NOK	Currency amount	NOK
EUR	630	6 620	608	6 083
USD	3	31	4	38
NOK	2 753	2 753	3 038	3 038
CNY	1 963	2 809	2 333	3 240
Other currencies	-	66	-	77
Total interest-bearing liabilities		12 278		12 476

Maturity of interest-bearing liabilities 31 December 2022

Amounts in NOK million	2023	2024	2025	2026	2027	2028 and later	Total
Lease liabilities	103	74	57	47	40	257	578
Loans from external parties, other than bank	10	916	1 234	942	500	105	3 706
Bank financing	74	9	39	63	5 335	755	6 276
Bills payable	1 742						1 742
Accrued interest	17						17
Total interest-bearing liabilities excluding prepaid loan fees	1 946	1 000	1 330	1 052	5 875	1 117	12 320
Prepaid loan fees							(42)
Total interest-bearing liabilities							12 278

Maturity of interest-bearing liabilities 31 December 2021

Amounts in NOK million	2022	2023	2024	2025	2026	2027 and later	Total
Lease liabilities	116	101	80	64	53	387	801
Loans from external parties, other than bank	1 264	7	1 118	1 000	500	500	4 389
Bank financing	572	4 398	206	3	3	4	5 186
Bills payable	2 096						2 096
Accrued interest	20						20
Total interest-bearing liabilities excluding prepaid loan fees	4 067	4 506	1 404	1 067	557	891	12 492
Prepaid loan fees							(16)
Total interest-bearing liabilities							12 476

Loan agreements

The main non-current loan agreements as of 31 December 2022 are a term loan of EUR 500 million (EUR 400 million), a term loan of EUR 0 million (EUR 5 million), issued bond loans of a total of NOK 2,500 million (NOK 2,500 million) and a series of loans issued in the Schuldschein market of EUR 113 million (EUR 61 million). The main loan agreements are granted to Elkem ASA. In addition Elkem Silicones Xinghuo financing is parts of its upgrade of property, plant and equipment with a unsecured term loan of CNY 650 million (CNY 0 million). The interest rates for the non-current loan agreements are in the range of 4.38% to 4.78% for the bond loans, 1.82% to 4.5% for the loans in the Schuldschein market and 3.45% to 3.95% for the PPE loans. For the term loan the interest rate is 3.44%.

Elkem placed EUR 200 million in the Schuldschein market on 4 and 6-year tenors in December 2022, where of EUR 52 million was disbursed in December 2022, while EUR 148 million was disbursed in January 2023. In June Elkem signed new bank facilities with a term loan of EUR 500 million and a credit facility of EUR 500 million, refinancing the term loan of EUR 400 million from prior year. Later in 2022 the facilities was linked to two sustainability KPIs, KPI 1 Lost Time Injury Rate and KPI 2 – Product Group Carbon Footprint. The margin of the RCF and term loan shall be reduced by 0.025% if both KPIs are met, and increased by 0.025% if none of the KPIs are met. If one KPI is met there shall be no change to the margin. The sustainability KPIS will first be tested for 2023 with effect from 2024.

One of the loans issued in the Schuldschein market (EUR 15 million), is a fixed rate loan with a fixed rate of 1.8160%. Given the market conditions as at 31 December 2022 the loan would have been approximately EUR 0.7 million lower, due to the difference between fixed and market rate.

The bond loans are listed on Oslo Børs. There are no covenants related to the bond loans. There are no material differences between fair value of the bond loans and book values.

The loan facilities are unsecured, but part of the loans has financial covenants related to them, see below.

Covenant Elkem related to drawn loan of NOK 6,501 million (NOK 5,971 million) in Elkem ASA

Amounts in NOK million	31.12.2022	31.12.2021	Loan covenant
Equity ratio	55 %	47 %	> 30%
Interest cover ratio	58.38	37.33	> 4.00

Credit facilities

As of 31 December 2022 the group is granted credit facilities of NOK 6,356 million. At 31 December 2022 NOK 14 million is drawn.

As of 31 December 2021 the group is granted credit facilities of NOK 3,144 million. The credit facilities are undrawn at 31 December 2021.

The main revolving credit facilities are granted to Elkem ASA, but the facilities can be utilised by Elkem ASA and its subsidiaries. The main facilities amount to EUR 500 million, CNY 199 million, CNY 300 million and NOK 250 million respectively. See note 27 Financial risk, section (c) liquidity risk for more information.

Hedging

Some / part of loans are designated as a hedging instrument, see note 26 Hedging.

Loan covenant

Elkem has financial covenants related to its main bank financing and parts of loans from external parties, other than bank (Schuldschein), in Norway. The interest-bearing loans in China have no connected financial covenants. In addition to the covenants on these loan facilities in Norway there are loan covenants related to the credit facilities in Elkem Metal Canada Inc of CAD 2 million. Elkem and Elkem Metal Canada Inc. are compliant with their covenants at the end of 2022 and 2021.

The covenants for the interest-bearing loan facilities in Norway relate to the financial performance of Elkem and are as specified in the table below.

Movements in interest-bearing liabilities 2022

Amounts in NOK million	31.12.2021	Cash flows		Non-cash changes			31.12.2022
		Receipts/ Payments	Additions, lease modifications, remeasurements and terminations	Acquisition / Disposal of subsidiaries	Reclassification	Currency translation differences	
Lease liabilities	685	-	118	(218)	(117)	8	475
Loans from external parties	3 125	547	-	-	(9)	34	3 697
Bank financing	4 615	902	-	650	(189)	223	6 202
Total movements non-current	8 425	1 449	118	432	(315)	266	10 374
Lease liabilities	116	(116)	-	(20)	117	5	103
Loans from external parties	1 264	(1 328)	-	-	9	64	10
Bank financing	572	(710)	-	10	189	13	74
Total movements current	1 952	(2 153)	-	(9)	315	82	187
Total	10 376	(704)	118	423	-	348	10 561

Movements in interest-bearing liabilities 2021

Amounts in NOK million	31.12.2020	Cash flows		Non-cash changes			31.12.2021
		Receipts/ Payments	Additions, lease modifications, remeasurements and terminations	Reclassification	Currency translation differences		
Lease liabilities	566	-	258	(138)	(1)	685	
Loans from external parties	1 996	2 464	-	(1 266)	(69)	3 125	
Bank financing	4 652	132	-	(5)	(164)	4 615	
Total movements non-current	7 214	2 596	258	(1 409)	(233)	8 425	
Lease liabilities	97	(118)	-	138	(1)	116	
Loans from external parties	2 407	(2 373)	-	1 266	(36)	1 264	
Bank financing	762	(226)	-	5	31	572	
Total movements current	3 266	(2 717)	-	1 409	(6)	1 952	
Total movements	10 479	(122)	258	-	(239)	10 376	

24. Provisions and other liabilities

Principle

Provisions

A provision is recognised when the group has a present obligation (legal or constructive) and it is probable that an outflow of resources is required to settle the obligation. The amount recognised is the best estimate of the consideration required to settle the obligation, taking into account the risks and uncertainties surrounding the obligation, known at the end of the reporting period. Provisions are measured at present value, unless the time value is assessed to be immaterial.

Contract obligations

Contract obligations are liabilities assumed in business combinations, liabilities related to cancellation of contracts and contracts that includes guarantees for losses.

Other liabilities

The liabilities are initially recognised at fair value of the amount required to settle the associated obligation, net of prepaid costs directly attributable to the liability.

Contingent liabilities

Contingent liabilities are liabilities which are not recognised because they are possible obligations that have not yet been confirmed, or they are present obligations where an outflow of resources is not probable. Any significant contingent liabilities are disclosed in the notes.

Contingent assets

Contingent assets are not recognised but disclosed in the notes if probable.

Judgements and estimates

Elkem has several types of provisions due to its operations. Such liabilities are normally uncertain in timing and amount, and recognised amounts are estimates based on available information at the end of the reporting period. The estimated liability is based on expected cash flows necessary to settle the obligation, adjusted for any related risk and discounted by using the pre-tax interest applicable for the specific entity. The estimates are updated when new or updated information is available, or at a minimum at each reporting date. The actual outcome will differ from the estimate.

Details of provision and other liabilities

Amounts in NOK million	Non-current		Current	
	31.12.2022	31.12.2021	31.12.2022	31.12.2021
Employee withholding taxes and other public taxes	-	-	160	133
Value added tax	-	-	137	223
Prepayments	-	-	356	375
Prepayments from related parties (note 32)	-	-	17	10
Liabilities to related parties (note 32)	-	-	30	32
Provisions	216	127	102	287
Contract obligations power	-	-	-	4
Contingent consideration acquisition of subsidiaries	-	40	42	163
Accrued expenses	-	-	516	320
Grants, deferred income (note 8)	-	-	8	18
Grants payable (note 8)	16	15	-	-
Recourse liability factoring agreement (note 21)	-	-	106	57
Other liabilities	-	-	72	35
Total provisions and other liabilities	232	182	1 545	1 657

The contingent consideration acquisition of subsidiaries relates to the acquisition of Polysil on 1 April 2020. The payments of the contingent consideration was due in installements and the payments have not differed significantly from the maximum that was recognised initially.

Movements in contingent consideration

Amounts in NOK million	2022	2021
Opening balance	203	261
Fair value adjustment of contingent consideration upon payment	(0)	1
Unwinding	4	6
Payments	(176)	(78)
Currency translation differences	12	13
Closing balance	42	203

Movements in provision 2022

Amounts in NOK million	Restructuring	Site restoration	Environmental measures	Litigations	Customers	Other provisions	Total provisions
Opening balance	70	32	109	66	4	134	415
Additional provisions recognised	-	2	83	7	6	0	99
Used during the year	(31)	(0)	(2)	(17)	(1)	(127)	(180)
Reversal of provisions recognised	(26)	-	(1)	(1)	(1)	-	(28)
Currency translation differences	3	0	0	7	1	0	12
Closing balance	17	34	190	62	9	7	318
Hereof non-current	-	34	131	50	-	1	216
Hereof current	17	-	58	12	9	6	102
Closing balance	17	34	190	62	9	7	318

Movements in provision 2021

Amounts in NOK million	Restructuring	Site restoration	Environmental measures	Litigations	Customers	Other provisions	Total provisions
Opening balance	127	31	94	60	9	12	332
Additional provisions recognised	-	2	16	10	0	171	199
Used during the year	(17)	(0)	-	(1)	(5)	(47)	(72)
Reversal of provisions recognised	(41)	-	-	-	-	-	(41)
Currency translation differences	1	(0)	(0)	(3)	(0)	(2)	(4)
Closing balance	70	32	109	66	4	134	415
Hereof non-current	-	32	55	40	-	0	127
Hereof current	70	0	54	26	4	134	287
Closing balance	70	32	109	66	4	134	415

Restructuring

The provision is related to Elkem's group wide productivity improvement programme launched in first quarter of 2020.

Site restoration

The site restoration provisions are related to the necessary site remediation work that Elkem will have to undertake in respect of its quartz mines.

Environmental measures

Elkem has worldwide operations representing potential exposure towards environmental consequences. Elkem has established clear procedures to minimise environmental emissions, well within public emission limits. The provisions relate to clean up costs for a closed down production site and landfills, mainly in Canada and Norway, and also estimated cost for clean-up cost of polluted soil and fjord in relation to production sites in Norway and France. The additional provision recognised in 2022 includes NOK 70 million in restoration expense related to decommissioned business in Canada.

Litigations

The provisions due to litigations are mainly related to business tax cases in the Carbon division in Brazil.

Tax cases in Brazil can take a substantial amount of time before resolution by the tax authorities, hence the time of settlement is uncertain. Provisions are made for each case based on the

estimated amount expected to be paid, including interest and penalties. In accordance with Brazilian regulations, agreed amounts have been transferred to restricted bank accounts and are adjusted for interest. The restricted cash is recognised in other non-current assets, see note 22 Other assets.

Customers

The provisions are related to customer complaints, mainly in the Silicones division.

Other provisions

Consist mainly of a provision related to relocation of workers buildings located in proximity to the Silicones Xinghuo plant, required by the authorities. The provision was settled in 2022.

Contingent liabilities

Due to its operations Elkem could be included in criminal or civil proceedings related to, among others, product liability, environment, health and safety, anti-competitive, anti-corruption, trade sanctions or other similar laws or regulations or other forms of commercial disputes which could have a material adverse effect on Elkem. See section litigation above for ongoing cases and see note 14 Taxes for ongoing tax audits by authorities.

at the end of each reporting period. The resulting gain or loss is recognised in the statement of profit or loss immediately, unless the derivative is designated and is effective as a hedging instrument, in which case the change in fair value is recognised in statement of profit or loss in the same period(s) as the hedged objects affects the profit or loss.

Derivatives are presented as current assets or liabilities, unless they are expected to be realised more than 12 months after the reporting period. In that case, they are classified as non-current assets or liabilities.

Embedded derivatives

An embedded derivative is a component of a hybrid instrument that also includes a non-derivative host contract with the effect that some of the cash flows of the combined instrument vary in a way similar to a stand-alone derivative. Derivatives embedded in financial liability of a non-financial host are separated from the host and accounted for as separate derivatives if; the economic characteristics and risks are not closely related to the host, a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative and the hybrid contract is not measured at fair value through profit and loss. Elkem has long-term power contracts settled in other currencies than the entity's functional currency. The currency portion of these contracts is an embedded derivative and is recognised and presented as an independent derivative, see section derivatives above.

Commodity contracts within the scope of IFRS 9

Non-financial commodity contracts where the relevant commodity is readily convertible to cash and where the contracts are not for own use, fall within the scope of IFRS 9 Financial instruments - recognition and measurement. The group currently has energy contracts in Norway that do not

meet the own use criteria, since the power under the contracts is delivered in another grid area to where the plants are located. Transfer between different grid areas is assessed to be net settlement and considered to be two different transactions. Such contracts are therefore measured at fair value through profit or loss and classified as derivatives, unless they are designated as hedging instruments.

Judgements and estimates

Estimates are used for financial assets and liabilities where there are no listed prices or direct observable prices. Calculation of fair value is in such cases based on observable prices for similar contracts, as far as possible. For contracts with a duration beyond the period of observable prices, the assumptions are derived based on the latest observable data. Due to the current market situation in the energy market with very high prices and high volatility there is significant uncertainty in the estimation of forward power prices with direct impact on the value of the power contracts classified as financial instruments. The estimated value of the power contracts can be impacted by the changes in the power prices both within the next 12 months, but also in the period beyond 12 months. There is also uncertainty related to the discount rate used for discounting future cash flows and the expectation to the development in the consumer price index going forward.

See assumptions used at the balance sheet date in chapter (a) Fair value measurement below, and sensitivity of the main power contracts in note 27 Financial risk.

25. Financial assets and liabilities

Principle

Financial assets

A financial asset or a financial liability is recognised in the statement of financial position when Elkem becomes party to a contract. Assets to be acquired and liabilities to be incurred as a result of a firm commitment to purchase or sell goods or services are recognised at the time one of the parties has performed under the agreement.

At initial recognition, the financial assets are carried in the statement of financial position at fair value plus any transaction costs directly attributable to the acquisition or issue of the asset. Financial assets are derecognised when the right to future cash flows have expired or been transferred to a third party, once the group has transferred substantially all the risk and rewards of control of these assets. Any rights or obligations retained in any transferred assets are booked separately as assets or liabilities.

Financial assets with a maturity exceeding one year are classified as non-current financial assets. Short-term investments that do not meet the definitions of a cash equivalent, and financial assets with a maturity of less than one year, are classified as current financial assets.

Financial liabilities

Non-derivative financial liabilities include interest-bearing liabilities, bills payable and trade payables. The liabilities are initially recognised at fair value of the amount required to settle the associated obligation, net of prepaid costs directly attributable to the liability. Subsequently and insofar, as they are not designated as liabilities at fair value through profit or loss, such liabilities are recognised at amortised cost using the effective interest rate method.

Financial liabilities are derecognised when they are extinguished.

Derivatives

Derivative financial assets and liabilities include financial instruments or contracts where the value changes in response to the change of a specified rate, price or index and commodity contracts within the scope of IFRS 9.

Derivatives are initially recognised at fair value at the date when the derivative contracts are entered into. Transaction costs that are directly attributable to the acquisition of financial assets or liabilities at fair value through profit or loss, are recognised immediately in the statement of profit or loss. Subsequently the derivatives are remeasured to their fair value

**Assets by category
31 December 2022**

Amounts in NOK million	Note	Assets at fair value through profit or loss	Assets at fair value - hedging instruments	Assets at fair value		Non-financial assets	Total
				through other comprehensive income	Loans and receivables at amortised cost		
Derivatives, non-current		822	740	-	-	-	1 562
Other assets, non-current	22	7	-	18	65	627	716
Trade receivables	21	-	-	-	4 248	-	4 248
Derivatives, current		284	427	-	-	-	711
Other assets, current	22	-	-	-	54	1 644	1 698
Restricted deposits	23	-	-	-	408	-	408
Cash and cash equivalents	23	-	-	-	9 255	-	9 255
Total		1 113	1 167	18	14 030	2 271	

Liabilities by category
31 December 2022

Amounts in NOK million	Note	Liabilities at fair value through profit or loss	Liabilities at fair value - hedging instruments	Liabilities at amortised cost	Non-financial liabilities	Total
Interest-bearing liabilities, non-current ¹⁾	23	-	-	10 331	-	10 331
Provisions and other liabilities, non-current	24	-	-	-	232	232
Trade payables		-	-	5 335	-	5 335
Interest-bearing liabilities, current ¹⁾	23	-	8	196	-	204
Bills payable	23	-	-	1 742	-	1 742
Derivatives, current ²⁾		(27)	136	-	-	109
Provisions and other liabilities, current	24	42	-	724	779	1 545
Total		15	144	18 329	1 011	

Assets by category
31 December 2021

Amounts in NOK million	Note	Assets at fair value through profit or loss	Assets at fair value - hedging instruments	Assets at fair value through other comprehensive income	Loans and receivables at amortised cost	Non-financial assets	Total
Derivatives, non-current		(4)	308	-	-	-	304
Other assets, non-current	22	6	-	27	84	362	478
Trade receivables	21	-	-	-	4 297	-	4 297
Derivatives, current ²⁾		(2)	285	-	-	-	283
Other assets, current	22	14	-	-	157	1 381	1 551
Restricted deposits	23	-	-	-	609	-	609
Cash and cash equivalents	23	-	-	-	7 040	-	7 040
Total		14	593	27	12 187	1 743	

Liabilities by category
31 December 2021

Amounts in NOK million	Note	Liabilities at fair value through profit or loss	Liabilities at fair value - hedging instruments	Liabilities at amortised cost	Non-financial liabilities	Total
Interest-bearing liabilities, non-current ¹⁾	23	-	3	8 406	-	8 409
Derivatives, non-current ²⁾		(71)	88	-	-	18
Provisions and other liabilities, non-current	24	40	-	-	142	182
Trade payables		-	-	4 614	-	4 614
Interest-bearing liabilities, current ¹⁾	23	-	8	1 964	-	1 972
Bills payable	23	-	-	2 096	-	2 096
Derivatives, current ²⁾		(16)	40	-	-	23
Provisions and other liabilities, current	24	163	-	448	1 047	1 657
Total		116	138	17 527	1 189	

¹⁾ In addition to the hedging instruments included in derivatives, currency effect of EUR loan is designated as a hedging instrument in a cash flow hedge of highly probable future sales. See note 26 Hedging.

²⁾ The group applies hedge accounting for certain currency contracts and certain parts of power contracts. The negative value reported as assets and liabilities at fair value is representing the value of parts of power contracts where hedge accounting is not applied.

There are no material differences between fair value and the carrying amount for financial liabilities and financial assets at amortised cost.

(a) Fair value measurement

Elkem's financial instruments measured to fair value are categorised into three levels based on the inputs to the valuation techniques used to measure fair value.

Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets or liabilities that the entity can access at the measurement date.

Level 2 inputs are inputs, other than quoted prices included within level 1, that are observable for the asset or liability, either directly or indirectly.

Level 3 inputs are unobservable inputs for the asset or liability.

Assets and liabilities measured at fair value 31.12

Amounts in NOK million	Level 1	Level 2	Level 3	Total 2022	Level 1	Level 2	Level 3	Total 2021
Financial assets at fair value through profit or loss	7	287	819	1 113	6	39	(31)	14
Derivatives designated in a hedging relationship	-	(55)	1 222	1 167	-	175	418	593
Assets at fair value through other comprehensive income	-	-	18	18	-	-	27	27
Total assets	7	233	2 058	2 297	6	214	414	634
Financial liabilities at fair value through profit or loss	-	(27)	42	15	-	(87)	203	116
Derivatives designated in a hedging relationship	-	144	-	144	-	138	-	138
Total liabilities	-	117	42	159	-	51	203	254

Level 1:

Financial assets measured at level 1 apply to external quoted shares, which are measured based on the quoted prices. Dividends from the external shares are classified as other items.

Level 2:

Financial assets and liabilities measured at level 2 applies to forward currency contracts, commodity contracts and embedded currency derivatives. The contracts are measured at fair value by estimating the future cash flows.

Level 3:

The financial assets and liabilities at fair value through profit or loss measured at level 3 consist of power contracts, contingent consideration and shares in unlisted companies. The power contracts are assessed to be settled net in cash and are therefore within the scope of IFRS 9 and recognised as financial instruments.

When valuing the power contracts observable data is used, such as power price, currency rates, CPI and CfD, when available. The power prices for long-term electricity contracts in Norway are not directly observable in the market for the whole contract length. Power prices are observable until 2031, CfD prices are only observable for a short time period and currency rates are observable until 2026. Valuation of the contracts for the remaining periods are based on the latest observable data adjusted for CPI, if relevant.

Overview of contracts and the assumptions used for assessment of fair value for the level 3 contracts

Power contract "30-øringen"

"30-øringen" power contract lasts until 31 December 2030 and the power from the contract is restricted to be used at Elkem ASA plants. For the years 2019 - 2020 the price under the contract was fixed except if the spot price at the relevant grid points exceeds a certain threshold, in which case the price equals the spot price. For the last 10 years of the contract, starting 1 January 2021, the price is fixed based on the average spot price the five years preceding 1 January 2021, adjusted for inflation. The fixed price and the threshold price are based on a start date and thereafter adjusted with inflation annually. Changes in fair value for the "30-øringen" contract was classified as other items before 1 January 2021. Due to the change in the contract's price structure of the instrument from 2021, the contract is designated as a hedging instrument from 1 January 2021. This means that fair value changes from the effective part of the hedging relationship from 1 January 2021 is recognised as raw materials and energy for production in statement of profit or loss in the same period(s) as the hedged objects affects the profit or loss. The ineffective part of the hedging relationship is recognised in other items.

Power contract with Salten Energigjenvinning AS

On 31 January 2022 entered into agreement to purchase the remaining 50% of the shares in Salten Energigjenvinning AS. The company was subsequently merged into Elkem ASA. The power contract was therefore de-recognised at the date of the merger.

Assumptions for valuation of the contracts

- Discount rate: 4,87% (3.5%) p.a. for the "30-øringen" power contract. The assumptions are based on the estimated risk of the contract, including credit risk.
- Inflation: 2% (2%) p.a.
- Power prices: Market prices per 31 December 2022 until 2031.
- CfDs: 4-year average historic CfD prices based on Nord Pool prices.
- Exchange rate EUR: Observable rates for the next 5 years, thereafter calculated rates based on long-term interest rates.

For external shares measured at level 3, book value of equity adjusted for excess values at purchase date is used as an approximation of fair value.

See note 24 Provision and other liabilities for value of contingent liabilities.

Movements in fair value measurement level 3

Amounts in NOK million	2022	2021
Opening balance	212	(348)
Acquisition / business combinations	(58)	-
Transfer to / from other levels	3	-
Change in fair value recognised in OCI, cash flow hedges	1 227	737
Hedge ineffectiveness	1 391	-
Disposal	(5)	-
Settlement / realised effects	(735)	(157)
Other changes in fair value through profit or loss, unrealised	(7)	(9)
Currency translation differences	(12)	(13)
Closing balance	2 016	212

(b) Details of financial instruments

**Details of currency exchange contracts
31 December 2022**

Purchase currency	Purchase ccy million	Sale currency	Sale ccy million	Type of instrument	Currency deal rate	Due	Fair value NOK	Notional amount ¹⁾ NOK
CAD	40	USD	31	Fwd	1,3101	2023	(9)	301
NOK	1 750	EUR	170	Fwd	10,2788	2023	(44)	1 790
NOK	189	JPY	2 014	Fwd	0,0938	2023	36	151
NOK	426	JPY	4 242	Fwd	0,1005	2024-2026	88	317
NOK	764	USD	79	Fwd	9,6767	2023	(10)	780
USD	1	JPY	123	Fwd	0,0072	2023	(0)	9
NOK	719	EUR	69	Embedded ²⁾	10,4520	2023	(22)	723
NOK	3 688	EUR	335	Embedded ²⁾	11,0169	2024-2034	42	3 520
Total fair value³⁾							80	

**Details of currency exchange contracts
31 December 2021**

Purchase currency	Purchase ccy million	Sale currency	Sale ccy million	Type of instrument	Currency deal rate	Due	Fair value NOK	Notional amount ¹⁾ NOK
CAD	40	USD	32	Fwd	1,2549	2022	(4)	284
NOK	1 231	EUR	120	Fwd	10,2303	2022	20	1 203
NOK	2	GBP	0	Fwd	11,6549	2022	(0)	2
NOK	169	JPY	1 844	Fwd	0,0916	2022	27	141
NOK	615	JPY	6 256	Fwd	0,0984	2023-2026	112	479
NOK	392	USD	45	Fwd	8,6557	2022	(9)	399
USD	1	JPY	102	Fwd	0,0088	2022	0	8
NOK	709	EUR	69	Embedded ²⁾	10,3355	2022	1	686
NOK	4 039	EUR	371	Embedded ²⁾	10,8877	2023-2034	(18)	3 709
Total fair value³⁾							129	

¹⁾ Notional value of the contracts, based on currency rates 31 December.

²⁾ Embedded EUR derivatives in own use power contracts.

³⁾ The spot element of forward currency contracts with duration more than 3 months are designated as hedging instruments in a cash flow hedge of highly probable future sales, hence this part is classified as "Derivatives used for hedging" in the table "Assets and liabilities classified by category" above. The interest element of these contracts and contracts of duration < 3 months are classified as "Assets/liabilities at fair value through profit or loss".

**Details of power contracts and other commodity contracts within the scope of IFRS 9
31 December 2022**

Amounts in NOK million	Volume GWh / Oz	Due	Fair value	Notional amount ¹⁾
Forward power contracts financial institutions	44	2023	43	15
Power contract "30-øringen"	501	2023	608	158
Power contract "30-øringen"	3 510	2024-2030	1 430	1 199
Equity warrants		2023	3	3
Commodity contracts Platinum	2 380	2023	1	7
Total fair value contracts within scope of IFRS 9²⁾			2 085	

Details of power contracts and other commodity contracts within the scope of IFRS 9
31 December 2021

Amounts in NOK million	Volume GWh / Oz	Due	Fair value	Notional amount ¹⁾
Forward power contracts financial institutions	98	2022	23	52
Forward power contracts financial institutions	44	2023	4	15
Power contract "30-øringen"	501	2022	167	157
Power contract "30-øringen"	4 011	2023-2030	163	1 378
Power contract with Salten Energigjenvinning AS (note 32)	124	2022	35	32
Power contract with Salten Energigjenvinning AS (note 32)	1 733	2023-2036	22	555
Equity warrants		2022	3	3
Commodity contracts Platinum	8 954	2022	0	7
Total fair value contracts within scope of IFRS 9 ²⁾			417	

¹⁾ Notional value of underlying asset at the end of reporting period, calculated as volume * price * currency rate as at 31 December (if other currencies than NOK).

²⁾ Certain power contracts are designated as hedging instruments, the remaining contracts / parts of contracts are classified as "Assets/liabilities at fair value through profit and loss".

(c) Offsetting

Financial assets
31 December 2022

Amounts in NOK million	Gross amount of financial liabilities set off in the statement of financial assets	Net amounts of financial assets recognised / presented	Financial instruments not set off in the statement of financial position	Cash collateral pledged	Net amount
Power contracts including embedded derivatives	2 123	(1)	2 122	-	2 122
Forward currency contracts	147	-	147	21	168
Total	2 269	(1)	2 268	21	2 289

Financial liabilities
31 December 2022

Amounts in NOK million	Gross amount of recognised financial liabilities	Net amounts of financial liabilities presented	Financial instruments not set off in the statement of financial position	Cash collateral pledged	Net amount
Power contracts including embedded derivatives	23	(1)	22	-	22
Forward currency contracts	86	-	86	21	108
Total	109	(1)	108	21	129

Financial assets
31 December 2021

Amounts in NOK million	Gross amount of financial assets	Gross amount of financial liabilities set off in the statement of financial position	Net amounts of financial assets recognised / presented	Financial instruments not set off in the statement of financial position	Cash collateral pledged	Net amount
Power contracts including embedded derivatives	414	-	414	-	-	414
Forward currency contracts	170	-	170	16	-	186
Total	585	-	585	16	-	601

Financial liabilities
31 December 2021

Amounts in NOK million	Gross amount of recognised financial liabilities	Gross amount of recognised financial assets set off in the statement of financial position	Net amounts of financial liabilities presented	Financial instruments not set off in the statement of financial position	Cash collateral pledged	Net amount
Power contracts including embedded derivatives	17	-	17	-	-	17
Forward currency contracts	24	-	24	16	-	40
Total	41	-	41	16	-	57

26. Hedging

Principle

Hedge accounting

Elkem has applied IFRS 9 for hedge accounting. According to Elkem's policy, derivatives can be designated as hedging instruments for fair value hedges and cash flow hedges. At the inception of the hedge relationship, the entity documents the relationship between the hedging instrument and the hedged item, along with its risk management objectives and its strategy for undertaking various hedge transactions.

i) Cash flow hedges

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges, are recognised in other comprehensive income and accumulated under the heading of cash flow hedging reserve. The gain or loss relating to the ineffective portion is recognised immediately in the statement of profit or loss and classified as other items. Realised effects are recognised through statement of profit or loss, in the same line item as the hedged objects.

ii) Net investment hedges

Hedges of net investments in foreign operations are accounted for similarly to cash flow hedges. Any gain or loss on the hedging instrument relating to the effective portion of the hedge is recognised in other comprehensive income and included in foreign currency translation reserve in equity. The gain or loss relating to the ineffective portion is recognised immediately in the statement of profit or loss within other items. Gains and losses accumulated in equity are reclassified to the statement of profit or loss when the foreign operation is partially disposed of or sold.

When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss existing in comprehensive income at that time remains in equity and is recognised in the statement of profit or loss when the forecast transaction is ultimately recognised in the statement of profit or loss. When a forecast transaction is no longer expected to occur, the cumulative gain or loss reported in equity is immediately transferred to the statement of profit or loss.

Elkem's hedging instruments

Cash flow hedge

Elkem has forward currency contracts, embedded EUR derivatives in power contracts and a EUR loan amounting to EUR 5 million (EUR 11 million) where the spot element is designated as hedging instruments and Elkem's highly probable future revenue in corresponding currencies is designated as the hedging objects in this hedging relationship, defined as a cash flow hedge. In addition certain power commodity contracts, defined as financial instruments, are designated as hedging instruments in a cash flow hedge of price fluctuations for highly probable future purchases. Hence, the effective part of changes in fair value of the financial instruments is booked against OCI, and recycled to profit or loss as an adjustment of revenue and power cost (included in raw materials and energy for production) when realised. The ineffective part of changes in the fair value of the financial instrument is recognised in other items in the statement of profit and loss.

Net investment hedge

Elkem entered in 2017 into a bank loan amounting to EUR 275 million. In 2018 the bank loan of EUR 275 million was re-financed and increased to EUR 400 million. In 2022 the loan was refinanced again and increased to EUR 500 million. The spot rate of the initial loan amount, EUR 275 million, has been designated as a hedge of the net investment in the group's subsidiaries with EUR as functional currency. The fair value and carrying amount of the borrowing at 31 December 2022 was NOK 2,891 million (NOK 2,749 million). The change foreign exchange gain of NOK 142 million (a gain of NOK 130 million) on translation of the borrowing from EUR to NOK at the end of the reporting period is recognised in other comprehensive income and accumulated in the foreign currency translation reserve in the statement of changes in equity. There was no ineffectiveness to be recorded from net investment hedges.

See note 27 Financial risk for Elkem's hedging policy.

Cash flow hedging instruments, by type

Amounts in NOK million	31.12.2022	31.12.2022	31.12.2021	31.12.2021
	Assets fair value	Liabilities fair value	Assets fair value	Liabilities fair value
Forward currency contracts	110	80	146	18
Power contracts financial institutions	28	-	27	-
Power contract "30-øringen"	1 235	-	364	-
Power contract Salten Energigjenvinning AS	-	-	58	-
Power contracts embedded derivatives	(207)	56	-	110
Currency effect loan EUR	-	8	-	10
Commodity contracts Platinum	1	-	-	-
Total hedging instruments	1 167	144	593	138

Less non-current portion:

Forward currency contracts	87	-	102	-
Power contracts financial institutions	-	-	4	-
Power contract "30-øringen"	861	-	180	-
Power contract Salten Energigjenvinning AS	-	-	22	-
Power contracts embedded derivatives	(207)	-	-	88
Currency effect loan EUR	-	-	-	5
Commodity contracts Platinum	-	-	-	-
Current portion of hedging instruments	427	144	285	45

As at 31 December 2022 financial power contracts designated in a hedging relationship comprise 15% of expected consumption in Norway in 2023 and about 14% in the period 2024 - 2030.

Elkem has hedged approximately 19% of the expected revenues in EUR and approximately 7% of expected revenues in USD for 2023. For the years 2024-2034 EUR is hedged at a range of 1 - 5%.

Financial instruments

31 December 2022

Amounts in NOK million	Net fair value	Hereof recognised in OCI	Effects to be recycled from OCI			
			Within 1 year	Within 2 years	Within 3 years	Within 4 years or more
Forward currency contracts	60	30	(57)	33	46	7
Embedded EUR derivatives	20	(263)	(56)	(51)	(49)	(108)
Power contracts	2 080	1 263	402	229	167	464
Warrants ²⁾	3	-	-	-	-	-
Commodity contracts Platinum	1	1	1	-	-	-
Total ¹⁾	2 164	1 031	291	211	165	364
EUR loan designed as cash flow hedging instrument	(56)	(8)	(8)	-	-	-
Total		1 023	283	211	165	364

Financial instruments

31 December 2021

Amounts in NOK million	Net fair value	Hereof recognised in OCI	Effects to be recycled from OCI			
			Within 1 year	Within 2 years	Within 3 years	Within 4 years or more
Forward currency contracts	146	127	25	24	29	49
Embedded EUR derivatives	(17)	(110)	(21)	(21)	(19)	(48)
Power contracts	414	448	242	57	32	117
Warrants ²⁾	3	-	-	-	-	-
Commodity contracts Platinum	0	0	0	-	-	-
Total ¹⁾	547	465	245	60	42	118
EUR loan designed as cash flow hedging instrument	(107)	(10)	(5)	(5)	-	-
Total		455	240	54	42	118

¹⁾ Hedge accounting is applied for certain contracts and for parts of contracts.

²⁾ Subscription SAFE (Simple Agreement for Future Equity)

Of total changes in fair value of power contracts designated as hedging instruments NOK 1,471 million (NOK 124 million) is recognised in profit or loss, and classified as other items (see note 12 Other items), due to ineffectiveness in the hedging relationship and discontinuation of hedging. The ineffectiveness on cash flow hedges relates to Elkem's hedges of future power purchase. The ineffectiveness is caused by the extraordinary developments in the Norwegian power market with significant differences in prices between the different price areas. Consequently, the cumulative change in fair value of some of the hedging instruments are higher than the cumulative changes

in the present value of the hedge objects from the inception of the hedge. The difference between the two is the recognised as ineffectiveness. Of the NOK 1,471 million recognised in 2022, NOK 1,422 million relates to hedge ineffectiveness caused by these price differences. The remaining gain of NOK 49 million is related to discontinuation of power hedging caused by furnace closures in Norway. For 2021 the entire ineffectiveness of NOK 124 million is caused by price differences. Effects from recognition of ineffectiveness from forward currency contracts are NOK 0 million (NOK 3 million).

Realised effects hedge accounting

Amounts in NOK million	31.12.2022	31.12.2021
Realised effects from forward currency contracts, recognised in revenue	(14)	127
Realised effects from embedded derivatives EUR, recognised in revenue	(29)	(31)
Realised effects from EUR loans, recognised in revenue	(5)	(4)
Realised effects from platinum contracts, included in Revenues	0	-
Realised effects from power contracts, recognised in raw materials and energy for production	377	190
Realised effects hedge discontinuation, recognised in other items	38	-
Realised effects Salten Energigjenvinning, business combination (note 4)	58	-
Total realised effects hedge accounting	424	282

In addition, Elkem applies hedge accounting principles related to currency risk from a net investment in foreign operation, see note 23 Interest-bearing assets and liabilities.

Movements in OCI related to hedging instruments 2022

Amounts in NOK million	Opening balance	Net change in fair value	Reclassified to P&L	Closing balance
Hedging of future sales, forward currency contracts	127	(112)	14	30
Hedging of future need for power, contracts with financial institutions	27	57	(56)	28
Hedging of future need for power, contract "30-øringen" ²⁾	364	1 230	(359)	1 235
Hedging of future need for power, contract Salten Energigjenvinning, business combination (see note 4)	58	0	(58)	-
Hedging of future sales, embedded EUR derivatives in own use power contracts ¹⁾	(110)	(182)	29	(263)
Hedging of future sales, currency effects EUR loan	(10)	(3)	5	(8)
Hedging of future sales, platinum contracts ²⁾	0	2	(0)	1
Total (before tax)	455	992	(424)	1 023

Movements in OCI related to hedging instruments 2021

Amounts in NOK million	Opening balance	Net change in fair value	Reclassified to P&L	Closing balance
Hedging of future sales, forward currency contracts	150	104	(127)	127
Hedging of future need for power, contracts with financial institutions	(6)	65	(33)	27
Hedging of future need for power, contract "30-øringen" ²⁾	-	501	(138)	364
Hedging of future need for power, contracts with Statkraft (swap) ¹⁾	(3)	15	(12)	0
Hedging of future need for power, contract with Salten Energigjenvinning	(29)	94	(8)	58
Hedging of future sales, embedded EUR derivatives in own use power contracts ¹⁾	(332)	191	31	(110)
Hedging of future sales, currency effects EUR loan	(23)	8	4	(10)
Hedging of future sales, platinum contracts ²⁾	-	0	-	0
Total (before tax)	(242)	979	(282)	455

¹⁾ Hedge accounting from 2016.

²⁾ Hedge accounting from 2021.

27. Financial risk

Elkem is exposed to financial risks from fluctuations in market prices for finished goods, raw materials, currency exchange rates and interest rates (a) Market risk. In addition, Elkem is exposed to financial risks related to (b) Counterparty credit risk (c) Liquidity risk and (d) Climate risk. This may have considerable impact on Elkem's financial performance.

Elkem's principle is to organise resources close to the value chain. Risk management is an integrated part of Elkem's business activities, included in the line management's responsibility. Financial risks, including financing, liquidity, currency, interest rates, and counterparty risks are generally managed centrally by Group Finance and Treasury. Elkem has financial risk policies in place, approved by the board of directors.

Elkem's financial risk exposure and business performance are evaluated regularly, and the main risks are analysed in terms of impact, likelihood and correlation. Based on the overall risk evaluation Elkem may accept or seek to further reduce the risks arising from operational activities.

(a) Market risk

(i) Price risk

Commodity prices

Elkem is exposed to fluctuations in market prices for finished goods and raw materials. The market risk assessment is based on a holistic approach as prices for Elkem's products tend to fluctuate with underlying macroeconomic conditions. The same dynamics tend to apply to prices for the main raw materials, giving Elkem a certain degree of natural hedging.

For the main upstream products and raw materials Elkem seeks to reduce the risk exposure by entering sales and purchase contracts for corresponding time periods and volumes. The goal is to partly offset changes in sales prices through changes in raw material costs.

A significant part of Elkem's sales consist of specialised products. These products have generally more stable pricing. Elkem's integrated value chain mitigates the supply chain and pricing risks and also give flexibility to realise value at various levels through the value chain. Elkem aims to ensure sales volumes and raw material supply by entering into long-term customer relationships.

Power

Electric power is a key input factor and Elkem enters into long-term power contracts to reduce the future exposure to changes in power prices, particularly in Norway where electricity prices based on hydro power tend to have different pricing dynamics than for Elkem's products and other raw materials.

Normally all plants have covered their main future need for power by entering into power contracts, primarily classified as own use contracts according to IFRS 9, hence such contracts are off-balance. In addition to the own use contracts certain financial power contracts are classified as derivatives and designated in a cash flow hedging relationship in accordance with IFRS (see notes 25 and 26). For plants located in Norway, Elkem's policy is that minimum 80% of the expected power consumption shall be covered by fixed price contracts for current and next year. This includes both own use and derivative contracts at fair value. For the following periods, the ratio extends until 4 years ahead, declining with 10%-point per year ending at 50%. Elkem currently fulfils this minimum hedge policy, and also has a substantial amount of contracts at fixed price for the later years. Optimisation of 24-hour-, seasonal- and capacity utilisation variations are solved through utilising financial and physical contracts that are traded bilaterally. The purpose of entering into long term power contracts is to reduce volatility in the power cost and to increase the predictability of the cost base. Fair value of commodity contracts is especially sensitive for future changes in energy prices.

Changes in fair value of commodity contracts, classified as financial instruments, reflect unrealised gains or losses, and are calculated as the difference between market price and contract price, discounted to present value. Valuations are based on market information where this is available, if not, valuations are based on estimated market price for non-observable parameters.

Valuation of the power contracts

The assumptions for the fair value measurement of power contracts are described in note 25 Financial assets and liabilities.

Sensitivity analysis - power contracts

Sensitivity on the "30-øringen" contract is as follows.

"30-øringen" contract

Amounts in NOK million	31.12.2022		31.12.2021	
	Fair value	Adjusted NPV	Fair value	Adjusted NPV
Discount rate (used 4.9% (3.5%)) change with -3.5 %-point	2 037	2 239	330	360
Discount rate (used 4.9% (3.5%)) change with +3.5 %-point	2 037	1 869	330	319
CPI (used 2.0%) change to 1%	2 037	2 084	330	379
CPI (used 2.0%) change to 3%	2 037	1 988	330	279
Power price decrease -10%	2 037	1 721	330	166
Power price increase + 10%	2 037	2 353	330	494

(ii) Currency risk

Elkem has revenues and operating costs in various currencies. The prices of finished goods are to a large extent determined in international markets, primarily denominated in US dollar, Chinese yuan and Euro. This is partly offset by purchases of raw materials denominated in the same currencies. Elkem aims to establish natural hedging positions if this is possible and economically viable. Financial derivatives are then used to hedge the remaining net currency risk exposures. Elkem has net positive operating cash flows in mainly Euro, US dollar, Chinese yuan and Brazilian real. Due to the location of its plants, Elkem has net cost positions in certain other currencies, mainly Norwegian krone, but also Canadian dollar and Icelandic krona.

Elkem's policy is to hedge the net positive cash flows in foreign currencies against NOK to even out fluctuations in result and cash flow. The target is to hedge expected net cash flow for 0–3 months on a 90% hedging ratio. Expected net cash flow for 4–12 months should be hedged on a rolling basis targeting a 45% hedging ratio. The hedging ratio for

4–12 months may vary subject to internal approval. Chinese yuan (CNY) is not included in the hedging programme. Elkem has hedged Japanese yen until 2026, related to a long-term customer contract. Elkem uses hedge accounting for all cash flow hedges over 3 months. Embedded EUR derivatives in power contracts are included in the foreign exchange hedging programme. To ensure an effective hedge, according to the hedge accounting principles, the spot element of the forward currency contracts is designated as hedging instruments and highly probable future revenue as hedging object in a hedging relationship, covering the exposure beyond 3 months.

Elkem realised a loss of NOK 49 million from hedging programme (gain of NOK 92 million).

Elkem aims to mitigate the currency risk in the statement of financial position by keeping interest-bearing debt in the same currencies as the group's assets. Elkem has mainly interest-bearing debt in Euro, Chinese yuan and Norwegian krone.

Currency effects recognised in total comprehensive income for the year, excluding effects from cash flow hedging

Amounts in NOK million	2022	2021
Net foreign exchange gains (losses) - forward currency contracts - recognised in other items	9	14
Operating foreign exchange gains (losses) - recognised in other items	387	20
Net foreign currency exchange gains (losses) on financing activities - recognised in foreign exchange gains (losses)	85	241
Currency translation differences - recognised in other comprehensive income	765	358
Hedging of net investment in foreign operations - recognised in other comprehensive income	(142)	130
Total	1 104	764

Currency exposure

The amounts in the tables below are translated to NOK using exchange-rates against NOK per 31 December.

Exchange rates against NOK per 31 December

	2022	2021
USD	9.8714	8.8242
EUR	10.5130	9.9978
CNY	1.4309	1.3891
CAD	7.2879	6.9449

Currency exposure affecting statement of profit or loss

The tables show carrying amount of assets and liabilities denominated in foreign currencies different from the entities functional currency, where changes in currency rates will affect profit and loss. The tables include notional amount of currency exchange contracts (note 25 Financial assets and liabilities). Amounts are presented in NOK based on currency rates as at 31 December.

31 December 2022

Amounts in NOK million	USD	EUR	CNY	CAD	NOK	Other	Total
Other non-current assets	-	-	-	-	-	-	-
Trade receivables	662	98	-	-	-	-	759
Other assets	-	-	-	-	-	-	-
Restricted deposits	-	-	-	-	-	-	-
Cash and cash equivalents	1 658	3 124	489	(265)	0	459	5 466
Total monetary assets	2 320	3 222	489	(265)	0	459	6 225
Interest-bearing liabilities	-	6 505	-	-	-	-	6 505
Other liabilities	-	-	-	-	-	-	-
Trade payables	592	232	-	-	-	37	862
Bills payable	-	-	-	-	-	-	-
Total monetary liabilities	592	6 738	-	-	-	37	7 367
Derivatives, notional value	780	6 033	-	-	-	468	7 281
Net currency exposure financial position	948	(9 549)	489	(265)	0	(46)	(8 423)

31 December 2021

Amounts in NOK million	USD	EUR	CNY	CAD	NOK	Other	Total
Other non-current assets	-	-	-	-	-	-	-
Trade receivables	927	457	-	-	0	98	1 483
Other assets	-	-	-	-	-	-	-
Restricted deposits	-	-	-	-	-	-	-
Cash and cash equivalents	1 172	25	80	(95)	0	387	1 570
Total monetary assets	2 100	482	80	(95)	0	485	3 052
Interest-bearing liabilities	-	6 773	-	-	-	-	6 773
Other liabilities	-	-	-	-	-	-	-
Trade payables	442	117	3	0	2	56	620
Bills payable	-	-	-	-	-	-	-
Total monetary liabilities	442	6 890	3	0	2	56	7 393
Derivatives, notional value	399	5 598	-	-	-	631	6 629
Net currency exposure financial position	1 258	(12 006)	77	(95)	(1)	(202)	(10 969)

Sensitivity on profit and loss from financial assets and liabilities

The following tables demonstrate the sensitivity to a reasonable possible change in EUR and USD exchange rates by 5%, with all other variables held constant. The impact on Elkem's profit before tax is due to changes in the fair value of monetary assets and liabilities including foreign currency derivatives and embedded derivatives not designated for hedging. The impact on Elkem's pre-tax equity is due to changes in the fair value of

forward exchange contracts designated as cash flow hedges and net investment hedges. The impact on pre-tax equity would be booked against OCI and recycled through profit before tax, when the hedged items are realised. In addition the profit and loss will be affected by translation differences on intra group balances, mainly in EUR, USD and CNY.

Currency	31.12.2022			31.12.2021		
	Change in FX rate	Effect on profit before tax	Effect on pre-tax equity	Effect on profit before tax	Effect on pre-tax equity	
EUR	5 %	(46)	(431)	(194)	(410)	
EUR	-5 %	46	431	194	410	
USD	5 %	79	(31)	70	(16)	
USD	-5 %	(79)	31	(70)	16	

Currency exposure affecting currency translation differences / equity

The table shows Elkem's total assets and liabilities denominated in the group's main currencies translated to NOK at the currency rates at 31 December and gives an overview of the group's total currency exposure that will affect currency translation differences both in the consolidated statement of comprehensive income and / or profit and loss.

31 December 2022

Amounts in NOK million	USD	EUR	CNY	CAD	NOK	Other	Total
Other non-current assets	64	399	113	40	67	34	716
Trade receivables	1 451	452	1 644	29	3	668	4 248
Other assets	64	215	236	32	938	213	1 698
Restricted deposits	7	0	400	-	-	1	408
Cash and cash equivalents	2 017	3 363	2 083	(60)	998	854	9 255
Total monetary assets	3 603	4 429	4 476	41	2 006	1 771	16 325
Asset non-monetary items	2 828	5 917	12 311	1 278	12 264	1 858	36 455
Total assets	6 431	10 345	16 787	1 319	14 270	3 628	52 781
Interest-bearing liabilities	31	6 620	1 066	-	2 753	66	10 535
Other liabilities	25	193	334	36	605	351	1 545
Trade payables	778	1 277	2 341	96	630	212	5 335
Bills payable	-	-	1 742	-	-	-	1 742
Total monetary liabilities	834	8 090	5 485	132	3 988	628	19 158
Liabilities non-monetary items	169	694	310	391	3 080	204	4 849
Total liabilities	1 004	8 785	5 794	524	7 069	832	24 007

31 December 2021

Amounts in NOK million	USD	EUR	CNY	CAD	NOK	Other	Total
Other non-current assets	47	285	43	-	72	31	478
Trade receivables	1 387	660	1 549	21	184	497	4 297
Other assets	20	185	262	12	939	134	1 551
Restricted deposits	2	-	604	-	3	-	609
Cash and cash equivalents	1 438	219	1 448	221	3 066	647	7 040
Total monetary assets	2 894	1 349	3 906	254	4 264	1 308	13 976
Asset non-monetary items	1 864	4 878	11 162	837	7 710	1 423	27 874
Total assets	4 758	6 227	15 068	1 092	11 974	2 731	41 850
Interest-bearing liabilities	38	6 083	1 144	-	3 038	77	10 380
Other liabilities	39	225	469	25	664	235	1 657
Trade payables	567	1 049	1 705	95	1 011	186	4 614
Bills payable	-	-	2 096	-	-	-	2 096
Total monetary liabilities	644	7 357	5 414	121	4 714	498	18 747
Liabilities non-monetary items	139	709	606	188	1 403	184	3 228
Total liabilities	782	8 065	6 020	308	6 117	683	21 976

(iii) Interest rate risk

Elkem's interest rate risk arises from interest-bearing liabilities granted by external financial institutions. Elkem's liabilities are mainly drawn in Euro, Chinese yuan and Norwegian krone.

Elkem has a floating interest rate policy and is hence exposed to fluctuating interest rates. Prices and sales volumes for Elkem's core products tend to correlate with general economic conditions. A floating interest rate policy is therefore seen as appropriate from a financial risk perspective. Interest rates

have stayed low for a number of years due to a low-rate economic environment. During 2022 the interest rate has increased as many central banks have inflation targets and have adjusted interest rates to control a higher rise in the price level than targeted. With floating interest rates the group will normally be in a position to benefit from lower interest rates in an economic downturn, but a floating rate policy will also leave the group exposed to future interest rate hikes.

**Elkem has the following interest-bearing assets and liabilities
31 December 2022**

Amounts in NOK million	Floating	Fixed	Total
Interest-bearing liabilities	12 120	158	12 278
Interest-bearing assets	9 718	-	9 718
Net exposure	2 402	158	2 559

Sensitivity

The interest rate sensitivity is based on a parallel shift in the interest rates that Elkem is exposed to. If interest rates had been 100 basis points higher for a full year, based on net debt as at 31 December 2022, with all other variables held constant, the profit (loss) for the year would have been NOK 20 million (NOK 38 million) lower. An overview of Elkem's debt portfolio is presented in note 23 Interest-bearing assets and liabilities.

(b) Counterparty credit risk

Credit risk is the risk of financial losses to the group if a customer or counterparty fails to meet contractual obligations. For Elkem this arises mainly to trade receivable and financial trading counterparties.

Trade receivables are generally secured by credit insurance from a reputable credit insurance company. For customers where credit insurance cannot be obtained, other methods are generally used to secure the sales proceeds, such as prepayment, letter of credit, documentary credit or guarantees. In particular, when sales are made in countries with a high political risk, or to remote customers, trade finance products are used to reduce the credit risk. Of Elkem's revenue outside China 85% - 95% is covered by credit insurance or other trade finance tools.

Elkem realised credit losses of NOK 5 million (NOK 12 million) trade receivables. The maximum exposure to credit risk for trade receivables for the group is NOK 4,257 million per 31 December 2022 (NOK 4,306 million). Please also refer to note 21 Trade receivables.

Evaluation of financial counterparties is based on external credit ratings from Moody's and / or Standard and Poor's. The general policy is that financial counterparties should have a rating equal to, or higher than, A- (or the equivalent) from the rating agencies, but exceptions may be made on a case-by-case basis, mainly for local banks in emerging markets. Elkem has not had any losses in 2022 or 2021 related to financial counterparties.

Year / maturity

Amounts in NOK million	2023	2027	Total
Total amount of credit facilities	1 100	5 257	6 356

(c) Liquidity risk

Liquidity risk is the risk that the group will encounter difficulty in meeting the obligations associated with its financial liabilities. Elkem is exposed to liquidity risk related to its operations and financing.

Elkem's cash flow will fluctuate due to economic conditions and financial performance. In order to assess its future operational liquidity risk, short-term and long-term cash flow forecasts are provided. The short-term forecast is updated each week, and the long-term cash flow projection is updated each quarter.

In order to mitigate the operational liquidity risk, Elkem has cash and revolving credit facilities with banks. As at 31 December 2022 Elkem has unrestricted cash of NOK 9,255 million (NOK 7,040 million). In addition, revolving credit facilities amount to NOK 6,356 million (NOK 3,144 million), of which NOK 6,342 million is undrawn (NOK 3,144 million).

The external loan agreements contain two financial covenants. The ratio of EBITDA to consolidated Net interest payable, as defined herein, for each measurement period, where the period is calculated as the 12 months ending on the last day of a financial quarter, must exceed 4. Additionally, the ratio of total equity to total assets must be more than 30% at all times. Elkem complies with these covenants as of 31 December 2022 and also complied with the covenants as of 31 December 2021, see note 23 Interest-bearing assets and liabilities.

The policy is to have cash and available credit facilities to cover known capital needs and generally not less than 10% of annual total operating income. In addition, the policy is to ensure that the main credit facilities have a remaining maturity of at least 12 months. The maturity profile of the credit facilities per 31 December 2022 for Elkem is shown in the table below.

The table below analyses the group's financial liabilities and assets into relevant maturity groupings based on the remaining period at the date of the statement of financial position to the contractual maturity date. The amounts disclosed in the table are the contractual undiscounted cash flows, and the amounts are including interest payments.

31 December 2022

Amounts in NOK million	2023	2024	2025	2026	2027	2028 and later	Total	Carrying amount
Trade receivables	4 248	-	-	-	-	-	4 248	4 248
Derivative assets	698	434	346	306	287	482	2 554	2 273
Total assets	4 946	434	346	306	287	482	6 802	6 521
Trade payables	5 335	-	-	-	-	-	5 335	5 335
Derivative liabilities	109	8	-	-	-	-	117	109
Lease liabilities	103	101	79	65	55	291	695	578
Loans from external parties, other than bank	103	1 009	1 299	979	518	105	4 014	3 706
Bank financing	140	73	102	125	5 395	827	6 661	6 276
Bills payable	1 742	-	-	-	-	-	1 742	1 742
Total liabilities	7 532	1 191	1 480	1 169	5 968	1 223	18 564	17 747

31 December 2021

Amounts in NOK million	2022	2023	2024	2025	2026	2027 and later	Total	Carrying amount
Trade receivables	4 297	-	-	-	-	-	4 297	4 297
Derivative assets	269	62	37	54	18	154	594	588
Total assets	4 567	62	37	54	18	154	4 891	4 885
Trade payables	4 614	-	-	-	-	-	4 614	4 614
Derivative liabilities	23	2	(1)	4	7	8	43	41
Lease liabilities	116	123	99	80	68	427	912	801
Loans from external parties, other than bank	1 334	64	1 174	1 037	519	509	4 637	4 389
Bank financing	671	4 477	214	4	4	4	5 374	5 186
Bills payable	2 096	-	-	-	-	-	2 096	2 096
Total liabilities	8 854	4 666	1 486	1 124	597	948	17 675	17 127

(d) Climate risk

Climate-related issues represent important risk factors to the business, as well as attractive business opportunities since our products can be key enablers for lower greenhouse gas emissions through amongst other things renewable energy, energy storage and electrification of transportation. Elkem's board of directors and management conduct regular reviews of the group's strategy, which includes processes for identifying, assessing, and responding to climate-related risks and opportunities. Climate-risk assessments are also integrated

into our multi-disciplinary company-wide risk management process and each year a mapping is performed to identify the top risks for each division and corporate function. The individual risks are then organised into categories and aggregated on group level. The process for identifying climate risks are part of the annual risk mapping.

28. Capital management

Elkem focuses on having a balanced capital structure, which seeks to reflect the return requirements for the shareholders and the need for a strong financial position to facilitate the group's strategy for growth and specialisation. The target is to have a leverage between 1.0x and 2.0x over a cycle. The leverage ratio is defined as net interest-bearing assets, less non-current interest-bearing assets (see note 23 Interest-bearing assets and liabilities), divided by EBITDA, as defined in the APM section.

Elkem is managing its financing and liquidity position to reduce liquidity risk and to ensure that the company can meet its financial obligations at all times. Elkem has centralised the responsibility for group financing and liquidity handling. The policy is to raise financing at parent company level however, country specific exceptions may be made due to local legislation or currency restrictions. Loan maturities are subject to liquidity and refinancing risk and the company aims to have a long-term and smooth maturity profile on its loan portfolio.

Cash pooling is used to secure availability and access to cash across the group. Due to local legislation, not all subsidiaries are able to participate in international cash pooling arrangements. In these cases, repatriation of excess cash is mainly executed through dividend payments and inter-company deposits, while liquidity needs are covered through capital injections and inter-company loans. Liquidity forecasts

are prepared and updated on a regular basis. The short-term forecasts are updated weekly. Elkem's cash position is reported on a daily basis and tracked against respective forecasts. The policy is that available liquidity reserves, defined as cash and cash equivalents and available long-term credit facilities, should exceed 10% of total operating income.

Financial covenants are applicable in some of Elkem's loan agreements. Financial covenants, if required, are standardised across all loan agreements. Financial covenants and other financial policy targets are monitored monthly and included in the company's management reports.

Elkem intends to pay dividends reflecting the underlying earnings and cash flow. Elkem envisages a dividend pay-out ratio of 30 - 50% based on profit for the year. When deciding the annual dividend level, Elkem's leverage, capital expenditure plans and financing requirements will be taken into consideration. Focus will also be on maintaining appropriate strategic flexibility. For the year 2021 Elkem distributed NOK 3.00 per share in dividends and for the year 2022 the proposed dividend is NOK 6.00 per share.

As at 31 December 2022, Elkem's equity was NOK 28,773 million, including minority interests of NOK 134 million. The equity ratio was 55%.

The share capital of Elkem ASA is NOK 3,197,206,890 divided on 639,441,378 shares of NOK 5 par value. Of this amount Elkem ASA held 4,964,393 treasury shares, 0.7% of total issued shares. Elkem has in 2022 acquired 5,000,000 own shares that will be used as settlement in Elkem's share option scheme. Total transaction value was NOK 192 million. Elkem has in 2022 sold 6,439,379 shares in connection with Elkem's share option scheme. Total consideration was NOK 154 million.

In the annual general meeting held on 27 April 2022, the board of directors was granted an authorisation to repurchase the company's own shares within a total nominal value of up to NOK 319,720,689. The maximum amount that can be paid for each share is NOK 150 and the minimum is NOK 1. The authorisation is valid until the annual general meeting in 2023, but not later than 30 June 2023. The authorisation can be used to acquire shares as the board of directors deems appropriate, provided however, that acquisition of shares shall not be by subscription.

In the annual general meeting held on 27 April 2022, the board of directors was granted an authorisation to increase the company's share capital with an amount up to NOK 319,720,689 - corresponding to 10 per cent of the current share capital. The authorisation is valid until the annual general meeting in 2023, but not later than 30 June 2023. The authorisation can be used to cover share capital increases against contribution in kind and in connection with mergers.

In the annual general meeting held on 27 April 2022, the board of directors was granted an authorisation to increase the share capital by up to NOK 40,000,000 to be used in connection with the issuance of new shares under share incentive scheme. The authorisation is valid until the annual general meeting in 2023, but not later than 30 June 2023. The authorisation does not cover capital increases against contribution in kind or capital increases in connection with mergers.

30. Earnings per share

Principle

The calculation of basic earnings per share (EPS) has been based on profit attributable to ordinary shareholders and weighted-average number of ordinary shares outstanding. The calculation of diluted EPS has been based profit attributable to ordinary shareholders and weighted-average number of ordinary shares outstanding after adjustment for the effects of all dilutive potential ordinary shares.

29. Number of shares

The development in share capital and other paid-in equity is set out in the consolidated statement of changes in equity. The largest shareholders are listed in note 21 to the financial statement of Elkem ASA.

Number of shares	2022			2021		
	Shares outstanding	Treasury shares	Total issued shares	Shares outstanding	Treasury shares	Total issued shares
Opening balance	633 037 606	6 403 772	639 441 378	581 310 344	-	581 310 344
Capital increase	-	-	-	58 131 034	-	58 131 034
Increase in treasury shares	(5 000 000)	5 000 000	-	(6 403 772)	6 403 772	-
Sale of treasury shares	6 439 379	(6 439 379)	-	-	-	-
Closing balance	634 476 985	4 964 393	639 441 378	633 037 606	6 403 772	639 441 378

	2022	2021
Weighted average number of shares outstanding	633 563 574	618 160 299
Effects of dilution	2 025 138	3 876 305
Weighted average number of shares outstanding - diluted	635 588 712	622 036 604
Owners of the parent's share of profit (loss) (NOK million)	9 561	4 628
Earnings per share (NOK)	15.09	7.49
Diluted earnings per share (NOK)	15.04	7.44

31. Supplemental information to the consolidated statement of cash flows

The following table gives an detailed overview of changes in working capital in the statement of cash flow. Working capital is defined as accounts receivable, inventory, other current assets, accounts payable, current employee benefit obligations and other current liabilities. Accounts receivable are defined as trade receivables less bills receivable. Other current assets are defined as other current assets less current receivables to related parties, current interest-bearing receivables, tax

receivables, grants receivable, assets at fair value through profit or loss and accrued interest income. Accounts payable are defined as trade payables less trade payables related to purchase of non-current assets. Other current liabilities are defined as provisions and other current liabilities less current provisions, contingent considerations, contract obligations and liabilities to related parties.

Changes in working capital

Amounts in NOK million	2022	2021
Changes in accounts receivable	324	(1 374)
Changes in inventory	(2 258)	(2 358)
Changes in other current assets	99	(205)
Changes in accounts payable	134	1 213
Changes in other current liabilities including employee benefit obligations	118	704
Total	(1 583)	(2 020)

Liquidity effects of contingent considerations

Amounts in NOK million	2022	2021
Settlement of contingent consideration	160	83
Discounting element on settlement of contingent consideration	12	3
Fair value adjustment on settlement of contingent consideration	(0)	1
Foreign exchange gains (losses) from date of control	4	(9)
Total payment of contingent consideration related to acquisitions (IFRS 3)	176	78

32. Related parties

Related parties' relationships are defined to be entities outside Elkem group that are under control (either directly or indirectly), joint control or significant influence by the owners of Elkem.

Elkem also consider equity accounted companies as related parties. On 14 September 2022 Elkem lost control of Vianode AS and transactions are from that date considered to be related party transactions.

Elkem ASA is owned 52.9% by Bluestar Elkem International Co. Ltd S.A., Luxembourg, which is under control of Sinochem Holdings Co., Ltd (Sinochem), a company registered and domiciled in China. All companies under control by Sinochem are considered to be related parties, including among others China Blue Chemicals Ltd and Jiangxi Xinghuo spaceflight New Material Co., Ltd.. On 1 February 2022 Elkem purchased the remaining shares in Salten Energigjenvinning AS and transactions from that date are eliminated.

The structure of Elkem group is disclosed in note 4 Composition of the group and note 5 Equity accounted investments and joint operation.

Transactions with related parties 2022

Amounts in NOK million	Sale of goods	Purchase of goods	Sale of services ¹⁾	Purchase of services	Interest income	Financial expenses
Bluestar Elkem International Co. Ltd S.A.	-	-	-	-	-	-
Joint ventures and associates	-	(280)	15	(191)	0	-
Related parties within Sinochem	336	(434)	14	(126)	-	-
Other related parties	-	(21)	-	(18)	-	-
Total	336	(735)	30	(335)	0	-

¹⁾ Including sub-lease

Transactions with related parties 2021

Amounts in NOK million	Sale of goods	Purchase of goods	Sale of services ¹⁾	Purchase of services	Interest income	Financial expenses ¹⁾
Bluestar Elkem International Co. Ltd S.A.	-	-	-	-	-	-
Joint ventures and associates	-	(158)	32	(184)	0	-
Related parties within Sinochem	581	(414)	41	(153)	-	-
Other related parties	0	(18)	-	(16)	-	-
Total	581	(591)	73	(354)	0	-

¹⁾ Including sub-lease

Balances with related parties

Amounts in NOK million	Non-current		Current	
	31.12.2022	31.12.2021	31.12.2022	31.12.2021
Receivables from joint ventures and associates, interest-bearing	1	1	-	-
Receivables from related parties within Sinochem, interest free	-	-	7	1
Liabilities to related parties within Sinochem, interest free	-	-	(30)	(32)
Trade receivables, related parties within Sinochem	-	-	4	17
Trade receivables, joint ventures and associates	-	-	15	16
Trade payables, Bluestar Elkem Investment Co. Ltd. S.A	-	-	(5)	(5)
Trade payables, related parties within Sinochem	-	-	(79)	(56)
Trade payables, joint ventures and associates	-	-	(71)	(43)
Prepayments to related parties within Sinochem	-	-	15	18
Prepayments from joint ventures and associates	-	-	(17)	(10)
Financial power contract with joint ventures and associates	-	22	-	35
Net balances with related parties	1	23	(161)	(60)

Outstanding balances at year-end are unsecured, and the current receivables and payables are interest-free, with an exception of the non-current receivables. The interest rate for the non-current receivables to the joint ventures and associates are currently 3.0% (2.5%).

Information about main transactions with related parties:

Related parties within Sinochem

- Sale of silicone to China Bluestar International Chemical Ltd, Jiangxi Xinghuo Spaceflight New Material Co., Ltd and other companies within Sinochem
- Purchase of raw materials from companies within Sinochem

Equity accounted companies

[Vianode AS](#)

The group has entered into a investment agreement and committed to cover its proportion of total estimated capital injections in Vianode AS. Elkem's proportion is NOK 534.5 million, whereof NOK 267 million is paid as of 31 December 2022.

[Jiangxi Guoxing Intelligence Energy Co. Ltd](#)

Elkem has committed to cover its proportion of total estimated capital injections in Jinangxi Energy of CNY 48.7 million, whereof CNY 17.5 million is paid as of 31 December 2022.

33. Pledge of assets and guarantees

Pledges

The main part of Elkem's interest-bearing liabilities are not pledged. Details of liabilities that have pledged assets or guarantees related to them are stated below.

Pledged liabilities			Book value pledged assets		
Amounts in NOK million	31.12.2022	31.12.2021	Amounts in NOK million	31.12.2022	31.12.2021
Pledged liabilities	125	79	Building	30	28
			Machinery and plant	0	0
			Other assets	106	57

Elkem makes limited use of guarantees, see specification below.

Guarantee commitments

Amounts in NOK million	31.12.2022	31.12.2021
Guarantee commitment KLIF (Climate and Pollution Agency)	40	40
Guarantee commitment tax cases Brazil	38	15

In addition Elkem has committed to sell the land, buildings and equipment needed to establish the cogeneration facility and when the facility is up and running committed to supply steam.

Other equity accounted companies

- Purchase of short and deep sea transport from North Sea Containerline AS and EPB Chartering AS
- Purchase of warehousing for Combined Cargo Warehousing BV
- Purchase of services related to shared infrastructure such as laboratory analysis, IT and telephone, warehousing and purchase of basic chemistry products such as gas, nitrogen, compressed air from GIE Osiris

There are no other contingent liabilities or commitments related to the joint ventures and associates.

Key management personnel and board of directors

Information on transactions with key management personnel, see note 9 Employee benefits and "Report on salary and other remuneration to leading personnel in Elkem ASA for the financial year 2022".

34. Change in presentation

Presentation of realised hedge ineffectiveness is changed from raw materials and energy for production to other items in the statement of profit or loss. The impact on comparable figures in the statement of profit or loss are shown in the tables below. The change in presentation will not affect accounting policies for operating segments, see note 6 Operating segments.

Consolidated statement of profit or loss

Amounts in NOK million	2022 before change	Impact	2022 After change
Raw materials and energy for production	(21 378)	(597)	(21 976)
Other items	1 554	597	2 151
Operating profit (loss)	12 414	-	12 414

Consolidated statement of profit or loss

Amounts in NOK million	2021 Financial statement	Impact of change	2021 Restated
Raw materials and energy for production	(15 861)	(124)	(15 985)
Other items	(114)	124	10
Operating profit (loss)	5 785	-	5 785

35. Events after the reporting period

Principle

Events after the reporting period

Events after the reporting period related to the group's financial position at the end of the reporting period, are considered in the financial statements. Events after the reporting period that have no effect on the group's financial position at the end of the reporting period, but will have effect on future financial position, are disclosed if the future effect is material.

No events have taken place after the reporting period that would have had a material impact on the financial statements or any assessments carried out.